

**BID DOCUMENTS  
FOR THE  
MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT  
FOR  
CONSTRUCTION OF SHADE STRUCTURES AND SITE WORK AT  
MENIFEE VALLEY CAMPUS  
AT  
28237 La Piedra Road  
Menifee, CA 92584  
Project No. 15-5102  
DSA Application No. 04-117629  
Bid No. 2019-015**

**MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT**  
1499 N. State Street  
San Jacinto, CA 92583

February 12, 2019

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## NOTICE INVITING BIDS

District: MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT

Bid Deadline: Tuesday, February 26, 2019 @ 10:00 a.m.

Place of Bid Receipt: Mt. San Jacinto Community College District  
Attention: Tammy Cunningham  
Purchasing Department  
Building 200, Room 223  
1499 N. State Street  
San Jacinto, CA 92583

Project: Bid No. 2019-015 - Construction of Shade Structures at Menifee Valley Campus

Contract Time: 65 Calendar Days

Required License: B License – General Building Contracting

**Bid Due Date:** February 26, 2019 @ 10:00 a.m. It is each bidder's sole responsibility to ensure it's bid is timely delivered and received at the location designated below and the District shall not be responsible for any delays or issues with mail delivery. Any bid received after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

**Submit Sealed Bids to:** Purchasing Office, Attention Tammy Cunningham, Building 200, Room 223, 1499 N. State Street, San Jacinto, CA 92583. Bids shall be opened and publicly read aloud at the above stated time and place. Bids shall only be submitted on forms prepared by the District. Failure to do so will render the bid non-responsive. Each bid must strictly conform with and be responsive to the Contract Documents as defined in the General Conditions. A list of designated subcontractors for the Project, per subletting and Subcontracting Fair Practices Act, California Public Contract Code Sections 4100 et seq., is required to be submitted with the bid. Subcontractors shall be licensed pursuant to California law for trades necessary to perform the Work called for in the Contract Documents. The District reserves the right to reject any or all bids to waive any irregularities or informalities in any bids or in the bidding.

**Pre-Qualification of Bidders:** As a condition of bidding for this project, and in accordance with California Public Contract Code Section 20651.5, prospective bidders are required to submit to the District a completed set of pre-qualification documents on forms provided by the District. Pre-Qualification documents are available at the Mt. San Jacinto Community College District, Office of Procurement and General Services (Purchasing Department) located at 1499 N. State Street, San Jacinto, CA 92583 or go to the Mt. San Jacinto Community College District Purchasing office website located at <https://www.msjc.edu/Purchasing/Pages/UPCCAA.aspx> to download the UPCCA Pre-Qualification Questionnaire. The pre-qualification documents must be submitted prior to 10:00 a.m. February 15, 2019. Bids will not be accepted if a Contractor has not been pre-qualified where prequalification is required. Contractors will be notified by telephone or e-mail of their prequalification documents.

**Miscellaneous Information:** The bid documents may be obtained at Mt. San Jacinto Community College Purchasing website at <https://www.msjc.edu/Purchasing/Pages/--Current-Bids.aspx> Each bid must strictly conform with and be responsive to the Contract Documents as defined in the General Conditions.

**Mandatory Pre-Bid Conference:** Tuesday, February 19, 2019 @10:00 a.m. at 28237 La Piedra Road, Menifee, CA 92584 (meet in front of Bldg. 800). **Contractor must attend job walk.** Any contractor bidding on the Project who fails to attend the entire mandatory job walk and conference will be deemed a non-responsive bidder and will have its bid returned unopened. Any Contractor who fails to arrive on-time (10:00 a.m.) will not be allowed to participate in the Pre-Bid Conference.

**Required License:** In accordance with the provisions of Business and Professions Code Section 7028.15 and Public Contract Code Section 3300, the DISTRICT requires that the bidder possess the following classification (s) of contractor's license (s) and certifications at the time the bid is submitted:

**B-License – General Building Contractor**

Any bidder not so licensed or in a possession of required certification at the time of the bid opening will be rejected as nonresponsive.

**Bid Security:** Time is of the essence. Each bid shall be accompanied by the bid security in the form of cash, a certified or cashier's check or bid bond in an amount not less than ten percent (10%) of the total bid price, payable to the DISTRICT.

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 process.

The California Department of Industrial Relations has determined the general prevailing rates of per diem wages for the locality in which the work is to be performed for the Project. Copies of these wage rates determinations, entitled Prevailing Wage Scale, are maintained at the DISTRICT office and are available at the following website: [www.dir.ca.gov](http://www.dir.ca.gov). It shall be mandatory upon the successful bidder to whom the contract is awarded, and upon any subcontractor listed, to pay not less than the said specified rates to all workers employed by them for the Project.

No bidder may withdraw any bid for a period of sixty (60) calendar days after the date set for the opening of bids.

Pursuant to Public Contract Code Section 22300, the Agreement will contain provisions permitting the successful bidder to substitute securities for any monies withheld by the DISTRICT to ensure performance under the Agreement or permitting payment of retentions earned directly into escrow.

Tammy Cunningham  
Director of Procurement and General Services  
Mt. San Jacinto Community College District

Published: Press Enterprise – February 11, 2019 and February 18, 2019

## INSTRUCTIONS TO BIDDERS

1. Preparation of Bid Form and Bidding Procedures. Proposals under these specifications shall be submitted on the blank forms furnished herewith including, but not limited to, the forms in the Special Conditions, at the time and place stated in the Notice Calling for Bids. Each bidder shall review and comply with all bidding instructions and requirements set forth in the Special Conditions. All blanks in the Bid Form must be appropriately filled in, and all proposed prices must be stated clearly and legibly in both words and numerals. All bids must be signed by the bidder in permanent ink and submitted in sealed envelopes, bearing on the outside, the bidder's name, address, telephone number, and California Contractor's License number, and the name of the Project for which the bid is submitted. The Owner reserves the right to reject any bid if all of the above information is not furnished. It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened.

2. Bid Security. Each bid must be accompanied by one of the following forms of bidder's security: (1) cash; (2) a cashier's check made payable to the Owner; (3) a certified check made payable to the Owner; or (4) a bidder's bond executed by a California admitted surety as defined in Code of Civil Procedure Section 995.120, made payable to the Owner, in the form set forth in the Contract Documents. Such bidder's security must be in an amount not less than **ten percent (10%)** of the maximum amount of such bidder's bid as a guarantee that the bidder will enter into the Contract, if the same is awarded to such bidder, and will provide the required Performance and Payment Bonds, insurance certificates and any other required documents. In the event that a bidder is awarded the Contract and such bidder fails to enter into said Contract or provide the surety bond or bonds within five (5) calendar days after award of the Contract to bidder, said security will be forfeited.

3. Signature. The bid form, all bonds, all designations of subcontractors, the Contractor's Certificate, the Agreement, and all Guarantees must be signed in permanent ink in the name of the bidder and must bear the signature in longhand of the person or persons duly authorized to sign the bid.

If bidder is a corporation, the legal name of the corporation shall first be set forth, together with two signatures: one from the President and one from the Secretary or Assistant Secretary. Alternatively, the signature of other authorized officers or agents may be affixed, if a certified copy of the resolution of the corporate board of directors authorizing them to do so is provided to the Owner. Such documents shall include the title of such signatories below the signature and shall bear the corporate seal.

If bidder is a partnership, the true name of the firm shall first be set forth, together with the names of all persons comprising the partnership or co-partnership. The bid must be signed by all partners comprising the partnership unless proof in the form of a certified copy of a statement of partnership acknowledging the signer to be a general partner is presented to the Owner, in which case the general partner may sign.

Bids submitted as joint ventures must so state and be signed by each joint venturer.

Bids submitted by individuals must be signed by the bidder unless an up to date power-of-attorney is on file in the Owner office, in which case, said person may sign for the individual.

The above rules also apply in the case of the use of a fictitious firm name. In addition, however, where a fictitious name is used, it must be so indicated in the signature.

4. Modifications. Changes in or additions to the bid form, recapitulations of the work bid upon, alternative proposals, or any other modification of the bid form which is not specifically called for in the Contract Documents may result in the Owner's rejection of the bid as not being responsive to the Notice Inviting Bids. **No oral or telephonic modification of any bid submitted will be considered.**

5. Erasures, Inconsistent or Illegible Bids. The bid submitted must not contain any erasures, interlineations, or other corrections unless each such correction creates no inconsistency and is suitably authenticated by affixing in the margin immediately opposite the correction the signature or signatures of the person or persons signing the bid. In the event of inconsistency between words and figures in the bid price, words shall control figures. In the event that the Owner determines that any bid is unintelligible, inconsistent, or ambiguous, the Owner may reject such bid as not being responsive to the Notice Inviting Bids.

6. Examination of Site and Contract Documents. Each bidder shall visit the site of the proposed work and become fully acquainted with the conditions relating to the construction and labor so that the facilities, difficulties, and restrictions attending the execution of the work under the Contract are fully understood. Bidders shall thoroughly examine and be familiar with the drawings, specifications and all other documents and requirements that are attached to and/or contained in the Project Manual. The failure or omission of any bidder to receive or examine any Contract Documents, Special Conditions, form, instrument, addendum, or other document or to visit the site and become acquainted with conditions there existing shall not relieve any bidder from obligations with respect to the bid or to the contract. The submission of a bid shall be taken as prima facie evidence of compliance with this section. Bidders shall not, at any time after submission of the bid, dispute, complain, or assert that there were any misunderstandings with regard to the nature or amount of work to be done.

7. Withdrawal of Bids. Any bid may be withdrawn, either personally or by written request, at any time prior to the scheduled closing time for receipt of bids. The bid security for bids withdrawn prior to the scheduled closing time for receipt of bids, in accordance with this paragraph, shall be returned upon demand therefor.

No bidder may withdraw any bid for a period of ninety (90) calendar days after the date set for the opening of bids.

8. Agreements and Bonds. The Agreement form which the successful bidder, as CONTRACTOR, will be required to execute, and the forms and amounts of surety bonds which will be required to be furnished at the time of execution of the Agreement, are included in the bid documents and should be carefully examined by the bidder. The number of executed copies of the Agreement, the Performance Bond, and the Payment Bond required is three (3). Payment and Performance bonds must be executed by an admitted surety insurer as defined in Code of Civil Procedure 995.120.

9. Interpretation of Plans and Documents/Pre-Bid Clarification. If any prospective bidder is in doubt as to the true meaning of any part of the Contract Documents, or finds discrepancies in, or omissions, a written request for an interpretation or correction thereof may be submitted to the Owner. The bidder submitting the request shall be responsible for its prompt delivery. **Any interpretation or correction of the Contract Documents will only be made by Addendum duly issued, and a copy of such Addendum will be made available for each contractor receiving a set of the Contract Documents.** No person is authorized to make any oral interpretation of any provision in the Contract Documents, nor shall any oral interpretation be binding on the Owner. If discrepancies on drawings, specifications or elsewhere in the Contract Documents are not covered by addenda, bidder shall include in their bid methods of construction and materials for the higher quality and complete assembly. Each request for clarification shall be submitted in writing, via email, to only the following persons:

TO: Carole Ward – Contract Coordinator  
cward@mejc.edu

CC: Tammy Cunningham – Director of Procurement and General Services  
tcunningham@msjc.edu

Each transmitted request shall contain the name of the person and/or firm filing the request, address, telephone and fax number, Specifications and/or Drawing number, and document title. Bidder is responsible for the legibility of hand written requests. Pre-bid clarification request shall be filed a minimum of **six (6)** days prior to bid opening. Requests received less than **six (6)** days before bid opening shall not be considered or responded to. A written response to timely pre-bid clarifications requests which materially affects the bidders price will be made by Addendum issued by the District not less than seventy-two (72) hours prior to bid opening.

10. Bidders Interested in More Than One Bid. No person, firm, or corporation shall be allowed to make, or file, or be interested in more than one prime bid for the same work unless alternate bids are specifically called for. A person, firm, or corporation that has submitted a proposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a proposal or quoting prices to other bidders or making a prime proposal.

11. Award of Contract. The Contract will be awarded to the lowest responsive responsible bidder by action of the governing Board pursuant to the terms and conditions of the Contract Documents including, but not limited to, the Special Conditions. The Owner reserves the right to reject any or all bids, or to waive any irregularities or informalities in any bids or in the bidding. In the event an award is made to bidder, and such bidder fails or refuses to execute the Contract and provide the required documents within five (5) calendar days after award of the Contract to bidder, the Owner may award the Contract to next lowest responsible and responsive bidder or release all bidders. **Each bid must conform and be responsive to the Contract Documents as defined in the General Conditions.**

12. Bid Protest Procedure. Any bidder may file a bid protest. The protest shall be filed in writing with the Owner's Contract Coordinator, Carole Ward not more than three (3) working days after the date of the bid opening. An e-mail address shall be provided and, by filing the protest, protesting bidder consents to receipt of e-mail notices for purposes of the Protest and Protest related questions and Protest Appeal, if applicable. The protest shall specify the reasons and facts upon which the protest is based.

a. Resolution of Bid Controversy: Once the bid protest is received, the apparent lowest responsible bidder will be notified of the protest and the evidence presented. If appropriate, the apparent low bidder will be given an opportunity to rebut the evidence and present evidence that the apparent low bidder should be allowed to perform the Work. If deemed appropriate by the Owner, an informal hearing will be held. Owner will issue a written decision within fifteen (15) days of receipt of the protest, unless factors beyond the Owner's reasonable control prevent such resolution. The Decision on the Bid Protest will be copied to all parties involved in the protest.

b. Finality. The decision concerning the Bid controversy will be final and not subject to any further Appeals.



c. Failure to comply with this Bid Protest Procedure shall constitute a waiver of the right to protest and shall constitute a failure to exhaust the protesting bidder's administrative remedies.

13. Alternates. If alternate bids are called for, the Contract may be awarded at the election of the Governing Board to the lowest responsible and responsive bidder using the method and procedures outlined in the Notice Inviting Bids and as specified in the section entitled Alternate/Deductive Bid Alternates.

14. Listing Subcontractors. Each bidder shall submit with his bid, on the form furnished with the Contract Documents, a list of the names, license numbers, scopes of work, locations of the places of business, contact information, and Department of Industrial Relations ("DIR") registration numbers of each subcontractor who will perform work or labor or render service to the bidder in or about the project, or a subcontractor who under subcontract to the bidder, specially fabricates and installs a portion of the work, in an amount in excess of one-half of 1 percent of the bidder's total bid as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code section 4100, et seq.) Pursuant to Labor Code section 1725.5, all subcontractors (of any tier) performing work on this Project must be properly registered with DIR.

15. Workers' Compensation. In accordance with the provisions of Labor Code Section 3700, the successful bidder as the Contractor shall secure payment of compensation to all employees. The Contractor shall sign and file with the Owner the following certificate prior to performing the work under this contract: "I am aware of the provisions of Section 3700 of the Labor Code, which requires 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 provisions before commencing the performance of the work of this contract." The form of such certificate is included as a part of the Bid Package.

16. Contractor's License. To perform the work required by this notice, the Contractor must possess the Contractor's License as specified in the Notice Inviting Bids, and the Contractor must maintain the license throughout the duration of the contract. If, at the time of bid, bidder is not licensed to perform the Project in accordance with Division 3, Chapter 9, of the Business and Professions Code for the State of California and the Notice to Contractors calling for bids, such bid will not be considered and the Contractor will forfeit its bid security to the Owner.

17. Preference for Materials and Substitutions.

a. One Product Specified. Unless the Plans and Specifications state that no Substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, construction, or any specific name, make, trade name, or catalog number, with or without the words, "or equal," such specification shall be read as if the language "or equal" is incorporated.

b. Request for Substitution. See Supplementary General Conditions.

18. Disqualification of Bidders and Proposals. More than one proposal for the same work from any individual, firm, partnership, corporation, or association under the same or different names will not be accepted; and reasonable grounds for believing that any bidder is interested in more than one proposal for the work will be cause for rejecting all proposals in which such bidder is interested and the bidder will forfeit their bid security to the Owner.

19. Unbalanced or Altered Bids. Proposals in which the prices are obviously unbalanced, and those which are incomplete or show any alteration of form, or contain any additions or conditional or alternate bids that are not called for or otherwise permitted, may be rejected. A proposal on which the signature of the bidder has been omitted may be rejected. If, in the District's sole discretion, it determines any pricing, costs or other information submitted by a bidder may result in an unbalanced bid, the District may deem such bid non-responsive. A bid may be determined by the District to be unbalanced if the bid is based on prices significantly less than cost for some work and prices which are significantly overstated in relation to cost for other work, and if there is a reasonable doubt that the bid will result in the lowest overall cost to the District even though it may be the low evaluated bid, or if it is so unbalanced as to be tantamount to allowing an advanced payment.

20. Employment of Apprentices. The Contractor and all Subcontractors shall comply with the provisions of California Labor Code including, but not limited to sections 1777.5, 1777.6, and 1777.7 concerning the employment of apprentices. The Contractor and any Subcontractor under him shall comply with the requirements of said sections, including applicable portions of all subsequent amendments in the employment of apprentices; however, the Contractor shall have full responsibility for compliance with said Labor Code sections, for all apprenticeable occupations, regardless of any other contractual or employment relationships alleged to exist.

21. Non-Collusion Declaration. Public Contract Code Section 7106 requires bidders to submit declaration of non-collusion with their bids. This form is included with the bid documents and must be signed and dated by the bidder under penalty of perjury.

22. Wage Rates, Travel and Subsistence.

a. The Contractor and all subcontractors shall comply with the requirements set forth in Division 2, Part 7, Chapter 1 of the Labor Code. Pursuant to Labor Code Sections 1770 et. seq., the Owner has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work

in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the contract. Copies are available from the Owner to any interested party on request and are also available from the Director of the Department of Industrial Relations. The Contractor shall obtain copies of the above-referenced prevailing wage sheets and post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

b. Any worker employed to perform work on the Project and such work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

c. Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

d. These per diem rates, including holiday and overtime work, and employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the administrative office of the Owner, located as noted above and are also available from the Director of the Department of Industrial Relations. It is the Contractor's responsibility to ensure the appropriate prevailing rates of per diem wages are paid for each classification. It shall be mandatory upon the Contractor to whom the Contract is awarded, and upon any subcontractor under such Contractor, to pay not less than the said specified rates to all workers employed by them in the execution of the Contract.

23. DIR Registration of Contractor and Subcontractors. A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in the Labor Code, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

This Project is a public works project as defined in Labor Code section 1720. Each contractor bidding on this Project and all subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with DIR and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. For more information and up to date requirements, contractors are recommended to periodically review the DI's website at [www.dir.ca.gov](http://www.dir.ca.gov). Contractor shall be solely responsible for ensuring compliance with Labor Code section 1725.5 as well as any requirements implemented by DIR applicable to its services or its subcontractors throughout the term of the Agreement and in no event shall contractor be granted increased payment from the District or any time extensions to complete the Project as a result of contractor's efforts to maintain compliance with the Labor Code or any requirements implemented by the DIR. Failure to comply with these requirements shall be deemed a material breach of this Agreement and grounds for termination for cause. The contractor and all subcontractors shall furnish certified payroll records as required pursuant Labor Code section 1776 directly to the Labor Commissioner in accordance with Labor Code section 1771.4 on at least on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. The District reserves the right to withhold contract payments if the District is notified, or determines as the result of its own investigation, that contractor is in violation of any of the requirements set forth in Labor Code section 1720 et seq. at no penalty or cost to the District. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE).

24. No Telephone or Facsimile Availability. No telephone or facsimile machine will be available to bidders on the Owner premises at any time.

25. Obtaining Bidding Documents. Bidding Documents, may be obtained from:

[https://www.msjc.edu/Purchasing/Pages/--Current Bids.aspx](https://www.msjc.edu/Purchasing/Pages/--Current%20Bids.aspx)

Bidder shall utilize a complete set of Bidding Documents in preparing a bid. The failure or omission of bidder to receive any Bidding Document, form, instrument, Addendum, or other document shall not relieve bidder from any obligations with respect to the bid and/or Contract.

26. Addenda. Clarification or any other notice of a change in the Bidding Documents will be issued only by the Owner office of Mt. San Jacinto Community College District and only in the form of a written Addendum, transmitted by fax, e-mail, or available for pick up to all who are known by the issuing office to have received a complete set of Bidding Documents. Any other purported Addenda are void and unenforceable.

Bidder is responsible for ascertaining the disposition of all Addenda issued regardless of Owner notification and to acknowledge all Addenda in the submitted sealed bid prior to the bid opening. Copies of Addendum will be made available for

inspection wherever Bidding Documents are on file for inspection. Each Addendum will be numbered, dated, and identified with the Project number. Oral statements or any instructions in any form, other than Addendum as described above, shall be void and unenforceable. Any Addendum issued by the Owner and not noted as being acknowledged by bidder as required in the Bid Form, may result in the bid being deemed non-responsive.

27. Debarment. Bidder may also be subject to debarment, in addition to seeking remedies for False Claims under Government Code section 12650 et seq. and Penal Code section 72, the District may debar a Contractor pursuant to Article 15 of the General Conditions if the Board, or the Board may designate a hearing officer who, in his or her discretion, finds the Contractor has done any of the following:

- a. Intentionally or with reckless disregard, violated any term of the contract with the District
- b. Committed an act or omission which reflects on the Contractor's quality, fitness or capacity to perform work for the District;
- c. Committed an act or offense which indicates a lack of business integrity or business honesty; or,
- d. Made or submitted a false claim against the District or any other public entity (See Government Code section 12650, et seq., and Penal Code section 72)

30. Proposal Submittal Requirement.

Submittal Due Date/Delivery Requirements

Interested contractors are invited to submit bids to the District to the address below, no later than **10:00 a.m. on Tuesday, February 26, 2019**. Late bids will not be considered. The District is not responsible for late mail or postal delivery errors. Proposers shall submit one electronic version of the bid on a flash drive (optional); one (1) printed original proposal including any supporting documentation in a sealed box or package addressed as follows:

Attention: Tammy Cunningham  
Bid No. 2019-015 – Construction of Shade Structures at Menifee Valley Campus  
Mt. San Jacinto Community College District  
Purchasing Department  
Bldg. 200, Room 223  
1499 N. State Street  
San Jacinto, CA 92583

## **Checklist of Mandatory Bid Forms**

(For Contractor's use and reference only. Additional documents may be required so bidders should carefully review all Contract Documents and Bid Documents)

Bid Form

Designation of Subcontractors

Non-Collusion Declaration

Bid Bond (or Bid Guarantee form if Security is other than Bid Bond)

Substitution Request Form (if Substitutions are being requested - If Substitution Request Form is not submitted then NO Substitutions will be allowed after the bids are opened)

Contractor's Certificate Regarding Workers Compensation

Acknowledgement of Bidding Practices Regarding Indemnity

DVBE Participation Statement

Contractor's Certificate Regarding Drug-Free Work Place

### PRE-BID CLARIFICATION FORM (For Contractor's Use)

PROJECT NAME:	Construction of Shade Structures and Site Work at Meniffee Valley Campus		
PROJECT NUMBER:	Bid No. 2019-015		
TO:	Carole Ward & Tammy Cunningham	EMAIL:	cward@msjc.edu & tcunningham@msjc.edu

DATE:			
FROM:		EMAIL:	
DOCUMENT/DIVISION NUMBER:		DRAWING NUMBER:	

REQUESTED CLARIFICATION:

RESPONSE TO CLARIFICATION:

PRE-BID CLARIFICATION FORM (For Contractor's Use)

Attach additional numbered sheets as necessary; however, only one (1) request shall be contained on each submitted form.

## **DESIGNATION OF SUBCONTRACTORS**

In compliance with the Subletting and Subcontracting Fair Practices Act (California Public Contract Code Sections 4100 et. seq.) and any amendments thereof, each Bidder shall set forth below: (a) the name, license number, and location of the place of business of each subcontractor who will perform work or labor or render service to the Contractor, who will perform work or labor or work or improvement to be performed under this Contract, or a subcontractor licensed by the State of California who, under subcontract to the Contractor, specially fabricates and installs a portion of the work or improvements according to detailed drawings contained in the Plans and Specifications in an amount in excess of one-half of one percent of the Contractor's total bid; and (b) the portion and description of the work which will be done by each subcontractor under this Act. The Contractor shall list only one subcontractor for each such portion as is defined by the Contractor in this bid. All subcontractors shall be properly licensed by the California State Licensing Board.

If a Contractor fails to specify a subcontractor, or if a Contractor specifies more than one subcontractor for the same portion of work to be performed under the Contract in excess of one-half of one percent of the Contractor's total bid, the Contractor shall be deemed to have agreed that the Contractor is fully qualified to perform that portion, and that the Contractor alone shall perform that portion.

No Contractor whose bid is accepted shall (a) substitute any subcontractor, (b) permit any subcontractor to be voluntarily assigned or transferred or allow the relevant portion of the work to be performed by anyone other than the original subcontractor listed in the original bid, or (c) sublet or subcontract any portion of the work in excess of one-half of one percent of the Contractor's total bid where the original bid did not designate a subcontractor, except as authorized in the Subletting and Subcontracting Fair Practices Act.

Subletting or subcontracting of any portion of the work in excess of one-half of one percent of the Contractor's total bid where no subcontractor was designated in the original bid shall only be permitted in cases of public emergency or necessity, and then only after a finding, reduced to writing as a public record, of the authority awarding this Contract setting forth the facts constituting the emergency or necessity.

All subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project.

**NOTE:** If alternate bids are called for and bidder intends to use different or additional subcontractors on the alternates, a separate list of subcontractors must be provided for each such Alternate.

**DESIGNATION OF SUBCONTRACTORS FORM**

<b>Scope of Work</b>	<b>Name of Subcontractor</b>	<b>Location &amp; Place of Business</b>	<b>License Type and Number</b>	<b>DIR Registration Number</b>	<b><i>E-Mail &amp; Telephone*</i></b>



Scope of Work	Name of Subcontractor	Location & Place of Business	License Type and Number	DIR Registration Number	E-Mail & Telephone*

\* This information must be provided at the time of submission of bid or must be provided within 24 hours after the time set for the opening of bids. Bidders who choose to provide this information within 24 hours after the time set for the opening of bids are solely responsible to ensure the District receives this information in a timely manner. The District is not responsible for any problems or delays associated with emails, faxes, delivery, etc. Absent a verified fax or email receipt date and time by the District, the District's determination of whether the information was received timely shall govern and be determinative. Bidder shall not revise or amend any other information in this form submitted at the time of bid. The information submitted at the time of bid shall govern over any conflicts, discrepancies, ambiguities or other differences in any subsequent Subcontractor Designation Forms submitted by the bidder

Proper Name of Bidder:

Date:

Name:

Signature of Bidder

Representative:

Address:

Phone:

**ACKNOWLEDGMENT OF BIDDING PRACTICES REGARDING INDEMNITY FORM**

TO: Mt. San Jacinto College District

RE: Project Number \_\_\_\_\_

Construction Contract for \_\_\_\_\_

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.

\_\_\_\_\_  
Contracting Party

\_\_\_\_\_  
Name of Agent/Title

**DISABLED VETERAN BUSINESS ENTERPRISE (DVBE) PARTICIPATION**  
**STATEMENT**

Each bidder must complete this form in order to comply with the Mt. San Jacinto College District ("District") policy for participation of disabled veteran business enterprises.

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

Bid No.: \_\_\_\_\_

DSA No.: \_\_\_\_\_

The undersigned, on behalf of the Contractor named below, certifies that the Contractor has made reasonable efforts to secure participation by DVBE in the Contract to be awarded for the above-referenced Bid No., including participation by DVBE subcontractors and/or material suppliers. **Check only one of the following:**

- ☐ The Contractor was unable after reasonable efforts to secure DVBE participation in the Contract for the above-referenced Project/Bid No. However, the Contractor will use DVBE services if the opportunity arises at any time during construction of the Project. Upon completion of the Project, the Contractor will report to the District the total dollar amount of DVBE participation in any Contract awarded to Contractor, and in any change orders, for the above-referenced Project.
- ☐ The Contractor has secured DVBE participation in the Contract for the above referenced Project/Bid No., and anticipates that such DVBE participation will equal approximately \_\_\_\_\_ dollars (\$ \_\_\_\_\_), which represents approximately \_\_\_\_\_ percent (\_\_\_\_%) of the total Contract for such Project. Upon completion of the Project, Contractor will report to the District the actual total dollar amount of DVBE participation in the Contract awarded to Contractor, and in any change orders, for such Project

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

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

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

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

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

## **CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE**

This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code section 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:

1. 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.
2. Establishing a drug-free awareness program to inform employees about all of the following:
  - a. The dangers of drug abuse in the workplace;
  - b. The person's or organization's policy of maintaining a drug-free workplace;
  - c. The availability of drug counseling, rehabilitation and employee-assistance programs; and
  - d. The penalties that may be imposed upon employees for drug abuse violations;
3. 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 Mt. San Jacinto College 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 Section 8350 et seq.

I acknowledge that I am aware of the provisions of Government Code section 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

Project Name  
[Insert Community College] District

Contractor's Certificate Regarding Drug Free Workplace  
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**BID FORM**

FOR  
CONSTRUCTION OF SHADE STRUCTURES AND SITE WORK  
At Menifee Valley Campus  
Bid Package No. 2019-015

FOR  
MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT

CONTRACTOR  
NAME:

\_\_\_\_\_

ADDRESS:

\_\_\_\_\_

\_\_\_\_\_

TELEPHONE:

\_(        ) \_\_\_\_\_

FAX:

\_(        ) \_\_\_\_\_

EMAIL

\_\_\_\_\_

TO: Mt. San Jacinto Community College District, acting by and through its Governing Board, herein called "Owner".

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the Contract, the local conditions affecting the performance of the Contract, the cost of the work at the place where the work is to be done, 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, including its acceptance by the Owner, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the Contract and complete all of the Work in a workmanlike manner required in connection with the construction of:

BID PACKAGE NO. 2019-015

CONSTRUCTION OF SHADE STRUCTURES AND SITE WORK AT MENIFEE VALLEY CAMPUS

in the Owner described above, all in strict conformance with the drawings and other Contract Documents on file at the Owner Offices of said Owner for amounts set forth herein.

2. BIDDER ACKNOWLEDGES THE FOLLOWING ADDENDUM:

Number	Number	Number	Number	Number	Number	Number	Number
--------	--------	--------	--------	--------	--------	--------	--------

Acknowledge the inclusion of all addenda issued prior to bid in the blanks provided above. Your failure to do so may render your bid non-responsive.

3. A. TOTAL CASH PURCHASE PRICE IN WORDS & NUMBERS:

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

B. ALLOWANCE Contractor to include allowance in bid:

FIVE THOUSAND DOLLARS

(\$5,000.00)

C. TOTAL PRICE – ENTIRE JOB (3A + 3B ABOVE)

\_\_\_\_\_ DOLLARS

(\$ \_\_\_\_\_)

4. TIME FOR COMPLETION: The Owner may give a notice to proceed within ninety (90) days of the award of the bid by the Owner. Once the Contractor has received the notice to proceed, the Contractor shall complete the work in the time specified in the Agreement. By submitting this bid, Contractor has thoroughly studied this Project and agrees that the Contract Time for this Project is adequate for the timely and proper completion of the Project. Further, Contractor has included in the analysis of the time required for this Project, and the requisite time to complete Punch List.

In the event that the Owner desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the Owner. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the postponement of giving the notice to proceed.

It is understood that the Owner reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The Contractor understands that it may not withdraw this bid for a period of ninety (90) days after the date set for the opening of bids.

5. Attached is bid security in the amount of not less than ten percent (10%) of the bid:

Bid bond (10% of the Bid), certified check, or cashier's check (circle one)

6. The required List of Designated Subcontractors is attached hereto.

7. The required Non-Collusion Declaration is attached hereto.

8. The Substitution Request Form, if applicable, is attached hereto.

Bid Form

Bid No. 2019-015

Construction of Shade Structures and Site Work at Meniffee Valley

Campus

000834.00018  
18099120.1

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9. 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 Owner a Contract in the form attached hereto in accordance with the bid as accepted, and that he or she will also furnish and deliver to the Owner the Performance Bond and Payment Bond, all within five (5) calendar days after award of Contract, and that the work under the Contract shall be commenced by the undersigned bidder, if awarded the Contract, by the start date provided in the Owner's Notice to Proceed, and shall be completed by the Contractor in the time specified in the Contract Documents.

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

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(IMPORTANT NOTICE: If bidder or other interested person is a corporation, state the legal name of such corporation, as well as the names of the president, secretary, treasurer, and manager thereof; if a co-partnership, state the true names of the firm, as well as the names of all individual co-partners comprising the firm; if bidder or other interested person is an individual, state the first and last names in full.)

11. PROTEST PROCEDURES. If there is a bid protest, the grounds shall be submitted as set forth in the Instructions to Bidders.

12. The undersigned bidder shall be licensed and shall provide the following California Contractor's license information:

License Number:

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License expiration date:

---

Name on License:

---

Class of License:

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If the bidder is a joint venture, each member of the joint venture must include the above information.

13. Time is of the essence regarding this Contract, therefore, in the event the bidder to whom the Contract is awarded fails or refuses to post the required bonds and return executed copies of the Agreement form within five (5) calendar days from the date of receiving the Notice of Award, the Owner may declare the bidder's bid deposit or bond forfeited as damages.

14. The bidder declares that he/she has carefully examined the location(s) of the proposed Project, that he/she has examined the Contract Documents, including the Plans, General Conditions, Supplemental Conditions, Special Conditions, Addenda, Specifications, and all other documents contained in the Project Manual, and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Contract Documents, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

I agree to receive service of notices at the e-mail address listed below.

I the below-indicated bidder, declare under penalty of perjury that the information provided and representations made in this bid are true and correct.

\_\_\_\_\_  
Proper Name of Company

Bid Form

Bid No. 2019-015  
Construction of Shade Structures and Site Work at Menifee Valley

---

Name of Bidder Representative

---

Street Address

---

City, State, and Zip

---

( )

Phone Number

---

( )

Fax Number

---

E-Mail

By: \_\_\_\_\_ Date: \_\_\_\_\_  
Signature of Bidder Representative

**NOTE:** If bidder is a corporation, the legal name of the corporation shall be set forth above together with the signature of authorized officers or agents 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 signature shall be placed above.

All signatures must be made in permanent blue ink.



**(INTENTIONALLY LEFT BLANK)**

**CONTRACTOR'S CERTIFICATE REGARDING  
WORKERS' COMPENSATION FORM**

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.
3. For any county, city, city and county, municipal corporation, public Owner, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702.

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.

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Print)

\_\_\_\_\_  
(Date)

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 submitted with the Contractor's bid.

\_\_\_\_\_  
Contractor's Certificate Regarding Workers' Compensation Form

Bid No. 2019-015  
Construction of Shade Structures and Site Work at Menifee Valley

000834.00018  
18099120.1  
Campus

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## **NON-COLLUSION DECLARATION**

The undersigned declares:

I am the \_\_\_\_\_ [Title] of \_\_\_\_\_ [Name of Company], 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 \_\_\_\_\_ [Date], at \_\_\_\_\_ [City], \_\_\_\_\_ [State].

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

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

**BID GUARANTEE FORM**  
(Use only when not using a Bid Bond)

Accompanying this proposal is a cashier's check payable to the order of the Mt. San Jacinto Community College District or a certified check payable to the order of the Mt. San Jacinto Community College District in an amount equal to ten percent (10%) of the base bid and alternates (\$\_\_\_\_\_).

The proceeds of this check shall become the property of said Owner, if, this proposal shall be accepted by the Owner through the Owner's Governing Board, and the undersigned fails to execute a Contract with and furnish the sureties required by the Owner within the required time; otherwise, said check is to be returned to the undersigned.

\_\_\_\_\_  
Bidder

Note: Use this form, in lieu of Bid Bond form, when a cashier's check or certified check is accompanying the bid

## **BID BOND FORM**

KNOW ALL MEN BY THESE PRESENT that we, the undersigned, (hereafter called "Principal"), and \_\_\_\_\_ (hereafter called "Surety"), are hereby held and firmly bound unto the Mt. San Jacinto Community College District (hereafter called "Owner") in the sum of \_\_\_\_\_ (\$ \_\_\_\_\_) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

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

The condition of the above obligation is such that whereas the Principal has submitted to the Owner a certain Bid, attached hereto and hereby made a part hereof, to enter into a Contract in writing for the construction of \_\_\_\_\_.

NOW, THEREFORE,

- a. If said Bid is rejected, or
- b. If said Bid is accepted and the Principal executes and delivers a Contract or the attached Agreement form within five (5) calendar days after acceptance (properly completed in accordance with said Bid), and furnishes bonds for his faithful performance of said Contract and for payment of all persons performing labor or furnishing materials in connection therewith,

Then this obligation shall be void; otherwise, the same shall remain in force and effect.

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

In the event suit is brought upon this bond by the Owner and judgment is recovered, the Surety shall pay all costs incurred by the Owner in such suit, including without limitation, attorneys' fees to be fixed by the court.

IN WITNESS WHEREOF, Principal and Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, on the day and year first set forth above.

By

(Corporate Seal)

Principal's Signature

Typed or Printed Name

Principal's Title

By

(Corporate Seal)

Surety's Signature

Typed or Printed Name

Title

(Attached Attorney in Fact Certificate)

---

Surety's Name

---

Surety's Address

---

Surety's Phone Number

**IMPORTANT:**

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, it must also appear on the Treasury Department's most current list (Circular 570 as amended).

**THIS IS A REQUIRED FORM.**

Any claims under this bond may be addressed to:

(Name and Address of Surety)

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(Name and Address of agent or representative for service of process in California if different from above)

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(Telephone Number of Surety and agent or representative for service of process in California).

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[End of Required Bid Documents to be Submitted with Bid]

## **AGREEMENT FORM**

**THIS AGREEMENT**, entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_ in the County of \_\_\_\_\_ of the State of California, by and between the Mt. San Jacinto Community College District, hereinafter called the "Owner" or the "District", and \_\_\_\_\_, hereinafter called the "Contractor".

**WITNESSETH** that the Owner and the Contractor for the consideration stated herein agree as follows:

**ARTICLE 1 - SCOPE OF WORK:** The Contractor shall furnish all labor, materials, equipment, tools, and utility and transportation services, and perform and complete all work required in connection with Construction of Shade Structures at Menifee Valley Campus in strict accordance with the Contract Documents enumerated in Article 7 below. The Contractor shall be liable to the District for any damages arising as a result of a failure to comply with that obligation, and the Contractor shall not be excused with respect to any failure to so comply by an act or omission of the Architect, Engineer, Inspector, Division of the State Architect (DSA), or representative of any of them, unless such act or omission actually prevents the Contractor from fully complying with the Contract Documents and the Contractor protests, in accordance with the Contract Documents, that the act or omission is preventing the Contractor from fully complying with the Contract Documents. Such protest shall not be effective unless reduced to writing and filed with the District office within seven (7) days of the date of occurrence of such act or omission preventing the Contractor from fully complying with the Contract Documents.

**ARTICLE 2 - TIME OF COMPLETION:** The Owner may give notice to proceed within ninety (90) days of the award of the bid by the Owner. Once the Contractor has received a notice to proceed, the Contractor shall reach Substantial Completion (See Article 1.1.46) of the Work within Sixty-One (61) calendar days from receipt of the Notice to Proceed. This shall be called Contract Time. (See Article 8.1.1). It is expressly understood that time is of the essence.

Contractor has thoroughly studied the Project and has satisfied itself that the time period for this Project is adequate for the timely and proper completion of the Project within the Contract time.

In the event that the Owner desires to postpone giving the notice to proceed beyond this ninety (90) day period, it is expressly understood that with reasonable notice to the Contractor, giving the notice to proceed may be postponed by the Owner. It is further expressly understood by the Contractor, that the Contractor shall not be entitled to any claim of additional compensation as a result of the Owner's postponement of giving the notice to proceed.

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

**ARTICLE 3 - LIQUIDATED DAMAGES:** It being impracticable and infeasible to determine the amount of actual damage, it is agreed that the Contractor will pay the Owner the sum of Two Hundred and Fifty Dollars (\$250.00) per calendar day for each and every day of delay beyond the Contract Time set forth in Article 2 of this Agreement as liquidated damages and not as a penalty or forfeiture. In the event Liquidated Damages are not paid, the Contractor further agrees that the Owner may deduct such amount thereof from any money due or that may become due the Contractor under the Contract (See Article 9.6 and 2.2 of the General Conditions).

**ARTICLE 4 - CONTRACT PRICE:** The Owner shall pay to the Contractor as full consideration for the faithful performance of the Contract, subject to any additions or deductions as provided in the Contract Documents, the sum of \_\_\_\_\_ DOLLARS (\$ \_\_\_\_\_), said sum being the total amount stipulated in the Bid Contractor submitted. Payment shall be made as set forth in the General Conditions.

Should any Change Order result in an increase in the Contract Price, the cost of such Change Order shall be agreed to in advance by the Contractor and the Owner, subject to the monetary limitations set forth in Public Contract Code Section 20659. In the event that the Contractor proceeds with a Change in work without an agreement between the Owner and Contractor regarding the cost of a Change Order, the Contractor waives any Claim of additional compensation for such additional work.

**ARTICLE 5 - HOLD HARMLESS AGREEMENT:** Contractor shall defend, indemnify and hold harmless Owner, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors from all liabilities, claims, actions, liens, judgments, demands, damages, losses, costs or expenses of any kind arising from death, personal injury, property damage or other cause based or asserted upon any act, omission, or breach connected with or arising from the progress of Work or performance of service under this Agreement or the Contract Documents. As part of this indemnity, Contractor shall protect and defend, at its own expense, Owner, Architect, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from any legal action including attorney's fees or other proceeding based upon such act, omission, breach or as otherwise required by this Article.



Furthermore, Contractor agrees to and does hereby defend, indemnify and hold harmless Owner, Architect, Construction Manager, Inspector, the State of California and their officers, employees, agents and independent contractors from every claim or demand made, and every liability, loss, damage, expense or attorney's fees of any nature whatsoever, which may be incurred by reason of:

(a) Liability for (1) death or bodily injury to persons; (2) damage or injury to, loss (including theft), or loss of use of, any property; (3) any failure or alleged failure to comply with any provision of law or the Contract Documents; or (4) any other loss, damage or expense, sustained by any person, firm or corporation or in connection with the Work called for in this Agreement or the Contract Documents, except for liability resulting from the sole or active negligence, or the willful misconduct of the Owner.

(b) Any bodily injury to or death of persons or damage to property caused by any act, omission or breach of Contractor or any person, firm or corporation employed by Contractor, either directly or by independent contract, including all damages or injury to or death of persons, loss (including theft) or loss of use of any property, sustained by any person, firm or corporation, including the Owner, arising out of or in any way connected with Work covered by this Agreement or the Contract Documents, whether said injury or damage occurs either on or off Owner property, but not for any loss, injury, death or damages caused by the sole or active negligence or willful misconduct of the Owner.

(c) Any dispute between Contractor and Contractor's subcontractors/supplies/ Sureties, including, but not limited to, any failure or alleged failure of the Contractor (or any person hired or employed directly or indirectly by the Contractor) to pay any Subcontractor or Materialman of any tier or any other person employed in connection with the Work and/or filing of any stop notice or mechanic's lien claims.

(d) Any claims, allegations, penalties, assessments, or liabilities to the extent caused by the Contractor's failure or the failure of any Subcontractor of any tier, to fully comply with the DIR registration requirements under Labor Code section 1725.5 at all times during the performance of any Work on the Project and shall reimburse the District for any penalties assessed against the District arising from any failure by the Contractor or any Subcontractor of any tier from complying with Labor Code sections 1725.5 and 1771.1. Nothing in this paragraph, however, shall require the Contractor or any Subcontractor to be liable to the District or indemnify the District for any penalties caused by the District in accordance with Labor Code section 1773.3 (g).

Contractor, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the Owner, its officers, agents or employees, on account of or founded upon any cause, damage, or injury identified herein Article 5 and shall pay or satisfy any judgment that may be rendered against the Owner, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

The Contractor's and Subcontractors' obligation to defend, indemnify and hold harmless the Owner, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors hereunder shall include, without limitation, any and all claims, damages, and costs for the following: (1) any damages or injury to or death of any person, and damage or injury to, loss (including theft), or loss of use of, any property; (2) breach of any warranty, express or implied; (3) failure of the Contractor or Subcontractors to comply with any applicable governmental law, rule, regulation, or other requirement; (4) products installed in or used in connection with the Work; and (5) any claims of violation of the Americans with Disabilities Act ("ADA").

**ARTICLE 6 - PROVISIONS REQUIRED BY LAW:** Each and every provision of law and clause required to be inserted in this Contract shall be deemed to be inserted herein, and this Contract shall be read and enforced as though it were included herein, and if through mistake or otherwise any such provision is not inserted or is not inserted correctly, then upon application of either party the Contract shall forthwith be physically amended to make such insertion or correction.

**ARTICLE 7 - COMPONENT PARTS OF THE CONTRACT:** The Contract entered into by this Agreement consists of the following Contract Documents, all of which are component parts of the Contract as if herein set out in full or attached hereto:

Notice Inviting Bids  
Instructions to Bidders  
Designation of Subcontractors  
Non-Collusion Declaration  
Bid Bond  
Bid Form  
Contractor's Certificate Regarding Worker's Compensation  
Agreement Form  
Payment Bond  
Performance Bond  
Guarantee  
Escrow Agreement for Security Deposit In Lieu of Retention  
Workers' Compensation/Employers Liability Endorsement  
General Liability Endorsement  
Automobile Liability Endorsement  
General Conditions

Supplementary and Special Conditions

Specifications

All Addenda as Issued

Drawings/Plans

Requirements, Reports and/or Documents in the Project Manual or Other Documents Issued to Bidders

All of the above named Contract Documents are intended to be complementary. Work required by one of the above named Contract Documents and not by others shall be done as if required by all.

**ARTICLE 8 - PREVAILING WAGES:** Wage rates for this Project shall be in accordance with the general prevailing rate of holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of work needed to execute the Contract as determined by the Director of the Department of Industrial Relations. Copies of schedules of rates so determined by the Director of the Department of Industrial Relations are on file at the administrative office of the Owner and are also available from the Director of the Department of Industrial Relations. Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE).

The following are hereby referenced and made a part of this Agreement and Contractor stipulates to the provisions contained therein.

1. Chapter 1 of Part 7 of Division 2 of the Labor Code (Section 1720 et seq.)
2. California Code of Regulations, Title 8, Chapter 8, Subchapters 3 through 6 (Section 16000 et seq.)

**ARTICLE 9 - RECORD AUDIT:** In accordance with Government Code Section 8546.7 (and Davis Bacon, if applicable) and Article 13.11 of the General Conditions, records of both the Owner and the Contractor shall be subject to examination and audit for a period of five (5) years after a Final Retention Payment or the Recording of a Notice of Completion, whichever occurs first.

**ARTICLE 10 - CONTRACTOR'S LICENSE:** The Contractor must possess throughout the Project a Class \_\_\_\_\_ Contractor's License, issued by the State of California, which must be current and in good standing.

**IN WITNESS WHEREOF,** this Agreement has been duly executed by the above named parties, on the day and year first above written.

**MT. SAN JACINTO COMMUNITY COLLEGE CONTRACTOR:  
DISTRICT**

By \_\_\_\_\_

Beth Gomez

Vice President, Business Services

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

By \_\_\_\_\_

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Title

\_\_\_\_\_  
Date

**(CORPORATE SEAL)**

**PAYMENT BOND**  
**(CALIFORNIA PUBLIC WORK)**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT (sometimes referred to hereinafter as "Obligee") has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: Construction of Shade Structures at Meniffee Valley Campus (hereinafter referred to as the "Public Work"); and

WHEREAS, said Contractor is required to furnish a bond in connection with said Contract, and pursuant to California Civil Code Section 9550;

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 MT. SAN JACINTO COMMUNITY COLELGE DISTRICT and to any and all persons, companies, or corporations entitled by law to file stop notices under California Civil Code Section 9100, or any person, company, or corporation entitled to make a claim on this bond, in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), such sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which payment will 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 said Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code Section 9100; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then said Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Section 9550 et seq.

This bond shall inure to the benefit of any person named in Civil Code Section 9100 giving such person or his/her assigns a right of action in any suit brought upon this bond.

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration or modification in, to, or of any contract, plans, or specifications, or agreement pertaining or relating to any scheme or work of improvement herein above described; or pertaining or relating to the furnishing of labor, materials, or equipment therefor; nor by any change or modification of any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described;

nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the 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 the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the Obligee and the Contractor or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code Section 9100, and who has not been paid the full amount of his or her claim; and that the 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/CONTRACTOR:

\_\_\_\_\_

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

SURETY:

\_\_\_\_\_

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

Attorney-in-Fact

IMPORTANT: THIS IS A REQUIRED FORM.

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).

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of agent or representative for  
service for service of process in California)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Telephone: \_\_\_\_\_

A notary public or other office completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.
---

STATE OF CALIFORNIA                    )  
  ) ss.  
COUNTY OF                                    )

On \_\_\_\_\_, before me, \_\_\_\_\_,  
personally appeared \_\_\_\_\_, who proved on the basis of satisfactory  
evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged  
to me that he/she/they executed the same in his/her/their authorized capacity(ies) as the Attorney-in-Fact  
of \_\_\_\_\_ (Surety) and acknowledged to me that by his/her/their signature(s)  
on the instrument the person(s), or the entity upon behalf of which the person(s) executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

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

(SEAL)

Commission expires: \_\_\_\_\_

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

**PERFORMANCE BOND**  
**(CALIFORNIA PUBLIC WORK)**

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT (sometimes referred to hereinafter as "Obligee") has awarded to \_\_\_\_\_ (hereinafter designated as the "Principal" or "Contractor"), an agreement for the work described as follows: \_\_\_\_\_ (hereinafter referred to as the "Public Work"); and

WHEREAS, the work to be performed by the Contractor is more particularly set forth in that certain contract for said Public Work dated \_\_\_\_\_, (hereinafter referred to as the "Contract"), which Contract is incorporated herein by this reference; and

WHEREAS, the Contractor is required by said 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 MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT in the sum of \_\_\_\_\_ Dollars (\$ \_\_\_\_\_), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which amount 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 the bounded Contractor, his or her 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 said Contract and any alteration thereof made as therein provided, on his or her 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 guarantees of all materials and workmanship; and indemnify, defend and save harmless the Obligee, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any change, extension of time, alteration in or addition to the terms of the contract or to the work to be performed there under or the specifications accompanying the same, nor by any change or modification to any terms of payment or extension of time for any payment pertaining or relating to any scheme of work of improvement under the contract. Surety also stipulates and agrees that it shall not be exonerated or released from the obligation of this bond (either by total exoneration or pro tanto) by any overpayment or underpayment by the Obligee that is based upon estimates approved by the Architect. The Surety stipulates and agrees that none of the aforementioned changes, modifications, alterations, additions, extension of time or actions shall in any way affect its obligation on this bond, and it does hereby waive notice of any such changes, modifications,

alterations, additions or extension of time to the terms of the contract, or to the work, or the specifications as well notice of any other actions that result in the foregoing.

Whenever Principal shall be, and is declared by the Oblige to be, in default under the Contract, the Surety shall promptly either remedy the default, or shall promptly take over and complete the Contract through its agents or independent contractors, subject to acceptance and approval of such agents or independent contractors by Oblige as hereinafter set forth, in accordance with its terms and conditions and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages; or, at Oblige's sole discretion and election, Surety shall obtain a bid or bids for completing the Contract in accordance with its terms and conditions, and upon determination by Oblige of the lowest responsible bidder, arrange for a contract between such bidder and the Oblige and make available as Work progresses (even though there should be a default or succession of defaults under the contract or contracts of completion arranged under this paragraph) sufficient funds to pay the cost of completion less the "balance of the Contract Price" (as hereinafter defined), and to pay and perform all obligations of Principal under the Contract, including, without limitation, all obligations with respect to warranties, guarantees and the payment of liquidated damages. The term "balance of the Contract price," as used in this paragraph, shall mean the total amount payable to Principal by the Oblige under the Contract and any modifications thereto, less the amount previously paid by the Oblige to the Principal, less any withholdings by the Oblige allowed under the Contract. Oblige shall not be required or obligated to accept a tender of a completion contractor from the Surety.

Surety expressly agrees that the Oblige may reject any agent or contractor which may be proposed by Surety in fulfillment of its obligations in the event of default by the Principal. Unless otherwise agreed by Oblige, in its sole discretion, Surety shall not utilize Principal in completing the Contract nor shall Surety accept a bid from Principal for completion of the work in the event of default by the Principal.

No final settlement between the Oblige and the Contractor shall abridge the right of any beneficiary hereunder, whose claim may be unsatisfied.

The Surety shall remain responsible and liable for all patent and latent defects that arise out of or relate to the Contractor's failure and/or inability to properly complete the Public Work as required by the Contract and the Contract Documents. The obligation of the Surety hereunder shall continue so long as any obligation of the Contractor remains.

Contractor and Surety agree that if the Oblige is required to engage the services of an attorney in connection with enforcement of the bond, Contractor and Surety shall pay Oblige's reasonable attorneys' fees incurred, with or without suit, in addition to the above sum.

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

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

PRINCIPAL/CONTRACTOR:

\_\_\_\_\_

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

SURETY:

\_\_\_\_\_

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

Attorney-in-Fact

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

The total amount of premium charged: \$ \_\_\_\_\_ (This must be filled in by a corporate surety).



**IMPORTANT:**            **THIS IS A REQUIRED FORM.**

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).

Any claims under this bond may be addressed to:

(Name and Address of Surety)

(Name and Address of agent or representative for  
service for service of process in California)

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Telephone: \_\_\_\_\_

Telephone: \_\_\_\_\_

A notary public or other office completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.
---

STATE OF CALIFORNIA                    )  
    ) ss.  
COUNTY OF                                    )

On \_\_\_\_\_, before me, \_\_\_\_\_,  
personally appeared \_\_\_\_\_, who proved on the basis of satisfactory  
evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged  
to me that he/she/they executed the same in his/her/their authorized capacity(ies) as the Attorney-in-Fact  
of \_\_\_\_\_ (Surety) and acknowledged to me that by his/her/their signature(s)  
on the instrument the person(s), or the entity upon behalf of which the person(s) executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

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

(SEAL)

Commission expires: \_\_\_\_\_

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

## **GUARANTEE**

Guarantee for \_\_\_\_\_. We hereby guarantee that the \_\_\_\_\_, which we have installed in \_\_\_\_\_ has been done in accordance with the Contract Documents, including without limitation, the drawings and specifications, and that the work as installed will fulfill the requirements included in the bid documents. The undersigned and its surety agrees to repair or replace any or all such work, together with any other adjacent work, which may be displaced in connection with such replacement, that may prove to be defective in workmanship or material within a period of one year from the date of the Notice of Completion of the above-mentioned structure by the Mt. San Jacinto Community College District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event the undersigned or its surety fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the Owner, but not later than ten (10) days after being notified in writing by the Owner or within forty-eight (48) hours in the case of an emergency or urgent matter, the undersigned and its surety authorizes the Owner to proceed to have said defects repaired and made good at the expense of the undersigned and its surety, who will pay the costs and charges therefor upon demand. The undersigned and its surety shall be jointly and severally liable for any costs arising from the Owner's enforcement of this Guarantee.

Countersigned

\_\_\_\_\_  
(Proper Name)

\_\_\_\_\_  
(Proper Name)

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

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

\_\_\_\_\_  
(Signature of Subcontract or Contractor)

\_\_\_\_\_  
(Signature of General Contractor if for Subcontractor)

Representatives to be contacted for service:

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

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

Phone Number: \_\_\_\_\_

## **ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION**

This Escrow Agreement is made and entered into by and between the Mt. San Jacinto Community College District, 1499 N. State Street, San Jacinto, California 92583, 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 \_\_\_\_\_ 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 ten (10) days of 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 the Owner, and shall designate the Contractor as beneficial owner.
2. The Owner shall make progress payments to the Contractor for such 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 payments of Retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the Contractor until such time as the escrow created under this Contract is terminated. The Contractor may direct the investment of the payments into securities. All terms and conditions of this 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 (7) days' written notice to the Escrow Agent from the Owner of the notice of default under Article 2.2, Article 9.6 or Article 14, 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 payment 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 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:

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Title

---

Name

---

Signature

---

Address

On behalf of Contractor:

---

Title

---

Name

---

Signature

---

Address

On behalf of Agent:

---

Title

---

Name

---

Signature

---

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 Agreement.

IN WITNESS WHEREOF, the parties have executed this Agreement by their proper officers on the date set forth above.

OWNER

CONTRACTOR

---

Title

---

Title

---

Name

---

Name

---

Signature

---

Signature

## **ARTICLE 1 DEFINITIONS**

### **1.1 BASIC DEFINITIONS**

NOTE: The following shall not be construed as a comprehensive list of all definitions in the Contract Documents and there may be other definitions set forth in the Contract Documents. Additionally, any references to any DSA forms, documents or requirements shall be construed to incorporate any updates, supplements, or additions. The Contractor shall be required to meet the latest DSA requirements applicable to the Project.

1.1.1 Action of the Governing Board is a vote of a majority of the Owner's Governing Board.

1.1.2 Approval means written authorization through action of the Governing Board. In no case shall the Assistant Superintendent have authority to approve total change orders or modifications to the Project exceeding 10% of the Contract sum.

1.1.3 Architect means the architect, engineer, or other design professional engaged by the Owner to design and perform general observation of the work of construction and interpret the Drawings and Specifications for the Project. (See Article 4)

1.1.4 As-Builts are a set of Plans and Specifications maintained by the Contractor clearly showing all changes, revisions, substitutions, field changes, final locations, and other significant features of the Project. The As-Builts shall be maintained continuously throughout the Work for the Project and is both a prerequisite to the issuance of Pay Application and a requirement for Contract Close-Out. (See Article 3.17)

1.1.5 Beneficial Occupancy is the point in time when a building or buildings are fit for occupancy is fit for occupancy and its intended use. Basic requirements are the building is safe, at or near Substantial Completion, and all life safety is operational. The fact that a building is occupied does not mean that the building is ready for Beneficial Occupancy if there are elements that are unsafe or if life safety items are not operational. Taking occupancy on a structure that is under a fire watch is not considered beneficial occupancy. Further, taking of Beneficial Occupancy is not a point in time when retention is due unless the entire building has obtained a Certificate of Substantial Completion that meets the definition of 1.1.46.

1.1.6 Claims. A Claim is a request for payment, supported by back-up documentation which includes, invoices time sheets, or other documents substantiating legitimacy or entitlement that is submitted during the Project or immediately following the Project made prior to the Final Retention Payment Application and prior to Final Completion of the Project. A "Claim" means a separate demand by the Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (3) and amount the payment of which is disputed by the Owner. (See Article 4.6)

1.1.7 Change Order (CO). A CO is a written instrument prepared by the Architect and signed by the Owner (as authorized by the Owner's Governing Board), the Contractor, and the Architect, stating

their agreement upon (1) A description of a change in the Work, (2) The amount of the adjustment in the Contract Sum, if any; and (3) The extent of the adjustment in the Contract Time, if any. (See Article 7.2)

1.1.8 Change Order Request (COR). A COR is a written request supported by backup documentation prepared by the Contractor requesting that the Owner and the Architect issue a CO based upon a proposed change, or a change that results in an adjustment in cost, time or both, or arising from an RFP, CCD or ICD. (See Article 7.6)

1.1.9 Close-Out means the process for Final Completion of the Project, but also includes the requirements for the DSA Certification that the Project is Complete (See DSA Certification Guide). (See Article 9.9)

1.1.10 Construction Change Document (CCD). A Construction Change Document is a DSA term that is utilized to address changes to the DSA approved Plans and Specifications. There are two types of Construction Change Documents. (1) DSA approved CCD Category A for work affecting Structural, Access or Fire-Life Safety of the Project which will require a DSA approval; and, (2) CCD Category B for work NOT affecting Structural Safety, Access Compliance or Fire and Life Safety that will not require a DSA approval (except to confirm that no Approval is required). Both CCD Category A and Category B shall be set forth in DSA Form 140 and submitted to DSA as required. (See Article 7.3)

1.1.11 Complete means that all Work in the Contract Documents is finished, the requirements of the Contract Documents have been met, the Project has been Closed Out, and all Work has ceased on the Project. This may also be referred to as Final Completion. In most cases, the recording of a Notice of Completion shall represent Completion of the Project. Beneficial Occupancy does not mean the Work is Complete.

1.1.12 Completion Date is the date when all Work for the Project shall be Substantially Complete and is the date assigned at the end of the Contract Time for the Project. (See Article 1.1.46)

1.1.13 Construction Manager. The Construction Manager is a consultant to the Owner contracted to assist in Project planning, management and construction of the Project. If there is a Construction Manager, they may assist in various aspects of the Project including, but not limited to Monitoring the progress of the construction, reviewing and monitoring the schedule, progress of work, monitoring pay requests, facilitating communications, advising the Owner and its Board of Education on various aspects of the construction process, monitoring the RFI, COR, CCD, ICD, RFP, Claims, Disputes and other Project related processes.

1.1.14 Contract or Agreement when the terms are used in these General Conditions shall be references to the Contract Documents as defined herein.

1.1.15 Contract Documents (sometimes referred to as Construction Documents) consist of the Agreement between Owner and Contractor (hereinafter the Agreement or Contract), Conditions of the Contract (General, Supplementary and other Conditions), Drawings, Specifications, Addenda issued prior to bid, instructions to bidders, notice to bidders, and the requirements contained in the Bid Documents, other documents listed in the Agreement, and Modifications issued after execution of the Contract. A Modification is a written amendment to the Contract signed by parties, a Change Order, a Construction Change Document, or a written order for a minor change in the Work issued by the Architect. 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 and Contractor, between the Owner and any Subcontractor or Sub-subcontractor, or between any persons or entities other than the Owner and the Contractor. The Architect shall, however, be entitled to performance and enforcement of obligations under the Contract intended to facilitate performance of the Architect's duties.

1.1.16 Contract Time is the time period specified in the Contract Documents in which the Project shall be completed. This is sometimes referred to a Contract Duration, or "time in which the Contractor has to complete the Project". (See Article 8.1.1)

1.1.17 Contractor, Owner, and Architect are those mentioned as such in the Agreement. They are treated throughout the Contract Documents as if they are of singular number and neuter gender. Any reference to "Owner" shall mean "District" or Mt. San Jacinto Community College District.

1.1.18 Cure is the act of remedying a material failure to perform under the terms of the Contract Documents during the time provided to correct Contractor's Default. Specific time periods are provided to Cure and Correct a Contractor Default under Article 14 and for a Partial Default under Article 2.2 as well as elsewhere in the Contract Documents.

1.1.19 Days mean calendar days unless otherwise specifically stated.

1.1.20 Default is a material breach of Contract. A Termination for Cause under Article 14 is a declaration of Default of the Contract and shall act as a demand upon the Surety to perform under the terms of the Performance Bond. Partial Defaults may also be tendered to the Surety at Owner's discretion. (See Article 2.2)

1.1.21 Dispute. A dispute is a disagreement on terms or conditions of the Project where the Contractor's opinion of the Project, Payment, Change Order or Request for Proposal differs from that of the Owner or Architect. A dispute only rises to the level of a claim once the dispute is assembled with back-up documentation and presented for evaluation. (See Article 4.6)

1.1.22 District/Owner Representative is the person designated by the Owner to represent the Owner during the Construction for the Project. This Owner representative shall have the delegated authority. This Owner representative may be an employee of the Owner, and may also include Construction Managers who shall have the authorities as set forth in Article 1.1.13. In some cases, the Owner and its Board may be assisted by a Construction Manager. When a Construction Manager is assisting the Owner, the Contractor, Architect, and Inspector shall have a primary contact with the Owner's Construction Manager who will advise the Owner.

1.1.23 Drawings or Plans 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. Sometimes Drawings will also be included in Addenda, Change Orders, and Specifications.

1.1.24 DSA is the Division of State Architect. DSA is the agency that provides design and construction oversight for K-12 Schools, Community Colleges, and State Funded Charter School Projects. DSA is the responsible agency for this Project and Contractor has submitted a bid for the Project since Contractor is familiar with Contractor's responsibilities under the DSA requirements more thoroughly set forth at Title 24 of the California Code of Regulations. Contractor agrees to abide by the jurisdiction of



DSA and shall construct the Project to conform with the approved Plans, Specifications, Addenda, and Change Orders (inclusive of approved CCD's and ICD's issued by the Owner pending CCD approval). The DSA website is at <http://www.dgs.ca.gov/dsa>.

1.1.25 Emergency shall be defined as a sudden, unexpected occurrence, involving a clear and imminent threat to the continuation of classes, a critical path delay that will result in not being able to occupy the campus or building when students arrive to use the facility, danger from the facility or from outside the facility, Act of God, or other action which requires immediate action to prevent or mitigate loss of, or damage to, life, health, property, or essential public services.

1.1.26 [Reserved]

1.1.27 Immediate Change Directive. (ICD) A written order prepared by the Architect and signed by the Owner and the Architect, directing a change in the Work where the Work must proceed immediately and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. (See Article 7.3)

1.1.28 Inspector of Record (IOR) or Project Inspector (PI) is the individual retained by the Owner in accordance with Title 24 of the California Code of Regulations and who will be assigned to the Project

1.1.29 Notice of Non-Compliance (DSA Form 154) is a document issued by the Inspector if there is a deviation from the DSA approved Plans, Specifications, and Change Orders. (See Article 7.1.2)

1.1.30 Payment Application, Pay Application or Certificate of Payment is the Contractor's certified representation of the actual level of Work performed on the Project. Payment Applications are sometimes also called "Certificate of Payment", "Request for Payment", or similar terms, and shall follow the Schedule of Values that are approved by the Architect, Inspector and Owner. (See Article 9.3)

1.1.31 The Project is the complete construction of the Work performed in accordance with the Contract Documents.

1.1.32 The Project Manual is the volume assembled for the Work which may include, without limitation, the bidding requirements, sample forms, Conditions of the Contract, Reports and Specifications.

1.1.33 Provide shall include "provide complete in place," that is "furnish and install complete."

1.1.34 Punch List/ Punch Item/ Incomplete Punch Item is a list of minor repair items, prepared after the issuance of a Certificate of Substantial Completion, by the Inspector and Architect of Work required in order to complete the Contract Documents and ensure compliance with the DSA Approved Plans so the Project may be Closed Out. Issuance of the Retention Payment is dependent of the proper completion of the Punch List. (See Article 9.9)

1.1.34.1 *Contractor's List of Punch Items* is a list of minor repair items the Contractor submits when the Contractor considers the Work Substantially Complete. Submission of this List of Incomplete Punch Items is the Contractor's representation that the Project is Substantially Complete. (See Article 9.9.1)

1.1.35 A Request for Information (RFI) is a written request prepared by the Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item which the

Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems which have arisen under field conditions. (See Article 7.4)

1.1.36 A Request for Proposal (RFP) is a written request prepared by the Architect (and/or CM) requesting the Contractor to submit to an estimate of the effect of a proposed change on the Contract Price and (if applicable) the Contract Time. (See Article 7.5)

1.1.37 Safety Orders are those issued by any city, county, state or federal agency having jurisdiction over the Project.

1.1.38 Schedule is the Contractor's view of the practical way in which the Work will be accomplished. See. Article 8 of the General Conditions.

1.1.39 Schedule of Values is a detailed breakdown of the Contract Price for each Project, building, Phase of Work or Site as determined by the Owner. This Schedule of Values shall adequately detail the price for the Work so Progress Payments Applications can be meaningfully reviewed by the Inspector, Architect of Record, Engineer of Record, and Owner. (See Article 9.2)

1.1.40 Separate Contracts are Contracts that the Owner may have with other Contractors, vendors, suppliers, or entities to perform Work on the Project. This may include, but is not limited to Multi-Prime Trade Contractors, furniture installers, testing agencies, clean-up contractors, or network or low voltage contractors. Contractor shall plan for certain other contractors that may also be working on the Project site and address these other contractors in Contractor's Schedule. (See Article 6)

1.1.41 Site refers to 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.

1.1.42 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.

1.1.43 Standards, Rules, and Regulations referred to are recognized printed standards and shall be considered as one and a part of these Specifications within limits specified. Federal, state and local regulations are incorporated into the Contract Documents by reference.

1.1.44 Stop Work Order, or an Order to Comply, is issued when either (1) the Work proceeds without DSA approval; (2) the Work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the Work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until DSA withdraws the Stop Work Order. Pursuant to Education Code Section 17307.5(b) and Education Code Section 81133.5, the Owner shall not be held liable in any action filed against the Owner for any delays caused by compliance with the Stop Work Order.

1.1.45 Subcontractor, as used herein, includes those having direct or indirect contracts with Contractor and ones who furnished labor, material or services for a special design according to Plans, Drawings, and Specifications of this Work.

1.1.46 Substantial Completion is not reached unless and until each of the following four (4) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch Items (See Article 9.9 ); (2) All Fire/Life Safety Systems have been

installed, and are working and signed off on the DSA Form 152 Inspection Card, all building systems including mechanical, electrical and plumbing are all functioning; (3) all other items DSA Form 152 Inspection Card for the Project have been approved and signed off; and (4) the Project is fit for occupancy and its intended use. For the purposes of this Contract, any references to Completion Date mean Substantial Completion Date.

1.1.47 Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by the Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of Article 3.10.

1.1.48 Supplementary Conditions/ Supplementary General Conditions or Special Conditions are terms that are sometimes used interchangeably and refer to any additional requirements or changes to the General Conditions as noted. In this set of General Conditions, the term used shall be Supplementary Conditions. However, Specifications or other documents may reference Special Conditions, which shall mean the same and Supplementary Conditions.

1.1.49 Surety is the person, firm, or corporation that executes as a bid bond, payment bond or performance bond guarantor on the Contractor's Bid, Contractor's Performance on the Contract and Payment of the Contractor's Subcontractors, material suppliers, vendors and labor on the Project. The Surety is bound to the same extent as the Contractor is bound once a Default occurs. A default includes a Termination for Substantial Failure to Perform under Article 14, but also includes any breach of Contract and is subject to the requirements and responsibilities as set forth in the Performance Bond.

1.1.50 Work shall include all labor, materials, services and equipment necessary for the Contractor to fulfill all of its obligations pursuant to the Contract Documents. It shall include the initial obligation of any Contractor or Subcontractor who performs any portion of the Work, to visit the Site of the proposed Work (a continuing obligation after the commencement of the Work), to fully acquaint and familiarize itself with the conditions as they exist 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 shall fully understand the facilities, physical conditions, and restrictions attending the Work under the Contract Documents. Each such Contractor and its Subcontractor shall also thoroughly examine and become familiar with the Drawings, Specifications, and associated Contract Documents and bid documents before preparing and submitting any bid.

1.1.51 Workers include laborers, workers, and mechanics.

## **1.2 EXECUTION, CORRELATION AND INTENT**

### **1.2.1 Correlation and Intent**

1.2.1.1 *Documents 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 form the Contractor's Contract with the Owner. Any item of Work mentioned in the Specifications and not shown on the Drawings, or shown on the Drawings and not mentioned in the Specifications, shall be provided by Contractor as if shown or mentioned in both. The Contractor is bound to provide the Work complete and is under a legal duty to carefully study plans and schedule operations well ahead of time and identify inconsistencies with the Plans and Specifications and call such inconsistencies to the attention of the Architect or Registered Engineer through the Inspector under Article 4-343(b) of Title 24.

1.2.1.2 *Work to be Complete.* Contractor has thoroughly studied the Contract Documents and understands that the Owner contracted with Contractor to provide a complete Project which means complete systems and buildings. Work includes, but is not limited to materials, workmanship, and manufacture of fabrication of components for the Project.

1.2.1.3 *Coverage of the Drawings and Specifications.* The Drawings and Specifications generally describe the Work to be performed by 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, which is shown on either the Drawings or the Specifications (or is reasonably inferable therefrom as being necessary to complete the Work), shall be provided by the Contractor.

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

1.2.1.5 *Conformance with Laws.* Each and every provision of law required by law to be inserted in this 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, 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. (See Title 24 Section 4-343)

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

1.2.1.6 *[Reserved]*

1.2.1.7 *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 of the same construction are shown in outline only, the complete or more detailed shall apply to the Work which is shown in outline.

1.2.1.8 *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.

## 1.2.2 Addenda and Deferred Approvals

1.2.2.1 *Addenda* are the changes in Specifications, Drawings, Contract Documents, and Plans which have been authorized in writing by the Owner or Architect, 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.

1.2.2.2 *Deferred Approvals.* Deferred Approvals are Submittals that are reviewed by the Architect (or Engineer of Record) and submitted to DSA for approval based on thorough detailing of manufacturer and Project specific design. See Article 3.9.1 and 3.9.3. Contractor is responsible for all Deferred Approval requirements set forth in the Contract Documents. Contractor is responsible to comply with all laws, building codes, Title 24 and regulations necessary to obtain all necessary approvals, including those required from the Division of the State Architect (“DSA”) and the State Fire Marshall. Contractor shall not be granted an extension of time for failure to plan, schedule for and obtain necessary approvals. Contractor shall Schedule all deferred approval items in the Baseline Schedule and Schedule Updates under Article 3.9.6

1.2.2.3 [Reserved]

### 1.2.3 Rules of Document Interpretation

1.2.3.1 If Contractor observes that Drawings and Specifications are in conflict, Contractor shall, prior to commencing work, notify the Architect in writing for the purposes of obtaining an interpretation of the Contract Documents.

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

- a. General Conditions take precedence over Drawings and Specifications.
- b. Supplemental Conditions and Special Conditions take precedence over General Conditions.
- c. The Agreement Form shall take precedence over the Supplemental Conditions and Special Conditions.
- d. In the case of disagreement or conflict between or within Specifications, and Drawings, the more stringent, higher quality, and greater quantity of Work shall apply.
- e. Addenda shall take precedence over Drawings and Specifications.
- f. General Conditions shall take precedence over Addenda.
- g. Drawings and Specifications take precedence over the Soils Report.

## 1.3 OWNERSHIP AND USE OF ARCHITECT’S DRAWINGS, SPECIFICATIONS AND OTHER DOCUMENTS

The Drawings, Specifications, and other Contract Documents for the Project are the property of the Owner and/or Architect pursuant Contract requirements between the Owner and Architect. Neither the 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 and/or Owner.

## **1.4 INFORMATION AND SERVICES REQUIRED OF THE OWNER**

### **1.4.1 Utilities**

1.4.1.1 *Location of Point of Connection.* The locations shown for the point of connection are approximate. It shall be the responsibility of the Contractor to determine the exact location of all service connections.

1.4.1.2 *Regional Notification Center.* Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) working 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 Owner, and obtain an inquiry identification number from that notification center. See Government Code Section 4216.3. No excavation shall be commenced and carried out by the Contractor unless such an inquiry identification number has been assigned to the Contractor or any subcontractor of the Contractor and the Owner has been given the identification number by the Contractor. Any damages arising from failure to make appropriate regional notification shall be at the sole risk of Contractor. Contractor shall solely be responsible for any fines, penalties or damages for violation of this Article and Government Code Section 4216.6 or 4216.7. Any delays caused by failure to make appropriate regional notification shall be at the sole risk of Contractor and shall not be considered for extension of time pursuant to Paragraph 8.4.

1.4.1.3 *Utilities - Removal and Restoration.* The Owner has endeavored to determine the existence of utilities at the Site of the Work from the records of the Owner 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. Thus, the locations of the Main or Trunklines located on the Drawings are approximate locations and not exact.

No excavations were made to verify the locations shown for underground utilities.

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. Contractor shall show timing of all utility coordination activities under the Scheduling requirements of Article 8.

## ARTICLE 2 OWNER

### 2.1 [Reserved]

### 2.2 OWNER'S RIGHT TO CARRY OUT THE WORK DUE TO PARTIAL DEFAULT IN A SPECIFIC SEGREGATED AREA OF WORK (TWO (2) BUSINESS DAY NOTICE TO CURE AND CORRECT)

If the Contractor Defaults or neglects to carry out the Work in accordance with the Contract Documents, the Owner may provide a two (2) business day written notice to cure (a shorter period of time in the case of Emergency or a critical path delay as defined in Article 2.2.1) Contractor's Partial Default in a specific segregated area of work. The Owner's right to issue a Partial Default of the Contractor's Work and take over that segregated area of Work includes, but is not limited to:

1. Failure to supply adequate workers on the entire Project or any part thereof;
2. Failure to supply a sufficient quantity of materials;
3. Failure to perform any provision of this Contract;
4. Failure to comply with safety requirements, or due to Contractor is creation of an unsafe condition;
5. Cases of bona fide emergency;
6. Failure to order materials in a timely manner;
7. Failure to prepare deferred-approval items or Shop Drawings in a timely manner;
8. Failure to comply with Contractor's Baseline or Update Schedule, meet critical Milestones which would result in a Delay to the Critical Path, or Delay the Contract Time;
9. Failure to comply with the Subletting and Subcontracting Fair Practices, Public Contract Code section 4100, et seq.
10. Failure to meet the requirements of the American's with Disabilities Act;
11. Failure to complete Punch List work;
12. Failure to proceed on an Immediate Change Directive; and/or
13. Failure to correct a Notice of Deviation.

If during the two (2) business day period, the Contractor fails to Cure and correct the deficiency noted in the notice of Partial Default with diligence and promptness, the Owner may correct such deficiencies without prejudice to other remedies the Owner may have, including a Termination for Cause as set forth in Article 14. If there are inadequate funds remaining the Project balance or in the Retention Escrow to address at least 150% of the costs set forth in the Article 2.2 notice, the Owner may copy the

Surety on the written notice of Partial Default. If a notice to the Surety is provided, except in the cases of Emergency or Critical Path Delay, the Surety has the option to take over and complete the Work described in the written notice if Surety personally delivers notice to Owner that it intends to perform such work. In the case where written notice has been provided, the Owner shall allow Surety seven (7) days to perform the Work.

2.2.1 Service of Notice of Partial Default with Right to Cure

A written notice of Partial Default and right to Cure under Article 2.2 (“Article 2.2 Notice” or “Notice of Partial Default”) shall be served by facsimile (with a copy provided by e-mail to the e-mail address provided on the Bid submitted and copied to the Project Superintendent).

2.2.2 Shortened Time for Partial Default in the Case of Emergencies.

In an Emergency situation, the Owner may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies by providing service of written notice of Emergency requiring a shortened time for Partial Default specifying the time given to Cure, if any.

2.2.3 Shortened Time for Partial Default in the Case of Critical Path Delay

In the case of critical path delay, the Owner may correct any of the deficiencies described in Article 2.2 without prejudice to other remedies providing service of written notice of Critical Path Delay to the Contractor with a specific description of the critical path delay items noting the line item or area of Work that is on the Critical Path and prescribe the length of shortened time to Cure, if any.

2.2.4 Written Notice of Partial Default to be Deducted by Deductive Change Order

The Owner shall have the right to determine the reasonable value of the Article 2.2 Partial Default Work, or if there is an actual value for the Work, shall use that value and issue a Deductive Change Orders under Article 7.7.4.



## **ARTICLE 3 THE CONTRACTOR**

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

#### **3.1.1 Contractor**

The Contractor shall continually supervise and direct the Work using the Contractor's best skill and attention. The Contractor shall be solely responsible for and have control over construction means, methods, techniques, sequences, procedures; and shall coordinate all portions of the Work under the Contract, unless the Contract Documents give other specific instructions concerning these matters. The Contractor shall not perform the Work without utilizing the Contract Documents or, where required, approved Submittals, Shop Drawings, or Samples for any such portion of the Work. If any of the Work is performed by contractors retained directly by the Owner, 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 pursuant to the requirements of Article 6 and Article 8. Specific duties of the 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:

1. *Responsibilities.* It is the duty of the Contractor to complete the Work covered by his or her Contract in accordance with the approved Plans and Specifications. The Contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of their duties.
2. *Performance of the Work.* The Contractor shall carefully study the approved Plans and Specifications and shall plan its schedule of operations well ahead of time. If at any time it is discovered that work is being done which is not in accordance with the approved Plans and Specifications, the Contractor shall correct the Work immediately.

#### **3.1.2 Contractor Responsibility to Study the Plans and Specifications**

All inconsistencies or timing or sequences which appear to be in error in the Plans and Specifications shall promptly be called to the attention of the Architect or, Engineer, for interpretation or correction. Local conditions which may affect the structure shall be brought to the Architect's attention at once. In no case, shall the instruction of the Architect be construed to cause work to be done which is not in conformity with the approved Plans, Specifications, change orders, construction change documents, and as required by law. (See Title 24 Section 4-343)

#### **3.1.3 All Work Under the Direction of Inspector**

Pursuant to Title 24 requirements, the Contractor shall not carry on Work except with the knowledge of the Inspector. (See Title 24 generally)

#### **3.1.4 Contractor to Establish Timing and Protocol with Inspector**

Contractor shall establish a protocol for requesting inspection with Inspector so as to not delay the Work and provide adequate time for the Inspector to perform inspection. If such a protocol is not established ahead of time, Inspector may utilize the time criteria set by Title 24 of 48 hours in advance of submitting form DSA 156 for each new area. The DSA requirements under PR 13-01 specifically give the

Special Inspector fourteen (14) days to post to the DSA website. Contractor is responsible for delays and for failure to plan.

For some Projects, there may be a need to incrementally install certain assemblies. It is up to Contractor to identify areas and assemblies that may be constructed incrementally. Contractor must identify and establish incremental areas of construction and establish protocols with Inspector for DSA 152 approvals so they may be presented to DSA. (See PR-13 item 1.17 for further discussion)

#### 3.1.5 Verified Reports

The Contractor shall make and submit to the office from time to time, verified reports as required in Title 24 Section 4-366. As part of the Close-Out of the Project (see Article 9.9), Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343.

Contractor shall fully comply with any and all reporting requirements of Education Code Sections 81147 et seq., in the manner prescribed by Title 24, as applicable.

#### 3.1.6 Contractor Responsibility

The Contractor shall be responsible to the Owner for acts and omissions of the 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 Contractor or any of its Subcontractors.

#### 3.1.7 Obligations not Changed by Architect's Actions

The 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 in the Architect's administration of the Contract or by tests, inspections, or approvals required or performed by persons other than the Contractor.

#### 3.1.8 Acceptance/Approval of Work

The Contractor shall be responsible to determine when any completed portions of the Work already performed under this Contract or provided pursuant to Article 6 are suitable to receive subsequent Work thereon.

### 3.2 SUPERVISION

#### 3.2.1 Supervision

Unless personally present on the Project site where the Work is being performed, the Contractor shall keep on the Work at all times during its progress a competent, English speaking construction Superintendent satisfactory to the Owner. The Superintendent shall represent the Contractor in its absence and shall be fully authorized to receive and fulfill any instruction from the Architect, the Inspector, the Owner or any other Owner representative (including CM in the cases where the Owner has a CM representative). All Requests for Information shall be originated by the Superintendent and responses thereto shall be given to the Superintendent. The Superintendent shall have authority to bind Contractor through the Superintendent's acts. The Superintendent shall represent the Contractor, and communications given to the Superintendent shall be binding on the Contractor. Before commencing the Work, Contractor shall give written notice to Owner (and CM representative) and Architect of the name and a Statement of

Qualifications of such superintendent. If superintendent proves to be unsatisfactory to Contractor and ceases to be employed by Contractor, Contractor shall notify Owner and Architect in writing. A replacement superintendent must be approved by the Owner prior to performing additional work.

### 3.2.2 Staff

Notwithstanding other requirements of the Contract Documents, the 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

Owner shall have the right, but not the obligation, to require the removal from the Project of any superintendent, staff member, agent, or employee of any Contractor, Subcontractor, material or equipment supplier.

## 3.3 LABOR AND MATERIALS

### 3.3.1 Contractor to Provide

Unless otherwise provided in the Contract Documents, the 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 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 Owner, including furnishing the Owner 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.

### 3.3.3 Replacement

Any work, materials, or equipment, which do not conform to these requirements or the standards set forth in the Contract Documents, may be disapproved by the Owner, in which case, they shall be removed and replaced by the Contractor at no additional cost or extension of time to the Owner.

### 3.3.4 Discipline

The Contractor shall enforce strict discipline and good order among the Contractor's and Subcontractor's employees, and other persons carrying out the Contract. The 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 Owner concludes is improperly skilled for the task assigned to that

person, who fails to comply with the requirements of this article, or who creates safety hazards which jeopardize other persons and/or property.

3.3.5 [NOT USED.]

3.3.6 Noise, Drugs, Tobacco, and Alcohol

Contractor shall take all steps necessary to insure that employees of Contractor or any of its subcontractors' employees do not use, consume, or work under the influence of any alcohol, tobacco or illegal drugs while on the project. Contractor shall further prevent any of its employees or its subcontractor employees from playing any recorded music devices or radios or wearing any radio headphone devices for entertainment while working on the project. Likewise, Contractor shall prevent its employees or subcontractor's employees from bringing any animal onto the project. Contractors shall not violate any written college policies.

3.3.7 Delivery of Material

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 set forth in Article 8 of this Agreement. Contractor shall, upon demand from the Architect, furnish to the Architect 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. Contractor shall have a system to receive materials and to ensure that the proper materials are being delivered, including in the case of critical materials to the Project, checking the delivery against Shop Drawings and ensuring that the materials meet the requirements of not only the Plans and Specifications, but also the approved Shop Drawings and Submittals and in conformance with Contractor's plan for delivery of materials (including but not limited to Contractor's representations in the Schedules for the Project and Contractor's equipment and materials schedule under Article 3.7). Contractor shall be responsible for all costs of accepting non-conforming materials delivered to the Project given Contractor's responsibilities and system for acceptance of deliveries. Contractor shall notify Inspector and Owner Representative (including CM) as early as possible, in writing, of the delivery of materials for the Project. The deliveries shall include documentation identifying the shipment sufficiently so that the Inspector, Architect or Owner Representative (including CM) may review the materials that are received.

Under no circumstances shall materials be delivered to the Project site that are meant for another Project.

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. 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 Owner free from any claims, security interests, liens, or charges. Contractor further agrees that neither it nor any person, firm, or corporation furnishing any materials or labor for any Work covered by this Contract shall have any right to place a lien upon the premises or any improvement or appurtenance thereof, except that 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 event of installation of any such

metering device or equipment, Contractor shall advise Owner as to its owner within five (5) days of such installation in writing, prior to making the installation.

Contractor agrees to indemnify, defend and hold the Owner harmless from any liens, stop notices, or assertion of security interests, including judgments and levies. If after written notice Contractor fails to address the lien, stop notice, or other security interest, the Owner may proceed to address the lien, stop notice or claim and seek reimbursement from Contractor.

3.3.8.1 *Stop Notice Releases.* All Stop Notice Releases shall be notarized and either executed by the same person who filed the Stop Notice or from an officer of the Trade Contractor or manager of Trade Contractor authorized to release Stop Notices.

### 3.3.9 Title to Materials

The title to new materials or equipment for the Work of this Contract shall remain with Contractor until incorporated in the Work of this Contract until Final Acceptance of the Project; no part of said materials shall be removed from its place of storage, and Contractor shall keep an accurate inventory of all said materials and equipment in a manner satisfactory to the Owner or its authorized representative. Responsibility for materials remains with Contractor and Contractor shall replace materials in case of loss. Owner similarly may pay for materials stored off site, but Contractor shall remain responsible for the materials that are stored off site.

### 3.3.10 [Reserved]

### 3.3.11 Noise Control

The Contractor shall be responsible for the installation of noise reducing devices on construction equipment. Contractor shall comply with the requirements of the city and county having jurisdiction with regard to noise ordinances governing construction sites and activities. If classes are in session at any point during the progress of the Project, and, in the Owner's reasonable discretion, the noise from such Work disrupts or disturbs the students or faculty or the normal operation of the campus, at the Owner's request, the Contractor shall schedule the performance of all such Work around normal campus hours or make other arrangements so that the Work does not cause such disruption or disturbance. There are specific periods of testing at operational campuses and it is critical that Contractor control noise during periods of testing. In no event shall 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. All noise related issues, including campus operations, and noise during testing should be detailed in the Schedule provided pursuant to Article 8

## 3.4 WARRANTY

The Contractor warrants to the Owner and Architect that material and equipment furnished under the Contract will be of the highest quality and new unless otherwise required or permitted by the Contract Documents, that the Work will be free from defects not inherent in the quality required or permitted, and that the Work will 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. Contractor's warranty to Owner includes, but is not limited to, the following representations:

1. In addition to any other warranties provided elsewhere, Contractor shall, and hereby does, warrant all Work after the date of Notice of Completion of Work by Owner and shall repair

or replace any or all such Work, together with any other Work, which may be displaced in so doing that may prove defective in workmanship or materials within a one (1) year period from date of Final Completion which shall be no later than the final date of Punch List as noted at Article 9.11) without expense whatsoever to Owner, ordinary wear and tear, unusual abuse or neglect excepted. Owner will give notice of observed defects with reasonable promptness. Contractor shall notify Owner upon completion of repairs.

2. In the event of failure of Contractor to comply with above mentioned conditions within one week after being notified in writing, Owner is hereby authorized to proceed to have defects repaired and made good at expense of Contractor who hereby agrees to pay costs and charges therefore immediately on demand.
3. This Article 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. Contractor shall furnish Owner all appropriate guarantee or warranty certificates upon completion of the project.

### **3.5 TAXES**

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

### **3.6 PERMITS, FEES AND NOTICES**

#### **3.6.1 Payment**

The Contractor shall secure and pay for 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 Division of the State Architect (DSA). Owner shall be responsible for all testing and inspection as required by the DSA on-site or within the distance limitations set forth in Paragraph 13.5.2, unless a different mileage range is specified in the Supplemental Conditions.

3.6.1.1 *DSA Fees.* DSA policy is to charge CCD review fees for processing and approval of changes in the Plans and Specifications through the Construction Change Document process. Contractor is specifically directed to the current DSA IR A-30 which provides fee structure and charges that will be incurred for proceeding is with respect to the CCD process, a process that must be followed for each change in the Plans and Specifications.

#### **3.6.2 Compliance**

The Contractor shall comply with and give notices required by any law, ordinance, rule, regulation, and lawful order of public authorities bearing on performance of the Work. Specifically, the Division of State Architect provides State oversight of the Project and enforcement of Title 24 rules and regulations. Contractor is directed to the DSA website at <http://www/dgs/ca/gov/dsa/home>. There will be local governmental oversight from City, County or both. Finally, Regional Water Quality Control Board, State Fire Marshall, local fire marshal, Department of Industrial Relations, Department of Labor Standards Enforcement, and Air Quality Management Owner (Local and State) are some of the agencies that provide oversight and may require specific permits, fees, or provide oversight over the Project. Contractor represents understanding and specialized knowledge of the rules governing Owners and Contractor shall

maintain compliance over the applicable rules and will file all documents required in order to ensure compliance with State, local, and other rules that apply to the Project.

### **3.7 SUBMITTALS REQUIRED AT THE COMMENCEMENT OF THE PROJECT**

#### **3.7.1 Requirements Within Ten (10) Calendar Days**

Within ten (10) calendar days after Notice to Proceed, Contractor shall submit the following:

3.7.1.1 Detailed Schedule of Values (See Article 9.2)

3.7.1.2 Submittal Listing and Schedule for Submittals

3.7.1.3 Critical Path Schedule (See Article 8)

#### **3.7.2 Requirements Within Thirty-Five (35) Calendar Days**

Unless otherwise shortened by the Contract Documents, within thirty-five (35) calendar days after Notice to Proceed, Contractor shall submit the following:

3.7.2.1 *All Submittals for the Project* except those specifically agreed upon by Owner and Architect, in writing, and shall be specifically incorporated into the Submittal section of the Schedule so as to not delay the Work. The agreement to allow a later Submittal does not mean that Article 3.3.7 is waived.

### **3.8 DOCUMENTS, SAMPLES, AND COMPUTER AT THE SITE**

The Contractor shall maintain at the Site for the Owner one current copy of the California Building Code, Titles 19 and 24 of the California Code of Regulations, any other document required by DSA, 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 Contractor shall maintain at the Site approved Shop Drawings, Product Data, Samples, and similar required Submittals. These documents shall be available to the Architect and shall be delivered to the Architect for delivery to the Owner upon completion of the Work.

Contractor shall have an operational computer with internet access so Contractor can review and post documents as required for the Project, including but not limited to the filing and posting of DSA required documents for the Project.

Contractor shall be prepared to post and review documents posted to the DSA Project website.

### **3.9 SUBMITTALS INCLUDING SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES**

#### **3.9.1 Definitions**

3.9.1.1 *Deferred Approvals.* Approval of certain aspects of the construction may be deferred until the construction Contract has been awarded. To facilitate the design process, DSA grants deferred approval to the design and detailing of certain elements of the Project at the request of the Architect or Engineer of Record. Design elements that may be deferred may include, but are not limited to Access floors, Bleachers, Elevator guide rails and related elevator systems, Exterior wall systems - precast concrete,

glass fiber reinforced concrete, etc. , Skylights, Window wall systems, storefronts, Stage rigging, and other systems as noted in the Contract Documents. (Also see Article 1.2.2 and 3.9.3)

3.9.1.2 *Shop Drawings.* The term “Shop Drawings” as used herein means drawings, diagrams, equipment or product schedules, and other data, which are prepared by 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.

3.9.1.3 *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.

3.9.1.4 *Submittals* is a term used interchangeably and sometimes refers to Shop Drawings, Product Data, and Samples since all subcontractor submissions are tracked in a Submittal Log and may include any of the noted items. However, generally, a Submittal is a manufacturer's product information and product data including description, characteristics, size, physical characteristics, and requirements to prepare the jobsite for receiving of the particular manufactured item.

3.9.1.5 *Samples.* The term “samples” as used herein are physical examples furnished by 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, etc., proposed by the Contractor conform to the required characteristics of the various parts of the Work. All Work shall be in accordance with the approved samples.

### 3.9.2 Shop Drawings.

3.9.2.1 *When Shop Drawings Are Required.* Shop Drawings are required for prefabricated components and for installation and coordination of these prefabricated components into the Project. In addition, Shop Drawings, are prepared to address the actual size and installation of components from various subcontractors and provides an opportunity for the Contractor to coordinate and address conflicts between the subcontracting trades.

3.9.2.2 *Shop Drawing Requirements.* The 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 Contractor to illustrate a material, product, or system for some portion of the Work.

3.9.2.3 *Not a Reproduction of Architectural or Engineering Drawings.* The Shop Drawings are not a reproduction of the architectural or engineering drawings. Instead, they must show



more detail than the Construction Documents and details the fabrication and/or installation of the items to the manufacturer's production crew or Contractor's installation crews.

3.9.2.4 *Shop Drawings Engineering Requirements:* Some Shop Drawings require an engineer stamp to be affixed on the Drawings and calculations. In such cases, a current and valid engineering stamp shall be affixed by a California registered engineer. No out of State engineers shall stamp Shop Drawings. (See DSA IR A-18). In most cases, an engineer means California registered mechanical, structural, electrical or plumbing engineer. California Registered Civil Engineers will not be accepted for structural details unless specifically approved by DSA.

### 3.9.3 Deferred Approvals

Deferred approvals shall be submitted and processed to ensure all DSA and other governmental approvals are secured so as to not delay the Project. There may be additional requirements for deferred approvals at Division 1 of the Specifications. All deferred approvals shall be prepared by Contractor or Contractor's agent early enough so as to not delay the Project. Contractor is aware that Title 24 California Code of Regulations Section 4-317 has specific requirements for deferred approval as to governing agencies and as to the Architect and Engineer for the Project. As a result, any delay associated with the time for approval by applicable agencies or by the Architect or Architect's consultants shall be Contractor's. Contractor is required to comply with inclusion of Deferred Approvals in the Schedule as required under Article 3.9.6

3.9.3.1 *DSA Approvals Required Prior to Work.* No work on a deferred approval item may proceed on the components until DSA approval is received. Contractor has provided DSA approval time and allowed adequate time for any DSA revisions in Contractor's Schedule as required pursuant to Article 8.

### 3.9.4 Submittals and Samples

3.9.4.1 *Information Required With Submittals:* Manufacturer, trade name, model or type number and quantities: Information provided must be of sufficient detail to allow Architect and Engineer to compare the submitted item with the specified products and acceptable products listed, in the Specifications and addenda.

3.9.4.2 *Finish Characteristics:* The Architect reviews the available finishes and selects the appropriate finish, if the finish was not previously specified in the documents. The Contractor should confirm that finish requirements in the Specification are being met by the product.

3.9.4.3 *Contractor Responsible for Jobsite Dimensions:* Some material is custom-fabricated to job conditions, requiring dimensions from the jobsite. These jobsite dimensions are provided by the Contractor as part of the Contractor's responsibilities for the Project and shall be provided prior to release of the product for manufacture. Contractor shall not rely on Architect or Engineers to provide jobsite dimensions.

### 3.9.5 Submittal Submission Procedure

3.9.5.1 *Transmittal Letter and Other Requirements.* All Submittals 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 Contractor. Each drawing shall have a clear space for the stamps of Architect and Contractor.

3.9.5.2 *Copies Required.* Each Submittal shall include one (1) legible, reproducible (if electronic is available, electronic copies shall also be provided) and five (5) legible prints of each drawing or schedule, table, cut sheet, etc., 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. Subcontractor shall submit copies, in an amount as requested by the Contractor, of: (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 Owner or Architect. (See also Division 1)

3.9.5.3 *Corrections.* The Contractor shall make all corrections required by Architect, Owner or CM and shall resubmit, as required by Architect or CM, corrected copies of Shop Drawings or new samples until approved. 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 Contractor pursuant to Paragraph 4.5.

3.9.5.4 *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 Contractor and Architect (and CM, if applicable) and approved by Architect (and CM where applicable) unless specifically directed in writing by the Architect. All such portions of the Work shall be in accordance with approved Shop Drawings and samples.

3.9.5.5 *Owner's Property.* All Submittals, Shop Drawings, computer disks, BIM modeling information, clash checks, schedules, annotated Specifications, samples and other Submittals shall become the Owner's property upon receipt by the Owner or Architect.

### 3.9.6 Schedule Requirements for Submittals

Contractor shall obtain and shall submit all required Submittals (i.e. Shop Drawings, Deferred Approvals, Samples, etc.), in accordance with Contractor's "Schedule for Submission of Shop Drawings and Samples" as required in the scheduling portion of the General Conditions at Articles 8 and the Specifications with such promptness as to cause no delay in its own Work or in that of any other contractor or subcontractor.

3.9.6.1 *Consideration of Schedule.* Contractor has considered lead times, DSA or other agency governmental review times, Architect or Engineer review times, manufacturing seasons, and specific long lead procurement concerns for all submittals for the Project.

### 3.9.7 General Submittal Requirements

3.9.7.1 *Contractor Submittal Representations.* By submitting Shop Drawings, product data, samples, etc., the 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.

3.9.7.2 *[Reserved]*.

3.9.7.3 *No Deviation from Contract Documents.* The submission of the Shop Drawings, product data, samples, etc., 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 Architect or through an accepted substitution pursuant to Paragraph 3.10. 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 Paragraph 3.10, "Substitutions."

3.9.7.4 *[Reserved]*

3.9.7.5 *Incomplete Submittals.* 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 Contractor.

3.9.7.6 *[Reserved]*

3.9.7.7 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, etc., 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 Contractor, 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 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 Contractor or Subcontractors 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. Contractor and Subcontractors shall be solely responsible for any quantities which may be shown on the Submittals or Contract Documents.

### **3.10 SUBSTITUTIONS**

#### **3.10.1 Definition**

A Substitution is a change in product, material, equipment, or method of construction from those required by the Construction Documents proposed by the Contractor. For this Project, a Substitution is subject to the filing of a Construction Substitution Request Form at the time of bid and meeting the requirements of this Article.

#### **3.10.2 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." Subject to the requirements of properly submitting a Substitution Request for as Addressed in

Special Conditions, the Contractor may, unless otherwise stated, offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the Contract Documents.

### 3.10.3 Products Specified Which Are Commercially Unavailable

If the Contractor fails to make a request for substitutions for products, prior to the submission of its bid, and such products subsequently become commercially unavailable, the Contractor may request a substitution for such commercially unavailable item. The decision to grant this request is solely at the Owner's discretion. The written approval of the Owner, consistent with the procedure for Change Orders, shall be required for the use of a proposed substitute material. The Owner may condition its approval of the substitution upon the delivery to Owner 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. All risks of delay due the approval of a requested substitution by the DSA, or any other governmental agency having jurisdiction, shall be on the requesting party. All additional costs, DSA review costs, all procurement and construction delays, and all costs for review by the Architect or its consultants shall be the responsibility of the Contractor and will be deducted from Contractor's pay request.

## 3.11 INTEGRATION OF WORK

### 3.11.1 Scope

The Contractor shall be responsible for cutting, fitting, or patching to complete the Work and to make all parts fit together properly. 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, Contractor shall match, as closely as conditions of Site and materials will allow, the finishes, textures, and colors of the original work, refinishing existing work at no additional cost to Owner. All cost caused by defective or ill-timed work shall be borne by Contractor. 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.

## 3.12 CLEANING UP

### 3.12.1 Contractor's Responsibility to Clean Up

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. 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. Disposal receipts or dump tickets shall be furnished to the Architect within five (5) days of request.

Contractor shall remove rubbish and debris resulting from the Work on a daily basis. Contractor shall maintain the structures and Site in a clean and orderly condition at all times until acceptance of the project by the Owner. 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. All concrete, sidewalks, and paths of travel shall be broom cleaned daily.

### 3.12.2 General Final Clean-Up

Upon completion of Work, Contractor shall employ experience workers or professional cleaners for final cleaning. Clean each surface to the condition expected in a normal, commercial, building cleaning and maintenance program.

- a. Clean interior and exterior of buildings, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected, so surfaces are free from foreign material or discoloration;
- b. Clean the Project site. The grounds should be cleared of any Contractor equipment, raked clean of debris and trash removed. Sweep paved areas broom clean;
- c. Repair or replace any damaged materials. Replace any chipped or broken glass;
- d. Remove any and all stains;
- e. Remove labels that aren't permanent labels;
- f. Clean and polish all glass, plumbing fixtures, equipment, finish hardware and similar finish surfaces. Remove any glazing compounds;
- g. Remove temporary utilities, fencing, barricades, planking, sanitary facilities and similar temporary facilities from Site;
- h. Remove temporary film that remains on any hardware, doors or other surfaces and
- i. Seal the bottom and tops of all doors.

### 3.12.3 Special Clean-Up.

In addition to the general cleaning, the following special cleaning shall be done at the completion of the Work in accordance with the Specifications including, but not limited to:

- a. Remove putty stains from glazing, then wash and polish glazing;
- b. Remove marks, stains, fingerprints and other soil or dirt from painted, stained or decorated work;
- c. Remove temporary protection and clean and polish floors and waxed surfaces;
- d. Clean and polish hardware and plumbing trim; remove stains, dust, dirt, plaster and paint;
- e. Wipe surfaces of mechanical and electrical equipment;
- f. Remove spots, soil, plaster and paint from tile work, and wash tile;

- g. Clean all fixtures and equipment, remove excess lubrication, clean light fixtures and lamps, polish metal surfaces;
- h. Vacuum-clean carpeted surfaces; and
- i. Remove debris from roofs, down spout and drainage system.

#### 3.12.4 Failure to Cleanup

If the Contractor fails to clean up as provided in the Contract Documents, the Owner may do so, and the cost thereof shall be the responsibility of the Contractor pursuant to Article 2.2 and seek a Deductive Change Order.

### 3.13 ACCESS TO WORK

The Contractor shall provide the Owner, the Architect, Engineers and the Inspector of Record, access to the Work in preparation and progress wherever located. Contractor shall provide safe and proper facilities for such access so that Owner's representatives may perform their functions.

### 3.14 ROYALTIES AND PATENTS

#### 3.14.1 Payment and Indemnity for Infringement

Contractor shall hold and save the Owner and its officers, agents, and employees, the Construction Manager, 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 Owner, 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 Owner, the Architect, or the Architect's consultants.

#### 3.15 [Reserved]

#### 3.16 [Reserved]

### 3.17 AS-BUILT DRAWINGS AND ANNOTATED SPECIFICATIONS

Throughout the duration of the Project, Contractor shall maintain on a current basis an accurate and complete set of As-Built Drawings (and Annotated Specifications) 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. In case a Specification allows Contractor to elect one of several brands, makes, or types of material or equipment, the annotations shall show which of the allowable items the Contractor has furnished. The Contractor will update the As-Built Drawings and Annotated Specifications as often as necessary to keep them current, but no less often than weekly.

Contractor shall update As-Built Drawings with complete information on an area of Work at or near the time when the Work is being performed and prior to any DSA 152 sign off and prior to any Work being covered.

The As Built Drawings and Annotated Specifications shall be kept at the Site and available for review and inspection by the Owner and the Architect. Failure to maintain and update the As Built Drawings is a basis to withhold Progress Payments pursuant to Article 9.6.

#### 3.17.1 Upon Beneficial Occupancy

Contractor shall obtain and pay for reproducible Plans upon Beneficial Occupancy. Contractor shall deliver Plans to Owner Representative (Construction Manager if one is hired for the Project).

#### 3.17.2 As-Builts at Completion of Work

On completion of the Work and prior to and as a condition precedent to Application for Retention Payment, the Contractor will provide one neatly prepared and complete set of As-Built Drawings and Annotated Specifications to the Owner. Contractor shall certify the As-Builts as a complete and accurate reflection of the actual construction conditions of the Work by affixing a Stamp indicating the Drawings are As-Builts and Certifying Accuracy on the final set of As-Builts. Failure to deliver a complete Record Set of Drawings may result in significant withholdings to ensure Work is properly documented. (See Article 9.9.1)

### 3.18 EQUIPMENT MANUALS

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 three-ring binders. At the completion of its Work, the Contractor shall certify, by endorsement thereon, that each of the manuals is complete, accurate, and covers all of its Work. Prior to submittal of Contractor's Application for Retention Payment, and as a further condition to its approval by the Architect, each Subcontractor shall deliver the manuals, arranged in logical, sequential order, labeled, indexed, endorsed, and placed in three-ring binders, to the Contractor, who shall assemble these manuals for all divisions of the Work, review them for completeness, and submit them to the Owner through the Architect.

### 3.19 DIR REGISTRATION

Strict compliance with all DIR registration requirements in accordance with Labor Code sections 1725.5 and 1771.1 is a material obligation of the Contractor and all of its subcontractors (of any tier) under the Contract Documents. The foregoing includes, without limitation, compliance with DIR registration requirements at all times during performance of the Work by the Contractor and all of its subcontractors of any tier. The failure of the Contractor and all subcontractors of any tier to be properly registered with DIR at all times during performance of the Work is a material breach of the Contract and subject to termination for cause.

An affirmative and ongoing obligation of the Contractor under the Contract Documents is the verification that all subcontractors of any tier are at all times during performance of the Work are in full and strict compliance with the DIR registration requirements. The Contractor shall not permit or allow any subcontractor of any tier to perform any Work without the Contractor's verification that all subcontractors are in full and strict compliance with the DIR registration requirements. Any subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1. Contractor

or its subcontractors of any tier shall not be entitled to any additional costs or time arising from or in any way related to compliance with the DIR registration requirements.



## **ARTICLE 4**

### **ADMINISTRATION OF THE CONTRACT AND CLAIMS**

#### **4.1 ARCHITECT**

##### **4.1.1 Replacement of Architect**

In the case of the termination of the Architect, the Owner may appoint an Architect or another construction professional or may perform such functions with its own licensed professional personnel. The status of the replacement Architect under the Contract Documents shall be the same as that of the former Architect.

#### **4.2 ARCHITECT'S ADMINISTRATION OF THE CONTRACT**

##### **4.2.1 Status**

Pursuant to Titles 2 of the California Code of Regulations and as required pursuant to the Field Act, Education Code 81130 et seq., the Architect will provide administration of the Contract Documents and the Work, and will be the Owner's representative during construction, as well as during the one (1) year period following the commencement of any warranties. The Architect will have authority to act on behalf of the Owner only to the extent provided in the Contract Documents.

##### **4.2.2 Site Visits**

The Architect will visit the 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 and as otherwise required by DSA.

##### **4.2.3 Limitations of Construction Responsibility**

The Architect, Owner and CM shall not have control over, charge of, or be responsible for construction means, methods, techniques, schedules, sequences or procedures, fabrication, procurement, shipment, delivery, receipt, installation, or for safety precautions and programs in connection with the Work, since these are solely the Contractor's responsibility under the Contract Documents. The Architect, Owner and CM shall not have control over or charge of acts or omissions of the Contractor, Subcontractors, their agents or employees, or any other persons or entities performing or supplying portions of the Work. The 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, Owner or CM in the Architect, Owner or CM's administration of the Contract Documents, or by tests, inspections, or approvals required or performed by persons other than the Contractor.

##### **4.2.4 Communications Facilitating Contract Administration**

Except where a CM is on the Project, or as otherwise provided in the Contract Documents or when direct communications are warranted by special circumstances, the Owner and the Contractor shall communicate through the Architect. In the cases where a CM is hired for the Project, all communication shall be through the CM (unless otherwise directed) with copies to the Owner, Architect and Inspector. Where direct communication is necessary between the Owner and the Contractor, the Owner's communication shall be through the Owner's authorized designated person. Contractor shall not rely upon any communications from the Owner that is not from the Owner's authorized designee. Communications

by and with the Architect's consultants shall be through the Architect. Copies of all communication shall be sent to the Architect, Owner Representative and Inspector.

#### 4.2.5 Payment Applications

The Architect will review and make recommendations to the Owner regarding the amounts due the Contractor on the Certificates for Payment pursuant to Article 9.3.4 and subject to the Inspector's review, (CM review, if applicable) and Architect's observation. This review of Payment Applications is sometimes called a "Pencil Draft." Return of a Pencil Draft shall constitute the Owner's dispute of the Pay Application that has been submitted. Contractor shall promptly respond to Pencil Drafts or Contractor's Pay Applications may be delayed. Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the Prompt Payment of a Request for Payment or Request for Retention.

#### 4.2.6 Rejection of Work

In addition to the rights, duties, and obligations of the Inspector under this Article, the Architect may recommend to the Owner that the Owner reject Work which does not conform to the Contract Documents. Contractor shall, without charge, replace or correct Work found by the Owner to not be in conformance to Contract requirements. Contractor shall promptly segregate and remove rejected materials from the Project site.

This section is does not address a Notice of Non-Compliance and the remedies associated with a Notice of Non-Compliance which are addressed at Article 7.1.2.

### 4.3 PROJECT INSPECTOR

#### 4.3.1 General

One or more project inspectors employed by the Owner 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 Inspector(s) duties are as specifically defined in Title 24 Section 4-333 and 4-342 and in DSA IR A-8.

#### 4.3.2 Inspector's Duties and DSA Noted Timelines for Inspection

All Work shall be under the observation of the Inspector. The Inspector shall have free access to any or all parts of the Work at any time. The Contractor shall furnish the Inspector such information as may be necessary to keep the Inspector fully informed regarding progress and manner of Work and character of materials. Such observations shall not, in any way, relieve the Contractor from responsibility for full compliance with all terms and conditions of the Contract, or be construed to lessen to any degree the Contractor's responsibility for providing efficient and capable superintendence. The Inspector is not authorized to make changes in the Drawings or Specifications nor shall the Inspector's approval of the Work and methods relieve the Contractor of responsibility for the correction of subsequently discovered defects, or from its obligation to comply with the Contract Documents.

Inspector shall electronically post DSA required documents on the DSA electronic posting website. It is the Contractor's responsibility to determine the status of posting and determine if all the criteria for sign off of a category of Work on the Project Inspection Card (Form DSA 152) as defined more thoroughly in the most current version of the DSA 152 manual posted on the DSA website.

Inspector may collaborate with Contractor about approval of areas that may be constructed and approved incrementally under the DSA 152 card pursuant to the guidelines of PR-13 at Article 1.17. Inspector shall work with Contractor to present incremental approval proposals to DSA.

#### 4.3.3 Inspector's Authority to Reject or Stop Work

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

#### 4.3.4 [Reserved]

#### 4.3.5 Testing Times

The Owner will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays). Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the Owner to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall provide adequate time for inspections so as to not delay the Work. .

#### 4.3.6 Special Inspection Out of State, Out of Country or Remote from Project

If Contractor has a subcontractor or supplier that requires in plant or special inspections or tests that are out of the Country, out of State or a Distance of more than 200 miles from the Project site, the Owner shall provide the Special Inspector or individual performing tests time for inspection and testing during normal work hours. Contractor, however, is responsible for the cost of travel, housing, food, out of area premiums that may be in the Inspector/Testing Agreement with Owner, or other expenses necessary to ensure proper inspection or testing is provided by a DSA Certified Inspector, Special Inspector, or individual performing tests. In some cases all three (DSA Inspector, Special Inspector, and Testing) may be required. In addition, if the DSA Certified Inspector, Special Inspector, or individual performing test has contractual travel clauses or special rates for out of town inspection, Contractor is responsible for all costs associated with the contractual travel costs in addition to all other costs. Arrangements for inspection and/or testing shall be made far enough in advance so as to not delay the Work.

### **4.4 STOP WORK ORDER**

DSA may issue a Stop Work Order, or an Order to Comply, when either (1) the Work proceeds without DSA approval; (2) the Work proceeds without a DSA Inspector of Record, or (3) where DSA determines that the Work is not being performed in accordance with applicable rules and regulations, and would compromise the structural integrity of the Project or would endanger lives. If a Stop Work Order is issued, the Work in the affected area shall cease until DSA withdraws the Stop Work Order. See Education Code Section 17307.5(b) and Education Code Section 81133.5.

#### **4.5     RESPONSIBILITY FOR ADDITIONAL CHARGES INCURRED BY THE OWNER FOR PROFESSIONAL SERVICES**

If at any time prior to the completion of the requirements under the Contract Documents, the Owner is required to provide or secure additional professional services (including CM, Inspection, Architect, Engineering and Special Consultant Services) for any reason by any act of the Contractor, the Owner may seek a Deductive Change Order for any costs incurred for any such additional services, which costs shall be deducted from the next progress payment. A Deductive Change Order shall be independent from any other Owner remedies and shall not be considered a waiver of any Owner rights or remedies. If payments then or thereafter due to the Contractor are not sufficient to cover such amounts, the Contractor shall pay the difference to the Owner. Additional services shall include, but shall not be limited to, the following:

- a. Services made necessary by the default of the Contractor (Article 14 or Article 2.2).
- b. Services made necessary due to the defects or deficiencies in the Work of the Contractor (Article 2.2 and Article 9.6).
- c. Spurious or frivolous RFI's issued that do not conform to the requirements of Article 7.4. Issuance of the same RFI after receiving an answer from the Architect or Engineer.
- d. Review of Schedules that are provided by Contractor that do not Conform with the Requirements of Article 8.
- e. Preparation of a CCD or ICD to correct a Contractor Deficiency, or Contractor Caused Notice of Non-Compliance (Article 7.3).
- f. Review of Incomplete Shop Drawings or Submittals, including the submission of Piecemeal Shop Drawings or Submittals unless piecemeal Submittals are specifically agreed upon by Owner (Article 3.9).
- g. Services required by failure of the Contractor to perform according to any provision of the Contract Documents.
- h. Services in connection with evaluating substitutions of products, materials, equipment, Subcontractors' proposed by the Contractor, and making subsequent revisions to Drawings, Specifications, obtaining DSA approvals, DSA costs for review of CCD's, other governmental agency review costs, and providing other documentation required (except for the situation where the specified item is no longer manufactured or available) (Article 3.10).
- i. Services for evaluating and processing Claims or Disputes submitted by the Contractor in connection with the Work outside the established Change Order process.
- j. Services required by the failure of the Contractor to prosecute the Work in a timely manner in compliance within the specified time of completion.
- k. 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.

- I. Services in conjunction with more than one (1) re-review of Submittals of Shop Drawings, product data, samples, RFI's etc.

## **4.6 DISPUTES AND CLAIMS**

### **4.6.1 Decision of Architect**

“Disputes” and “Claims” as defined in Article 4.6.9.1 between Owner and Contractor involving money or time, including those alleging an error or omission by the Architect shall be referred initially to the Architect for action within ten (10) days after Contractor’s Article 7 request for Change is denied. A decision by the Architect, as provided in Paragraph 4.6.5, shall be required as a condition precedent to proceeding with remedies set forth in Paragraph 4.6.9 as to all such matters arising prior to the date Retention Payment Application is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has reached Final Completion.

The condition precedent of an Architect decision shall be waived if: (1) the position of Architect is vacant; (2) the Architect has failed to take action required under Paragraph 4.6.5 within the time periods required therein; or (3) the Claim relates to a Stop Notice Claim not arising from any extra change order or Immediate Change Directive for which approval has not been provided.

### **4.6.2 [Reserved]**

### **4.6.3 [Reserved]**

### **4.6.4 [Reserved]**

### **4.6.5 Architect’s Written Decision**

If a Dispute has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the Architect, the Architect (or Architect through CM) shall provide a written decision twenty (20) days after the Architect’s preliminary decision rendered in accordance with Paragraph 4.6.1. Upon expiration of such time period, the Architect (or Architect through CM) will render to the parties its written decision relative to the Dispute, including any change in the Contract Sum or Contract Time or both.

The Architect may also request reasonable additional time to complete Architect’s written decision.

If the resolution of the Dispute by the Architect is not satisfactory to the Contractor and copies of all back-up documentation of costs and the basis for the Dispute is fully articulated in a package of material that is complete, the Contractor may then submit a Claim to the Owner under Article 4.6.9

### **4.6.6 Continuing Contract Performance**

Pending final resolution of a Dispute or Claim, including, negotiation, mediation, arbitration, or litigation, the Contractor shall proceed diligently with performance of the Contract, and the Owner shall continue to make any undisputed payments in accordance with the Contract (less any withholdings or offsets). If the Claim is not resolved, Contractor agrees it will neither rescind the Contract nor stop the progress of the work, but Contractor’s sole remedy shall be to submit such controversy to

determination by a court of competent jurisdiction in the county where the project is located, after the project has been completed, and not before.

4.6.6.1 *Owner's Option to Submit Individual Disputes to Arbitration during Claims and Disputes Process.* At the Owner's sole option, in order to more efficiently resolve Claims during the Project and prior to the completion of the Claims Process, pursuant to Government Code Section 9201, the Owner may submit individual Disputes or Claims for binding arbitration and Contractor agrees to the resolution of for each individual Dispute or Claim by an Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual Disputes or Claims, such resolution is full and final as to that particular Dispute or Claim. THIS INDIVIDUAL DISPUTE ARBITRATION PROCESS IS NOT AN ARBITRATION CLAUSE AND SHALL NOT BE CONSTRUED AS AN AGREEMENT TO ARBITRATE. THIS INDIVIDUAL DISPUTES ARBITRATION PROCESS IS FOR THE SOLE PURPOSE OF STREAMLINING AND RESOLVING DISPUTES OR CLAIMS DURING CONSTRUCTION AND SHALL BE REQUESTED ON SPECIFIC INDIVIDUAL ITEMS BY THE OWNER PRIOR TO RETENTION PAYMENT (EVEN IF THERE ARE DEDUCTIONS MADE FROM RETENTION PAYMENT) WHICH REPRESENTS THE FINAL COMPLETION OF THE PROJECT.

- a. If there is no Retention remaining on the Project, Individual Disputes initiated prior to Project Final Completion shall continue until a final disposition of the Arbitration or resolution of the individual Claim or Dispute.
- b. No Tolling. The Arbitration process shall not toll the Disputes or Claims process under Article 4.6 or the requirement to submit Claims to Court under Article 4.6.9.4.

4.6.7 [Reserved]

4.6.8 Dispute Concerning Extension of Time.

If Contractor and Owner cannot agree upon an extension of time, whether compensable or not, then Contractor must have first completed the procedures set forth in Paragraph 8.4. Upon completion of the procedures set forth under Paragraph 8.4, Contractor must then comply with the requirements in this Article including those set forth under Paragraph 4.6.9.

4.6.9 Claims Procedures

Pursuant to the remedies under Public Contract Code Section 9201 and Government Code Section 930.2, Contractor, through execution of this Agreement, also agrees to comply with the Disputes and Claims requirements of Article 4.6 to quickly and efficiently resolve Disputes and Claims. Further, to provide a level of accuracy to the records submitted, the Owner shall have the right to audit books and records pursuant to Article 13.11 based on the actual costs incurred and to reduce the uncertainty in resolving Disputes and Claims with limited information.

4.6.9.1 *Procedure Applicable to All Claims*

- a. Definition of Claim: A "Claim" is where a Dispute between the parties rises to the level where backup documentation is assembled and provided to the Owner as a separate demand by the Contractor for: (1) a time extension including, without limitation, for relief from damages or

penalties assessed by the Owner under the Contract; (2) payment by the Owner of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment for which is not otherwise expressly provided for or to which the Contractor is not otherwise entitled to; or (3) an amount of payment disputed by the Owner.

- b. Filing Claim Is Not Basis to Discontinue Work: The Contractor shall promptly comply with Work under the Contract or Work requested by the Owner even though a written Claim has been filed. The Contractor and the Owner shall make good faith efforts to resolve any and all Claims that may arise during the performance of the Work covered by this Contract.
- c. Claim Notification: The Contractor shall within seven (7) calendar days after the written decision of the Architect, or if the time period for Architect's decision has passed under Article 4.6.1, submit a notification in writing sent by registered mail or certified mail return receipt requested to the Owner (and the Owner's CM) stating clearly the basis for the Claim and including all relevant and required documents. If the notification is not submitted within seven (7) days after the written decision of the Architect or the passage of time under Article 4.6.1, the Contractor shall be deemed to have waived all right to assert the Claim, and the Claim shall be denied. Claims submitted after the Retention Payment date shall also be considered null and void by the Owner. All Claims shall be reviewed pursuant to Article 4.6.1 through 4.6.5.

The Formal Notification of Claim must be presented as follows:

- (1) All documentation submitted pursuant to Article 4.6 to the Architect shall be submitted with the Claim.
  - (2) Any additional or supporting documentation that Contractor believes is relevant should be submitted at this time.
- d. Reasonable Documents to Support Claim: The Contractor shall furnish reasonable documentation to support the Claim. The Contractor shall provide all written detailed documentation which supports the Claim, including but not limited to: arguments, justifications, cost, estimates, Schedule analysis and detailed documentation. The format of the required reasonable documentation to support the Claim shall include, without limitation:
    - 1. Cover letter.
    - 2. Summary of factual basis of Claim and amount of Claim.
    - 3. Summary of the basis of the Claim, including the specific clause and section under the Contract under which the Claim is made.
    - 4. Documents relating to the Claim, including:
      - a. Specifications sections in question.

- b. Relevant portions of the Drawings
- c. Applicable Clarifications (RFI's)
- d. Other relevant information, including responses that were received.
- e. Break down of all costs associated with the Claim.
- f. Applicable Daily reports and logs.
- g. For Claims involving overhead, cost escalation, acceleration, disruption or increased costs, a full version of job costs reports organized by category of work or Schedule of Values with budget information tracked against actual costs. Any and all supporting back-up data, including the original bid (and associated original unaltered metadata). Certification: The Contractor (and subcontractors, if applicable) shall submit with the Claim a certification under penalty of perjury:
  - 1. That the Contractor has reviewed the Claim and that such Claim is made in good faith;
  - 2. Supporting data are accurate and complete to the best of the Contractor's knowledge and belief;
  - 3. The amount requested accurately reflects the amount of compensation for which the Contractor believes the Owner is liable; and
  - 4. That the Contractor is familiar with Government Code Sections 12650 et seq. and Penal Code Section 72 and that false claims can lead to substantial fines and/or imprisonment.
- e. Signature of Certification: If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.
- f. Upon receipt of a Claim and all supporting documents as required above, the District shall conduct a reasonable review of the Claim and, within a period not to exceed 45 days, shall provide the Contractor a written statement identifying what portion of the Claim is disputed and what portion is undisputed. Upon receipt of a Claim, the District and Contractor may, by mutual agreement, extend the time period provided in this paragraph.
- g. If the District needs approval from its governing Board to provide the Contractor a written statement identifying the disputed portion and the undisputed portion of the Claim, and the governing Board does not meet within the 45 days or within the mutually agreed to extension of time following receipt of a Claim sent by registered mail or certified mail, return receipt requested, the District shall have up to three days following the next duly publicly noticed meeting of the governing Board after the



45-day period, or extension, expires to provide the Contractor a written statement identifying the disputed portion and the undisputed portion.

- h. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement. If the District fails to issue a written statement, paragraph n below shall apply.
- i. If the Contractor disputes the District's written response, or if the District fails to respond to a Claim issued pursuant to this Article 4.6.9 within the time prescribed, the Contractor may demand in writing an informal conference to meet and confer for settlement of the issues in dispute. Upon receipt of a demand in writing sent by registered mail or certified mail, return receipt requested, the District shall schedule a meet and confer conference within 30 days for settlement of the Claim.
- j. Within 10 business days following the conclusion of the meet and confer conference, if the Claim or any portion of the Claim remains in dispute, the District shall provide the Contractor a written statement identifying the portion of the Claim that remains in dispute and the portion that is undisputed. Any payment due on an undisputed portion of the Claim shall be processed and made within 60 days after the District issues its written statement. Any disputed portion of the Claim, as identified by the Contractor in writing, shall be submitted to nonbinding mediation, with the District and the Contractor sharing the associated costs equally. The District and Contractor shall mutually agree to a mediator within 10 business days after the disputed portion of the Claim has been identified in writing. If the parties cannot agree upon a mediator, each party shall select a mediator and those mediators shall select a qualified neutral third party to mediate with regard to the disputed portion of the Claim. Each party shall bear the fees and costs charged by its respective mediator in connection with the selection of the neutral mediator. If mediation is unsuccessful, the parts of the Claim remaining in dispute shall be subject to applicable procedures in Article 4.6.9.4.
- k. For purposes of this Article 4.6.9, mediation includes any nonbinding process, including, but not limited to, neutral evaluation or a dispute review board, in which an independent third party or board assists the parties in dispute resolution through negotiation or by issuance of an evaluation. Any mediation utilized shall conform to the timeframes in this section.
- l. Unless otherwise agreed to by the District and the Contractor in writing, the mediation conducted pursuant to this Article 4.6.9 shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.
- m. This Claims process does not preclude the District from requiring arbitration of disputes under private arbitration or the Public Works Contract Arbitration Program, if mediation under this Article 4.6.9 does

not resolve the parties' Claim. This Claims process does not preclude the District from submitting individual Disputes or Claims to binding arbitration pursuant to Article 4.6.9.3 below.

- n. Failure by the District to respond to a Claim from the Contractor within the time periods described in this subdivision or to otherwise meet the time requirements of this Article 4.6.9 shall result in the Claim being deemed rejected in its entirety. A Claim that is denied by reason of the District's failure to have responded to a Claim, or its failure to otherwise meet the time requirements of this Article 4.6.9, shall not constitute an adverse finding with regard to the merits of the Claim or the responsibility or qualifications of the Contractor.
- o. If a subcontractor or a lower tier subcontractor lacks legal standing to assert a Claim against a District because privity of contract does not exist, the Contractor may present to the District a Claim on behalf of a subcontractor or lower tier subcontractor. A subcontractor may request in writing, either on his or her own behalf or on behalf of a lower tier subcontractor, that the Contractor present a Claim for work which was performed by the subcontractor or by a lower tier subcontractor on behalf of the subcontractor. The subcontractor requesting that the Claim be presented to the District shall furnish reasonable documentation to support the Claim. Within 45 days of receipt of this written request, the Contractor shall notify the subcontractor in writing as to whether the Contractor presented the Claim to the District and, if the Contractor did not present the Claim, provide the subcontractor with a statement of the reasons for not having done so.
- p. Upon receipt of a Claim, the parties may mutually agree to waive, in writing, mediation and proceed directly to the commencement of a civil action or binding arbitration, as applicable.
- q. The Contractor's Claim shall be denied if it fails to follow the requirements of this Article.

4.6.9.2 Owner (through CM or Owner's Agent or Attorney) May Request Additional Information: Within thirty (30) days of receipt of the Claim and the information under this Article, the Owner may request in writing any additional documentation supporting the Claim or documentation relating to defenses to the Claim which the Owner may assert. Nothing in the Claims procedures set forth in this Article 4 of the General Conditions shall act to waive or relieve the Contractor from meeting the requirements set forth in Government Code section 900 et seq.

4.6.9.3 *Binding Arbitration of Individual Claim Issues.* To expedite resolution of Claims pursuant to Public Contract Code Section 9201, at the Owner's sole option, the Owner may submit individual Claims to Arbitration prior to Retention Payment consistent with the requirements of Article 4.6.6.1.

4.6.9.4 *Resolution of Claims in Court of Competent Jurisdiction.* If Claims are not resolved under the procedure set forth and pursuant to Article 4.6.9, such Claim or controversy shall be

submitted to a court in the County of the location of the Project after the Project has been completed, and not before.

## **ARTICLE 5 SUBCONTRACTORS**

### **5.1 DEFINITIONS**

#### **5.1.1 Subcontractual Relations Bound to Same Contract Terms at General Contractor**

By appropriate agreement, written where legally required for validity, the Contractor shall require each Subcontractor, to the extent of the Work to be performed by the Subcontractor, to be bound to the Contractor by terms of the Contract Documents, and to assume toward the Contractor all the same obligations and responsibilities, assumed by Contractor pursuant to the Contract Documents.

#### **5.1.2 Subcontractor Licenses**

All Subcontractors shall be properly licensed by the California State Licensing Board. All Subcontractors (of any tier) performing any portion of the Work must comply with the Labor Code sections 1725.5 and 1771.1 and must be properly and currently registered with the California Department of Industrial Relations and qualified to perform public works pursuant to Labor Code section 1725.5 throughout the duration of the Project. No portion of the Work is permitted to be performed by a subcontractor of any tier unless the Subcontractor is properly registered with DIR. Any Subcontractors of any tier not properly registered with DIR shall be substituted in accordance with Labor Code section 1771.1.

#### **5.1.3 Substitution of Subcontractor**

Substitution of Subcontractors shall be permitted only as authorized under Public Contract Code §§ 4107 et. seq. Any substitutions of Subcontractors shall not result in any increase in the Contract Price or result in the granting of any extension of time for the completion of the Project.

#### **5.1.4 Contingent Assignment of Subcontracts and Other Contracts**

Each subcontract, purchase order, vendor contract or agreement for any portion of the Work is hereby assigned by the Contractor to the Owner provided that:

- a. Such assignment is effective only after Termination of this Contract with the Contractor by the Owner as provided under Article 14 and only for those subcontracts and other contracts and agreements that the Owner accepts by notifying the Subcontractor or Materialman (as may be applicable) in writing; and
- b. Such assignment is subject to the prior rights of the Surety(ies) obligated under the Payment Bond and Performance Bond.
- c. The Contractor shall include adequate provisions for this contingent assignment of subcontracts and other contracts and agreements in each such document.

**ARTICLE 6**  
**CONSTRUCTION BY OWNER OR BY SEPARATE CONTRACTORS**

**6.1     OWNER'S RIGHT TO PERFORM CONSTRUCTION AND TO AWARD SEPARATE CONTRACTS**

6.1.1     Separate Contracts.

6.1.1.1     Owner reserves the right to let other contracts in connection with this Work. Contractor shall afford other contractors reasonable opportunity for (1) introduction and storage of their materials; (2) access to the Work; and (3) execution of their work. Contractor shall properly connect and coordinate its work with that of other Contractors.

6.1.1.2     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 Owner in prosecution of the Project and the potential impact of such Work on the Baseline Schedule or Schedule updates.

6.1.1.3     Nothing herein contained shall be interpreted as granting to Contractor the exclusive occupancy at the site of Project. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on the Project Site. If execution of any contract by the Owner is likely to cause interference with Contractor's performance of this Contract, once Contractor provides Owner timely written notice and identifies the Schedule Conflict, Owner 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.

6.1.1.4     Owner shall not be responsible for any damages suffered or extra costs incurred by Contractor resulting directly or indirectly from award or performance or attempted performance of any other contract or contracts at the Project necessary for the performance of the Project (examples include Electrical Utility Contractor, separate offsite contractor, a separate grading contractor, furniture installation etc.).

**6.2     [Reserved]**

**6.3     OWNER'S RIGHT TO CLEAN UP**

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

## **GENERAL CONDITIONS**

### **ARTICLE 7 CHANGES IN THE WORK**

#### **7.1 CHANGES**

##### **7.1.1 No Changes Without Authorization**

There shall be no change whatsoever in the Drawings, Specifications, or in the Work without an executed Change Order, Change Order Request, Immediate Change Directive, or order by the Architect for a minor change in the Work as herein provided. Owner 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 Owner's Governing Board or designated representative with delegated authority (subject to Board ratification) has authorized the same and the cost thereof approved in writing by Change Order or executed Construction Change Document. No extension of time for performance of the Work shall be allowed hereunder unless claim for such extension is made at the time changes in the Work are ordered, and such time duly adjusted in writing in the Change Order.

##### **7.1.2 Notices of Non-Compliance**

Contractor deviation or changes from approved Plans and Specifications may result in the issuance of a Notice of Non-Compliance (See DSA Form 154). Contractor is specifically notified that deviations from the Plans and Specifications, whether major or minor, may result in the requirement to obtain a DSA Construction Change Document to correct the Notice of Non-Compliance. (See Article 7.3.1.1 for Definition of CCD). In some cases, the lack of a DSA approved CCD AND verification from the Inspector that a Notice of Non-Compliance has been corrected may result in a critical path delay to the next stage of Work on the Project. Specifically, a deviation from approved Plans and Specifications may prevent approval of the category of Work listed in the DSA 152 Project Inspection Card. Any delays that are caused by the Contractor's deviation from approved Plans and Specifications shall be the Contractor's responsibility.

##### **7.1.3 Architect Authority**

The Architect will have authority to order minor changes in the Work that do not involve DSA Approval not involving any adjustment in the Contract Sum, or an extension of the Contract Time.

#### **7.2 CHANGE ORDERS ("CO")**

A CO is a written instrument prepared by the Architect and signed by the Owner (as authorized by the Owner's Governing Board), the Contractor, and the Architect stating their agreement upon all of the following:

- a. A description of a change in the Work;
- b. The amount of the adjustment in the Contract Sum, if any; and
- c. The extent of the adjustment in the Contract Time, if any.

A CO may be comprised of ICD's, Response to RFP's and COR's

## **GENERAL CONDITIONS**

### **7.3 CONSTRUCTION CHANGE DOCUMENT (CCD Category A, and CCD Category B) and IMMEDIATE CHANGE DIRECTIVE (ICD)**

#### **7.3.1 Definitions**

7.3.1.1 *Construction Change Document (CCD)*. A Construction Change Document is a DSA term that is utilized to address changes to the DSA approved Plans and Specifications. There are two types of Construction Change Documents. (1) DSA approved CCD Category A for Work affecting Structural, Access or Fire-Life Safety of the Project which will require a DSA approval; and, (2) CCD Category B for Work NOT affecting Structural Safety, Access Compliance or Fire and Life Safety that will not require a DSA approval (except to confirm that no Approval is required). Both CCD Category A and Category B shall be set forth in DSA Form 140 and submitted to DSA as required.

7.3.1.2 *Immediate Change Directive (ICD)*. An Immediate Change Directive is a written order to the Contractor prepared by the Architect and signed by the Owner (and CM if there is a CM on the Project) and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The Owner may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly.

In the case of an Immediate Change Directive being issued, Contractor must commence Work immediately or delays from failure to perform the ICD shall be the responsibility of Contractor and the failure to move forward with Work immediately shall also be grounds for Termination under Article 14.

An ICD does not automatically trigger an Article 7.6 Dispute or Claim. Contractor must timely follow the procedures outlined at Article 7.6 and 4.6 where applicable.

Refer to Division 1 for a copy of the proposed Immediate Change Directive form.

#### **7.3.2 Use to Direct Change**

An ICD shall be used to move work forward immediately and to avoid delay. In some cases, an ICD shall be issued in the absence of agreement on the terms of a CO, COR, or RFP. A copy of an ICD form is provided in Division 1. The anticipated not to exceed price for the Work will be inserted into the ICD. In the case of an ICD issued to correct Contractor Deficiencies or to correct a Contractor caused Notice of Non-Compliance, the ICD may be issued with \$0 and 0 time. Contractor may prepare a COR associated with the ICD pursuant to Article 7. However, Contractor shall proceed with all Work required under an Approved ICD immediately upon issuance. Failure to proceed with the Work under an ICD shall be grounds for Termination for Cause under Article 14 or take over the Work under Article 2.2.

If adequate time exists, an ICD may be subject of an RFP for pricing and determination if any time that may be required. However, if an RFP is not completed, Contractor shall immediately commence Work when an ICD is issued. If the RFP is incomplete, it may still be completed to be submitted for Pricing Purposes as long as the PR is submitted within the timeline provided by the PR, or within 10 days following issuance of the ICD.

## **GENERAL CONDITIONS**

### **7.3.3      ICD Issued Over a Notice of Non-Compliance or to Cover Work Subject to a DSA 152 Sign Off**

In some cases, an ICD shall be for the purpose of proceeding with Work to keep the Project on Schedule and as an acknowledgement by the Owner that Contractor is proceeding with Work contrary to a Notice of Non-Compliance, prior to issuance of a DSA approved CCD Category A, or to direct the covering of Work which has not yet received a DSA 152 Inspection Approval to move forward.

7.3.3.1      *Contractor Compliance with all Aspects of an ICD.* Contractor is to undertake the ICD and comply with all aspects of the Work outlined in the ICD. Inspector is to inspect the Work pursuant to the ICD. Failure to follow the ICD may result in deduction of the ICD Work under Article 2.2 or Termination of the Contractor pursuant to Article 14. .

7.3.3.2      *Exception in the Case of DSA Issued Stop Work Order.* Contractor must proceed with an ICD even if a CCD has not been approved by DSA except in the case of a DSA issued Stop Work Order. If a DSA Stop Work Order is issued, Contractor must stop work and wait further direction from the Owner.

7.3.3.3      *ICD Due to Contractor Deficiency or Contractor Caused Notice of Non-Compliance.* If an ICD is issued to correct a Contractor Deficiency or a Contractor caused notice of Non-Compliance, Contractor specifically acknowledges responsibility for all consequential damages associated with the Contractor Deficiency or Contractor Caused Notice of Non-Compliance and all consequential damages and costs incurred to correct the deficiency under Article 4.5

## **7.4      REQUEST FOR INFORMATION (“RFI”)**

### **7.4.1      Definition**

An RFI is a written request prepared by the Contractor requesting the Architect to provide additional information necessary to clarify or amplify an item which the Contractor believes is not clearly shown or called for in the Drawings or Specifications, or to address problems which have arisen under field conditions.

7.4.1.1      An RFI shall not be used as a vehicle to generate time extensions.

7.4.1.2      Resubmission of the same or similar RFI is not acceptable. RFI's that are similar should be addressed in Project meetings where the requestor (Contractor, subcontractor or vendor) is able to address the particular issue with the Architect or Engineer and a resolution addressed in the minutes.

7.4.1.3      An RFI response applicable to a specific area cannot be extended to other situations unless specifically addressed in writing within the RFI or in a separate RFI.

7.4.1.4      RFI's should provide a proposed solution and should adequately describe the problem that has arisen.

### **7.4.2      Scope**

The RFI shall reference all the applicable Contract Documents including Specification section, detail, page numbers, drawing numbers, and sheet numbers, etc. The Contractor shall make



## **GENERAL CONDITIONS**

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 Architect must respond to a RFI within a reasonable time after receiving such request. If the Architect's response results in a change in the Work, then such change shall be effected by a written CO, COR RFP or ICD, if appropriate. If the Architect cannot respond to the RFI within a reasonable time, the Architect shall notify the Contractor, with a copy to the Inspector and the Owner, of the amount of time that will be required to respond.

### **7.4.4      Costs Incurred**

The Contractor shall be responsible for any costs incurred for professional services as more fully set forth in Article 4.5, which shall be subject to a Deductive Change Order, if an RFI requests an interpretation or decision of a matter where the information sought is equally available to the party making such request. Owner, at its sole discretion, shall issue a Deductive Change Order to Contractor for all such professional services arising from this Article.

## **7.5      REQUEST FOR PROPOSAL ("RFP")**

### **7.5.1      Definition**

An RFP is a written request prepared by the Architect (and/or CM) requesting the Contractor to submit to the Owner and the Architect an estimate of the effect of a proposed change on the Contract Price and (if applicable) the Contract Time. If Architect issues a Bulletin, the Changed items in the Bulletin shall be addressed as an RFP and all responses shall be prepared to a Bulletin as addressed in this Article 7.5. A form RFP is included in the Division 1 documents.

### **7.5.2      Scope**

An RFP shall contain adequate information, including any necessary Drawings and Specifications, to enable Contractor to provide the cost breakdowns required by Paragraph 7.7. The Contractor shall not be entitled to any Additional Compensation for preparing a response to an RFP, whether ultimately accepted or not.

### **7.5.3      Response Time**

Contractor shall respond to an RFP within ten (10) days or the time period otherwise set forth in the RFP.

## **7.6      CHANGE ORDER REQUEST ("COR")**

### **7.6.1      Definition**

A COR is a written request prepared by the Contractor supported by backup documentation requesting that the Owner and the Architect issue a CO based upon a proposed change, cost, time, or cost and time that may be incurred on the Project or arising from an RFP, ICD, or CCD.

## **GENERAL CONDITIONS**

### **7.6.2      Changes in Price**

A COR shall include breakdowns per Paragraph 7.7 to validate any change in Contract Price due to proposed change or claim.

### **7.6.3      Changes in Time**

A COR shall also include any additional time required to complete the Project only if the delay is a critical path delay. 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 as defined in Article 8 of the General Contract. A schedule fragnet showing the time delay must be submitted with the COR. Any changes in time will be granted only if there is an impact to the critical path. If Contractor fails to request a time extension in a COR, then the Contractor is thereafter precluded from requesting or claiming a delay.

### **7.6.4      Notice of Change**

Contractor shall submit a written Notice of Change to the Owner and the Architect if any instruction, request, drawing, specification, action, condition, omission, default, deduction, deletion, or other circumstance occurs that impacts the Contract Sum as defined in Article 9.1, the critical path, or the Contract Time as defined in Article 8.1.1. Such Notice of Change shall be provided prior to the commencement of performance of the Work affected and no later than five (5) Days after the discovery date of such circumstance by Contractor. Once a timely Notice of Change has been submitted to the Owner and Architect, Contractor shall thereafter submit a fully complete COR as required by Article 7.6 and Article 7.7. FAILURE BY THE CONTRACTOR TO PROVIDE A COMPLETE AND TIMELY NOTICE OF CHANGE AND/OR COR WHERE A NOTICE OF CHANGE AND/OR COR IS REQUIRED BY THIS ARTICLE 7.6 AND ARTICLE 7.7 SHALL CONSTITUTE A WAIVER BY CONTRACTOR OF THE RIGHT TO A CONTRACT ADJUSTMENT ON ACCOUNT OF SUCH CIRCUMSTANCES AND A WAIVER OF ANY RIGHT TO FURTHER RECOURSE OR RECOVERY BY REASON OF OR RELATED TO SUCH CHANGE BY MEANS OF THE DISPUTES AND CLAIMS PROCESS (SEE ARTICLE 4.6) OR BY ANY OTHER LEGAL PROCESS OTHERWISE PROVIDED FOR UNDER APPLICABLE LAWS.

## **7.7      COST OF CHANGE ORDERS**

### **7.7.1      Scope**

At the time a request is made for a change that impacts the Contract Sum as defined in Paragraph 9.1, the critical path, or the Contract Time as defined in Paragraph 8.1.1, the Contractor shall provide the Owner and the Architect, with a written estimate of the effect of the proposed CO upon the Contract Sum and the actual or estimated 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 CO. Changes may be made by Owner by an appropriate written CO, or, at the Owner's option, such changes shall be implemented immediately upon the Contractor's receipt of an appropriate written Construction Change Document.

Owner may, as provided by law and without affecting the validity of this Agreement, order changes, modification, deletions and extra work by issuance of written CO or Construction Change Documents from time to time during the progress of the Project, Contract sum being adjusted accordingly.

**7.7.1.1      *Time and Material Charges.*** If the Owner orders Work on a "time and material" basis, timesheets shall be signed daily by the Inspector or Owner Designee at or near the time the Work is

## **GENERAL CONDITIONS**

actually undertaken and shall show the hours worked, and the Work actually completed. No time sheets shall be signed the next day. A copy shall be provided to the Person signing the document at the time the document is signed, but not before 10 am the following day.

### **7.7.2      Determination of Cost**

The amount of the increase or decrease in the Contract Price from a CO or COR, if any, shall be determined in one or more of the following ways as applicable to a specific situation:

- a.      Mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation. If an agreement cannot be reached within fifteen (15) days after submission and negotiation of Contractor's proposal, Contractor may submit pursuant to Paragraph 7.7.3. Submission of sums which have no basis in fact are at the sole risk of Contractor and may be a violation of the False Claims Act set forth under Government Code Section 12650 et. seq.);
  1.      If the Owner objects to 7.7.2(a) as a method for submission due to inaccuracies in the submitted amount, overstatement of manpower or time required to perform the CO, or unreliability of the data provided, the Owner may either have the Architect or a professional estimator determine the cost for the CO, and the applicable time extension, or the Contractor shall utilize Paragraph 7.7.2d) or 7.7.3.
  2.      Once the Owner provides a written objection to use of Article 7.7.2(a) due to unreliability of the estimated price, the Contractor shall no longer utilize mutual acceptance of a lump sum as a method for submission of CO's and shall provide a breakdown of estimated or actual costs pursuant to Article 7.7.2(d) or 7.7.3.
- b.      By unit prices contained in Contractor's original bid and incorporated in the Project documents or fixed by subsequent agreement between Owner and Contractor;
- c.      Cost to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee. However, in the case of disagreement, Contractor must utilize the procedure under section 7.7.3; or
- d.      By cost of material and labor and percentage of overhead and profit. If the value is determined by this method the following requirements shall apply:
  1.      *Basis for Establishing Costs*
    - i.      Labor will be the cost for wages prevailing locally for each craft or type of workers at the time the extra Work is done, plus employer payments of payroll taxes and workers compensation insurance (exclude insurance costs as part of the Overhead and Profit mark-up), health and welfare, pension, vacation, apprenticeship funds, and other direct costs resulting from Federal, State, or local laws, as well as assessments or benefits required by lawful collective bargaining agreements. In no case shall the total labor costs exceed the applicable prevailing wage

## **GENERAL CONDITIONS**

rate for that particular classification. The use of a labor classification which would increase the extra Work cost will not be permitted unless the Contractor establishes the necessity for such additional costs. Labor costs for equipment operators and helpers shall be reported only when such costs are not included in the invoice for equipment rental.

- ii. Materials shall be at invoice or lowest current price at which such materials are locally available and delivered to the Site in the quantities involved, plus sales tax, freight, and delivery. The Owner reserves the right to approve materials and sources of supply or to supply materials to the Contractor if necessary for the progress of the Work. No markup shall be applied to any material provided by the Owner.
- iii. Tool and Equipment Rental. No payment will be made for the use of tools which have a replacement value of \$250 or less.

Regardless of ownership, the rates to be used in determining equipment rental costs shall not exceed listed rates prevailing locally at equipment rental agencies or distributors at the time the Work is performed. Rates applied shall be appropriate based on actual equipment need and usage. Monthly, weekly or other extended use rates that results in the lowest cost shall be applied if equipment is used on site for extended periods.

The rental rates paid shall include all associated costs, including the cost of fuel, oil, lubrication, supplies, small tools, necessary attachments, repairs and maintenance of any kind, depreciation, storage, insurance, and all incidentals.

If tool and equipment charges are part of a Dispute, Claim, or Appeal, the Owner reserves the right to utilize actual costs for tools and equipment or a depreciation rate for equipment based on audit finding under Article 13.11 and deduct any rental charges that exceed actual or depreciated costs.

- e. Other Items. The Owner may authorize other items which may be required on the extra work. Such items include labor, services, material, and equipment which are different in their nature from those required by the Work, and which are of a type not ordinarily available from the Contractor or any of the Subcontractors. Invoices covering all such items in detail shall be submitted with the request for payment.
- f. Invoices. Vendors' invoices for material, equipment rentals, and other expenditures shall be submitted with the COR. If the request for payment is not substantiated by invoices or other documentation, the Owner may establish the cost of the item involved at the lowest price which was current at the time of the Daily Report.

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- g. Overhead. Overhead, including direct and indirect costs, shall be submitted with the COR and include: field overhead, home office overhead, off-site supervision, CO preparation/negotiation/research, time delays, project interference and disruption, additional guaranty and warranty durations, on-site supervision, additional temporary protection, additional temporary utilities, additional material handling costs, liability and property damage insurance, and additional safety equipment costs.

### 7.7.3 Format for COR or CO's

The following format shall be used as applicable by the Owner and the Contractor to communicate proposed additions to the Contract. All costs submitted shall be actual costs and labor shall be unburdened labor. Refer to Division 1 for a copy of the Construction Change Order form.

	<u>EXTRA</u>	<u>CREDIT</u>
(a) Material (attach itemized quantity and unit cost plus sales tax)		
(b) Labor Not to Exceed Applicable Prevailing Wage Rates (attach itemized hours and rates)		
(c) Equipment (attach invoices)		
(d) Subtotal		
(e) If Subcontractor performed work, add Subcontractor's overhead and profit to portions performed by Subcontractor, not to exceed 10% of item (d).		
(f) Subtotal		
(g) Contractor's Overhead and Profit: Not to exceed 10% of Item (d) if Contractor performed the work. No more than 5% of Item (d) if Subcontractor performed the work. If work was performed by Contractor and Subcontractors, portions performed by Contractor shall not exceed 10% of Item (d), and portions performed by Subcontractor shall not exceed 10% of Item (d).		
(h) Subtotal		
(i) Bond not to exceed one percent (1%) of Item (h)		

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The undersigned Contractor approves the foregoing Change Order or Immediate Change Directive as to the changes, if any, and the Contract price specified for each item and as to the extension of time allowed, if any, for completion of the entire Work on account of said Change Order or Immediate Change Directive, and agrees to furnish all labor, materials and service and perform all Work necessary to complete any additional Work specified therein, for the consideration stated herein. It is understood that said Change Order or Immediate Change Directive shall be effective when approved by the Governing Board of the Owner.

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 Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages or time extensions not included are deemed waived.

The Contractor expressly acknowledges and agrees that any change in the Work performed shall not be deemed to constitute a delay or other basis for claiming additional compensation based on theories including, but not limited to, acceleration, suspension or disruption to the Project.

7.7.3.1 *Adjustment for Time and Compensable Delay.* A CO 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 as defined in Article 8 of the General Contract. A schedule fragnet showing the time delay must be submitted with the CO. Any changes in time will be granted only if there is an impact to the critical path. If Contractor fails to request a time extension in a CO, then the Contractor is thereafter precluded from requesting or claiming a delay.

### 7.7.4 Deductive Change Orders

All Deductive Change Order(s) must be prepared utilizing the form under Paragraph 7.7.3 (a)-(d) only setting forth the actual costs incurred. Except in the case of an Article 2.2 or 9.6 Deductive Change Order where no mark-up shall be allowed, Contractor will be allowed a maximum of 5% total profit and overhead. Unilateral Deductive Change Orders

For Unilateral Deductive Change Orders, or where credits are due from Contractor for Allowances, Deductive Items, Inspection, Damage, DSA CCD review costs, Architect or Inspector costs for after hours or corrective services, Work removed from the Agreement under Article 2.2 or Article 9.6, there shall be no mark-up.

Owner may, any time after a Deductive Change Order is presented to Contractor by Owner for items under Article 2.2 or Article 9.6 of if there is disagreement as to the Deductive Change Order, issue a unilateral Deductive Change Order on the Project and deduct the Deductive Change Order from a Progress Payment, Final Payment, or Retention.

### 7.7.5 [Reserved]

### 7.7.6 Notice Required

If the Contractor desires to initiate a Dispute for an increase in the Contract Price, or any extension in the Contract Time for completion, Contractor shall notify the applicable party responsible for addressing the Dispute or Claim pursuant to Article 4.6.

## **GENERAL CONDITIONS**

### **7.7.7      Alteration to Change Order Language**

Contractor shall not alter or reserve time in COR's, CO's or ICD's. Contractor shall execute finalized CO's and proceed under Paragraph 7.7.7 and Paragraph 4.6 with proper notice. If Contractor intends to reserve time without an approved CPM schedule prepared pursuant to Article 8 or without submitting a schedule fragnet showing delay to critical path, then Contractor may be prosecuted pursuant to the False Claim Act.

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### **ARTICLE 8 TIME AND SCHEDULE**

#### **8.1 DEFINITIONS**

##### **8.1.1 Contract Time**

Contractor shall perform and reach Substantial Completion (See Article 1.1.46) within the time specified in the Agreement Form..

##### **8.1.2 [Reserved]**

##### **8.1.3 Computation of Time**

The term “day” as used in the Contract Documents shall mean calendar day unless otherwise specifically defined.

##### **8.1.4 [Reserved]**

#### **8.2 HOURS OF WORK**

##### **8.2.1 Sufficient Forces**

Contractors 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 set forth in the Special Conditions and 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 Owner and approval of any required governmental agencies.

##### **8.2.3 Costs for After Hours Inspections**

If the Contractor elects to perform Work outside the Inspector’s regular working hours, costs of any inspections required outside regular working hours shall be invoiced to the Contractor by the Owner and a Deductive Change Order from the next Progress Payment as a Deductive Change Order.

#### **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 Contractor confirms that the Contract Time is a reasonable period for performing the Work.



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### **8.3.2 Baseline Schedule Requirements**

8.3.2.1 *Timing.* Within ten (10) calendar days after Notice to Proceed, Contractor shall submit a practical schedule showing the order in which the Contractor proposes to perform the Work, and the dates on which the Contractor contemplates starting and completing the salient categories of the Work. This first schedule which outlines the Contractor's view of the practical way in which the Work will be accomplished is the Baseline Schedule. If the Contractor Fails to submit the Baseline Schedule with the ten (10) days noted then Owner may withhold processing and approval of progress payments pursuant to Article 9.4 and 9.6.

8.3.2.2 *[Reserved].*

8.3.2.3 *Schedule Must Be Within the Given Contract Time.* The schedule shall not exceed time limits set forth in the Contract Documents and shall comply with all of the scheduling requirements as set forth in the Specifications.

8.3.2.4 *Submittals Must Be Incorporated (See Article 3.7.2 and 3.9.6):* Contractor shall include Submittals as line items in the Baseline Schedule as required under Article 3.7.2 and 3.9.6. Submittals shall not delay the Work, Milestones, or the Completion Date. Failure to include Submittals in the Baseline Schedule shall be deemed a material breach by the Contractor.

8.3.2.5 *[Reserved]*

8.3.2.6 *No Early Completion.* Contractor shall not submit a schedule showing early completion without indicating float time through the date set for Project completion by Owner. Contractor's schedule shall account for all days past early completion as float which belongs to the Project. Usage of float shall not entitle Contractor to any delay claim or damages due to delay.

8.3.2.7 *Use of Schedule Provided in Bid Documents.* In some cases, the Bid will include a preliminary schedule indicating milestones and construction sequences for the Project along with general timing for the Project. The preliminary schedule is not intended to serve as the Baseline Schedule utilized for construction. It is up to the Contractor to study and develop a Baseline Schedule to address the actual durations and sequences of Work that is anticipated while maintaining the Milestones provided by the Owner. Contractor shall obtain information from Contractor's subcontractors and vendors on the planning, progress, delivery of equipment, coordination, and timing of availability of subcontractors so a practical plan of Work is fully developed and represented in the Baseline Schedule.

8.3.2.8 *Incorrect Logic, Durations, Sequences, or Critical Path.* The Owner may reject or indicate durations, sequences, critical path or logic are not acceptable and request changes. The electronic copy of the schedule shall have adequate information so logic ties, duration, sequences and critical path may be reviewed electronically. Contractor is to diligently rebuild and resubmit the schedule to represent the Contractor's plan to complete the Work and maintain milestones at the next Progress meeting, or before the next progress meeting. If Contractor is not able to build a schedule that is acceptable to the Owner or Architect, the Owner reserves the right to utilize the unapproved originally submitted Baseline (See Article 8.3.2.12) and the comments submitted to hold Contractor accountable for timely delivery of Work and maintenance of Milestones. Furthermore, Contractor's representations in Baseline, if unacceptable, may also be used as a basis for termination of the Contract under Article 14 if Contractor fails to adequately maintain the schedule and falls significantly behind without undertaking the efforts to either submit and follow a recovery schedule or fail to submit a recovery schedule and make no effort toward recovery on the Project.

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8.3.2.9 *Contractor Responsibility Even if Schedule Issues Are Not Discovered.* Failure on the Part of the Owner to discover errors or omissions in schedules submitted shall not be construed to be an approval of the error or omission and a flawed schedule is not grounds for a time extension.

8.3.2.9.1 [Reserved]

8.3.2.10 *[Reserved].*

8.3.2.11 *Failure to Meet Requirements.* Failure of the Contractor to provide proper schedules as required by this Article and Article 9 is a material breach of the Contract and grounds for Termination pursuant to Article 14. The Owner, at its sole discretion, may choose, instead, to withhold, in whole or in part, any Progress Payments or Retention amounts otherwise payable to the Contractor.

8.3.2.12 *Use of an Unapproved Baseline Schedule.* If Schedule Submitted is unacceptable to the Owner (i.e. failing to meet the requirements of Article 8.3.2) and Contractor does not incorporate or address the written comments to the schedule and a Baseline Schedule is not approved, but due to extreme necessity, the Owner moves forward without an approved Baseline Schedule, Contractor shall diligently revise and meet Schedule update requirements of Article 8 and incorporate all Article 8.3.2 comments in all updates). However, for purposes of Termination pursuant to Article 14, the Schedule initially submitted shall be treated as a Baseline Schedule with durations shortened to accommodate all Float and other mandatory Schedule Requirements under Article 8.3.2.1 as well as incorporate all 8.3.2 revisions from Owner or Architect that are noted.

### 8.3.3 Update Schedules

8.3.3.1 *Updates Shall Be Based on Approved Baseline Schedule.* Except in the case where there has not been agreement as to a Baseline Schedule as addressed in Article 8.3.2.4, after there has been agreement as to the Baseline Schedule, the Baseline Schedule shall be used to build future schedule updates. Schedule Updates shall be a CPM based schedule consistent with the Baseline Schedule requirements of 8.3.2

In the case of utilization of Article 8.3.2.4 and no Baseline has been approved, Schedule updates shall be provided monthly and each update shall incorporate all comments and revisions noted as not complying with the requirements of Article 8.3.2. Contractor shall be held to the Article 8.3.2.4 Unapproved Baseline Schedule, inclusive of all Milestones, adjusted for comments and all required Baseline Schedule Inclusions under Article 8.3.2.1.

8.3.3.2 *Schedule Updates.* Contractor shall update the schedule each month to address actual start dates and durations, the percent complete on activities, actual completion dates, estimated remaining duration for the Work in progress, estimated start dates for Work scheduled to start at future times and changes in duration of Work items

8.3.3.3 *[Reserved]*

8.3.3.4 *Recovery Schedule.* In addition to providing a schedule update every thirty (30) days, the Contractor, if requested by the Architect or Owner, shall take the steps necessary to improve Contractor's progress and demonstrate to the Owner and Architect that the Contractor has seriously considered how the lost time, the Completion Date, or the milestones that are required to be met within the terms of the Contract. Contractor shall immediately provide a Recovery Schedule showing how the

## **GENERAL CONDITIONS**

Completion Date will be met. In no case, shall a Recovery Schedule be provided later than ten (10) days following the request for a Recovery Schedule from the Architect or Owner.

### **8.4 EXTENSIONS OF TIME - LIQUIDATED DAMAGES**

#### **8.4.1 Liquidated Damages**

CONTRACTOR AND OWNER HEREBY AGREE THAT THE EXACT AMOUNT OF DAMAGES FOR FAILURE TO COMPLETE THE WORK WITHIN THE TIME SPECIFIED IS EXTREMELY DIFFICULT OR IMPOSSIBLE TO DETERMINE. IF THE WORK IS NOT SUBSTANTIALLY COMPLETED IN THE TIME SET FORTH IN THE AGREEMENT, IT IS UNDERSTOOD THAT THE OWNER WILL SUFFER DAMAGES. IT BEING IMPRACTICAL AND UNFEASIBLE TO DETERMINE THE AMOUNT OF ACTUAL DAMAGE, IT IS AGREED THE CONTRACTOR SHALL PAY TO THE OWNER THE AMOUNT LIQUIDATED DAMAGES SET FORTH IN THE AGREEMENT, FOR EACH CALENDAR DAY OF DELAY IN REACHING SUBSTANTIAL COMPLETION (SEE ART 1.1.46). CONTRACTOR AND ITS SURETY SHALL BE LIABLE FOR THE AMOUNT THEREOF PURSUANT TO GOVERNMENT CODE SECTION 53069.85.

#### **8.4.2 Delay**

Except and only to the extent provided under Article 7 and Article 8, by signing the Agreement, Contractor agrees to (a) bear the risk of delays to completion of the Work; and (b) that Contractor's bid for the Contract was made with full knowledge of this risk.

#### **8.4.3 [Reserved]**

#### **8.4.4 Notice by Contractor Required**

The Contractor shall within five (5) calendar days of beginning of any such delay notify the Owner in writing of causes of delay with justification and supporting documentation. Claims relating to time extensions shall be made in accordance with applicable provisions of Article 7.

##### **8.4.4.1 [Reserved]**

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### **ARTICLE 9 PAYMENTS AND COMPLETION**

#### **9.1 CONTRACT SUM**

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

#### **9.2 COST BREAKDOWN**

##### **9.2.1 [Reserved]**

##### **9.2.2 Information and Preparation of Schedule of Values**

9.2.2.1 *Break Down of Schedule of Values.* Schedule of Values shall be broken down by Project, site, building, milestone, or other meaningful method to measure the level of Project Completion as determined by the Owner.

9.2.2.2 *Based on Contractor Bid Costs.* The Schedule of Values shall be based on the costs from Contractor's bid to the Owner. However, the submission of the Schedule of Values shall not be front loaded so the Contractor is paid a greater value than the value of the Work actually performed and shall not shift funds from parts of the Project that are later to Work that is performed earlier.

9.2.2.3 *Largest Dollar Value for Each Line Item.* Identify subcontractors and materials suppliers proposed to provide portions of Work equal to or greater than ten thousand dollars (\$10,000) or one-half (1/2) of one percent (1%) of their Contract Price, whichever is less.

9.2.2.4 *Allowances.* Any Allowances provided for in the Contract shall be a line item in the Schedule of Values.

9.2.2.5 *Labor and Materials Shall Be Separate.* Labor and Materials shall be broken into two separate line items unless specifically agreed in writing by the Owner.

##### **9.2.3 Owner Approval Required**

The Owner shall review all submissions received pursuant to Paragraph 9.2 in a timely manner. All submissions must be approved by the Owner before becoming the basis of any payment.

#### **9.3 PROGRESS PAYMENTS**

##### **9.3.1 Payments to Contractor**

Unless there is a resolution indicating that the Work for the Project is sufficiently complex, within thirty (30) days after approval of the Request for Payment, Contractor shall be paid a sum equal to ninety-five percent (95%) of the value of the Work performed (as certified by Architect and Inspector and verified by Contractor) up to the last day of the previous month, less the aggregate of previous payments. The value of the Work completed shall be the Contractor's best estimate. Work completed as estimated shall be an approximation or estimate only and no mistake, inaccuracy, error or falsification in said any approved estimate shall operate to release the Contractor, or any surety upon any bond, from damages arising from such Work, or from the Owner's enforcement of each and every provision of this Contract

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including but not limited to the Performance Bond and Payment Bond. The Owner shall have the right to subsequently to correct any mistake, inaccuracy, error or falsification made or otherwise set forth in any approved Request for Payment and such correction may occur in any future Payment Application or in the Retention Payment to the Contractor.

### **9.3.2      Purchase of Materials and Equipment and Cost Fluctuations**

The 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 Owner to assure that there will be no delays or cost fluctuations due to market fluctuations or procurement difficulties. Contractor further understands and incorporates into Contractor's bid cost any wage rate increases during the Project for the Contractor's labor force as well as all other subcontractor and vendor labor forces.

### **9.3.3      No Waiver**

No payment by Owner hereunder shall be interpreted so as to imply that Owner has inspected, approved, or accepted any part of the Work. Contractor specifically understands that Title 24 Section 4-343 that:

“It is the duty of the contractor to complete the work covered by his or her contract in accordance with the approved Plans and Specifications therefore. The contractor in no way is relieved of any responsibility by the activities of the Architect, Engineer, Inspector or DSA in the performance of such duties...In no case, however, shall the instruction of the Architect or registered Engineer be construed to cause work to be done with is not in conformity with the approved Plans, Specifications, and change orders...”

### **9.3.4      Issuance of Certificate of Payment**

The Architect shall, within seven (7) days after receipt of the Contractor's Application for Payment, either approve such payment or notify the Contractor in writing of the Architect's reasons for withholding approval in whole or in part as provided in Paragraph 9.6. The review of the Contractor's Application for Payment by the Architect is based on the Architect's observations at the 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. In some cases, the Architect may act upon or rely on the evaluation of the Work by the Inspector. This review of Payment Applications is sometimes called a “Pencil Draft.” Owner's return of a Pencil Draft shall constitute the Owner's dispute of the Pay Application that has been submitted. Contractor shall promptly respond to Pencil Drafts or Contractor's Pay Applications may be delayed. Contractor's failure to promptly respond to a Pencil Draft shall qualify as a delay in the Prompt Payment of a Request for Payment or Request for Retention.

### **9.3.5      [Reserved]**

## **9.4      APPLICATIONS FOR PROGRESS PAYMENTS**

### **9.4.1      Procedure**

9.4.1.1      *Application for Progress.* On or before the fifth (5th) day of each calendar month during the progress of the Work, Contractor shall submit to the Architect an itemized Application for Progress Payment for operations completed. Such application shall be notarized, if required, and supported by the following or such portion thereof as Architect requires:

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1. The amount paid to the date of the Application to the Contractor, to all its Subcontractors, and all others furnishing labor, material, or equipment for its Contract;
2. The amount being requested under the Application for Payment by the 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;
3. The balance that will be due to each of such entities after said payment is made;
4. A certification that the As-Built Drawings and Annotated Specifications are current;
5. Itemized breakdown of Work done for the purpose of requesting partial payment;
6. An updated construction schedule in conformance with Paragraph 8;
7. The additions to and subtractions from the Contract Price and Contract Time;
8. A summary of the Retention held;
9. Material invoices, evidence of equipment purchases, rentals, and other support and details of cost as the Owner may require from time to time;
10. The percentage of completion of the Contractor's Work by line item;
11. An updated Schedule of Values from the preceding Application for Payment; and
12. Prerequisites for Progress Payments.

9.4.1.2 *[Reserved]:*

9.4.1.3 *[Reserved].*

9.4.1.4 *All Payment Requests.* No payment requests will be processed unless Contractor has submitted copies of the Certified Payroll records for the Work which correlates to the payment request and a proper CPM schedule pursuant to Article 8 is submitted. Contractor must also submit all required OCIP information and documents as set forth in the OCIP Manual and Information, if applicable.

9.4.1.5 *Final Pay Application (90% or 95%).* (See Article 9.11.1)

9.4.1.6 *Final Pay Application (100%).* (See Article 9.11.3)

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### **9.5 STOP NOTICE CLAIMS AND WARRANTY OF TITLE**

The Contractor warrants title to all Work. The Contractor further warrants that all Work is free and clear of liens, claims, security interests, stop notices, or encumbrances in favor of the 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, stop notices, claims, security interests or encumbrances is grounds to make a claim against Contractor's payment and performance bond to immediately remedy and defend.

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

If the Contractor fails to furnish to the Owner within ten (10) calendar days after written demand by the Owner, satisfactory evidence that a lien or stop notice has been so released, discharged, or secured, then Owner may discharge such indebtedness and deduct the amount required therefor, together with any and all losses, costs, damages, and attorney's fees and expense incurred or suffered by Owner from any sum payable to Contractor under the Contract. In addition, any liens, stop notices, claims, security interests or encumbrances shall trigger the indemnification requirements under Article 3.14.1 and shall act as a trigger under Civil Code Section 2778 and 2779 requiring reimbursement for any and all costs following the Owner's written demand has been made.

### **9.6 DECISIONS TO WITHHOLD PAYMENT**

#### **9.6.1 Reasons to Withhold Payment**

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

- a. Defective Work not remedied;
- b. Stop Notices served upon the Owner;
- c. Liquidated damages assessed against the Contractor;
- d. 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;
- e. Damage to the Owner or other contractor;
- f. Unsatisfactory prosecution of the Work by the Contractor;
- g. Failure to store and properly secure materials;
- h. Failure of the Contractor to submit on a timely basis, proper and sufficient documentation required by the Contract Documents, including, without limitation,

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acceptable monthly progress schedules, Shop Drawings, Submittal schedules, schedule of values, product data and samples, proposed product lists, executed Change Order, Construction Change Documents, and verified reports;

- i. Failure of the Contractor to maintain As Built Drawings;
- j. Erroneous estimates by the Contractor of the value of the Work performed, or other false statements in an Application for Payment;
- k. Unauthorized deviations from the Contract Documents (including but not limited to Unresolved Notices of Deviations (DSA Form 154) );
- l. Failure of the Contractor to prosecute the Work in a timely manner in compliance with established progress schedules and completion dates.
- m. Failure to properly pay prevailing wages as defined in Labor Code section 1720, et seq.;
- n. Failure to properly maintain or clean up the Site;
- o. Payments to indemnify, defend, or hold harmless the Owner;
- p. Any payments due to the Owner including but not limited to payments for failed tests, or utilities changes or permits;
- q. Failure to submit an acceptable schedule in accordance with Paragraph 3.8;
- r. Failure to pay Subcontractor or suppliers;
- s. Failure to secure warranties, including the cost to pay for warranties;
- t. Failure to provide release from material suppliers or subcontractors when requested to do so;
- u. Items deducted pursuant to Article 2.2;
- v. Incomplete Punch List items under Article 9.9.1.2 which have gone through the Article 2.2 process; or
- w. Allowances that have not been used.

### **9.6.2      Reallocation of Withheld Amounts**

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



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If Contractor defaults or neglects to carry out the Work in accordance with the Contract Documents or fails to perform any provision thereof, Owner may, after ten (10) calendar days written notice to the Contractor and without prejudice to any other remedy make good such deficiencies. The Owner shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If Owner 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 approval are removed, 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 Contractor to perform in accordance with the terms and conditions of the Contract Documents.

## **9.7      NONCONFORMING WORK**

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

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

### **9.8      [Reserved]**

## **9.9      COMPLETION OF THE WORK**

### **9.9.1      Close-Out Procedures**

#### **9.9.1.1      *[Reserved]***

9.9.1.2      *Punch List Is Prepared Only After the Project Is Substantially Complete.* If any of the conditions noted in Article 1.1.46 as defining Substantial Completion are not met, the Inspector, Architect or Owner may reject Contractor's Incomplete Punch Items as premature. If the Architect and Inspector commence review of Incomplete Punch Items, all rights are reserved until the Project actually meets the definition of Substantially Complete. Liquidated Damages, warranties, and other contractual rights are not affected by Incomplete Punch Items unless otherwise addressed in these General Conditions.

Once the Inspector and the Architect determine the Project is Substantially Complete, a Certificate of Substantial Completion shall be issued. The Inspector and Architect shall prepare a Punch List of items which is an inspection report of the Work, if any, required in order to complete the Contract Documents and ensure compliance with the DSA Approved Plans so the Project may be Completed by the Contractor and a final DSA Close-Out is approved. When all Work for the Project is Complete, including Punch Lists and all Work complies with the approved Contract Documents and Change Orders, the Project has reached Final Completion.

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9.9.1.3 *Time for Completion of Punch List.* Contractor shall only be given a period of no more than thirty (30) days to complete the Punch List on Project. During the Punch List period Contractor Superintendent and Project Manager shall remain engaged in the Project and shall not be removed or replaced. If the Punch List is not completed at the end of the Punch List time then Contractor shall issue a valued Punch List within 5 days after the date the Punch List time ends. If Contractor does not issue such a list, the Owner or Architect may issue a valued Punch List to the Contractor and withhold up to 150% of the value of the Punch List Work pursuant to Article 2.2 of this Agreement.

9.9.1.4 *[Reserved]*

9.9.1.5 *Punch List Liquidated Damages to Compensate for Added Owner Project Costs.* If the total time utilized for Punch List exceeds sixty (60) days, then Contractor shall be charged liquidated damages of at least \$750 per day for continued Punch List Work to compensate for an Inspector, Architect, and Construction Manager extended time on the Project. This Punch List Liquidated Damage number is based on anticipated cost for an Inspector on site and additional costs for the Architect and Construction Manager to re-inspect Punch List items and perform the administration of the Close-out.

### 9.9.2 Close-Out Requirements for Final Completion of the Project

- a. Utility Connections. Buildings shall be connected to water, gas, sewer, and electric services, complete and ready for use. Service connections shall be made and existing services reconnected
- b. As-Builts Up to Date and Complete. 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 As Built Drawings
  1. The exact location and elevations of all covered utilities, including valves, cleanouts, etc. must be shown on As-Builts
  2. Contractor is liable and responsible for inaccuracies in As-Built Drawings, even though they become evident at some future date.
  3. Upon completion of the Work and as a condition precedent to approval of Retention Payment, Contractor shall obtain the Inspector's approval of the "As-Built" information. When completed, Contractor shall deliver corrected sepias and/or a Diskette with an electronic file in a format acceptable to the Owner.
  4. Owner may withhold the cost to hire a draftsman and potholing and testing service to complete Record As-Built Drawings at substantial cost if the Contractor does not deliver a complete set of Record As-Built Drawings. This shall result in withholding of between \$10,000 to \$20,000 per building that does not have a corresponding Record As Built Drawing.
- c. Any Work not installed as originally indicated on Drawings

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- d. All DSA Close-Out requirements (See DSA Certification Guide) Contractor is also specifically directed to Item 3.2 in the DSA Certification Guide and the applicable certificates for the DSA-311 form.
- e. Submission of Form 6-C. Contractor shall be required to execute a Form 6-C as required under Title 24 Sections 4-343. The Contractor understands that the filing with DSA of a Form 6-C is a requirement to obtain final DSA Approval of the Construction by Contractor and utilized to verify under penalty of perjury that the Work performed by Contractor complies with the DSA approved Contract Documents. The failure to file a DSA Form 6C has two consequences. First, the Construction of the Project will not comply with the Design Immunity Provisions of Government Code Section 830.6 and exposes the Owner and the individual Board members to Personal Liability for injuries that occur on the Project.

Secondly, under DSA IR A-20, since the Project cannot be Certified by DSA, no future or further Projects will be authorized so Contractor will have essentially condemned the campus from any future modernization or addition of new classrooms through their failure to file the DSA Form 6C.

- 1. *Execution of the DSA Form 6-C is mandatory.* Refusal to Execute the Form 6-C, which is a Final DSA Verified Report that all Work performed complies with the DSA approved Contract Documents is a violation of Education Code Section 81144 and shall be referred to the Attorney General for Prosecution.
  - 2. *Referral to the Owner Attorney for Extortion.* If the Contractor's refusal to execute the DSA Form 6C is to leverage a Dispute, Claim or Litigation, then the matter shall also be referred to the Owner Attorney for prosecution for Extortion.
  - 3. *Contractor shall be Responsible for All Costs to Certify the Project.* The Owner may Certify the Project complies with Approved Plans and Specifications by utilizing the procedures under the Project Certification Guide (Located at the DSA website at [http://www.documents.dgs.ca.gov/dsa/plan\\_review\\_process/project\\_certification\\_guide\\_updated\\_03-15-13.pdf](http://www.documents.dgs.ca.gov/dsa/plan_review_process/project_certification_guide_updated_03-15-13.pdf)). All costs for professionals, inspection, and testing required for an alternate Project Certification shall be the Contractor's responsibility and the Owner reserves its right to institute legal action against the Contractor and Contractor's Surety for all costs to Certify the Project and all costs to correct Non-Compliant Work that is discovered during the Alternate Certification Process.
- f. ADA Work that must be corrected to receive DSA certification. (See Article 12.2)
  - g. 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 8½" x 11" binders. Provide a table of contents in front and all items shall be indexed with tabs. Each manual shall also contain a list of

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subcontractors, with their addresses and the names of persons to contact in cases of emergency. Identifying labels shall provide names of manufactures, their addresses, ratings, and capacities of equipment and machinery.

1. Maintenance manuals shall also be delivered in electronic media for the Project. Any demonstration videos shall also be provided on electronic media.
- h. Inspection Requirements. Before calling for final inspection, Contractor shall determine that the following Work has been performed:
1. The Work has been completed.
  2. All life safety items are completed and in working order.
  3. Mechanical and electrical Work complete, fixtures in place, connected and tested.
  4. Electrical circuits scheduled in panels and disconnect switches labeled.
  5. Painting and special finishes complete.
  6. Doors complete with hardware, cleaned of protective film relieved of sticking or binding and in working order.
  7. Tops and bottoms of doors sealed.
  8. Floors waxed and polished as specified.
  9. Broken glass replaced and glass cleaned.
  10. Grounds cleared of Contractor's equipment, raked clean of debris, and trash removed from Site.
  11. Work cleaned, free of stains, scratches, and other foreign matter, replacement of damaged and broken material.
  12. Finished and decorative work shall have marks, dirt and superfluous labels removed.
  13. Final cleanup, as in Paragraph 3.12.
  14. All Work pursuant to Article 9.11
  15. Furnish a letter to Owner stating that the Owner's Representative or other designated person or persons have been instructed in working characteristics of mechanical and electrical equipment.

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### **9.9.3      Costs of Multiple Inspections**

More than two (2) requests of the Owner to make inspections required under Paragraph 9.9 shall be considered an additional service of Architect, Inspector, Engineer or other consultants shall be the Contractor's responsibility pursuant to Article 4.5 and all subsequent costs will be prepared as a Deductive Change Order.

## **9.10      PARTIAL OCCUPANCY OR USE**

### **9.10.1      Owner's Rights**

The Owner may occupy or use any completed or partially completed portion of the Work at any stage. The Owner and the 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 Owner and Contractor cannot agree as to responsibilities such disagreement shall be resolved pursuant to Paragraph 4.6. When the Contractor considers a portion complete, the Contractor shall prepare and submit a Punch List to the Owner as provided under Paragraph 9.9.1.

### **9.10.2      Inspection Prior to Occupancy or Use**

Immediately prior to such partial occupancy or use, the Owner, the Contractor, 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 Work not complying with the requirements of the Contract Documents.

## **9.11      COMPLETION AND FINAL PAYMENT**

### **9.11.1      Final Payment (90% Billing if Substantially Complex Finding and 95% Billing If No Finding Is Made)**

The following items must be completed before the Final Pay Application will be accepted for processing at Substantial Completion of the Project:

- a.      Inspector Sign off of each item in the DSA 152 Project Inspection Card;
- b.      The Project has reached the Punch List items under Article 9.9.1.2 and the Project has been determined to be Substantially Complete under Article 1.1.28;
- c.      Removal of temporary facilities and services;
- d.      Testing, adjusting and balance records are complete;
- e.      Removal of surplus materials, rubbish, and similar elements;
- f.      Change Over of Door locks;

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- g. Deductive items pursuant to Article 9.6 and Article 2.2; and
- h. Completion and submission of all final Change Orders for the Project.

### **9.11.2 Final Inspection (Punch List Completion)**

Contractor shall comply with Punch List procedures under Article 9.9, and maintain the presence of Project Superintendent and Project Manager (not replacement project superintendent or project manager) until the Punch List is complete to ensure proper and timely completion of the Punch List. Under no circumstances shall Contractor demobilize its forces prior to completion of the Punch List.

Upon completion of the Work under Article 9.9.1, the Contractor shall notify the District and Architect, who shall again inspect such Work. If the Architect and the District find the Work contained in the Punch List acceptable under the Contract Documents, the Work shall have reached Final Completion. Architect shall notify Contractor, who shall then submit to the Architect its Application for Retention Payment. This Application for Retention Payment shall contain any deductions under Article 9.6, including but not limited to incomplete Punch List items under Article 9.9.1.

Upon receipt and approval of Application for Retention Payment, the Architect shall issue a Form 6 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 Owner shall thereupon inspect such Work and either accept the Work as complete or notify the Architect and the Contractor in writing of reasons why the Work is not complete. Upon acceptance of the Work of the Contractor as fully complete (which, absent unusual circumstances, will occur when the Punch List items have been satisfactorily completed), the Owner shall record a Notice of Completion with the County Recorder, and the Contractor shall, upon receipt of payment from the Owner, pay the amounts due Subcontractors.

If the Architect and the Owner find that the Work Contained in the Punch List is unacceptable, then Contractor shall issue a valued Punch List within 5 days after the date the Punch List time ends. If Contractor does not issue such a list, the Owner or Architect may issue a valued Punch List to the Contractor and withhold up to 150% of the value of the Punch List Work pursuant to Article 2.2 of this Agreement.

### **9.11.3 Retainage (100% Billing for the Entire Project)**

The retainage, less any amounts disputed by the Owner or which the Owner has the right to withhold Pursuant to Paragraph 9.6 (including but not limited to incomplete Punch List items under Article 9.9.1), shall be paid after approval by the Owner of the Application for Retention Payment, after the satisfaction of the conditions set forth in Article 9, the Final Inspection under Article 9.11.2 is completed, and after thirty-five (35) days after the acceptance of the Work and recording of the Notice of Completion by Owner. No interest shall be paid on any retainage, or on any amounts withheld due to a failure of the 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 Owner and the Contractor.

- a. Procedures for Application for Retention Payment. The following conditions must be fulfilled prior to release of Retention Payment:

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- i. A full and final waiver or release of all Stop Notices in connection with the Work shall be submitted by Contractor, including a release of Stop Notice in recordable form, together with (to the extent permitted by law) a copy of the full and final release of all Stop Notice rights.
- ii. The Contractor shall have made all corrections, including all Punch List Items, 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 Owner required under the Contract Documents.
- iii. Each Subcontractor shall have delivered to the Contractor all written guarantees, warranties, applications, releases from the Surety and warranty bonds (if applicable) required by the Contract Documents for its portion of the Work.
- iv. Contractor must have completed all requirements set forth in Article 9.9.
- v. Contractor must have issued a Form 6C for the Project.
- vi. The Contractor shall have delivered to the Owner all manuals and materials required by the Contract Documents.
- vii. The Contractor shall have completed final clean up as required by Paragraph 3.12.
- viii. Contractor shall have all deductive items under Article 9.6 and Article 2.2 submitted as part of the Retention Payment.

### **9.11.4 Recording of a Notice of Completion After Punch List Period and Final Inspection.**

When the Work, or designated portion thereof, is complete or the Owner has completed the Article 9.6 and/or the Article 2.2 process, whichever occurs first, the Owner will file either a Notice of Completion or a Notice of Completion noting Valued Punch List items. Valued Punch List items will be deducted from the Retention Payment.

During the time when Work is being performed on the Punch List, the Project does not meet the definition of "Complete" under Public Contract Code Section 7107(c)(1) even if there is "beneficial occupancy" of the Project since that has been no "cessation of labor" on the Project. Completion of Punch List under this Article is not "testing, startup, or commissioning by the public entity or its agent." In other words, the continuing Punch List Work is Contractor labor on the Project until each and every item of Punch List Work is complete or the time periods under Article 9.9.1 have expired.

### **9.11.5 Warranties**

Warranties required by the Contract Documents shall commence on the date of Completion of the entire Work. Warranty periods DO NOT commence at Substantial Completion or when a particular

## **GENERAL CONDITIONS**

subcontractor work is complete. No additional charges, extras, Change Orders, or Claims may be sought for warranties commencing from the Notice of Completion.

Owner shall have the right to utilize equipment, test, and operate as necessary for acclimation, or testing without voiding or starting warranties. Taking beneficial occupancy shall not start warranties except in the case where the Owner agrees, in writing, that warranties shall commence running or where the Owner is taking phased occupancy of specific buildings or areas and completes separate Punch Lists as further addressed in Article 3.4.

### **9.11.6 Time for Submission of Application for Final Payment and Retention Payment (Unilateral Processing of Final and Retention Pay Application).**

If Contractor submits a Final Pay Application which fails to include deductive items under Article 9.6, the Owner or Architect shall note this defective request for Final Pay Application. The Contractor shall be notified that specific deductive items shall be included in the Final Pay Application. If Contractor either continues to submit the Final Pay Application without deductive items under Article 9.6, or a period of 14 calendar days passes after Contractor is provided written notice of deductive items for inclusion in Final Pay Application, then Owner may either alter the Final Pay Application and recalculate the math on the Final Pay Application to address the Article 9.6 deductive items or process a Unilateral Final Pay Application.

### **9.11.7 Unilateral Release of Retention**

After the recordation of the Notice of Completion, or within sixty (60) days following the completion of the Punch List or the expiration of the time for completion of Punch List under Article 9.9.1, if Contractor does not make an Application for Release of Retention, the District may unilaterally release retention less any deducts under Article 9.6 and/or Article 2.2, withholds due to stop notices, or withholdings due to other defective Work on the Project. District may also choose to unilaterally release Retention after deduction of 150% of any disputed items, which may also include items under Article 9.6 and 2.2. If a deduction pursuant to Article 9.6 is made from Retention, a letter deducting specific valued items shall be considered a notice of Default under the terms of the Escrow Agreement.

## **9.12 SUBSTITUTION OF SECURITIES**

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



## **GENERAL CONDITIONS**

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

#### **10.1 SAFETY PRECAUTIONS AND PROGRAMS**

##### **10.1.1 Contractor Responsibility**

The 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 this 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 Owner. All Work shall be solely at the 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).

Contractor shall take, and require subcontractor to take, all necessary precautions for safety of workers on the Work and shall comply with all applicable federal, state, 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, and local codes, Contractor shall furnish, erect and properly maintain at all times, as directed by Owner or Architect 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. 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 occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. The name and position of person so designated shall be reported to Owner by Contractor. 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 Division of Occupational Safety and Health, such violation shall be corrected promptly.

##### **10.1.2 Subcontractor Responsibility**

Contractor shall require that Subcontractors participate in, and enforce, the safety and loss prevention programs established by the Contractor for the Project, which will cover all Work performed by the 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 Contractor, the Owner, and all insurance carriers and loss prevention engineers.

##### **10.1.4 Accident Reports**

Subcontractors shall immediately, within two (2) days, report in writing to the Contractor all accidents whatsoever arising out of, or in connection with, the performance of the Work, whether on or

## **GENERAL CONDITIONS**

off the Site, which caused death, personal injury, or property damage, giving full details and statements of witnesses. In addition, if death or serious injuries or serious damages are caused, the accident shall be reported within four (4) days by telephone or messenger. Contractor shall thereafter immediately, within two (2) days, report the facts in writing to the Owner and the Architect giving full details of the accident.

### **10.1.5 First-Aid Supplies at Site**

The Contractor will provide and maintain at the Site first-aid supplies which complies with the current Occupational Safety and Health Regulations.

### **10.1.6 Material Safety Data Sheets and Compliance with Proposition 65**

Contractor is required to have material safety data sheets available in a readily accessible place at the job site for any material requiring a material safety data sheet per the Federal "hazard communication" standard, or employees' "right-to-know law." The Contractor is also required to properly label any substance brought into the job 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.

Contractor is required to comply with the provisions of California Health and Safety Code section 25249, 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 Contractor agrees to familiarize itself with the provisions of this section, and to 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.

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.

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

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

## **GENERAL CONDITIONS**

### **10.2 SAFETY OF PERSONS AND PROPERTY**

#### **10.2.1 The Contractor**

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

- a. Employees on the Work and other persons who may be affected thereby;
- b. The Work, material, and equipment to be incorporated therein, whether in storage on or off the Site, under the care, custody, or control of the Contractor or the Contractor's Subcontractors or Sub-subcontractors; and
- c. Other property at the 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.

Contractor is constructive owner of Project site as more fully discussed in Paragraph 6.1.

#### **10.2.2 Contractor Notices**

The 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 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.

#### **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 Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel. The Contractor shall notify the Owner any time that explosives or hazardous materials are expected to be stored on Site. Location of storage shall be coordinated with the Owner and local fire authorities.

#### **10.2.5 Protection of Work**

The Contractor and Subcontractors shall continuously protect the Work, the Owner's property, and the property of others, from damage, injury, or loss arising in connection with operations under the Contract Documents. The 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 Owner.

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

## **GENERAL CONDITIONS**

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 Contractor.

### **10.2.6      Requirements for Existing Sites**

Contractor shall (unless waived by the Owner in writing):

- a.      When performing construction on existing sites, become informed and take into specific account the maturity of the students on the Site; and perform Work which may interfere with campus routine before or after campus 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 activities. The Contractor shall comply with Specifications and directives of the Owner regarding the timing of certain construction activities in order to avoid unnecessary interference with the campus functioning.
- b.      Avoid performing any Work that will disturb students during testing.
- c.      Provide substantial barricades around any shrubs or trees indicated to be preserved.
- d.      Deliver materials to building area over route designated by Architect.
- e.      Take preventive measures to eliminate objectionable dust, noise, or other disturbances.
- f.      Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of Architect; and not interfere with the Work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of Owner and Architect regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on the Project site.
- g.      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 Owner. All filing and plan check fees shall be paid by Contractor.
- h.      Provide Owner on request with Contractor's written safety program and safety plan for each site.

### **10.2.7      Shoring and Structural Loading**

The Contractor shall not impose structural loading upon any part of the Work under construction or upon existing construction on or adjacent to the 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

## **GENERAL CONDITIONS**

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 steel, is the sole responsibility of the 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 Contractor shall take special precautions, such as shoring of masonry walls and temporary tie bracing of structural steel 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 Contractor at no cost to the Owner.

### **10.2.8      Conformance within Established Limits**

The 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 Owner or the Contractor, and shall not unreasonably encumber the premises with construction equipment or materials.

### **10.2.9      Subcontractor Enforcement of Rules**

Subcontractors shall enforce the Owner's and the 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 Site.

### **10.2.10     Site Access**

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

### **10.2.11     Security Services.**

The Contractor shall be responsible for providing security services for the Site as needed for the protection of the Site and as determined in the Owner's sole discretion.

## **10.3      EMERGENCIES**

### **10.3.1      Emergency Action**

In an emergency affecting the safety of persons or property, the Contractor shall take any action necessary, at the Contractor's discretion, to prevent threatened damage, injury, or loss. Additional compensation or extension of time claimed by the Contractor on account of an emergency shall be determined as provided in Article 7.

### **10.3.2      Accident Reports**

The Contractor shall promptly report in writing to the Owner 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

## **GENERAL CONDITIONS**

in conformance with Article 10.1.4. In addition, if death, serious personal injuries, or serious property damages are caused, the accident shall be reported in accordance with Paragraph 10.1.4, immediately by telephone or messenger to the Owner.

### **10.4 HAZARDOUS MATERIALS**

#### **10.4.1 Discovery of Hazardous Materials**

In the event the Contractor encounters or suspects the presence on the job site of material reasonably believed to be asbestos, polychlorinated biphenyl (PCB), or any other material defined as being hazardous by § 25249.5 of the California Health and Safety Code, which has not been rendered harmless, the Contractor shall immediately stop Work in the area affected and report the condition to the Owner and the Architect in writing, whether or not such material was generated by the Contractor or the Owner. The Work in the affected area shall not thereafter be resumed, except by written agreement of the Owner and the Contractor, if in fact the material is asbestos, polychlorinated biphenyl (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, polychlorinated biphenyl (PCB), or other hazardous material, or when it has been rendered harmless by written agreement of the Owner and the Contractor.

#### **10.4.2 Hazardous Material Work Limitations**

In the event that the presence of hazardous materials is suspected or discovered on the Site (except in cases where asbestos and other hazardous material Work in the Contractor's responsibility), the Owner shall retain an independent testing laboratory to determine the nature of the material encountered and whether corrective measures or remedial action is required. The Contractor shall not be required pursuant to Article 7 to perform without consent any Work in the affected area of the Site relating to asbestos, polychlorinated biphenyl (PCB), or other hazardous material, until any known or suspected hazardous material has been removed, or rendered harmless, or determined to be harmless by Owner, as certified by an independent testing laboratory and approved by the appropriate government agency.

#### **10.4.3 Indemnification by Contractor for Hazardous Material Caused by Contractor**

In the event the hazardous materials on the Project Site is caused by the Contractor, the Contractor shall pay for all costs of testing and remediation, if any, and shall compensate the Owner for any additional costs incurred as a result of Contractor's generation of hazardous material on the Project Site. In addition, the Contractor shall defend, indemnify and hold harmless Owner 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 this Contract.

## **GENERAL CONDITIONS**

### **ARTICLE 11 INSURANCE AND BONDS**

#### **11.1 CONTRACTOR'S LIABILITY INSURANCE**

##### **11.1.1 Insurance Requirements**

Before the commencement of the Work, the 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 an A-VIII status as rated in the most recent edition of Best's Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the Owner from claims set forth below, which may arise out of or result from the Contractor's Work under the Contract and for which the Contractor may be legally liable, whether such Work are by the 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. Any required insurance shall not contain any exclusion that applies to the type of work performed by the Contractor under the Contract Documents.

- a. Claims for damages because of bodily injury, sickness, disease, or death of any person Owner would require indemnification and coverage for employee claim;
- b. 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 Contractor or by another person;
- c. Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;
- d. 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;
- e. Claims involving contractual liability applicable to the Contractor's obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors; and
- f. Claims involving Completed Operations, Independent Contractors' coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating. (XCU)
- g. Claims involving sudden or accidental discharge of contaminants or pollutants.

##### **11.1.2 Specific Insurance Requirements**

Contractor shall take out and maintain and shall require all Subcontractors, if any, whether primary or secondary, to take out and maintain:

## **GENERAL CONDITIONS**

Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than \$2,000,000.00 or Commercial General Liability Insurance which provides limits of not less than:

- |       |  |                |
|-------|--|----------------|
| (a)   | Per occurrence (combined single limit)             | \$2,000,000.00 |
| ..... |  |                |
| (b)   | Project Specific Aggregate (for this Project only) | \$2,000,000.00 |
| ..... |  |                |
| (c)   | Products and Completed Operations (aggregate)      | \$2,000,000.00 |
| ..... |  |                |
| (d)   | Personal and Advertising Injury Limit              | \$1,000,000.00 |
| ..... |  |                |

### **Insurance Covering Special Hazards**

The following Special hazards shall be covered by riders or riders to above mentioned public liability insurance or property damage insurance policy or policies of insurance, in amounts as follows:

- |       |  |                |
|-------|--|----------------|
| (a)   | Automotive and truck where operated in amounts     | \$1,000,000.00 |
| ..... |  |                |
| (b)   | Material Hoist where used in amounts               | \$1,000,000.00 |
| ..... |  |                |
| (c)   | Explosion, Collapse and Underground (XCU coverage) | \$1,000,000.00 |
| ..... |  |                |
| (d)   | Hazardous Materials                                | \$1,000,000.00 |
| ..... |  |                |

In addition, provide Excess Liability Insurance coverage in the amount of Four Million Dollars (\$4,000,000.00).



## **GENERAL CONDITIONS**

### **11.1.3 Subcontractor Insurance Requirements**

The Contractor shall require its Subcontractors to take out and maintain public liability insurance and property damage insurance required under Article 11.1 in like amounts. A “claims made” or modified “occurrence” policy shall not satisfy the requirements of Article 11.1 without prior written approval of the Owner.

### **11.1.4 Additional Insured Endorsement Requirements**

The Contractor shall name, on any policy of insurance required under Article 11.1, the Owner, CM, Architect, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. Subcontractors shall name the Contractor, the Owner, Architect, Inspector, the State of California, their officers, employees, agents, volunteers and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall be an ISO CG 20 10 (04/13), or an ISO CG 20 38 (04/13), or their equivalent as determined by the Owner in its sole discretion, and must 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 which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor pursuant to 11.1 must be designated in the policy as primary to any insurance obtained by the Owner. The amount of the insurer’s liability shall not be reduced by the existence of such other insurance.

## **11.2 WORKERS’ COMPENSATION INSURANCE**

During the term of this Contract, the Contractor shall provide workers’ compensation and employer’s liability insurance for all of the Contractor’s employees engaged in Work under this Contract on or at the Site of the Project and, in case any of the Contractor’s Work is subcontracted, the 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 Contractor’s insurance. In case any class of employees engaged in Work under this Contract on or at the Site of the Project is not protected under the Workers’ Compensation laws, the Contractor shall provide or cause a Subcontractor to provide insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the Owner certificates of insurance as required under Article 11.6 and in compliance with Labor Code § 3700.

Workers’ compensation limits as required by the Labor Code, but not less than \$1,000,000 and employers’ liability limits of \$1,000,000 per accident for bodily injury or disease.

## **11.3 BUILDER’S RISK/ “ALL RISK” INSURANCE**

### **11.3.1 Course-of-Construction Insurance Requirements**

The Contractor, during the progress of the Work and until final acceptance of the Work by Owner upon completion of the entire Contract, shall maintain Builder’s Risk, Course of Construction or similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable Work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation

## **GENERAL CONDITIONS**

regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind, lightning, smoke and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the Architect's and engineering services and expenses required as a result of any insured loss upon the Work and Project which is the subject of the Contract Documents, including completed Work and Work in progress, to the full insurable value thereof. Such insurance shall include the Owner and the Architect as additional named insureds, and any other person with an insurable interest as designated by the Owner.

The Contractor shall submit to the Owner for its approval all items deemed to be uninsurable. The risk of the damage to the Work due to the perils covered by the "Builder's Risk/All Risk" Insurance, as well as any other hazard which might result in damage to the Work, is that of the Contractor and the surety, and no claims for such loss or damage shall be recognized by the Owner nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

### **11.4 FIRE INSURANCE**

Before the commencement of the Work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor's expense, fire insurance on all Work subject to loss or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the Owner. This requirement may be waived upon confirmation by the Owner that such coverage is provided under the Builder's Risk Insurance being provided.

### **11.5 AUTOMOBILE LIABILITY**

11.5.1 The Owner, Architect and Construction Manager, Inspectors, their directors, officers, employees, agents and volunteers shall be covered as additional insureds with respect to the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Contractor or for which the Contractor is responsible. Such insurance coverage shall be primary and non-contributory insurance as respects the Owner, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers, or if excess, shall stand in an unbroken chain of coverage excess of the Contractor's scheduled underlying coverage. Any insurance or self-insurance maintained by the Owner, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers shall be excess of the Contractor's insurance and shall not be called upon to contribute with it. The insurer shall agree to waive all rights of subrogation against the Owner, Architect, Construction Manager, Project Inspector, their directors, officers, employees, agents and volunteers for losses paid under the terms of the insurance policy that arise from Work performed by the Contractor.

11.5.2 Insurance Services Office Business Auto Coverage Form Number CA 0001, Code 1 (any auto) is required. Comprehensive Automobile Liability insurance to include all autos, owned, non-owned, and hired, with limits of \$1,000,000 per accident for bodily injury and property damage

### **11.6 OTHER INSURANCE**

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

## **GENERAL CONDITIONS**

### **11.7 PROOF OF INSURANCE**

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

- a. Certificates and insurance policies shall include the following clause:  
  
“This policy and any coverage shall not be suspended, voided, non-renewed, canceled, or reduced in required limits of liability or amounts of insurance or coverage until notice has been mailed via certified mail to the Owner. Date of cancellation or reduction may not be less than thirty (30) days after the date of mailing notice.”
- b. 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.
- c. Certificates of insurance shall clearly state that the Owner 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 Owner.
- d. The Contractor and its Subcontractors shall produce a certified copy of any insurance policy required under this Section upon written request of the Owner.

### **11.8 COMPLIANCE**

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

### **11.9 WAIVER OF SUBROGATION**

Contractor waives (to the extent permitted by law) any right to recover against the Owner 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 Owner.

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 Owner and the 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.

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### **11.10 PERFORMANCE AND PAYMENT BONDS**

#### **11.10.1 Bond Requirements**

Unless otherwise specified in the Supplemental Conditions, prior to commencing any portion of the Work, the 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 Contractor shall, upon request of the Owner, cause the amount of the bonds to be increased accordingly and shall promptly deliver satisfactory evidence of such increase to the Owner. 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 Contractor will release the surety. If the Contractor fails to furnish the required bonds, the Owner may terminate the Contract for cause.

#### **11.10.2 Surety Qualification**

Only bonds executed by admitted Surety insurers as defined in Code of Civil Procedure § 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.

#### **11.10.3 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 § 995.660 of the California Code of Civil Procedure and proof of such is provided to the Owner.

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

#### **12.1 COMPLIANCE WITH TITLE 24 INSTALLATION REQUIREMENTS**

Contractor is aware of the requirements governing Contractor's Work under title 24 Section 4-343 Issuance of Notices of Non-Compliance

The Inspector may issue a Notice of Non-Compliance on the Project indicating deviation from Plans and Specifications. It is Contractor's responsibility to correct all deviations from the approved Plans and Specifications unless the Owner has issued an Immediate Change Directive. In such case, the Contractor shall proceed with the Work with the understandings of the Owner as set forth in the ICD and as specifically noted in Article 7.3.

#### **12.2 SPECIAL NOTICE OF AMERICAN'S WITH DISABILITIES ACT**

Some of the requirements in the Plans and Specifications are meant to comply with the Americans with Disabilities Act ("ADA"). The requirements of the ADA are technical in nature and may appear to be minor in nature (i.e. whether a walkway or ramp has a 2% cross-slope). Contractor is warned that even the slightest deviation from the specific requirements from the ADA is considered a Civil Rights Violation and subjects the Owner to fines of three times actual damages sustained by a handicap individual or up to \$4,000 per violation and attorney's fees required to enforce the ADA violation. As a result of the significant liability and exposure associated with ADA aspects of the Contract, Contractor shall take special care to meet all ADA requirements detailed in the Plans and Specifications. Failure to comply with ADA rules that results in a Notice of Non-Compliance shall be repaired to meet ADA requirements promptly. In addition, any ADA violations that are not identified by Inspector or Architect that are later identified shall be repaired and charged back to the Contractor through a Deductive Change Order.

##### **12.2.1 Indemnification of ADA Claims**

Contractor shall indemnify, hold harmless and defend the District from ADA claims arising from the failure to comply with the Plans and Specifications. Further, any withholdings for ADA violations under Article 9.6 shall include potential redesign costs and an accelerated repair costs due to the potential for ADA claims arising from DSA posting of ADA violations on the Project.

#### **12.3 UNCOVERING OF WORK**

##### **12.3.1 Uncovering Work for Required Inspections**

Work shall not be covered without the Inspector's review and the Architect's knowledge that the Work conforms with the requirements of the approved Plans and Specifications (except in the case of an ICD under Article 7.3). Inspector must be timely notified of inspections and of new areas so Work can be inspected at least 48 hours before opening a new area (For example, see DSA Form 156 for Commencement/Completion of Work Notification which requires "at least 48 hour" advance notification of a new area). An Inspector must comply with DSA protocols for signing each category or phase of Work under DSA Form 152 (in compliance with the Form 152 Manual) or a Notice of Deviation (DSA Form 154) will be issued requiring the Work that was not inspected be uncovered for inspection. Thus, if a portion of the Work is covered without Inspection or Architect approval, is subject to a Notice of Non-Compliance for being undertaken without Inspection, or otherwise not in compliance with the Contract Documents, after issuance of a Written Notice of Non-Compliance (Form 154) or a written notice to uncover Work,

## **GENERAL CONDITIONS**

Contractor shall promptly uncover all Work (which includes furnishing all necessary facilities, labor, and material) for the Inspector's or the Architect's observation and such Work be replaced at the Contractor's expense without change in the Contract Sum or Time.

### **12.3.2      Costs for Inspections Not Required**

If a portion of the Work has been covered is believed to be Non-Conforming to the Plans and Specifications, even if the Form 152 for the category of Work has been signed by the Inspector, the Inspector or the Architect may request to see such Work, and it shall be promptly uncovered by the Contractor. If such Work is in accordance with the Contract Documents, costs of uncover and replacement shall, by appropriate Change Order and shall, be charged to the Owner. If such Work is not in accordance with Contract Documents, the Contractor shall be responsible for all costs to uncover the Work, delays incurred to uncover the Work, and Contractor shall pay all costs to correct the Non-Conforming construction condition unless the condition was caused by the Owner or a separate contractor, in which event the Owner shall be responsible for payment of such costs to the Contractor.

## **12.4      CORRECTION OF WORK**

### **12.4.1      Correction of Rejected Work**

The Contractor shall promptly correct the Work rejected by the Inspector or the Owner upon recommendation of 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 Contractor shall bear costs of correcting the rejected Work, including cost for delays that may be incurred by Contractor or subcontractors, the cost for additional testing, inspections, and compensation for the Inspector's or the Architect's services and expenses made necessary thereby (including costs for preparing a CCD, DSA CCD review fess, and additional inspection and special inspection costs).

### **12.4.2      One-Year Warranty Corrections**

If, within one (1) year after the date of Completion of the Work or a designated portion thereof, or after the date for commencement of warranties established under Paragraph 9.9.1, 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 Contractor shall correct it promptly after receipt of written notice from the Owner to do so unless the Owner has previously given the Contractor a written acceptance of such condition. This period of one (1) years 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 Paragraph 12.2 shall survive acceptance of the Work under the Contract and termination of the Contract. The Owner shall give such notice promptly after discovery of the condition.

### **12.4.3      Owner's Rights if Contractor Fails to Correct**

If the Contractor fails to correct nonconforming Work within a reasonable time, the Owner may correct the Work and seek a Deductive Change Order, pursuant to Article 9.6 or Article 2.2.

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### **ARTICLE 13 MISCELLANEOUS PROVISIONS**

#### **13.1 GOVERNING LAW**

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

#### **13.2 SUCCESSORS AND ASSIGNS**

The Owner and the 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 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.

#### **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.

#### **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 Inspector, the Owner, 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 of or acquiescence in a breach thereunder, except as may be specifically agreed in writing.

#### **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 Division 1, Title 24, and with all other laws, ordinances, rules, regulations, or orders of public authorities having jurisdiction.

##### **13.5.2 Independent Testing Laboratory**

The Owner 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 Owner's representative and not by the Contractor. Any costs or expenses of inspection or testing incurred outside

## **GENERAL CONDITIONS**

of a fifty (50) mile radius from the Project Site or not located in a contiguous county to the Site, whichever distance is greater, shall be paid for by the Owner, invoiced by the Owner to the Contractor, and deducted from the next Progress Payment.

### **13.5.3     Advance Notice to Inspector**

The Contractor shall notify the Inspector a sufficient time in advance of its readiness for required observation or inspection so that the Inspector may arrange for same. The Contractor shall notify the 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 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 Contractor from the source of supply, prior to having satisfactorily passed such testing and inspection or prior to the receipt of notice from said 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 Inspector, the Architect, the Owner, or public authority having jurisdiction determines that portions of the Work require additional testing, inspection, or approval not included under Paragraph 13.5.1, the Inspector will, upon written authorization from the Owner, make arrangements for such additional testing, inspection, or approval. The Owner shall bear such costs except as provided in Paragraph 13.5.7.

### **13.5.6     Costs for Retesting**

If such procedures for testing, inspection, or approval under Paragraphs 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 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 services and expenses. Any such costs shall be paid by the Owner, invoiced to the Contractor, and deducted from the next Progress Payment.

### **13.5.7     Costs for Premature Test**

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

## **13.6     TRENCH EXCAVATION**

### **13.6.1     Trenches Greater Than Five Feet**

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 Contractor shall, in advance of excavation, submit to the Owner or a Registered Civil or Structural Engineer employed by the Owner 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.



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### **13.6.2     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 Owner or by the person to whom authority to accept has been delegated by the Owner.

### **13.6.3     No Tort Liability of Owner**

Pursuant to Labor Code § 6705, nothing in this Article shall impose tort liability upon the Owner or any of its employees.

### **13.6.4     No Excavation without Permits**

The Contractor shall not commence any excavation Work until it has secured all necessary permits including the required CAL OSHA excavation/shoring permit. Any permits shall be prominently displayed on the Site prior to the commencement of any excavation.

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

### **13.7.1     Wage Rates**

Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the Owner 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 works project 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 at the administrative office of the Owner and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

Any worker employed to perform Work on the Project, but such Work is not covered by any classification listed in the published general prevailing wage rate determinations or per diem wages determined by the Director of the Department of Industrial Relations, shall be paid not less than the minimum rate of wages specified therein for the classification which most nearly corresponds to the employment of such person in such classification.

### **13.7.2     Holiday and Overtime Pay**

Holiday and overtime work, when permitted by law, shall be paid for at the rate set forth in the prevailing wage rate determinations issued by the Director of the Department of Industrial Relations or at least one and one-half (1½) times the specified basic rate of per diem wages, plus employer payments, unless otherwise specified in the Contract Documents or authorized by law.

### **13.7.3     Wage Rates Not Affected by Subcontracts**

The 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 Contractor or any Subcontractor and such workers.

## **GENERAL CONDITIONS**

### **13.7.4     Per Diem Wages**

The Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including, but not limited to, employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

### **13.7.5     Forfeiture and Payments**

Pursuant to Labor Code §1775, the Contractor shall forfeit to the Owner, not more than Two Hundred Dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by the 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: (1) whether the Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of the Contractor or Subcontractor; and (2) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations.

### **13.7.6     Monitoring and Enforcement by Labor Commissioner**

Monitoring and enforcement of the prevailing wage laws and related requirements will be performed by the Labor Commissioner/ Department of Labor Standards Enforcement (DLSE). The Contractor and all Subcontractors shall be required to furnish, at least monthly, certified payroll records directly to the Labor Commissioner in accordance with Labor Code section 1771.4. All payroll records shall be furnished in a format required by the Labor Commissioner. The Contractor and all Subcontractors must sign up for, and utilize, the Labor Commissioner's electronic certified payroll records submission system. The District will have direct and immediate access to all CPRs for the Project that are submitted through the Labor Commissioner's system. The District can use this information for any appropriate purpose, including monitoring compliance, identifying suspected violations, and responding to Public Records Act requests.

The Labor Commissioner/ DLSE may conduct various compliance monitoring and enforcement activities including, but not limited to, confirming the accuracy of payroll records, conducting worker interviews, conducting audits, requiring submission of itemized statements prepared in accordance with Labor Code section 226, and conducting random in-person inspections of the Project site ("On-Site Visits"). On-Site Visits may include inspections of records, inspections of the Work site and observation of work activities, interviews of workers and others involved with the Project, and any other activities deemed necessary by the Labor Commissioner/DLSE to ensure compliance with prevailing wage requirements. The Labor Commissioner/DLSE shall have free access to any construction site or other place of labor and may obtain any information or statistics pertaining to the lawful duties of the Labor Commissioner/DLSE.

Any lawful activities conducted or any requests made by the Labor Commissioner/DLSE shall not be the basis for any delays, claims, costs, damages or liability of any kind against the District by the Contractor. Contractor and all Subcontractors shall cooperate and comply with any lawful requests by the Labor Commissioner/ DLSE. The failure of the Labor Commissioner, DLSE, or any other entity related to the Department of Industrial Relations to comply with any requirement imposed by the California Code of Regulations, Title 8, Chapter 8 shall not of itself constitute a defense to the failure to pay prevailing wages or to comply with any other obligation imposed by Division 2, Part 7, Chapter 1 of the Labor Code.

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Prior to commencing any Work on the Project, the Contractor shall post the notice/poster required under the California Code of Regulations and Labor Code section 1771.4 in both English and Spanish at a conspicuous, weatherproof area at the Project site. The required notice/poster is available on the Labor Commissioner's website.

### **13.8 RECORDS OF WAGES PAID**

#### **13.8.1 Payroll Records**

- a. Pursuant to §1776 of the Labor Code, each Contractor and 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 Project.
- b. All payroll records as specified in Labor Code §1776 of the Contractor and all Subcontractors shall be certified and furnished directly to the Labor Commissioner in accordance with Labor Code §1771.4(a)(3) on a monthly basis (or more frequently if required by the District or the Labor Commissioner) and in a format prescribed by the Labor Commissioner. Payroll records as specified in Labor Code §1776 shall be certified and submitted to the District with each application for payment. All payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:
  1. A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request.
  2. A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of Owner, the Division of Labor Standards Enforcement or the Division of Apprenticeship Standards of the Department of Industrial Relations.
  3. A certified copy of all payroll records 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 the Owner, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs, according to law for the preparation by the Contractor, Subcontractor(s), 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 Contractor.
- c. 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 of Labor Standards Enforcement.

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- d. The Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within 10 calendar days after receipt of a written request.
- e. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the Owner, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number. Notwithstanding any other provision of law, agencies that are included in the Joint Enforcement Strike Force on the Underground Economy established pursuant to Section 329 of the Unemployment Insurance Code and other law enforcement agencies investigating violations of law shall, upon request, be provided non-redacted copies of certified payroll records.
- f. The Contractor shall inform the Owner of the location of all payroll records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.
- g. The Contractor or Subcontractor(s) shall have 10 calendar days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Contractor or Subcontractor(s) fails to comply within the 10-day period, the Contractor or Subcontractor(s) shall, as a penalty to the Owner, 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 Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

Responsibility for compliance with this Article shall rest upon the Contractor.

### **13.8.2 Withholding of Contract Payments & Penalties**

The Owner may withhold or delay contract payments to the Contractor and/or any Subcontractor if:

- a. The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or
- b. The Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or
- c. The Contractor or Subcontractor(s) submit incomplete or inadequate payroll records; or

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- d. The Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or
- e. The Contractor or Subcontractor(s) fail to comply with any applicable state laws governing workers on public works projects.

### **13.9 APPRENTICES**

#### **13.9.1 Apprentice Wages and Definitions**

All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this 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, or in accordance with the rules and regulations of the California Apprenticeship Council.

#### **13.9.2 Employment of Apprentices**

Contractor agrees to comply with the requirements of Labor Code §1777.5. The Contractor awarded the Project, or any Subcontractor under him or her, when performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5. The Contractor or any Subcontractor must apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the contractor or subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor upon the Contractor's or Subcontractor's request. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

#### **13.9.3 Submission of Contract Information**

Prior to commencing Work on the Project, the Contractor and Subcontractors shall submit contract award information to the applicable apprenticeship program(s) that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the Owner if requested. Within 60 days after concluding Work on the Project, the Contractor and Subcontractors shall submit to the Owner, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

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### **13.9.4     Apprentice Fund**

The Contractor or any Subcontractor under him or her, who, 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. The Contractor and Subcontractors may take as a credit for payments to the California Apprenticeship Council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

### **13.9.5     Prime Contractor Compliance**

The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7.

## **13.10    ASSIGNMENT OF ANTITRUST CLAIMS**

### **13.10.1   Application**

Pursuant to Government Code § 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the Owner 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 Retention Payment to the Contractor, without further acknowledgment by the parties. If the Owner 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 Owner any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the Owner 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 Owner shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the Owner has not been injured thereby or the Owner declines to file a court action for the cause of action.

## **13.11    STATE AND OWNER CONDUCTED AUDITS**

Pursuant to and in accordance with the provisions of Government Code § 10532, or any amendments thereto, all books, records, and files of the Owner, the Contractor, or any Subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of Ten Thousand Dollars (\$10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of five

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(5) years after Retention Payment is made or a Notice of Completion is Recorded, whichever occurs first. Contractor shall preserve and cause to be preserved such books, records, hard drives, electronic media, and files for the audit period.

Pursuant to the remedies under Public Contract Code Section 9201 and Government Code Section 930.2, Contractor, through execution of this Agreement, also agrees the Owner shall have the right to review and audit, upon reasonable notice, the books and records of the Contractor concerning any monies associated with the Project. The purpose of this Audit is to quickly and efficiently resolve disputes based on the actual costs incurred and to reduce the uncertainty in resolving disputes with limited information. The Owner shall perform any audits at its own cost and any such audit shall be performed by an independent auditor, having no direct or indirect relationship with the functions or activities being audited or with the business conducted by the Contractor or Owner. In the event the independent auditor determines that Change Orders, Response to Request for Proposals, Claims, Appeal of Claims, or other requests for payment the Auditor shall report the results of the Audit findings to the Owner and provide a copy to the Contractor after giving the Owner Board the opportunity for at least 10 days review. If the Contractor disputes the findings of the independent auditor, such dispute shall be handled in the manner set forth under Article 4.6 entitled Disputes.

If Contractor having agreed to the terms of this Contract fails to produce books or records requested by Auditor, such failure to produce books or records that were required to be preserved for audit, it shall be presumed that the information contained in the withheld books or records were unfavorable to the Contractor and the Auditor shall note this refusal in the results of the Audit findings for further evaluation by the Owner and the Owner's Board. The refusal to release records that are concerning monies associated with the Project may be used as a grounds to debar the Contractor for failure to preserve records under Article 13.11 and the failure to produce required audit records may also be used as a grounds for a negative finding against the Contractor depending on the significance of the records that are withheld by Contractor. Failure to produce Job Cost Data tied to Job cost categories and budgets shall be presumed an intentional failure to produce key audit records. Similarly, failure to produce daily time records (prepared at or near the time of the Work actually took place shall be presumed an intentional failure to produce key audited records.

If Contractor is seeking costs for inefficiency, home office overhead, or unanticipated increased costs due to delays or acceleration, Contractor shall also produce copies of the original bid tabulation utilized in submitting Contractor's bid for the Project. This document shall be considered confidential and shall not be subject to disclosure through a Public Records Act and shall not be distributed to anyone other than the Owner and the Owner's counsel. This bid tabulation shall only be used in litigation, arbitration, evaluation of Claims or Disputes, Audit, and trial. If the records for the bid tabulation are kept on a computer, the Contractor shall also produce all metadata (in native format) that accompanies the bid tabulation for inspection to prove the authenticity of the underlying bid tabulation. Failure to produce the bid tabulation for review of inefficiency, home office overhead, or unanticipated increased costs due to delays or accelerations shall be considered material evidence that the bid tabulation was not favorable to the Contractor. This evidence shall be entered as a jury instruction for trial that the bid tabulation was not produced and the bid tabulation information was unfavorable to the Contractor. The evidence may also be used in Debarment Proceedings, and noted as an exception to an Audit Findings.

Upon notification of Contractor concerning the results of the audit and a reasonable time has passed for Contractor to respond to Audit Findings and if either there is no Dispute of the Audit findings under Article 4.6 or if the result after utilizing the Disputes Clause confirms the Audit findings, the Owner may seek reimbursement for overstated Claims, Change Orders, or Appeal of Claims and may also undertake debarment proceedings.

## **GENERAL CONDITIONS**

### **13.12 STORM WATER POLLUTION PREVENTION**

#### **13.12.1 Application**

This Section addresses the preparation, implementation and monitoring of a Storm Water Pollution Prevention Plan (SWPPP) for the purpose of preventing the discharge of pollutants from the construction site. This includes the elimination of pollution discharges such as improper dumping, spills or leakage from storage tanks or transfer areas. The Owner will not issue a Notice to Proceed until Contractor has prepared by a qualified individual and obtained approval of the Permit Registration Documents ("PRDs") that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee and any additional required documents from all applicable Local Governing Agencies including the Regional Water Quality Control Board. The Contractor shall also secure a certification that the Project has met all of the conditions of the General Construction Activity Storm Water Permit (GCASP) and comply with all applicable local, state and federal regulations governing storm water pollution prevention.

#### **13.12.2 References and Materials**

- California Stormwater Quality Association New Development and Redevelopment Best Management Practice Handbook
- 2009 California Stormwater Quality Association Construction BMP Handbook .
- State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities. Available on-line at:  
  
- [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml). - Use materials of a class, grade and type needed to meet the performance described in the BMP Handbook.

#### **13.12.3 Preparation and Approval**

The Contractor shall prepare by a qualified individual the PRDs that include a Notice of Intent, Construction Risk Calculation, Site Map, SWPPP, Annual Fee and any additional required documents. The Contractor's Qualified SWPPP Developer ("QSD") shall prepare the Storm Water Pollution Prevention Plan (SWPPP) as required to comply with storm water pollution regulations for project sites with storm water discharges associated with construction activity such as clearing or demolition, grading, excavation and other land disturbances. The SWPPP shall apply to all areas that are directly related to construction activity, including but not limited to staging areas, storage yards, material borrow areas, and access roads.

13.12.3.1 The Contractor shall prepare and submit to the Local Governing Agencies and the Owner the SWPPP for review and approval if the project sites, new or existing, with land disturbance of 1 or more acres (or less than 1 acres if part of a common plan of development); the construction activity that results in land surface disturbances of less than one acre is part of a larger common plan of development or sale of one or more acres of disturbed land surface; or the construction activity associated with Linear Underground/Overhead Projects ("LUPs") including, but not limited to, those activities necessary for the installation of underground and overhead linear facilities (e.g., conduits, substructures, pipelines, towers, poles, cables, wires, connectors, switching, regulating and transforming equipment and associated ancillary facilities) and include, but are not limited to, underground utility mark-out, potholing, concrete and asphalt cutting and removal, trenching, excavation, boring and drilling, access road and pole/tower pad and



## **GENERAL CONDITIONS**

cable/wire pull station, substation construction, substructure installation, construction of tower footings and/or foundations, pole and tower installations, pipeline installations, welding, concrete and/or pavement repair or replacement, and stockpile/borrow locations.

13.12.3.2 The Contractor shall also pay annual renewal fee(s) until the contract is completed and make all such checks payable to the State Water Resources Control Board. The Notice of Intent must be submitted at least two weeks prior to the commencement of construction activities.

13.12.3.3 The Contractor shall prepare the SWPPP by following the format in Sections 2, 3, 4 and Appendices A through F of the California Stormwater BMP Handbook - Construction, January 2009 edition, published by the California Stormwater Quality Association. The publication is available from:

California Stormwater  
Quality Association  
P.O. Box 2105  
Menlo Park, CA 94026-2105  
Phone: (650) 366-1042  
E-mail: [info@casqa.org](mailto:info@casqa.org)

or

<https://www.casqa.org/store/products/tabid/154/p-167-construction-handbookportal-initial-subscription.aspx>

13.12.3.4 Where land disturbance is less than 1 acre, any BMPs indicated in the BMP Handbook needed to prevent or minimize storm water pollution shall be implemented at no extra cost to the Owner.

13.12.3.5 Within two weeks after Award of Contract by the District, the Contractor shall submit to the District's Civil Engineer one copy of the PRDs including the SWPPP for review. After the District's approval, the Contractor shall provide approved copies of the SWPPP as follows: one copy each to the Project Inspector, Construction Manager, Architect, Commissioned Architect and District's Civil Engineer.

### **13.12.4 Implementation**

The Contractor shall implement the Storm Water Pollution Prevention Plan by doing the following:

- a. Obtain a Waste Discharger Identification (WDID) number from the SWRCB before beginning construction. This number will be issued once your PRDs are administratively accepted and fee is received.
- b. Keep the SWPPP, REAPs, monitoring data on the construction site.
- c. Employ a Qualified SWPPP Practitioner (QSP) to implement the SWPPP during construction and develop Rain Event Action Plans ("REAPs").
- d. Install, inspect, maintain and monitor BMPs required by the General Permit.

## **GENERAL CONDITIONS**

- e. Install perimeter controls prior to starting other construction work at the site.
- f. Contain on-site storm water at the jobsite. Do not drain on-site water directly into the storm drain.
- g. Implement the SWPPP.
- h. Provide SWPPP and BMP implementation training for those responsible for implementing the SWPPP.
- i. Designate trained personnel for the proper implementation of the SWPPP.
- j. Conduct monitoring, as required, and assess compliance with the Numeric Action Levels (NALs) or Numeric Effluent Limitations (NELs) appropriate to your project.
- k. Report monitoring data.
  - 1. Maintain a paper or electronic copy of all required records for three years from the date generated or date submitted, whichever is last. These records must be available at the construction site until construction is completed.
  - 2. Have a QSD revise the SWPPP as needed to reflect the phases of construction and to suit changing site conditions and instances when properly installed systems are ineffective.
  - 3. Assist the Owner with entering any necessary data or information into the Stormwater Multi-Application and Reporting System ("SMARTS") system.
- l. At the end of Construction Contract:
  - 1. Submit Notice of Termination (NOT) into the SMARTS when construction is complete and conditions of termination listed in the NOT have been satisfied. A copy of the NOT can be found at: [http://www.waterboards.ca.gov/water\\_issues/programs/stormwater/construction.shtml](http://www.waterboards.ca.gov/water_issues/programs/stormwater/construction.shtml).
  - 2. Leave in place storm water pollution prevention controls needed for post-construction storm water management and remove those that are not needed as determined by the Owner. Thereafter, left-in-place controls will be maintained by the Owner.
  - 3. Provide Site Monitoring Reports, SWPPP revisions, Compliance Certifications and related documents to the Owner. Post-construction storm water operation and management plan as mentioned in the compliance certifications are considered to be in place at the end of the Construction Contract.

## **GENERAL CONDITIONS**

### **13.12.5    Monitoring**

The Contractor shall conduct examination of storm water pollution prevention controls as required by the State Water Resources Control Board (2009). Order 2009-0009-DWQ, NPDES General Permit No. CAS000002: Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbing Activities. This includes properly qualified personnel performing all required monitoring, testing, inspections and monitoring. The Contractor shall also conduct examination of storm water pollution prevention controls, as well as before and after each storm event in compliance with the State Water Resources Control Board Order No. 2009-0009-DWQ, National Pollutant Discharge Elimination System General Permit No. CAS000002, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction and Land Disturbance Activities (General Permit) (SWRCB, 2009).and at least once each 24-hour period during extended storm events to identify BMP effectiveness and implement repairs or BMP changes as soon as feasible. All maintenance related to a storm event should be completed within 48 hours of the storm event. The Contractor shall also prepare and maintain, at the jobsite, a log of each inspection using Site Monitoring Report forms.

### **13.12.6    Liabilities and Penalties**

- a.      Review of the SWPPP and inspection logs by the Owner shall not relieve the Contractor from liabilities arising from non-compliance with storm water pollution regulations.
- b.      Payment of penalties for non-compliance by the Contractor shall be the sole responsibility of the Contractor and will not be reimbursed by the Owner.
- c.      Compliance with the Clean Water Act pertaining to construction activity is the sole responsibility of the Contractor. For any fine(s) levied against the Owner due to non-compliance by the Contractor, the Owner will deduct from the final payment due the Contractor the total amount of the fine(s) levied on the Owner, plus legal and associated costs.
- d.      The Contractor shall submit to the Owner a completed NOI for change of information (Construction Site Information and Material Handling/Management Practices).

## **GENERAL CONDITIONS**

### **ARTICLE 14 TERMINATION OR SUSPENSION OF THE CONTRACT**

#### **14.1 TERMINATION BY THE CONTRACTOR FOR CAUSE**

##### **14.1.1 Grounds for Termination**

The Contractor may terminate the Contract if the Work is stopped for a period of thirty (30) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, for only the following reasons:

- a. Issuance of an order of a court or other public authority having jurisdiction; or
- b. An act of the United State or California government, such as a declaration of national emergency.

##### **14.1.2 Notice of Termination**

If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the Owner, terminate the Contract and recover from the Owner payment for Work executed and for reasonable costs verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

#### **14.2 TERMINATION BY THE OWNER FOR CAUSE**

##### **14.2.1 Grounds for Termination**

The Owner may terminate the Contractor and/or this Contract for the following reasons:

- a. Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
- b. Persistently or repeatedly is absent, without excuse, from the job site;
- c. Fails to make payment to Subcontractors, suppliers, materialmen, etc.;
- d. Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction;
- e. Fails to provide a schedule or fails or refuses to update schedules required under the Contract;
- f. Falls behind on the Project and refuses or fails to undertake a recovery schedule;
- g. If the Contractor has been debarred from performing Work;
- h. Becomes bankrupt or insolvent, including the filing of a general assignment for the benefit of creditors; or
- i. Otherwise is in substantial breach of a provision of the Contract Documents.

## **GENERAL CONDITIONS**

### **14.2.2 Notification of Termination**

When any of the above reasons exist, the Owner may, without prejudice to any other rights or remedies of the Owner and after giving the Contractor and the Contractor's surety written notice of seven (7) days, terminate the Contractor and/or this Contract and may subject to any prior rights of the surety:

- a. Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;
- b. Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the Owner (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the Owner which the Owner has chosen to accept;
- c. Complete the Work by any reasonable method the Owner may deem expedient, including contracting with a replacement contractor or contractors; and,
- d. Agree to accept a takeover and completion arrangement with Surety that is acceptable to the Owner Board.

### **14.2.3 Takeover and Completion of Work after Termination for Cause**

A Termination for Cause is an urgent matter which requires immediate radiation since Project Work is open and incomplete, the site is subject to vandalism and theft, the Project site is considered a public nuisance, and there is a possibility of injury and deterioration of the Project Work and materials. Thus, the Owner shall be entitled to enter a takeover contract to either remediate the unfinished condition or complete the Work for this Project.

### **14.2.4 Payments Withheld**

If the Owner terminates the Contract for one of the reasons stated in Paragraph 14.2.1, the Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Contractor and/or its surety.

### **14.2.5 Payments upon Completion**

If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor and its Surety shall pay the difference to the Owner. The amount to be paid to the Contractor, or Owner, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

## **14.3 TERMINATION OF CONTRACT BY OWNER (CONTRACTOR NOT AT FAULT)**

### **14.3.1 Termination for Convenience**

Owner may terminate the Contract upon fifteen (15) calendar days of written notice to the Contractor and use any reasonable method the Owner deems expedient to complete the project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of

## **GENERAL CONDITIONS**

either the Owner or Contractor make it impossible or against the Owner's interest to complete the Work. In such a case, the Contractor shall have no claims against the Owner 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). Contractor acknowledges and agrees that if the Owner (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the Owner which the Owner has chosen to accept.

### 14.3.2 [Reserved]

## **14.4 REMEDIES OTHER THAN TERMINATION**

If a default occurs, the Owner may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14.2, do any of the following:

- a. Permit the Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the Owner may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Contractor to the Owner on demand;
- b. If the workmanship performed by the Contractor is faulty or defective materials are provided, erected or installed, then the Owner may order the 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 Contractor, at its sole costs and expense, shall proceed in accordance with the Owner's order and complete the same within the time period given by the Owner in its notice to the Contractor; or
- c. Initiate procedures to declare the Contractor a non-responsible bidder for a period of two (2) to five (5) years thereafter.

All amounts expended by the Owner in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the Owner at the maximum legal rate. The Owner may retain or withhold any such amounts from the Contract Price. If the Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Contractor shall replace the same with new work or materials approved by the Architect and the Owner, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the Owner 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 Paragraph be deemed to constitute a waiver by the Owner of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Contractor that the remedies set forth in this Paragraph are in addition to, and not in lieu of, any other rights or remedies that the Owner may have at law or in equity.

## SPECIAL CONDITIONS

### REQUEST FOR SUBSTITUTION AT TIME OF BID

Pursuant to Public Contract Code Section 3400, bidder submits the following request to Substitute with the bid that is submitted. I understand that if the request to substitute is not “and/or equal” or is not accepted by District and I answer “no” I will not provide the specified item, then I will be held non-responsive and my bid will be rejected. With this understanding, I hereby request Substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods, or types of construction:

	Specification Section	Specified Item	Requested Substituted Item	Contractor Agrees to Provide Specified Item if request to Substitute is Denied <sup>1</sup> (circle one)	District Decision (circle one)
1.				Yes    No	Grant    Deny
2.				Yes    No	Grant    Deny
3.				Yes    No	Grant    Deny
4.				Yes    No	Grant    Deny
5.				Yes    No	Grant    Deny
6.				Yes    No	Grant    Deny
7.				Yes    No	Grant    Deny
8.				Yes    No	Grant    Deny
9.				Yes    No	Grant    Deny
10.				Yes    No	Grant    Deny
11.				Yes    No	Grant    Deny
12.				Yes    No	Grant    Deny

This Request Form must be accompanied by evidence as to whether the proposed Substitution (1) is equal in quality, service, and ability to the Specified Item; (2) will entail no change in detail, construction, and scheduling of related work; (3) will be acceptable in consideration of the required design and artistic effect; (4) will provide no cost disadvantage to the District; (5) will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; (6) will require no change of the construction schedule or milestones for the Project; and, (7) Contractor agrees to pay for any DSA Fees or

<sup>1</sup> Bidder must state whether bidder will provide the Specified Item in the event the Substitution request is evaluate and denied. If bidder states that bidder will not provide the Specified Item the denial of a request to Substitute shall result in the rejection of the bidder as non-responsive. However, if bidder states that bidder will provide the Specified Item in the event that bidder’s request for Substitution is denied, bidder shall execute the Agreement and provide the Specified Item(s). If bidder refuses to execute the Agreement due to the District’s decision to require the Specified Item(s) at no additional cost, bidder’s Bid Bond shall be forfeited.

## **SPECIAL CONDITIONS**

**ARTICLE 3 – THE CONTRACTOR** Article 3.10 Add the following: The Contractor shall require all Subcontractors to prepare and submit to the Contractor, within five (5) days of execution of the Subcontract, comprehensive lists, in quadruplicate, 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 Contractor's or Architect's approval.

### **ARTICLE 8 – TIME**

Article 8.2.2 Performance During Working Hours – delete this Article and replace with the following:

8.2.2 Where a single shift is worked, eight (8) consecutive hours between **7 a.m.** and **4 p.m.**, shall constitute a work day at the applicable prevailing wage rate(s).

Article 8.4.1 Liquidated Damages – Contractor will be liable to Owner for liquidated damages pursuant to Article 8.4 for each calendar day of delay in the amount of \$250.00.

### **ARTICLE 11 – INSURANCE AND BONDS**

Article 11.10 Performance and Payment Bonds – The number of executed copies of the Performance Bond and the Payment Bond required is three (3).



## **SPECIAL CONDITIONS**

### Division 1 Forms

#### **IMMEDIATE CONSTRUCTION CHANGE DIRECTIVE NO.**

PROJECT: \_\_\_\_\_

TO: \_\_\_\_\_

You are hereby directed to provide the extra work necessary to comply with this ICD.

DESCRIPTION OF CHANGE: \_\_\_\_\_

\_\_\_\_\_

COST (This cost shall not be exceeded): \_\_\_\_\_

TIME FOR COMPLETION: \_\_\_\_\_

#### NOTE:

Pursuant to Article 7.3.1.2 An Immediate Change Directive is a written order to the Contractor prepared by the Architect and signed by the District (and CM if there is a CM on the Project) and the Architect, directing a change in the Work and stating a proposed basis for adjustment, if any, in the Contract Sum or Contract Time, or both. The District may by ICD, without invalidating the Contract, direct immediate changes in the Work within the general scope of the Contract consisting of additions, deletions, or other revisions within. If applicable, the Contract Sum and Contract Time will be adjusted accordingly. CONTRACTOR SHALL PROCEED WITH WORK SET FORTH IN THIS ICD IMMEDIATELY UPON RECEIPT OR THE DISTRICT MAY EITHER HOLD THE CONTRACTOR IN EITHER PARTIAL DEFAULT PURSUANT TO ARTICLE 2.2 OR TOTAL DEFAULT PURSUANT TO ARTICLE 14.

\_\_\_\_\_  
Architect

\_\_\_\_\_  
District

Special Conditions

**SPECIAL CONDITIONS**

**CERTIFICATE OF SUBSTANTIAL COMPLETION**

PROJECT: \_\_\_\_\_

TO: \_\_\_\_\_

As the Architect for the Project described above, the Project has reached Substantial Completion. Substantial Completion is not reached unless and until each of the following three (3) conditions have been met: (1) all contractually required items have been installed with the exception of only minor and Incomplete Punch Items (See Article 9.9 of the General Conditions); (2) All Fire/Life Safety Systems have been installed, and are working and signed off on the DSA Form 152 Inspection Card, all building systems including mechanical, electrical and plumbing are all functioning; and (3) the Project is fit for occupancy and its intended use

I certify that the Project has reached Substantial Completion as defined above on the following date: \_\_\_\_\_.

\_\_\_\_\_  
Architect

PROJECT MANUAL

MENIFEE CAMPUS SHADE STRUCTURES  
FOR MT. SAN JACINTO COMMUNITY COLLEGE  
MENIFEE, CA

1.51.07

August 2018





**SECTION 00 01 01  
PROJECT MANUAL**

**Shade Structures for the  
Menifee Campus**

**Project No. 1-51-07**

**OWNER  
MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT  
FACILITIES**

**1499 N. STATE STREET 92583  
PHONE: (951) 416-6000**

**ARCHITECT  
RUHNAU CLARKE ARCHITECTS  
3775 Tenth Street, Riverside, California 92501  
PHONE: (951) 684-4664  
[www.ruhnaucclarke.com](http://www.ruhnaucclarke.com)**

**RUHNAU CLARKE ARCHITECTS  
PROJECT NO. 1-51-07**

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).

**SECTION 00 01 05**  
**PROJECT DIRECTORY**

**NAMES & ADDRESSES OF PROJECT TEAM**

**1.01 PROJECT SITE**

A. Project Address:

Mt. San Jacinto Community College (Menifee Campus)  
28237 La Piedra Road  
Menifee, CA 92584

**1.02 DISTRICT AND DISTRICT'S CONSULTANTS**

District:

**Mt. San Jacinto Community College District**  
**Facilities, Planning, District Construction & Support Services**  
1499 N. State Street, San Jacinto, CA 92583      **(951) 487-3395**  
www.msjc.edu  
Contact: Lynn Purper      lpurper@msjc.edu  
Dean of Facilities Planning

**1.03 DESIGN TEAM**

Architect:

**Ruhnau Clarke Architects**      **(951) 684-4664**  
3775 Tenth Street, Riverside, California 92501  
www.ruhnauclarke.com      FAX (951) 684-6276  
Principal-In-Charge:  
Roger Clarke      rclarke@ruhnauclarke.com  
Contact: Juan Cantoran      jcantoran@ruhnauclarke.com  
Project Manager

Civil Engineer:

**Epic Engineers**      (909) 792-5969  
101 E. Redlands Blvd., Suite 146, Redlands, CA 92373  
www.epicrce.com  
Contact: Troy Molaug      troy@epicrce.com

## **END OF PROJECT DIRECTORY**



FILE NUMBER: 33-C3

**SECTION 00 01 07**  
**SEALS PAGE**

**ARCHITECT**

**RUHNAU CLARKE ARCHITECTS**

3775 Tenth Street  
Riverside, California 92501-3669



\_\_\_\_\_  
Roger Clarke, Architect of Record C-21340

IDENTIFICATION STAMP	
DIVISION OF THE STATE ARCHITECT	
APP. NO: 04 - 117629	INCR : 0
AC <u>  </u> DH <u>  </u> FLS <u>  </u> EA <u>  </u> SS <u>  </u> VJN <u>  </u>	
DATE <u>  11/07/2018  </u>	



**END OF SEALS PAGE**



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## **SECTION 01 10 00**

### **SUMMARY**

#### **PART 1 GENERAL**

##### **1.01 PROJECT**

- A. Project Name: Shade Structures for the Meniffee Campues
- B. District's Name: Mt. San Jacinto Community College District
- C. Architect's Name: Ruhnau Clarke Architects.
- D. The Project consists of the installation of PC shade structures and related site improvements.

##### **1.02 CONTRACT DESCRIPTION**

- A. Contract Type: A single prime contract based on a Stipulated Price as described in Owner-Contractor Agreement.
- B. The Work:
  - 1. The Work includes new paving with drainage, seat wall and installation of new PC shade structures.
  - 2. See Drawings for additional general information.

##### **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 Divisions 1 through 33 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.
  - 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 DESCRIPTION OF ALTERATIONS WORK**

- A. Scope of demolition and removal work is shown on drawings and specified in Section 02 41 19.
- B. Electrical Power and Lighting: Alter existing system and add new construction, keeping existing in operation.
- C. Fire Alarm: Alter existing system and add new construction, keeping existing in operation.
- D. Telephone: Alter existing system and add new construction, keeping existing in operation.
- E. Security System: Alter existing system and add new construction, keeping existing in operation.
- F. Communications: Alter existing system and add new construction, keeping existing in operation.

#### **1.05 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 Substantial Completion.
- C. District will supply the following for installation by Contractor:
  - 1. Owner-Furnished Products: 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.
      - 8) Field finishing, as shown on Drawings and specified herein.
    - b. See Section 01 30 00 - Administrative Requirements for additional requirements.

#### **1.06 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, 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.

#### **1.07 OWNER OCCUPANCY**

- A. District intends to continue to occupy adjacent portions of the existing building during the entire construction period.

- B. District intends to occupy the Project upon Substantial Completion.
- C. Cooperate with District to minimize conflict and to facilitate District's operations.
- D. Schedule the Work to accommodate District occupancy.

#### **1.08 CONTRACTOR USE OF SITE AND PREMISES**

- A. 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.
- B. 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.
- C. Existing building spaces may not be used for storage.
- D. Time Restrictions:
  - 1. Limit conduct of especially noisy, malodorous, and dusty exterior work to be coordinated with district personnel so as not to disturb classes in session.
  - 2. Limit conduct of especially noisy interior work to be coordinated with district personnel so as not to disturb classes in session.
- E. 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.

#### **1.09 CONSTRUCTION WASTE MANAGEMENT**

- A. Construction and waste management, complying with General Conditions, is a requirement for this project.
- B. The Contractor, Prime Contractors, and subcontractors all have obligations in meeting the requirements of this specification.



## **1.10 WORK SEQUENCE**

- A. Construct Work in stages during the construction period:
  - 1. Stage 1A: Re-route existing exits to temporary locations and provide pedestrian protection to allow for construction.
  - 2. Stage 1: Site demolition and clearing.
  - 3. Stage 2: Construct main primary structure and facility.
  - 4. Stage 3: Obtain operational status for life safety systems.
  - 5. Stage 4: Connect to existing building and re-route exits to their final configuration.
  - 6. Stage 5: Complete construction.
- B. Coordinate construction schedule and operations with District.
- C. Prior to commencement of the Work, prepare and submit to the District a Project Logistics Plan, including a Logistics Site Plan, showing in detail the Work Sequence/Phasing plan, in the same size and scale as the architectural site plan, including, but not limited to, the following, items:
  - 1. Truck access route to and from the Project site, in accordance with local ordinances.
  - 2. Location of any overhead wire restrictions for power, street lighting, signal, and/or cable.
  - 3. Local sidewalk access and street closure requirements.
  - 4. Protection of sidewalk pedestrians and vehicular traffic.
  - 5. Project site fencing and access gate locations.
  - 6. Construction parking.
  - 7. Material staging and/or delivery areas.
  - 8. Material storage areas.
  - 9. Temporary trailer locations.
  - 10. Temporary service location and proposed routing of all temporary utilities.
  - 11. Location of temporary and/or accessible fire protection
  - 12. Trash removal and location of dumpsters.
  - 13. Concrete pumping locations.
  - 14. Crane locations.
  - 15. Location of portable sanitary facilities.
  - 16. Mixer truck wash out locations.
  - 17. Traffic control signage.
  - 18. Perimeter and site lighting.
  - 19. Provisions for Storm Water Pollution Prevention Plan – SWPPP
  - 20. Stockpile and/or lay down areas.
  - 21. Areas for separately identified phases of the work.
  - 22. Barriers to separate construction activities from on-going school operations and circulation.

**END OF SECTION**



**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. Division 0 - Contracting Forms and Supplements: Forms to be used.
- B. Section 01 70 00 - Execution and Closeout Requirements: Project record documents.

**1.03 SCHEDULE OF VALUES**

- A. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- B. Forms filled out by hand will not be accepted.
- C. Submit Schedule of Values in duplicate within 15 days after date of Owner-Contractor Agreement.
- D. Format: Utilize the Table of Contents of this Project Manual. Identify each line item with number and title of the specification Section. Identify site mobilization.
- E. Include in each line item, the amount of Allowances specified in this section. For unit cost Allowances, identify quantities taken from Contract Documents multiplied by the unit cost to achieve the total for the item.
- F. Include separately from each line item, a direct proportional amount of Contractor's overhead and profit.
- G. Revise schedule to list approved Change Orders, with each Application For Payment.
- H. 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.

**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. Electronic media printout including equivalent information will be considered in lieu of standard form specified; submit sample to Architect for approval.
- C. Forms filled out by hand will not be accepted.
- D. 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. Percentage of Completion.
  9. Balance to Finish.
  10. Retainage.
- E. Execute certification by signature of authorized officer.
  - F. 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.
  - G. 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 Owner and Architect.
  - H. Submit five copies of each Application for Payment.
  - I. 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 Owner and shall be completed in accordance with directions provided.
    5. Project record documents as specified in Section 01 78 00, for review by Owner which will be returned to the Contractor.
    6. Affidavits attesting to off-site stored products.
  - J. 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.

## **1.06 MODIFICATION PROCEDURES**

- A. Construction Bulletins, General: 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. The Architect will prepare and issue a Bulletin on which the Architect's Supplemental Instructions, a Construction Change Directive or a Request for Proposal will 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 the Contract Documents.
- C. Contract Change Order Forms: Form as directed by Owner.
- 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. 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 Owner instructing Contractor to proceed with the change, for subsequent inclusion in a Contract 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 Directives: In accordance with provisions of the Conditions of the Contract, the Owner 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 Bulletin containing a Construction Change Directive which, when signed by the Owner 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.
- F. For changes for which advance pricing (Request for Proposal) 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.
- G. 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 Owner's approval, the Architect will prepare a Bulletin containing a Request for Proposal, as described above.
  2. Issuance of such a request by the Architect shall not indicated 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.
- H. 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.
- I. Substantiation of Costs: Provide full information required for evaluation.
1. 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 Owner and Contractor, amounts shall be resolved in accordance with provisions of the Conditions of the Contract for resolution of 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 Owner and Architect to evaluate and substantiate proposed costs and time for the change in the Work.
      - 4) When Owner 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) Owner shall have the right to audit Contractor's invoices and bid quotations to substantiate costs for Contract Change Orders.
- J. Construction Changes Based on Stipulated Sum or Time: Based on the Contractor's response to a Request for Proposal or Construction Change Directive, the Owner and Architect will review the response.
1. The Owner 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.
- K. Execution of Contract Change Orders: Architect will issue Contract 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 Owner, 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 installation.
  3. Submit Contract Change Orders to Owner through the Architect.
  4. Contractor shall prepare and submit five original sets of documents for each Change Order. Owner, Architect and Construction Administrator shall sign the Change Order indicating acceptance and approval of the change.
    - a. Structural Engineer shall also sign the Change Order, when applicable.
  5. Upon approval of the Change Order, Contractor shall promptly execute the change in the Work.
- L. After execution of Contract Change Order, promptly revise Schedule of Values and Application for Payment forms to record each authorized Contract Change Order as a separate line item and adjust the Contract Sum.
- M. 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.
- N. 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**





**SECTION 01 26 00**  
**CONTRACT MODIFICATION PROCEDURES**

**PART 1 - GENERAL**

**SECTION INCLUDES**

- A. Administrative requirements for changes in the Work.
- B. Documentation of changes in Contract Sum and Contract Time.
- C. Change procedures.
- D. Construction Change Document.
- E. Change Orders.
- F. Execution of Change Orders.
- G. Reconciliation of Change Orders.

**1.01 RELATED DOCUMENTS AND SECTIONS**

- A. Owner Contractor Agreement: Monetary values to be used in computing Change Orders.
- B. Document - District issued General Conditions of the Contract and Document - District issued Supplementary Conditions of the Contract: Governing requirements for changes in the Work, in Contract Sum and Contract Time.
- C. Section 01 60 00 - Product Requirements: Product options, substitutions, omissions and misdescriptions.
- D. Section 01 77 00 - Contract Closeout: Project record documents.

**1.02 ADMINISTRATIVE REQUIREMENTS FOR CHANGES IN THE WORK**

- A. Responsible Person for Contractor: Submit name of the individual authorized to receive construction change documents, and who is responsible for informing others in Contractor's employ or subcontractors of changes in the Work.
- B. Change Order Forms: Form as directed by District.

**1.03 DOCUMENTATION OF CHANGES IN CONTRACT SUM AND CONTRACT TIME**

- A. Documentation of Changes in Contract Sum and Contract Time: Provide full information required for evaluation of proposed changes and to substantiate costs of changes in the Work.
- B. Document each quotation for a change in Contract Sum and Contract Time, with sufficient data to allow evaluation of the quotation.
- C. Additional Data: Upon request, provide additional data to support computations:
  - 1. Quantities of products, labor and equipment.
  - 2. Taxes, insurance and bonds.
  - 3. Overhead and profit.
  - 4. Justification for change in Contract Time, if claimed.
  - 5. Credit for deletions from Contract similarly documented.

**1.04 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 Div of the State Architect.
- B. These documents may or may not have approved by the Div of the State Architect prior to the close of Bid. If not approved by D.S.A. prior to close of the bidding period, the contract price shall include the Addenda. No work shall proceed regarding any Addendum until approved by D.S.A. Revisions to Addenda, when approved by D.S.A., shall be incorporated by Bulletin and Change Order as indicated below and as provided for in the Contract for Construction and General Conditions.

**1.05 CONSTRUCTION BULLETINS**

- A. Construction Bulletins, General: 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 DOCUMENT and Change Orders. The Architect will prepare and issue a Bulletin on which the Architect's Supplemental Instructions, a Field Change Directive or a Request for Proposal will be presented to the Contractor for action.

#### **1.06 REQUESTS FOR PROPOSAL**

- A. Architect or District Initiated Requests for Proposal: The Architect will issue a Bulletin containing a Request for Proposal, which will include a detailed description of a proposed change, with supplementary or revised Drawings and Specifications as appropriate.
  - 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.
  - 2. Contractor shall prepare and submit a response to the Request for Proposal within 14 days of the date of the Request for Proposal.
- B. Contractor Initiated Request for Proposal: The Contractor may propose a change by submitting a request for a change to the Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and a full description of effects on the Contract Sum, Contract Time, related Work and work being performed under separate contracts.
  - 1. Requests for substitutions shall be included under this category, with procedures as specified in Section 01 60 00 - Product Requirements.
  - 2. After review of the request and with the District's approval, the Architect will prepare a Bulletin containing a Request for Proposal, as described above.
  - 3. Issuance of such a request by the Architect shall not indicate authorization of the Contractor to proceed with the proposed change.
  - 4. Changes will be approved only by an approved Field Change Directive and Change Order.

#### **1.07 ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS**

- A. Architect's Supplemental Instructions:
  - 1. 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.
  - 2. 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.

#### **1.08 CONSTRUCTION CHANGE DOCUMENT**

- A. Construction Change Document: 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 Change Order, in order to not delay construction.
  - 1. The Architect will prepare and issue a Bulletin containing a Construction Change Document 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 Change Order.
  - 2. Should the Construction Change Document result in disputed costs and time adjustments, such dispute shall be resolved in accordance with the provisions of the Conditions of the Contract.
  - 3. Construction Change Document shall follow procedures specified below for Change Orders except that Contractor shall immediately proceed with the change upon receipt of the signed Change Directive.
- B. Construction Change Document approval required from D.S.A. prior to installation

#### **1.09 CHANGE ORDERS**

- A. Construction Changes Based on Stipulated Sum or Time: Based on the Contractor's response to a Request for Proposal or Field 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 Change Order for the stipulated amounts shall be prepared based on the stipulated sum and change in time.
- B. Construction Changes Based on Unit Costs or Quantities: When the scope of a change in the Work cannot be accurately determined in advance, a Field Change Directive shall be executed based on mutually-acceptable quantities and pre-determined unit prices. Actual costs shall be determined after completion of the Work and a Change Order for this amount shall be executed.

- C. Construction Changes Based on Time and Material Costs: When the scope of a change in the Work cannot be accurately determined in advance, a Field Change Directive shall be executed based upon an agreement that the District will adjust the Contract Sum and the Contract Time based on actual costs and time expended by the Contractor in performance of the change.
- D. 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 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 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 Change Orders.
- E. Change Order Preparation, General:
  - 1. In response to each Request for Proposal or Field Change Directive, Contractor shall submit information for review by District and Architect, in order to confirm the scope of the proposed change and to determine the acceptable amounts, if any, for changes to be made in the Contract Sum and Contract Time.
  - 2. In accordance with provisions of the Conditions of the Contract, the Architect and the District will review the Contractor's response to the Request for Proposal or Field Change Directive, confirm the scope of the proposed change and determine with the Contractor the acceptable amounts, if any, for changes in the Contract Time and the Contract Sum.
- F. Execution of Change Orders:
  - 1. When agreement is reached on changes, if any, in the Contract Time and the Contract Sum, The Contractor shall prepare a 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 Documents approval required from D.S.A. prior to installation.
  - 3. Submit 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 Construction Manager shall sign the Change Order indicating acceptance and approval of the change.
    - a. Structural Engineer shall also sign the Change Order, when applicable.
  - 5. Upon approval of the Change Order, Contractor shall promptly execute the change in the Work.

#### **1.10 RECONCILIATION OF CHANGE ORDERS**

- A. Schedule of Values: Contractor shall promptly revise the Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjustment to the Contract Sum.
- B. Schedules: Contractor shall promptly revise progress schedules to reflect changes in Contract Time, revising sub-schedules to adjust time for other items of Work as may be affected by the change. Contractor shall submit revised schedules at the next Application for Payment following approval and acceptance of the Change Order.

#### **PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION.)**

#### **PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION.)**

### **END OF SECTION**



**SECTION 01 29 00**  
**MEASUREMENT AND PAYMENT**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Procedures for preparation and presentation of Applications for Payment.

**1.2 RELATED DOCUMENTS AND SECTION**

- A. Owner/Contractor Agreement: Contract Sum, amounts of Progress Payments and Retainages, and time schedule for presenting Applications for Payment.
- B. General Conditions of the Contract: Progress Payments and Final Payment.
- C. Supplementary Conditions of the Contract: Application for Payment and Retainages.
- D. Section 01 26 00 - Contract Modification Procedures.
- E. Section 01 77 00 - Contract Closeout: Final Payment.

**1.3 FORM**

- A. Prepare Applications for Payment on AIA Document G702 - Application and Certification for Payment, latest effective edition. Include continuation sheets as necessary, using AIA Document G703 - Continuation Sheet, edition as for AIA Document G702.

**1.4 PREPARATION OF APPLICATIONS**

- A. The following requirements supplement the provisions of the General Conditions of the Contract, as may be modified by the Supplementary Conditions of the Contract. Refer to appropriate Article, Payment and Completion, in the General Conditions of the Contract.
- B. Present required information typewritten on the required forms.
- C. Execute certification by signature of authorized officer of the Contractor.
- D. Use data form approved Schedule of Values. Provide dollar value in each column of Application for each line item for portion of Work performed and for products stored, if permitted.
- E. 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.
- F. List each Field Change Directive as each provides for an adjustment in the Contract Sum. Include in the Application only amounts not in dispute. Refer to appropriate Paragraph of the General Conditions.
- G. Prepare Application for Final Payment as specified in Section 01 77 00 - Contract Closeout.
- H. No Change Orders shall be included with Application for Payment until approved in writing by District and Architect.

**1.5 SUBMITTAL PROCEDURES**

- A. The following requirements supplement the provisions of the General Conditions of the Contract, as may be modified by the Supplementary Conditions of the Contract. Refer to Paragraph referencing Applications for Payment, in the General Conditions of the Contract.
- B. Submit five (5) copies of each Application for Payment with original signature. Round off values to nearest dollar or as specified for the Schedule of Values.
- C. Submit an updated construction schedule with each Application for Payment.
- D. 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.

- E. Payment Period: Submit Applications at intervals and covering periods stated in the Agreement. Application submission date may be adjusted by mutual consent of the District and Contractor to coincide with regularly scheduled progress meetings or to accommodate holiday periods.

**1.6 SUBSTANTIATING DATA**

- A. Submit substantiating information, as required by District and Architect, to substantiate dollar amounts on Application for Payment. 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. Provide one copy of substantiating information with each copy of the Application.

**PART 2 - PRODUCTS** - (Not Applicable to this Section.)

**PART 3 - EXECUTION** - (Not Applicable to this Section.)

**END OF SECTION**

**SECTION 01 30 00**  
**ADMINISTRATIVE REQUIREMENTS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Site mobilization meeting.
- B. Construction progress schedule.
- C. Progress photographs.
- D. Coordination drawings.
- E. Submittals for review, information, and project closeout.
- F. Number of copies of submittals.
- G. Submittal procedures.

**1.02 RELATED REQUIREMENTS**

- A. General Conditions: Dates for applications for payment.
- B. General Conditions: Duties of the Project Coordinator.
- C. Supplementary Conditions: Duties of the Project Coordinator.
- D. Section 01 10 00 - Summary: Stages of the Work, Work covered by each contract, occupancy.
- E. Section 01 70 00 - Execution and Closeout Requirements: Additional coordination requirements.
- F. Section 01 78 00 - Closeout Submittals: Project record documents.

**1.03 PROJECT COORDINATION**

- A. Project Coordinator: Construction Manager, if applicable, or Architect.
- 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.
- 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.
- F. Coordinate field engineering and layout work under instructions of the Project Coordinator.
- G. Make the following types of submittals to Architect:
  - 1. Requests for interpretation.
  - 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.
  - 7. Progress schedules.
  - 8. Coordination drawings.
  - 9. Closeout submittals.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 SITE MOBILIZATION MEETING**

- A. Attendance Required:
  - 1. Contractor.
  - 2. Owner.
  - 3. Architect.
  - 4. Contractor's Superintendent.
  - 5. Major Subcontractors.
- B. Agenda:
  - 1. Use of premises by Owner and Contractor.
  - 2. Owner's requirements and occupancy prior to completion.
  - 3. Construction facilities and controls provided by Owner.
  - 4. Temporary utilities provided by Owner.
  - 5. Survey and building layout.
  - 6. Security and housekeeping procedures.
  - 7. Schedules.
  - 8. Application for payment procedures.
  - 9. Procedures for testing.
  - 10. Procedures for maintaining record documents.
  - 11. Requirements for start-up of equipment.
  - 12. Inspection and acceptance of equipment put into service during construction period.
- C. Record minutes and distribute copies within two days after meeting to participants, with two copies to Architect, Owner, participants, and those affected by decisions made.

### **3.02 CONSTRUCTION PROGRESS SCHEDULE**

- A. If preliminary schedule requires revision after review, submit revised schedule within 10 days.
- B. Within 20 days after review of preliminary schedule, submit draft of proposed complete schedule for review.
  - 1. Include written certification that major contractors have reviewed and accepted proposed schedule.
- C. Within 10 days after joint review, submit complete schedule.
- D. Submit updated schedule with each Application for Payment.

### **3.03 PROGRESS PHOTOGRAPHS**

### **3.04 COORDINATION DRAWINGS**

### **3.05 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 conformance with information given and the design concept expressed in the contract documents.
- C. Samples will be reviewed only 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.



### **3.06 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 Owner. No action will be taken.

### **3.07 SUBMITTALS FOR PROJECT CLOSEOUT**

- A. When the following are specified in individual sections, submit them at project closeout:
  - 1. Project record documents.
  - 2. Operation and maintenance data.
  - 3. Warranties.
  - 4. Bonds.
  - 5. Other types as indicated.
- B. Submit for Owner's benefit during and after project completion.

### **3.08 NUMBER OF COPIES OF SUBMITTALS**

- A. Documents for Review:
  - 1. Small Size Sheets, Not Larger Than 8-1/2 x 11 inches: Submit the number of copies that Contractor requires, plus two copies that will be retained by Architect OR one electronic copy via email or file transfer site. Electronically submitted copies will be returned electronically.
- B. Documents for Information: Submit two copies OR one electronic copy via email or file transfer site.
- C. 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.

### **3.09 SUBMITTAL PROCEDURES**

- A. Transmit each submittal with a submittal transmittal (reference Section 01 33 23).
- B. Sequentially number the transmittal form. Revise submittals with original number and a sequential alphabetic suffix.
- C. Identify Project, Contractor, Subcontractor or supplier; pertinent drawing and detail number, and specification section number, as appropriate on each copy.
- D. 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.
- E. Schedule submittals to expedite the Project, and coordinate submission of related items.
- F. For each submittal for review, allow 15 days excluding delivery time to and from the Contractor.
- G. Identify variations from Contract Documents and Product or system limitations that may be detrimental to successful performance of the completed Work.
- H. Provide space for Contractor and Architect review stamps.
- I. When revised for resubmission, identify all changes made since previous submission.
- J. Distribute reviewed submittals as appropriate. Instruct parties to promptly report any inability to comply with requirements.

K. Submittals not requested will not be recognized or processed.

**END OF SECTION**

**SECTION 01 33 23**  
**SHOP DRAWINGS, PRODUCT DATA AND SAMPLES**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Administrative requirements for shop drawings, product data and samples submittals.
- B. Submittals Schedule.
- C. Contractor's review of submittals.
- D. Architect's review of submittals.
- E. Product data submittals.
- F. Shop drawing submittals.
- G. Sample submittals.
- H. Maintenance and operation data submittals.

**1.02 RELATED SECTIONS**

- A. Section 01 40 00 - Quality Requirements: Test and inspection reports.
- B. Section 01 77 00 - Contract Closeout: Submittals for occupancy, Acceptance and Final Payment.
- C. Section 01 78 23 - Operation and Maintenance Data: Requirements for preparation and submission of operation and maintenance data.

**1.03 DEFINITIONS**

- A. 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.
- B. 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.
- C. 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.
- D. 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.
- E. 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 ADMINISTRATIVE REQUIREMENTS**

- A. Administrative Requirements for Submittals: Submittals shall be made in accordance with requirements specified herein and in product Sections of the Specifications.
- B. Transmission of Submittals: Transmit all submittals to the Architect through the Construction Manager, unless otherwise directed. Include all information specified below for identification of submittal and for monitoring of review process. Transmittal required for submittal is included at end of this Section.
- C. Timing of Submittals: Make submittals sufficiently in advance of construction activities to allow shipping, handling and review by the Architect and Architect's consultants.
- D. Submittals Identification:

1. Title each submittal with Project name, Architect's Project number and submission date.
  2. Identify each element on submittal by reference to Drawing sheet number, detail, schedule, room number, assembly or equipment number, Specifications article and paragraph, and other pertinent information to clearly correlate submittal with Contract Drawings.
  3. Identify each submittal by Specification Section number followed by a number indicating sequential submittal for that Section. For example:
    - a. 09 21 16-1 First submittal for Section 09 21 16 - Gypsum Board.
    - b. 09 21 16-2 Second submittal for Section 09 21 16 - Gypsum Board.
  4. Resubmittals shall use same number as original submittal, followed by a letter indicating sequential resubmittal. For example:
    - a. 09 21 16-2A Resubmission of second submittal for Section 09 21 16 - Gypsum Board.
    - b. 09 21 16-2B Second resubmission of second submittal for Section 09 21 16 - Gypsum Board.
- E. Grouping of Submittals: Unless otherwise specifically permitted by the Architect, make all submittals in groups containing all associated items. The Architect may reject partial submittals as incomplete or hold them until related submittals are made.
- F. Unsolicited Submittals: Unsolicited submittals will be returned unreviewed.
- 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.

#### **1.05 SUBMITTALS SCHEDULE**

- A. Format: 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. Submittals shall be connected to the related construction element by a graphically indicated critical path on the same page. Present schedules using opaque reproductions on substantial paper, with sheet size a multiple of 8-1/2 inches by 11-inches and large enough to clearly read characters.
- B. Content: List all items specified to be submitted, indicating submittal number (see instructions following), submittal type (i.e., product data, shop drawings, sample, quality control report, maintenance and operating data, etcetera), scheduled date submittal is to be made and date review should be complete in order to maintain construction on schedule. Allow time for Architect's request for revisions or corrections and resubmittal by Contractor and the ensuing review by the Architect. Allow time for shipping and distribution to involved parties.
- C. Administration:
1. Submit initial Submittals Schedule within 10 days of date of Notice of Award of construction.
  2. After review and return by Architect, resubmit Submittals Schedule within 10 days and thereafter submit updated Submittals Schedules at each Construction Progress Meeting.
  3. Submit one copy each to District, District's Construction Manager and Architect.
- D. Posting: Post one copy of most recent Submittals Schedule in Contractor's field office, readily available to District, District's Construction Manager and Architect. Update bi-weekly with project schedule.
- E. Archive: Preserve a minimum of two copies of all superseded schedules, with one copy available at field office for review by District or Architect.

#### **1.06 CONTRACTOR'S REVIEW OF SUBMITTALS**

- A. Contractor's Review of Submittals: Prior to submission to Architect for review, Contractor shall review each submittal for completeness and conformance to specified requirements. Contractor shall stamp each submittal with a review action stamp and sign each copy certifying that:
1. Field measurements have been determined and verified.
  2. Conformance with requirements of Contract Drawings and Specifications is confirmed.
  3. Catalog numbers and similar data are correct.
  4. Work being performed by various subcontractors and trades is coordinated.
  5. 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.

6. All deviations from requirements of Drawings and Specifications have been identified and noted.
- B. Changes in Work: Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorize changes in the Work. Changes shall only be authorized by separate written direction, in accordance with the Conditions of the Contract and Section 01 2600 - Contract Modification Procedures.

#### **1.07 ARCHITECT'S REVIEW OF SUBMITTALS**

- A. Architect's Review of Submittals: Submittals shall be a communication aid between Contractor and Architect by which interpretation of Contract Documents requirements may be confirmed in advance of construction. Reviews by Architect and Architect's consultants shall be only for general conformance with the design concept of the Project and general compliance with the information given in the Drawings and Specifications.
- B. Contract Requirements:
  1. Review actions by Architect and Architect's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications.
  2. No review action, implicit or explicit, shall be interpreted to authorize changes in the Work. Changes shall only be authorized by separate written Change Order or Construction Change Directive, in accordance with the Conditions of the Contract and Section 01 2600 - Contract Modification Procedures.

#### **1.08 PRODUCT DATA SUBMITTALS**

- A. Copies: Electronic Documents: Submit one electronic copy in PDF format; a reviewed electronically-marked up file will be returned. Create PDFs at native size with renderable text and right-side up; illegible files will be rejected. Provide with applicable data highlighted and cross-referenced to Drawings and Specifications requirements.
- B. Modifications to Standard Product Data: Modify manufacturer's standard catalog data to indicate precise conditions of the Project. Comply with requirements as for shop drawings, following. Provide space for review action stamps and, if required by governing authorities having jurisdiction, license seal of Architect and Architect's design consultant, if applicable.

#### **1.09 SHOP DRAWINGS SUBMITTALS**

- A. Copies: Electronic Documents: Submit one electronic copy in PDF format; a reviewed electronically-marked up file will be returned. Create PDFs at native size with renderable text and right-side up; illegible files will be rejected. Prepare shop drawings on minimum sheet size of 17-inches by 22-inches. Submit in addition to the PDF, one (1) hard copy for Structural Steel submittal only.
- B. Preparation: Shop drawings shall be original drawings prepared for submittal review, fabrication and execution of Work. Direct copies and modified reproductions of Contract Drawings will not be accepted for review. Provide space for review action stamps and, if required by governing authorities having jurisdiction, license seal of Architect and Architect's design consultant, if applicable.
- C. Coordination: Show all field dimensions and relationships to adjacent or critical features of Work.

#### **1.10 SAMPLES SUBMITTALS**

- A. Quantity: Submit minimum of four (4) samples of each of color, texture and pattern. Submit one item only of actual assembly or product. Unless otherwise noted, full-size and complete samples will be returned and may be incorporated into field mock-ups and the Work.
- B. Color Samples: Architect will review and select colors for Project only after all colors are received, so that colors may be properly coordinated.
- C. Copies: Submit actual samples. Photographic or printed reproductions will not be accepted.
- D. Review of Field Samples: Review by Architect of field samples will be made for the following products, as applicable, if not otherwise required and if requested by Contractor.
  1. Concrete wall finishes and detailing (edges, corners and reveals).
  2. Concrete paving colors and textures.

3. Gypsum board textures and finishes.
4. Field-applied paint colors and finishes.

#### **1.11 OPERATION AND MAINTENANCE DATA SUBMITTALS**

- A. Operation and Maintenance Data Submittals: Refer to requirements specified in Section 01 78 23 - Operation and Maintenance Data. Include operation and maintenance data submittals in Submittals Schedule specified above. Provide space for review action stamps and, if required by governing authorities having jurisdiction, license seal of Architect and Architect's design consultant, if applicable.

### **PART 2 - PRODUCTS**

#### **2.01 (NOT APPLICABLE TO THIS SECTION.)**

### **PART 3 - EXECUTION**

#### **3.01 (NOT APPLICABLE TO THIS SECTION.)**

**END OF SECTION**



## SUBMITTAL / SHOP DRAWING TRANSMITTAL

To:	Ruhna Clarke Architects	Contractor's Submittal No.	
Attn:	construction@ruhnaclarke.com		
Contractor:		Project Name:	Shade Structures @ Menifee Campus
Street:		RCA's Project No.	1-51-07
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</u> ONE:	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"/>	<b>CONTRACTORS CERTIFICATION</b> 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 RCA:
	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 33 26**

### **QUALITY CONTROL SUBMITTALS**

#### **PART 1 - GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Administrative requirements for submittals reporting results of tests and inspections.

##### **1.02 RELATED SECTIONS**

- A. Section 01 10 00- Summary of Work: Subcontractor and materials suppliers list, Work includes Contractor use of site, work sequence.
- B. Section 01 33 23 - Shop Drawings, Product Data and Samples: Quality control submittals for products prior to field work.
- C. Section 01 40 00 - Quality Control: Test and inspection procedures.
- D. Section 01 77 00 - Contract Closeout: Submittals for occupancy, Acceptance and Final Payment.

##### **1.03 ADMINISTRATIVE REQUIREMENTS**

- A. Administration: Make all submittals to the Architect through the Construction Manager, 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 3323 - Shop Drawings, Product Data and Samples. Resubmittals shall use same number as original submittal, followed by a letter indicating sequential resubmittal.
  - 1. 03 30 00-1First submittal for Section 03 30 00 - Cast in Place Concrete.
  - 2. 03 30 00-2Second submittal for Section 03 30 00 - Cast in Place Concrete.
  - 3. 03 30 00-2AResubmittal of second submittal for Section 03 30 00 - Cast in Place Concrete.
  - 4. 03 30 00-2BSecond resubmittal of second submittal for Section 03 30 00 - Cast in Place Concrete.
- C. Project Identification: Title each submittal with Project name, submittal date and Architect's Project number.
- D. Copies: Submit one (1) copy electronically via email or file transfer site or six (6) copies, minimum, of reports of quality control reports on dry-process xerographic copies only.
- E. Contractor's Review: Submittals shall be made by Contractor in accordance with requirements specified herein and in individual Sections. Indicate clearly on each submittal the specified or referenced values for each quality control activity and the values obtained. Contractor shall note clearly and sign each submittal certifying that reported quality control activity "Conforms" or "Does Not Conform".
- F. Changes and Deviations: Identify all deviations from requirements of Drawings and Specifications. Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work. Changes shall only be authorized by separate written Change Order or Construction Change Authorization, in accordance with the General Conditions.
- 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.

##### **1.04 QUALITY CONTROL SUBMITTALS SCHEDULE**

- A. Schedule Format: Include quality control submittals on Submittals Schedule specified in accordance with General Conditions.



- B. 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.

#### **1.05 ARCHITECT'S REVIEW**

- A. General: Review by Architect and Architect's consultants shall be only for general conformance with the design concept and requirements based on the information presented. Neither Architect nor Architect's consultants shall verify submitted quality control data.
- B. Contract Requirements: Review by Architect and Architect's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications. Changes shall only be authorized by separate written Change Order or Construction Change Authorization, in accordance with the General Conditions and Section 01 26 00- Contract Modification Procedures.

### **PART 2 - PRODUCTS**

#### **2.01 (NOT APPLICABLE TO THIS SECTION.)**

### **PART 3 - EXECUTION**

#### **3.01 (NOT APPLICABLE TO THIS SECTION.)**

**END OF SECTION**

**SECTION 01 35 50**  
**REQUESTS FOR ELECTRONIC FILES**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Requirements to receive electronic construction document files from Architect.
- B. Hold Harmless Agreement form.

**1.02 RELATED SECTIONS (AS APPLICABLE)**

- A. Section 01 33 23 - Shop Drawings, Product Data and Samples.
- B. Section 01 77 00 - Contract Closeout.
- C. Divisions 31 through 33 - Sitework.

**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 USED)**

**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, Ruhnau Clarke Architects, 3775 Tenth Street, Riverside, CA 92501.
- B. In order to expedite the transfer, upon receipt of a fax copy of this acknowledgement, the requested CAD files will be sent in the form of a compact disc to the recipient, as requested, by UPS or similar delivery service.
- C. It is expressly understood that any transfer is done as a courtesy and can be revoked at any time by the Architect.

## HOLD HARMLESS AGREEMENT

We, \_\_\_\_\_, understand that we may be receiving electronic media containing design information, not necessarily intended for construction. We agree to hold Ruhnau Clarke 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

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print or Type Name

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

\_\_\_\_\_  
Street Address

\_\_\_\_\_  
City, State, Zip Code

\_\_\_\_\_  
E-mail Address

**END OF SECTION**

## **SECTION 01 40 00**

### **QUALITY REQUIREMENTS**

#### **PART 1 - GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Regulatory requirements for testing and inspection.
- B. Contractor's quality control.
- C. Quality of the Work.
- D. Inspections and tests by governing authorities.
- E. Inspections and tests by serving utilities.
- F. Inspections and tests by manufacturer's representatives.
- G. Inspections by independent testing and inspection agency.

##### **1.02 RELATED SECTIONS**

- A. Section 01 33 26 - Quality Control Submittals: Administrative requirements for submittals reporting results of tests and inspections during field Work.
- B. Section 01 41 00 - Regulatory Requirements: Compliance with applicable codes, ordinances and standards.
- C. Section 01 45 33 - Code Testing, Special Inspection and Procedures: Testing laboratory services and inspections required during the course of construction.
- D. Section 01 60 00 - Product Requirements: Product options, substitutions, transportation and handling requirements, storage and protection requirements, and system completeness requirements.

##### **1.03 REGULATORY REQUIREMENTS FOR TESTING AND INSPECTION**

- A. Regulatory Requirements for Testing and Inspection: 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 and Procedures.

##### **1.04 CONTRACTOR'S QUALITY CONTROL**

- A. Contractor's Quality Control: Contractor shall ensure that products, services, workmanship and site conditions comply with requirements of the Drawings and Specifications by coordinating, supervising, testing and inspecting the Work and by utilizing only suitably qualified personnel.
- B. 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.
- C. 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.

##### **1.05 QUALITY OF THE WORK**

- A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects and fit for the intended use.
- B. 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.
- C. 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 Owner.

- D. 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.
- E. 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.
- F. Verification of Quality: Work shall be subject to verification of quality by Owner, or Architect in accordance with provisions of the General Conditions of the Contract.
  - 1. Contractor shall cooperate by making Work available for inspection by Owner, 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 Owner, or Architect.
  - 5. Contract modifications, if any, resulting from such verification activities shall be governed by applicable provisions in the General Conditions.
- G. 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.
- H. Limitations on Inspection, Test and Observations: Neither employment of an Independent Testing and Inspection Agency nor observations by Architect and Architect's consultants shall in any way relieve Contractor of obligation to perform Work in full conformance to all requirements of Contract Documents and applicable Building Code and other regulatory requirements.
- I. 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.
- J. Correction of Non-Conforming Work: Non-conforming Work shall be modified, replaced, repaired or redone by the Contractor at no change in Contract Sum or Contract Time.
- K. Acceptance of Non-Conforming Work: Acceptance of non-conforming Work, without specific written acknowledgement and approval of the Owner, 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.
- L. Contract Adjustment for Non-conforming Work: Should Architect or Owner determine that it is not feasible or in Owner's interest to require non-conforming Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between Owner and Contractor. 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.
- M. 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.

#### **1.06 INSPECTIONS AND TESTS BY GOVERNING AUTHORITIES**

- A. Inspections and Tests by Authorities Having Jurisdiction: 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. Except as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

#### **1.07 INSPECTIONS AND TESTS BY SERVING UTILITIES**

- A. Inspections and Tests by Serving Utilities: Contractor shall cause all tests and inspections required by serving utilities to be made for Work under this Contract. Scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

#### **1.08 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES**

- A. Inspections and Tests by Manufacturer's Representatives: Contractor shall cause all tests and inspections specified to be conducted by materials or systems manufacturers to be made. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

#### **1.09 INSPECTIONS BY INDEPENDENT TESTING AND INSPECTION AGENCY**

- A. Inspections by Independent Testing and Inspection Agency or Agencies: Contractor shall cause all tests and inspections required during the course of construction to be conducted. See Section 01 45 33 - Code Required Procedures and Special Inspections.

#### **PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION.)**

#### **PART 3 - EXECUTION - (NOT APPLICABLE TO THIS SECTION.)**

**END OF SECTION**



**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 shall 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 shall 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.

**1.02 APPLICABLE CODES, LAWS AND ORDINANCES**

- A. Applicable Codes, Laws and Ordinances: Refer also to Section 00100 - Summary (provided under separate cover by CM), General Conditions, and Supplementary General Conditions, regarding permits and licenses.
  - 1. Performance of the Work shall 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 Owners 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.
- B. 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.
  - 1. Local and State Building Codes: Performance of the Work shall meet or exceed the minimum requirements of the following, as adopted by the DSA:
    - a. 2016 Building Standards Administrative Code - Part 1, Title 24 CCR.
    - b. 2016 California Building Code (CBC), Part 2, Title 24 CCR.
    - c. 2016 California Electrical Code (CEC), Part 3, Title 24 CCR.
    - d. 2016 California Mechanical Code (CMC), Part 4, Title 24 CCR.
    - e. 2016 California Plumbing Code (CPC), Part 5, Title 24 CCR.
    - f. 2016 California Energy Code, Part 6, Title 24 CCR.
    - g. 2016 California Fire Code (CFC), Part 9, Title 24 CCR.
    - i. 2016 California Referenced Standards Code, Part 12, Title 24 CCR.
    - j. Title 19 CCR, Public Safety, State Fire Marshal Regulations.
  - 2. Safety Codes: State of California, California Administrative Code, California Code of Regulations (CCR), Title 8 - Industrial Relations, Chapter 4, Subchapter 7, General Industry Safety Orders.
  - 3. General Standards: California Building Code (CBC) Standards, UL Building Products Listing, FM Approval Guide and ASTM Standards in Building Codes.
  - 4. Fire and Life Safety Standards: All referenced standards pertaining to fire rated construction and exiting.



5. State of California Requirements: Performance of the Work shall also comply with applicable requirements of the State of California, California Code of Regulations (CCR), as follows:
  - a. Title 19 - Public Safety.
  - b. Title 22 - Social Security.
  - c. Title 24 - Building Standards, Parts 2 through 7 specifically and any other applicable chapters, and Title 25 as applicable.
  - d. Title 24 - Accessibility Requirements shall conform to the following:
    - 1) Chapters 10, 11B and 30 specifically and any other applicable chapters of 2016 California Building Code, Part 2, Title 24, CCR.
    - 2) Applicable sections of 2016 Edition California Electrical Code, Part 3, Title 24, CCR.
    - 3) Applicable sections of 2016 California Plumbing Code, Part 5, Title 24, CCR.
- C. Date of Codes, Laws and Ordinances: The applicable edition of all codes shall be that adopted at the time of issuance of permits by the jurisdiction having authority and shall include all modifications and additions adopted by that jurisdiction. The applicable date of laws and ordinances shall be that of the date of performance of the Work.

**PART 2 - PRODUCTS - (NOT USED)**

**PART 3 - EXECUTION - (NOT USED)**

**END OF SECTION**

**SECTION 01 45 33**  
**CODE TESTING, SPECIAL INSP. & PROCEDURES**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Div of the State Architect (D.S.A.) Procedures for construction oversight and inspections required during the course of construction.
- B. Div of the State Architect (D.S.A.) approved testing laboratory services and inspections required during the course of construction.

**1.02 CONTRACTOR RESPONSIBILITIES**

- A. 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 Group 1, 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).
  - 1. Assist the Project Inspector (IOR) and complete and fill out the following forms during the course of construction.
    - a. Form-102-IC: Construction Start Notice/ Inspection Card Request: Verify Project Inspector has an active form issued by DSA.
    - b. Form-151: Project Inspector Notifications: Contractor to notify IOR and assist.
    - c. Form-152: Project Inspection Card: See below.
    - d. 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).
      - 1) 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.
      - 2) 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.
      - 3) Deviations include both construction deviations and material deficiencies.
      - 4) The written notice of deviations shall be made using form DSA 154.
      - 5) The notice of resolution of deviations shall be made using the original form DSA 154 that reported the deviations.
    - e. Form-156: Commencement/Completion of Work Notification
    - f. Form-6.C: Verified Report – Contractor: From each contractor having a contract with the school board.
- B. Duties of contractor related to the use of form DSA 152 are as follows:
  - 1. The contractor shall carefully study the DSA approved documents and shall plan a schedule of operations well ahead of time.
  - 2. 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.
  - 3. Verify that forms DSA 152 are issued for the project prior to the commencement of construction.
  - 4. 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.

5. 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.
6. 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.
7. 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.

### 1.03 TESTS

- A. The District will select an independent testing laboratory to conduct tests. Material required to be tested will be selected by the laboratory or the District's Inspector and not by the Contractor.
- B. 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.
- C. 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.
- D. 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.
- E. DSA Form 291 shall be from the engineering manager of the laboratory of record.
- F. 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 the architect, structural engineer, Project Inspector and school district.
  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. Submit Verified Reports form DSA 291 to the DSA, Project Inspector, district and design professional in responsible charge. The reports are required to be submitted upon any of the following events occurring:
  10. Within 14 days of the completion of the material testing/special inspection program.
  11. Work on the project is suspended for a period of more than one month.

12. The services of the laboratory of record are terminated for any reason prior to completion of the project.
  13. The DSA requests a Verified Report. (See interim verified reports below. This is a “DSA request.”)
  14. Submit an interim Verified Report (form DSA 291) 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 material testing. 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
  15. The Verified Reports shall be sent electronically to the DSA.
- G. 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.
  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 DSA292) 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 as required per PR 13-01.

#### **1.04 TESTING LABORATORY**

- A. 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). 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 2016 California Building Code (CBC) Sec. 4-335.
- B. Testing and inspection services which are performed shall be in accordance with requirements of the 2016 CBC, and as specified herein. Testing and inspection services shall verify that work meets the requirements of the Contract Documents.
- C. 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.
- D. Test reports shall be signed by a Civil Engineer licensed in the State of California.

#### **1.05 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.
- 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.

#### **1.06 TEST AND INSPECTION REPORTS**

- A. 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.
- B. Each and every test or inspection report shall bear the File Number and Application Number assigned to this project by the DSA.

- C. The Testing Laboratory will make the following distribution of test and inspection reports:
- |                                    |   |
|------------------------------------|---|
| 1. School District                 | 1 |
| 2. Architect                       | 2 |
| 3. Structural Engineer             | 1 |
| 4. Contractor                      | 1 |
| 5. District's Inspector            | 1 |
| 6. Division of the State Architect | 1 |
| 7. Construction Manager            | 1 |
- D. Test reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of the 2016 CBC, and with the approved specifications. They shall also state definitely whether or not the material or materials tested comply with requirements.
1. Test reports shall be issued within 14 days of finding being known, to all parties listed above.

#### **1.07 VERIFICATION OF TEST REPORTS**

- A. The Testing Laboratory of record shall submit to the DSA a verified report covering all tests which are required to be made by that agency during the progress of the project. 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.
- B. DSA Form 292 - Special Inspection Verified Report shall be from all special inspectors contracting directly and individually with the school board.

#### **1.08 REPORTING TEST FAILURES**

- A. 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 facsimile (or email if agreed to in advance) to the Architect, Structural Engineer, and District's Inspector

#### **1.09 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.

#### **1.10 REMOVAL OF MATERIALS**

- A. Unless otherwise directed, materials not conforming to the requirements of Contract Documents shall be promptly removed from the Project site.

#### **1.11 INSPECTION BY THE DISTRICT**

- A. The District shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the District. 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. 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. 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.

#### **1.12 DISTRICT'S INSPECTOR (INSPECTOR OF RECORD)**

- A. An Inspector employed by the District and approved by Architect, Structural Engineer and DSA in accordance with the requirements of the 2016 CBC will be assigned to the work. His duties are specifically defined in CCR Title 24 Part 1, Sec. 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 Inspector. 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. Inspection of the work shall not relieve the Contractor from any obligation to fulfill this Contract.
  - 1. 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.

### **PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION.)**

### **PART 3 - EXECUTION**

#### **3.01 TESTS AND INSPECTIONS**

- A. Tests and inspections for the following will be required in accordance with DSA IR 17-4, 17-6, 17-7, and the 2016 CBC, unless otherwise specified:
- B. Structural Steel (Chapter 22A):
  - 1. Materials:
    - a. Structural Steel, Cold Formed Steel 2212A.1
    - b. Material Identification 2203A
  - 2. Inspection of Structural Steel:
    - a. Tests of Structural & Cold Formed Steel 2212A.1
    - b. Tests of H.S. Bolts, Nuts, Washers 2212A.2
    - c. Tests of End Welded Studs 2212A.3
    - d. Welding Inspection 1704A.3.1
    - e. Shop Fabrication Inspection 1704A.3.2.1
    - f. Tests of Beam-to-Column Moment Connection 2212A.4
- C. Miscellaneous Fasteners:
  - 1. Anchorage test methods as shown on Drawings and as specified in respective sections.

#### **3.02 TESTING AND INSPECTION OF STRUCTURAL STEEL**

- A. Mill certificates or affidavits and manufacturers' certification shall be supplied to the Testing Laboratory and Inspector for verification of steel materials. Testing Laboratory shall be notified at least 2 working days in advance of fabrication and supplied with the reports so that it can make a shop inspection of the steel.

- B. Tests of Steel Materials: If structural steel cannot be identified by heat or melt numbers, or if its source is questionable, not less than one tension test and one bend test will be made for each 5 tons or fractional part thereof. Comply with CBC 2212A.1. Such testing shall be paid for by the District and backcharged to the Contractor.
1. CBC 2212A.1 Exception: No mechanical tests are required for unidentified steel when the minimum yield stress required by the design is less than or equal to 25 ksi (172 MPa) and the steel is not part of the designated lateral-force-resisting system.
- C. General Inspection:
1. Testing Laboratory will visit the fabricator's plant to verify that materials used check with the mill tests, affidavits of test reports, and that fabrication and welding procedures meet specifications.
  2. Testing Laboratory will visually check fabricated steel against the contract drawings and reviewed shop drawings for compliance, and will make physical tests and measurements as required to meet the specifications. Single pass fillet welds may be visually checked.
  3. Testing Laboratory will review welding procedure specifications as prepared by the fabricator.
  4. Inspection of Shop Fabrication: Inspection of shop fabrication is required. This inspection shall be made by a qualified inspector approved by the DSA. He shall furnish the Architect and the DSA a report duly verified by him that the materials and workmanship conform to the approved plans and specifications.
  5. Inspection of welding shall be in accordance with the requirements of the 2016 CBC Title 24 Part 2, Sec. 1704A.3.1.
  6. Erection Inspection: Testing Laboratory will visually inspect bolted and field welded connections, perform such additional tests and inspections of field work as are required by the Architect and prepare test reports for the Architect's review.
  7. Shop Fabrication Inspection Outside of Area: The added cost of shop fabrication inspection, and material testing outside the State of California or 150 mile radius of the Project site will be paid by the District and backcharged to the Contractor.
  8. Special inspection for high tension bolting will be provided by the Testing Laboratory. Inspection shall be in accordance with AISC Specification for Structural Joints Using ASTM A325 or A490 Bolts, June 30, 2004.
  9. Ultrasonic Testing: All full penetration multi-pass groove welds shall be subject to ultrasonic testing.
    - a. Defective welds shall be repaired and retested with ultrasonic equipment.
    - b. Initially, all multi-pass groove field welds shall be tested at the rate of 100 percent of each individual welder. If rejectable defects occur in less than 5 percent of the welds tested, the frequency of testing may be reduced to 25 percent. If the rate of rejectable defects increases to 5 percent or more, 100 percent testing shall be reestablished until the rate is reduced to less than 5 percent. The percentage of rejects shall be calculated for each welder independently.
    - c. When ultrasonic indications arising from the weld root can be interpreted as either a weld defect or the backing strip itself, the backing strip shall be removed at the expense of the Contractor, and if no root defect is visible, the weld shall be retested. If no defect is indicated on this retest, and no significant amount of the base and weld metal have been removed, no further repair or welding is necessary. If a defect is indicated, it shall be repaired at the Contractor's expense.
  10. The ultrasonic instrumentation shall be calibrated by the technician to evaluate the quality of the welds in accordance with AWS D1.1 latest Edition.
  11. Should defects appear in welds tested, repairs shall be similarly inspected at the Contractor's expense and at the direction of the Architect until satisfactory performance is assured.
  12. Other methods of inspection, for example, X-ray, gamma ray, magnetic particle, or dye penetrant, may be used on welds if felt necessary by the Architect.
- D. Corrections:
1. Correct deficiencies in structural steel work which inspections and test reports indicate to be not in compliance with the specified requirements.



2. Perform additional tests required to reconfirm noncompliance of the original work and to show compliance of corrected work. Costs for all additional tests will be paid for by the District and backcharged to the Contractor.

### **3.03 SPECIAL INSPECTIONS FOR CONCRETE CONSTRUCTION (CHAPTER 19A)**

- A. Inspection:
  1. Job Site Inspection: CBC 1704A.4.5(Conc. Preplacement), 1704A.4.6(Placing Record), and 1905A.7(Equipment Placement).
  2. Batch Plant or Weighmaster Inspection: CBC 1704A.4.3.
    - a. Waiver of Batch Plant Inspection: Batch plant inspection may be waived if the concrete plant complies fully with the requirements of CBC 1704A.4.3 and has been certified to comply with the requirements of the National Ready Mixed Concrete Association. The plant must be equipped with an automatic batcher in which the total batching cycle, except for the measuring and introduction of an admixture, is completed by activating a single starter device. Prior to waiving of batch plant inspection, the testing lab must certify and submit evidence of compliance to DSA and obtain agency approval prior to mixing concrete.
      - 1) Approved inspector of the testing laboratory shall check the first batching at the start of work each day and furnish mix proportions to the licensed weigh-master.
      - 2) Licensed weigh-master shall positively identify materials as to quantity and certify each load by a ticket.
      - 3) Tickets shall be transmitted to the Inspector of Record by a truck driver with load identified thereon. The inspector shall not accept the load without a load ticket identifying the mix and will keep a daily record of placements, identifying each truck, its load and time of receipt and approximate location of deposit in the structure and will transmit a copy of the daily record to the enforcement agency.
      - 4) At the end of the project, the weigh-master shall furnish an affidavit to the enforcement agency certifying that all the concrete furnished conforms in every particular to proportions established by mix designs.
- B. Reinforcing Steel, Including Prestressing of Tendons and Placement: Verify compliance with approved contract documents and ACI 318, 3.5 and 7.1 through 7.7; periodic.
  1. Reinforcing Bars: CBC 1903A.4, 1916A.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 or ASTM A706.
    - c. Sample at the place of distribution, before shipment: 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. Mill analysis shall accompany report. 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. Tests on unidentified reinforcing steel will be paid by the District and backcharged to the Contractor. 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. Reinforcing Steel Welding: Verify compliance with AWS D1.4 and ACI 318, 3.5.2; periodic.
  1. Reinforcing Bar Welding Inspection: CBC 1704A.3.1.3.
  2. Inspection of welding of reinforcing steel shall be done by a specially qualified laboratory inspector and tested in accordance with AWS D1.4. Inspector shall be present during welding of all reinforcing steel. Inspector of welded reinforcing steel shall meet requirements of 1704A.4.1.
- D. Bolts Installed in Concrete: Where allowable loads have been increased or where strength design is used, verify compliance with approved contract documents and ACI 318, 8.1.3 and 21.2.8 prior to and during placement of concrete; continuous.

- E. Anchors Installed in Hardened Concrete: Verify compliance with ACI 318, 3.8.6, 8.1.3 and 21.2.8; periodic.
- F. Design Mix: Verify plastic concrete complies with the design mix in approved contract documents and with ACI 318, Chapter 4 and 5.2; periodic.
  - 1. Portland Cement Tests: CBC 1704A.4.1, 1903A, 1916A.1
  - 2. Concrete Aggregates: CBC 1704A.4.1, 1903A.7, 1903A.5
  - 3. Batch Plant Inspection: CBC 1704A.4.2
  - 4. Waiver of Batch Plant Inspection and Tests: CBC 1704A.4.3
  - 5. Admixtures: CBC 1903A, 1903A.4
  - 6. Proportions of Concrete: CBC 1904A(Durability) and 1905A,1,2,3,4,5(Quality).
- G. Concrete Sampling Concurrent with Strength Test Sampling: Each time fresh concrete is sampled for strength tests, verify compliance with ASTM C172, ASTM C31 and ACI 318, 5.6 and 5.8 and record the following, continuous:
  - 1. Slump.
  - 2. Air content.
  - 3. Temperature of concrete.
  - 4. Strength Tests of Concrete: CBC 1905A.1.1 and 1905A.6.
- H. Concrete and Shotcrete Placement: Verify application techniques comply with approved contract documents and ACI 318, 5.9 and 5.10; continuous.
- I. Specified Curing Temperature and Techniques: Verify compliance with approved contract documents and ACI 318, 5.11 through 5.13; periodic.
- J. Concrete Strength in Situ: Verify concrete strength complies with approved contract documents, CBC 1704 and ACI 318, 6.2, for the following.
  - 1. Beams and structural slabs, prior to removal of shores and forms; periodic.
- K. Formwork Shape, Location and Dimensions: Verify compliance with approved contract documents and ACI 318, 6.1.1; periodic.
- L. 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.
- M. 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. Keep daily record of concrete placement, identifying each truck load, time of receipt, and location of concrete in structure. Keep record until completion of Project and make available for inspection by DSA Field Engineer or representative. See also subparagraph on Waiver of Batch Plant Inspection above.
  - 3. During progress of work, take reasonable number of test cylinders as directed by Architect. Conform to CBC 1905A.6 (ACI 318). Test cylinders need not be made for concrete used in exterior flatwork.
    - a. ACI 318 Section 5.6.2.1 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. 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.
  - 4. 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. The 28-day test may be omitted if the 7-day compressive strength exceeds 85 percent of the specified 28-day strength.
  - 5. Make and store cylinders according to ASTM C31.
  - 6. Deliver cylinders to laboratory or store cylinders in a suitable protected environment for pick up by laboratory personnel.
  - 7. Make slump test of wet concrete according to test for slump of portland cement concrete, ASTM C143, at least at the same frequency that the cylinders are taken.

**END OF SECTION**

**SECTION 01 50 00**  
**TEMPORARY FACILITIES AND CONTROLS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Temporary utilities.
- B. Temporary telecommunications services.
- C. Temporary sanitary facilities.
- D. Temporary Controls: Barriers, enclosures, and fencing.
- E. Security requirements.
- F. Vehicular access and parking.
- G. Waste removal facilities and services.
- H. Project identification sign.

**1.02 TEMPORARY UTILITIES**

- A. Owner will provide the following:
  - 1. Electrical power, consisting of connection to existing facilities.
  - 2. Water supply, consisting of connection to existing facilities.
- B. Existing facilities may be used.
- C. Use trigger-operated nozzles for water hoses, to avoid waste of water.

**1.03 TELECOMMUNICATIONS SERVICES**

- A. Provide equivalent equipment and connections for Owner's field office.
- B. Provide equivalent equipment and connections for Architect's field office.
- C. Telecommunications services shall include:
  - 1. Windows-based personal computer dedicated to project telecommunications, with necessary software and laser printer.
  - 2. Telephone Land Lines: One line, minimum; one handset per line.
  - 3. Internet Connections: Minimum of one; DSL modem or faster.
  - 4. Facsimile Service: Minimum of one dedicated fax machine/printer, with dedicated phone line.
  - 5. Facsimile Service: Fax-to-email software on personal computer.
  - 6. Project web site.

**1.04 TEMPORARY SANITARY FACILITIES**

- A. Provide and maintain required facilities and enclosures. Provide at time of project mobilization.
  - 1. Contractor(s) shall provide temporary toilet facilities if maximum number of personnel on project is greater than 10.
  - 2. Contractor shall submit proposed location of temporary toilet(s) to Construction Administrator for approval.
    - a. Place on-site portable toilets away from building air intakes and entryway.
- B. Use of existing facilities is permitted.
  - 1. Construction personnel (less than 10 on site) may use existing sanitary facilities but must keep them clean. Sanitary facilities may not be used for clean up of personnel (other than washing of hands.)

- C. Maintain daily in clean and sanitary condition.
- D. At end of construction, return facilities to same or better condition as originally found.

#### **1.05 BARRIERS**

- A. Provide barriers to prevent unauthorized entry to construction areas, to prevent access to areas that could be hazardous to workers or the public, to allow for owner's use of site and to protect existing facilities and adjacent properties from damage from construction operations and demolition.
- B. Provide barricades and covered walkways required by governing authorities for public rights-of-way and for public access to existing building.
- C. Provide protection for plants designated to remain. Replace damaged plants.
- D. Protect non-owned vehicular traffic, stored materials, site, and structures from damage.

#### **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 EXTERIOR ENCLOSURES**

- A. Provide temporary weather tight closure of exterior openings to accommodate acceptable working conditions and protection for Products, to allow for temporary heating and maintenance of required ambient temperatures identified in individual specification sections, and to prevent entry of unauthorized persons. Provide access doors with self-closing hardware and locks.

#### **1.08 INTERIOR ENCLOSURES**

- A. Provide temporary partitions and ceilings as indicated to separate work areas from Owner-occupied areas, to prevent penetration of dust and moisture into Owner-occupied areas, and to prevent damage to existing materials and equipment.
- B. Construction: Framing and reinforced polyethylene sheet materials with closed joints and sealed edges at intersections with existing surfaces:
  - 1. STC rating of 35 in accordance with ASTM E90.
  - 2. Maximum flame spread rating of 75 in accordance with ASTM E84.
- C. Paint surfaces exposed to view from Owner-occupied areas.

#### **1.09 SECURITY**

- A. Provide security and facilities to protect Work, existing facilities, and Owner's operations from unauthorized entry, vandalism, or theft.
- B. Coordinate with Owner's security program.

#### **1.10 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 Administrator proposed location of any break areas and eating areas for approval.

#### **1.11 SMOKING AND TOBACCO**

- A. Smoking is not permitted indoors.

- B. Smoking is permitted outdoors in designated areas.
- C. All ashes and cigarette butts must be deposited in approved receptors.
- D. No chewing tobacco or spitting of tobacco is permitted.

#### **1.12 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 Owner.
- C. Provide and maintain access to fire hydrants, free of obstructions.
- D. Provide means of removing mud from vehicle wheels before entering streets.
- E. Existing on-site roads may be used for construction traffic.
- F. Provide temporary parking areas to accommodate construction personnel. When site space is not adequate, provide additional off-site parking.

#### **1.13 WASTE REMOVAL**

- A. Provide waste removal facilities and services as required to maintain the site in clean and orderly condition.
- B. Provide containers with lids. Remove trash from site periodically.
- C. 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.
- D. Open free-fall chutes are not permitted. Terminate closed chutes into appropriate containers with lids.

#### **1.14 PROJECT IDENTIFICATION**

- A. Provide project identification sign of design and construction indicated on Drawings.
- B. Erect on site at location established by Architect.
- C. No other signs are allowed without Owner permission except those required by law.

#### **1.15 REMOVAL OF UTILITIES, FACILITIES, AND CONTROLS**

- A. Remove temporary utilities, equipment, facilities, materials, prior to Substantial Completion 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**



## **SECTION 01 60 00**

### **PRODUCT REQUIREMENTS**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. General product requirements.
- B. Transportation, handling, storage and protection of products.
- C. Product option requirements.
- D. Substitutions and procedures, Request for Substitution Form.
- E. System Completeness.
- F. Installation of Products.
- G. Procedures for Owner-supplied products.
- H. Maintenance materials, including extra materials, spare parts, tools, and software.

##### **1.02 RELATED REQUIREMENTS**

- A. Instructions to Bidders: Product options and substitution procedures prior to bid date.
- B. Section 01 33 23 - Shop Drawings, Product Data and Samples: Requirements applicable to submittals for "or equal" and substitute products.
- C. Section 01 40 00 - Quality Requirements: Product quality monitoring.
- D. Section 01 41 00 - Regulatory Requirements: Codes and standards applicable to product specifications; minimum requirements.

##### **1.03 REFERENCE STANDARDS**

- A. NFPA 70 - National Electrical Code; National Fire Protection Association; Most Recent Edition Adopted by Authority Having Jurisdiction, Including All Applicable Amendments and Supplements.

##### **1.04 SUBMITTALS**

- A. See Section 01 33 23 - Shop Drawings, Product Data and Samples.
- B. 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 10 days after date of Notice to Proceed.
  - 2. For products specified only by reference standards, list applicable reference standards.
- C. 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.
- D. 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.
- E. 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.



## **PART 2 PRODUCTS**

### **2.01 GENERAL PRODUCT REQUIREMENTS**

- A. Drawings and Specifications: If a specific product is indicated on the Drawings for use, then that product shall be used without exception in the location identified. If the Contractor proposes the use of another product other than the item indicated, whether or not listed in these specifications, the Contractor shall submit the product using the complete substitution process. See the the Article titled "SUBSTITUTIONS" below
  - 1. AHJ 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. Installation of a non-approved product may result in the contractor removing and replacing the non-approved product at the Contractor's own expense.
  - 2. If a conflict exists between the Drawings and the Specifications (Project Manual), then the Contractor shall submit a Request for Interpretation from the Architect.
    - a. As noted in the General Conditions, the more stringent requirements shall govern, including cost of materials and/or installation.
- B. Products, 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 Control and individual product Specifications Sections in Divisions 2 through 33 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 Control and elsewhere herein.
- E. Product Selection: Provide products that fully comply with the Contract Documents, are undamaged and unused at installation. Comply with additional requirements specified herein in Article titled "PRODUCT OPTIONS".
- F. Standard Products: 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. Products shall be as selected by Contractor and subject to review and acceptance by the Owner (Owner) and Architect.
- G. Product Completeness: 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. Comply with additional requirements specified herein in Article titled "SYSTEM COMPLETENESS".
- H. Code Compliance: All products, other than commodity products prescribed by Code, shall have a current ICC Evaluation Service Research Report (ICC ESRR) or CABO National Evaluation Report (NER). Refer to additional requirements specified in Section 01 41 00 - Regulatory Requirements.
- I. Interchangeability: 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. When options are specified for the selection of any of two or more products, the product selected shall be compatible with products previously selected.
- J. 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 Division 23 - Mechanical, if included in the 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.
- K. Electrical Product Requirements: Comply with requirements specified in Divisions 26, 27, & 28 - Electrical.

## **2.02 NEW PRODUCTS**

- A. Provide new products unless specifically required or permitted by the Contract Documents.
- B. Do not use products having any of the following characteristics:
  1. Made outside the United States, its territories, Canada, or Mexico.
  2. Made using or containing CFC's or HCFC's.
  3. Made of wood from newly cut old growth timber.
- C. Where all other criteria are met, Contractor shall give preference to products that:
  1. Are extracted, harvested, and/or manufactured closer to the location of the project.
  2. Have longer documented life span under normal use.
  3. Result in less construction waste.
- D. Provide interchangeable components of the same manufacture for components being replaced.
- E. Wiring Terminations: Provide terminal lugs to match branch circuit conductor quantities, sizes, and materials indicated. Size terminal lugs to NFPA 70, include lugs for terminal box.
- F. Cord and Plug: Provide minimum 6 foot cord and plug including grounding connector for connection to electric wiring system. Cord of longer length is specified in individual specification sections.

## **2.03 PRODUCT OPTIONS**

- A. Products Specified by Description: 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.
- B. Products Specified by Performance Requirements: Where Specifications require compliance with performance requirements, provide product(s) that comply and are recommended by the manufacturer for the intended application. Verification of manufacturer's recommendations may be by product literature or by certification of performance from manufacturer.
- C. Products Specified by Reference to Standards: Where Specifications require compliance with a standard, provided product shall fully comply with the standard specified. Refer to general requirements specified in Section 01 42 00 - Reference Standards and Abbreviations regarding compliance with referenced standards, standard specifications, codes, practices and requirements for products.
- D. Products Specified by Reference Standards or by Description Only: Use any product meeting those standards or description.
- E. Products Specified by Naming One or More Manufacturers: Use a product of one of the manufacturers named and meeting specifications, no options or substitutions allowed.
- F. Products Specified by Naming One or More Manufacturers with a Provision for Substitutions: Submit a request for substitution for any manufacturer not named.

- G. 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 the phrase "or 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. Equivalence shall be demonstrated by submission of information in compliance with requirements specified herein under the Article titled "SUBSTITUTIONS."
  2. "Acceptable Manufacturers": 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 specified herein in the Article titled "SUBSTITUTIONS", except considerations regarding changes in Contract Time and Contract Sum will be waived if no increase in Contract Time or Contract Sum results from 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). Equivalent products of unnamed manufacturers will be accepted in accordance with the "or equal" provision specified herein, below.
    - b. If provided, products of unnamed manufacturers shall be subject to the requirements specified herein in the Article titled "SUBSTITUTIONS."
  4. Quality basis: 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. 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.
- H. 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.
- I. "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 Article herein titled "SUBSTITUTIONS" with the following conditions:
1. The requirements specified herein in the Article titled "SUBSTITUTIONS" shall apply to products provided under the "or equal" provision except, 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 Owner or for work under separate contract by Owner.
  3. Use of product(s) under the "or equal" provision shall not result in any costs to the Owner, including design fees and permit and plancheck 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. The intent of the design shall include functional performance and aesthetic qualities.
  5. The determination of equivalence will be made by the Architect and Owner, and such determination shall be final.
- J. Visual Matching: Where Specifications require matching a sample, the decision by the Architect on whether a proposed product matches shall be final. 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.

- K. Visual Selection of Products: 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 Architect will select color, pattern and texture from the product line of submitted manufacturer, if all other specified provisions are met.

## **2.04 SYSTEM COMPLETENESS**

- A. System Completeness:
1. 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.
  2. 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.
  3. Refer to related general requirements specified in Section 01 41 00 - Regulatory Requirements regarding compliance with minimum requirements of applicable codes, ordinances and standards.
- B. 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 Conditions or general requirements specified in Section 01 31 14 - Facility Services Coordination regarding construction interfacing and coordination.

## **2.05 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 PROCEDURES**

- A. Substitutions Regulation: Pursuant to Section 3400 of the Public Contract Code, requests for substitution will be considered 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 engineering requested by the Owner.
- B. Substitutions: Requests by Contractor to deviate from specified requirements for products, materials, equipment, and methods, or to provide products other than those specified, shall be 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 Owner 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.
- C. Substitutions will not be considered when a product becomes unavailable through no fault of the Contractor.

- D. Document each request with complete data substantiating compliance of proposed substitution with Contract Documents.
- E. 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: Substitutions will not be considered if they are indicated or implied on shop drawing, product data or sample submittals. 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 Owner's benefit, including redesign costs, life cycle costs, changes in related Work and overall performance of building systems.
  - 3. Design Revision: 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. 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: Architect will determine the acceptability of proposed substitutions and will notify Contractor, in writing within a reasonable time, of acceptance or rejection. The determination by the Architect regarding functional performance and aesthetic quality shall be final.
  - 6. Non-Acceptance: If a proposed substitution is not accepted, Contractor shall immediately provide the specified product.
  - 7. Substitution Limitation: Only one request for substitution will be considered for each product.
- F. A request for substitution 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.
  - 2. Will provide the same warranty for the substitution as for the specified product.
  - 3. Will coordinate installation and make changes to other Work that may be required for the Work to be complete with no additional cost to Owner.
  - 4. Waives claims for additional costs or time extension that may subsequently become apparent.
  - 5. Will reimburse Owner and Architect for review or redesign services associated with re-approval by authorities.
- G. Substitutions will not be considered when they are indicated or implied on shop drawing or product data submittals, without separate written request, or when acceptance will require revision to the Contract Documents.
- H. Substitution Submission Period:
  - 1. Time Limit: Only within 10 days of Notice to Proceed or execution of the Owner-Contractor Agreement, whichever is earliest, will the Owner and Architect consider requests for substitutions.
  - 2. Product Availability Waiver: Substitutions will be considered after 35 day time limit only when a product becomes unavailable due to no fault of Contractor. 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 Owner, limitations on substitutions may be waived.
- I. Request for Substitution Process:
  - 1. Contractor shall prepare a request for substitution and submit the request to the Architect for review and acceptance. Submit a minimum of 4 copies. Form and other administrative requirements shall be as included herein or as directed by the Architect.
  - 2. Substitution requests shall include complete product data, including drawings and descriptions of products, fabrication details and installation procedures. Include samples where applicable or requested.

3. Substitution requests shall include appropriate product data for the specified product(s) of the specified manufacturer, suitable for use in comparison of characteristics of products.
    - a. Include a written, point-by-point comparison of characteristics of the proposed substitute product with those of the specified product.
    - b. 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 Owner and by others under separate Contract with Owner, that will be necessary if the proposed substitution is accepted.
  4. Substitution requests shall include a statement indicating 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 Owner or for work under separate contract by Owner.
  5. Except as otherwise specified, substitution requests shall include detailed cost data, including a proposal for the net change, if any, in the Contract Sum.
  6. Substitution requests shall include signed certification that the Contractor has reviewed the proposed substitution and has determined that the substitution is equivalent or superior in every respect to product requirements indicated or specified in the Contract Documents, and that the substitution is suited for and can perform the purpose or application of the specified product indicated or specified in the Contract Documents.
  7. Substitution requests shall include a signed waiver by the Contractor for change in the Contract Time or Contract Sum because of the following:
    - a. Substitution failed to perform adequately.
    - b. Substitution required changes in on other elements of the Work.
    - c. Substitution caused problems in interfacing with other elements of the Work.
    - d. Substitution was determined to be unacceptable by authorities having jurisdiction.
  8. 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.
- J. Substitution Submittal Procedure:
1. Submit three copies of request for substitution for consideration. Limit each request to one proposed substitution.
  2. Submit shop drawings, product data, and certified test results attesting to the proposed product equivalence. Burden of proof is on proposer.
  3. The Architect will notify Contractor in writing of decision to accept or reject request.
- K. Contract Document Revisions:
1. Should a Contractor-proposed substitution or alternative sequence or method of construction require revision of the Contract Drawings or Specifications; 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; revisions will be made by Architect or other consultant of Owner who is the responsible design professional, as approved in advance by Owner.
  2. Services of Architect or other consultant of the Owner, 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 Owner.
  3. Costs of services by Architect or other responsible design professional of the Owner 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 billing.
  4. Such fees shall be paid whether or not the proposed substitution or alternative sequence or method of construction is ultimately accepted by Owner and a Change Order is executed.
  5. 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 Owner.

6. 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. Owner will then pay Architect or other consultant of the Owner.
7. Substitutions require Field Change Directive approval from DSA.

### **3.02 TRANSPORTATION AND HANDLING**

- A. 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. Coordinate with installation to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
- B. Transport and handle products in accordance with manufacturer's instructions.
- C. Transport products by methods to avoid product damage.
- D. Transport materials in covered trucks to prevent contamination of product and littering of surrounding areas.
- E. Deliver products in undamaged condition in manufacturer's original sealed container or packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.
- F. Arrange for the return of packing materials, such as wood pallets, where economically feasible.

### **3.03 STORAGE AND PROTECTION**

- A. 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.
- B. Inspection Provisions: Arrange storage to provide access for inspection and measurement of quantity or counting of units.
- C. Structural Considerations: Store heavy materials away from the structure in a manner that will not endanger supporting construction.
- D. Store and protect products in accordance with manufacturers' instructions.
  1. Store with seals and labels intact and legible.
- E. Weather-Resistant Storage:
  1. 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.
  2. Maintain storage within temperature and humidity ranges required by manufacturer's instructions.
  3. For exterior storage of fabricated products, place products on raised blocks, pallets or other supports, above ground and in a manner to not create ponding or misdirection of runoff. place on sloped supports above ground.
  4. Store loose granular materials on solid surfaces in a well-drained area. Prevent mixing with foreign matter.
- F. For exterior storage of fabricated products, place on sloped supports above ground.
- G. Provide bonded off-site storage and protection when site does not permit on-site storage or protection.
- H. Cover products subject to deterioration with impervious sheet covering. Provide ventilation to prevent condensation and degradation of products.
- I. Store loose granular materials on solid flat surfaces in a well-drained area. Prevent mixing with foreign matter.
- J. Prevent contact with material that may cause corrosion, discoloration, or staining.
- K. Provide equipment and personnel to store products by methods to prevent soiling, disfigurement, or damage.

- L. Arrange storage of products to permit access for inspection. Periodically inspect to verify products are undamaged and are maintained in acceptable condition.
- M. Protection of Completed Work:
  - 1. Provide barriers, substantial coverings and notices to protect installed Work from traffic and subsequent construction operations.
  - 2. Remove protective measures when no longer required and prior to Substantial Completion review of the Work.
  - 3. Comply with additional requirements specified in Section Temporary Construction Facilities.

### **3.04 INSTALLATION OF PRODUCTS**

- A. Installation of Products:
  - 1. 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.
  - 2. Anchor each product securely in place, accurately located and aligned with other Work.
  - 3. Clean exposed surfaces and provide protection to ensure freedom from damage and deterioration at time of Substantial Completion review. Refer to additional requirements specified in General Conditions, Section Temporary Construction Facilities and Section Final Cleaning.

**END OF SECTION**





**SECTION 01 60 00.01**  
**REQUEST FOR SUBSTITUTION**

**SUBSTITUTION REQUEST NO.** \_\_\_\_\_

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

Project Name: Shade Structures - Meniffee Campus

Project Number: 1-51-07

To: Ruhnau Clarke Architects  
3775 Tenth Street, Riverside, California 92501

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 may be made during bidding (not later than 7 days prior to bid opening for inclusion by Addendum) and not later than 35 days after award of contract or Notice to Proceed, whichever is earliest, except under conditions beyond control of Contractor.

Specified Product: \_\_\_\_\_

Project Manual Section Title \_\_\_\_\_ Number \_\_\_\_ Page \_\_\_\_ Paragraph \_\_\_\_.

Drawing No. \_\_\_\_\_ Detail No. \_\_\_\_\_

Proposed Substitution: \_\_\_\_\_

Manufacturer: \_\_\_\_\_ Tel: \_\_\_\_\_

Reason request for substitution is being submitted: \_\_\_\_\_

Does proposed substitution affect dimensions, gages, weights, etc. on Drawing? No\_\_ Yes\_\_  
(explain how) \_\_\_\_\_

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.)

Does proposed substitution affect product cost, delivery time, or construction schedule?

No\_\_ Yes\_\_ Explain \_\_\_\_\_

Does proposed substitution comply with specified ICC Number, UL Rating, ASTM Numbers?

No\_\_ Yes\_\_ Explain \_\_\_\_\_

Does proposed substitution affect other trades and systems such as wiring, piping, ductwork, structure, etc.?

No \_\_\_\_ Yes \_\_\_\_ (explain which and how)



**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. Cleaning and protection.
- E. Starting of systems and equipment.
- F. Closeout procedures, 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 78 00 - Closeout Submittals: Project record documents, operation and maintenance data, warranties and bonds.
- E. 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. NFPA 241 - Standard for Safeguarding Construction, Alteration, and Demolition Operations; 2009.

**1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. 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 Owner or separate Contractor.
- C. Project Record Documents: Accurately record actual locations of capped and active utilities.

**1.05 PROJECT CONDITIONS**

- A. Grade site to drain. Maintain excavations free of water. Provide, operate, and maintain pumping equipment.
- B. Protect site from puddling or running water. Provide water barriers as required to protect site from soil erosion.
- C. Ventilate enclosed areas to assist cure of materials, to dissipate humidity, and to prevent accumulation of dust, fumes, vapors, or gases.
- D. Dust Control: Execute work by methods to minimize raising dust from construction operations. Provide positive means to prevent air-borne dust from dispersing into atmosphere and over adjacent property.

- E. Pollution Control: Provide methods, means, and facilities to prevent contamination of soil, water, and atmosphere from discharge of noxious, toxic substances, and pollutants produced by construction operations. Comply with federal, state, and local regulations.

## **1.06 COORDINATION**

- A. 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.
- B. Notify affected utility companies and comply with their requirements.
- C. 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.
- D. Coordinate space requirements, supports, and installation of mechanical and electrical work that are indicated diagrammatically on Drawings. Follow routing shown 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.
- E. In finished areas except as otherwise indicated, conceal pipes, ducts, and wiring within the construction. Coordinate locations of fixtures and outlets with finish elements.
- F. Coordinate completion and clean-up of work of separate sections.
- G. After Owner occupancy of premises, coordinate access to site for correction of defective work and work not in accordance with Contract Documents, to minimize disruption of Owner'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.

## **PART 3 EXECUTION**

### **3.01 EXAMINATION**

- A. Verify that existing site 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.
- C. Apply manufacturer required or recommended substrate primer, sealer, or conditioner prior to applying any new material or substance in contact or bond.

### **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 14 calendar 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 two copies to Architect, Owner, participants, and those affected by decisions made.

### **3.04 GENERAL INSTALLATION REQUIREMENTS**

- A. In addition to compliance with regulatory requirements, conduct construction operations in compliance with NFPA 241, including applicable recommendations in Appendix A.
- B. 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.
- C. Make vertical elements plumb and horizontal elements level, unless otherwise indicated.
- D. Install equipment and fittings plumb and level, neatly aligned with adjacent vertical and horizontal lines, unless otherwise indicated.
- E. Make consistent texture on surfaces, with seamless transitions, unless otherwise indicated.
- F. Make neat transitions between different surfaces, maintaining texture and appearance.

### **3.05 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-conforming 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.
- D. Employ original installer to perform cutting for weather exposed and moisture resistant elements, and sight exposed surfaces.
- E. Cut rigid materials using masonry saw or core drill. Pneumatic tools not allowed without prior approval.
- F. Restore work with new products in accordance with requirements of Contract Documents.
- G. Fit work air tight to pipes, sleeves, ducts, conduit, and other penetrations through surfaces.
- H. At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with fire rated material in accordance with CFC, to full thickness of the penetrated element.

- I. 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.

### **3.06 PROGRESS CLEANING**

- A. Maintain areas free of waste materials, debris, and rubbish. Maintain site in a clean and orderly condition.
- B. Remove debris and rubbish from pipe chases, plenums, attics, crawl spaces, and other closed or remote spaces, prior to enclosing the space.
- C. Broom and vacuum clean interior areas prior to start of surface finishing, and continue cleaning to eliminate dust.
- D. Collect and remove waste materials, debris, and trash/rubbish from site periodically and dispose off-site; do not burn or bury.

### **3.07 PROTECTION OF INSTALLED WORK**

- A. Protect installed work from damage by construction operations.
- B. Provide special protection where specified in individual specification sections.
- C. Provide temporary and removable protection for installed products. Control activity in immediate work area to prevent damage.
- D. Provide protective coverings at walls, projections, jambs, sills, and soffits of openings.
- E. Protect finished floors, stairs, and other surfaces from traffic, dirt, wear, damage, or movement of heavy objects, by protecting with durable sheet materials.
- F. Prohibit traffic or storage upon waterproofed or roofed surfaces. If traffic or activity is necessary, obtain recommendations for protection from waterproofing or roofing material manufacturer.
- G. Remove protective coverings when no longer needed; reuse or recycle plastic coverings if possible.

### **3.08 SYSTEM STARTUP**

- A. Coordinate schedule for start-up of various equipment and systems.
- B. Verify that each piece of equipment or system has been checked for proper lubrication, drive rotation, belt tension, control sequence, and for conditions that may cause damage.
- C. Verify tests, meter readings, and specified electrical characteristics agree with those required by the equipment or system manufacturer.
- D. Verify that wiring and support components for equipment are complete and tested.
- E. Execute start-up under supervision of applicable Contractor personnel and manufacturer's representative in accordance with manufacturers' instructions.
- F. Submit a written report that equipment or system has been properly installed and is functioning correctly.

### **3.09 ADJUSTING**

- A. Adjust operating products and equipment to ensure smooth and unhindered operation.

### **3.10 FINAL CLEANING**

- A. Use cleaning materials that are nonhazardous.
- B. Clean interior and exterior glass, surfaces exposed to view; remove temporary labels, stains and foreign substances, polish transparent and glossy surfaces, vacuum carpeted and soft surfaces.
- C. Remove all labels that are not permanent. Do not paint or otherwise cover fire test labels or nameplates on mechanical and electrical equipment.

- D. Clean equipment and fixtures to a sanitary condition with cleaning materials appropriate to the surface and material being cleaned.
- E. Clean filters of operating equipment.
- F. Clean debris from roofs, gutters, downspouts, and drainage systems.
- G. Clean site; sweep paved areas, rake clean landscaped surfaces.
- H. 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.
- B. Notify Architect when work is considered ready for Substantial Completion.
- C. Submit written certification 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 review.
- D. Correct items of work listed in executed Certificates of Substantial Completion and comply with requirements for access to Owner-occupied areas.
- E. Notify Architect when work is considered finally complete.
- F. Complete items of work determined by Architect's final inspection.

### **3.12 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 Substantial Completion or the length of the specified warranty, whichever is longer.
- 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 Owner.

### **END OF SECTION**





## **SECTION 01 73 29**

### **CUTTING AND PATCHING**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Requirements and limitations for cutting and patching of Work.

##### **1.02 RELATED SECTIONS**

- A. Summary of Work: Work by Owner or by separate contractors.
- B. Individual product Specification Sections:
  - 1. Cutting and patching incidental to Work specified in the Section.
  - 2. Coordination with Work specified in other Sections for openings required to accommodate Work specified in those other Sections.

##### **1.03 SUBMITTALS**

- A. Written Requests for Cutting and Alteration:
  - 1. Submit written request in advance of cutting or alteration which affects:
    - a. Structural integrity of any element of new or existing construction.
    - b. Integrity of weather-exposed or moisture-resistant elements.
    - c. Efficiency, maintenance, or safety of operational elements.
    - d. Visual qualities of elements exposed to view in the completed construction.
    - e. Work of Owner or separate contractor.
    - f. Existing construction not otherwise indicated to be revised by Work under the Contract.
  - 2. Include in requests for cutting and alteration:
    - a. Identification of Project.
    - b. Location and description of affected Work. Include shop drawings as necessary to identify locations and communicate descriptions.
    - c. Explanation of necessity for cutting and patching.
    - d. Description of proposed Work and products to be used.
    - e. Alternatives to cutting and patching.
    - f. Effect on work of Owner or separate contractor.
    - g. Effect on existing construction of Owner and, if applicable, work for Project being provided by Owner under separate contract.
  - 3. Include written evidence that those performing work under separate contract for Owner have been notified and acknowledge that cutting and patching work will be occurring. Include written permission for intended cutting and patching, included scheduled times.
  - 4. Indicate date and time cutting and patching Work will be performed.

#### **PART 2 PRODUCTS**

##### **2.01 MATERIALS**

- A. Primary Products: As required for original installation and to match surrounding construction.
- B. Product Substitution: For each proposed change in materials, submit request for substitution under provisions of Section 01 60 00 - Product Requirements.

#### **PART 3 EXECUTION**

##### **3.01 EXAMINATION**

- A. After uncovering existing Work, inspect conditions affecting proper accomplishment of Work.

- B. Beginning of cutting or patching shall be interpreted to mean that existing conditions were found by Contractor to be acceptable.

### **3.02 PREPARATION**

- A. Temporary Supports: Provide supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.
- B. Weather Protection: Provide protection from elements for areas which may be exposed by uncovering Work. Maintain excavations free of water.

### **3.03 CUTTING AND PATCHING**

- A. Cutting and Patching: Execute cutting, fitting, and patching, excavation and fill, to complete the Work.
  - 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 in the Work for penetration of mechanical and electrical Work.

### **3.04 PERFORMANCE**

- A. Execute cutting and patching by methods to avoid damage to adjoining Work, and which will provide appropriate surfaces to receive final finishing.
- B. Execute cutting and patching of weather-exposed, moisture-resistant elements and surfaces exposed to view by methods to preserve weather, moisture and visual integrity.
- C. Cut rigid materials using diamond grit abrasive saw or similar cutter for smooth edges. Do not overcut corners.
  - 1. Core drill holes through concrete and masonry.
  - 2. Pneumatic tools will not be allowed without prior approval.
- D. Restoration:
  - 1. Restore Work with new Products as specified in individual Sections.
  - 2. Fit work neat and tight allowing for expansion and contraction. Butt new finishes to existing exposed structure, pipes, ducts, conduit, and other penetrations through surfaces.
- E. Penetrations at Fire-Rated Construction: At penetrations of fire rated walls, partitions, ceiling, or floor construction, completely seal voids with material in accordance with CFC, to full thickness of the penetrated element.
- F. 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.

**EXAMINATION, GENERAL: INSPECT EXISTING CONDITIONS PRIOR TO COMMENCING WORK, INCLUDING ELEMENTS SUBJECT TO DAMAGE OR MOVEMENT DURING CUTTING AND PATCHING.**

**END OF SECTION**

**SECTION 01 77 00**  
**CONTRACT CLOSEOUT**

**PART 1 - GENERAL**

**1.01 SECTION INCLUDES**

- A. Contract closeout procedures.
- B. Project record documents.

**1.02 RELATED SECTIONS**

- A. Section 01 30 00 - Administrative Requirements: General requirements for submittals.
- B. Section Construction Facilities: Cleaning and debris removal during construction.
- C. General Conditions and Section Final Cleaning: Cleaning as part of Contract closeout.

**1.03 FINAL COMPLETION ACTIONS**

- A. Final Application for Payment: In the Application for Payment that coincides with the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed substantially complete.
- B. Warranties, Bonds and Certificates: Submit specific warranties, guarantees, workmanship bonds, maintenance agreements, final certifications and similar documents.
- C. Locks and Keys: Change temporary lock cylinders over to permanent keying and transmit keys to the Owner, unless otherwise directed or specified.
- D. Tests and Instructions: Complete start-up testing of systems, and instruction of the Owner's personnel. Remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.

**1.04 SUBSTANTIAL COMPLETION REVIEW**

- A. Contractor's Notification for Substantial Completion Review: When the Contractor determines that the Work is complete in accordance with Contract Documents, the Contractor shall submit to the Owner and Architect written certification that the Contract Documents have been reviewed, the Work has been inspected by the Contractor and by authorities having jurisdiction, and the facility is ready for the Substantial Completion review.
- B. Preliminary Contract Closeout Review Meeting: As authorized by the Owner, Architect and Architect's and Owner'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 Owner. This meeting shall be scheduled not earlier than 14 days prior to the date anticipated for the Substantial Completion review.
- C. 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 Owner.
  - 1. The punch list shall include all items to be completed or corrected prior to the Contractor's application for final payment.
  - 2. 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.
  - 3. Contractor shall prepare separate lists according to categories used for Drawings. For example, provide lists for Architectural, Structural, Mechanical, Plumbing, Electrical, Civil, Landscape, Process Piping and Laboratory Furnishings. Provide a list also for the Fire Protection (sprinkler) system.
  - 4. Architect, Architect's consultants and Owner'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.

5. Verbal comments will be made to the Contractor by the Architect and the Architect's and Owner'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 Substantial Completion review.
- D. Substantial Completion Meeting: On a date mutually agreed by the Owner, 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 (Substantial Completion).
  1. Contractor shall provide three working days notice to Architect for requested date of Substantial Completion meeting.
  2. The Architect and the Architect's and Owner's consultants, as authorized by the Owner, will attend the Substantial Completion meeting.
  3. 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 Owner, submission of operation and maintenance data (manuals), provision of specified extra materials to the Owner, and submission of other Contract closeout documents and materials as required and if not already submitted.
  4. The Architect and Architect's consultants, as appropriate, will conduct a walk-through of the facility with the Contractor and review the punch list.
  5. 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.
  6. Contractor shall retype the punch list and distribute it within three working days to those attending the meeting.
  7. If additional site visits by the Architect and the Architect's and Owner's consultants are required to review completion and correction of the Work, the costs of additional visits shall be reimbursed to the Owner by the Contractor by deducting such costs from the Final Payment.
- E. Uncorrected Work: Refer to requirements specified in Section 01 40 00 - Quality Control regarding Contract adjustments for non-conforming Work.
- F. Clearing and Cleaning: Prior to the Substantial Completion review, Contractor shall conduct a thorough cleaning and clearing of the Project area, including removal of construction facilities and temporary controls. Refer to Contract General Conditions, Section 01740 - Final Cleaning (provided under separate cover by CM).
- G. Inspection and Testing: Prior to the Substantial Completion review, complete inspection and testing required for the Work, including securing of approvals by authorities having jurisdiction.
  1. Complete all inspections, tests, balancing, sterilization and cleaning of plumbing and HVAC systems.
  2. Complete inspections and tests of electrical power and signal systems.
  3. Complete inspections and tests of conveying (elevator or wheelchair lift) systems.
- H. Architect's Certification of Substantial Completion: When Architect determines that list of items to be completed and corrected (Punch List) is sufficiently complete for Owner to occupy Project for the use to which it is intended, Architect will complete and issue to the Owner and Contractor a Certificate of Substantial Completion using The American Institute of Architects Form G704 - CERTIFICATE OF SUBSTANTIAL COMPLETION or other form if directed by the Owner.
- I. Notice of Completion: Contractor, after receipt of Architect's certification, shall record and pay for Notice of Completion in compliance with the requirements of authorities having jurisdiction. Provide copies to Owner and Architect.

## **1.05 FINAL COMPLETION SUBMITTALS**

- A. See Section 01 78 00

## **1.06 PROJECT RECORD DOCUMENTS**

- A. See Section 01 78 00.

## **1.07 FINAL PAYMENT**

- A. Final Payment: 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. Payment will not be made until the following are accomplished:
1. All Project Record Documents have been transferred and accepted by Owner.
  2. All extra materials and maintenance stock have been transferred and received by Owner.
  3. All warranty documents and operation and maintenance data have been received and accepted by Owner.
  4. All liens have been released or bonded by Contractor.
  5. Contractor's surety has consented to Final Payment.

## **PART 2 - PRODUCTS - (NOT USED)**

## **PART 3 - EXECUTION - (NOT USED)**

**END OF SECTION**



**SECTION 01 78 00**  
**CLOSEOUT SUBMITTALS**

**PART 1 GENERAL**

**1.01 SECTION INCLUDES**

- A. Project Record Documents.
- B. Operation and Maintenance Data.
- C. Warranties and bonds.

**1.02 RELATED REQUIREMENTS**

- A. 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 70 00 - Execution and Closeout Requirements: Contract closeout procedures.
- D. Individual Product Sections: Specific requirements for operation and maintenance data.
- E. Individual Product Sections: Warranties required for specific products or Work.

**1.03 SUBMITTALS**

- A. Final Completion Submittals: Prior to application for final payment, Contractor shall submit the following:
  - 1. Agency Document Submittals: Submit to Owner 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.
  - 2. Final Specifications Submittals: Submit to Owner all documents and products required by Specifications to be submitted, including the following:
    - a. Project record drawings and specifications.
    - b. Operating and maintenance data.
    - c. Guarantees, warranties and bonds.
    - d. Keys and keying schedule.
    - e. Spare parts and extra stock.
    - f. Test reports and certificates of compliance.
  - 3. Certificates of Compliance and Test Report Submittals: Submit to Owner certificates and reports as specified and as required by authorities having jurisdiction, including the following:
    - a. Sterilization of water systems.
    - b. Sanitary sewer system tests.
    - c. Gas system tests.
    - d. Lighting, power and signal system tests.
    - e. Ventilation equipment and air balance tests.
    - f. Fire sprinkler system tests.
    - g. Fire detection system, smoke alarms and dampers.
    - h. Roofing inspections and tests.
  - 4. Lien and Bonding Company Releases: Submit to Owner, with copy to Architect, evidence of satisfaction of encumbrances on Project by completion and submission of The American Institute of Architects Forms G706 - CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS, G706A - CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS, and (if applicable) G707 - CONSENT OF SURETY. Comply also with other requirements of Owner, as directed. All signatures shall be notarized.



5. Subcontractor List: Submit two copies to Owner and two copies to Architect of updated Subcontractor and Materials Supplier List.
  6. Warranty Documents: Prepare and submit to Owner all warranties and bonds as specified in Contract General Conditions.
- B. Project Record Documents: Submit documents to Architect for review, prior to submitting claim for final payment.
- C. Operation and Maintenance Data:
1. Submit two copies of preliminary draft or proposed formats and outlines of contents before start of Work. Architect will review draft and return one copy with comments.
  2. For equipment, or component parts of equipment put into service during construction and operated by Owner, submit completed documents within ten days after acceptance.
  3. Submit one copy of completed documents 15 days prior to final inspection. This copy will be reviewed and returned after final inspection, with Architect comments. Revise content of all document sets as required prior to final submission.
  4. Submit two sets of revised final documents in final form within 10 days after final inspection.
- D. Warranties and Bonds:
1. For equipment or component parts of equipment put into service during construction with Owner's permission, submit documents within 10 days after acceptance.
  2. Make other submittals within 10 days after Date of Substantial Completion, prior to final Application for Payment.
  3. For items of Work for which acceptance is delayed beyond Date of Substantial Completion, submit within 10 days after acceptance, listing the date of acceptance as the beginning of the warranty period.

## **PART 2 PRODUCTS - NOT USED**

## **PART 3 EXECUTION**

### **3.01 PROJECT RECORD DOCUMENTS**

- A. Maintain on site, one set of the following record documents; record actual construction and all revisions to the Work:
  1. Contract Drawings.
  2. Project Manual, with Specifications.
    - a. Addenda.
    - b. Change Orders and other modifications to the Contract.
  3. Reviewed shop drawings, product data, and samples.
  4. Manufacturer's instruction for assembly, installation, and adjusting.
- B. Ensure entries are complete and accurate, enabling future reference by Owner.
- C. Store record documents separate from documents used for construction.
- D. Record information concurrent with construction progress.
- E. Specifications: Legibly mark and record in PART 2 - PRODUCTS at each section description of actual products installed or used, 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.
- F. Record Drawings and Shop Drawings: Record information continuously as Work progresses. Do not conceal Work permanently until all required information is recorded. Legibly and to scale, mark a reproducible set of Contract Drawings to record actual construction, including:
  1. Reproducible set of Contract Drawings will be provided to Contractor by Owner through Architect.
  2. Measured depths of foundations and footings 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.
- G. Submission: Submit Record Documents to Architect prior to final Application for Payment.
1. 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. One copy is to be kept on site for a period of three years to comply with CFC section 901.6.2.

### **3.02 OPERATION AND MAINTENANCE DATA**

- A. For Each Product or System: List names, addresses and telephone numbers of Subcontractors and suppliers, including local source of supplies and replacement parts.
- B. Product Data: Mark each sheet to clearly identify specific products and component parts, and data applicable to installation. Delete inapplicable information.
- C. Drawings: Supplement product data to illustrate relations of component parts of equipment and systems, to show control and flow diagrams. Do not use Project Record Documents as maintenance drawings.
- D. Typed Text: As required to supplement product data. Provide logical sequence of instructions for each procedure, incorporating manufacturer's instructions.

### **3.03 OPERATION AND MAINTENANCE DATA FOR MATERIALS AND FINISHES**

- A. For Each Product, Applied Material, and Finish:
  1. Product data, with catalog number, size, composition, and color and texture designations.
  2. Information for re-ordering custom manufactured products.
- B. Instructions for Care and Maintenance: Manufacturer's recommendations for cleaning agents and methods, precautions against detrimental cleaning agents and methods, and recommended schedule for cleaning and maintenance.
- C. Moisture protection and weather-exposed products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional information as specified in individual product specification sections.
- E. Provide a listing in Table of Contents for design data, with tabbed fly sheet and space for insertion of data.

### **3.04 OPERATION AND MAINTENANCE DATA FOR EQUIPMENT AND SYSTEMS**

- A. For Each Item of Equipment and Each System:
  1. Description of unit or system, and component parts.
  2. Identify function, normal operating characteristics, and limiting conditions.
  3. Include performance curves, with engineering data and tests.
  4. Complete nomenclature and model number of replaceable parts.
- B. Panelboard Circuit Directories: Provide electrical service characteristics, controls, and communications; typed.
- C. Include color coded wiring diagrams as installed.
- D. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.

- E. Maintenance Requirements: Include routine procedures and guide for preventative maintenance and trouble shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.
- F. Provide servicing and lubrication schedule, and list of lubricants required.
- G. Include manufacturer's printed operation and maintenance instructions.
- H. Include sequence of operation by controls manufacturer.
- I. Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams required for maintenance.
- J. Provide control diagrams by controls manufacturer as installed.
- K. Provide Contractor's coordination drawings, with color coded piping diagrams as installed.
- L. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams.
- M. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in storage.
- N. Include test and balancing reports.
- O. Additional Requirements: As specified in individual product specification sections.

### **3.05 OPERATION AND MAINTENANCE MANUALS**

- A. Prepare instructions and data by personnel experienced in maintenance and operation of described products.
- B. Prepare data in the form of an instructional manual.
- C. Binders: Commercial quality, 8-1/2 by 11 inch three D side ring binders with durable plastic covers; 2 inch maximum ring size. When multiple binders are used, correlate data into related consistent groupings.
- D. Cover: Identify each binder with typed or printed title OPERATION AND MAINTENANCE INSTRUCTIONS; identify title of Project; identify subject matter of contents.
- E. Provide tabbed dividers for each separate product and system, with typed description of product and major component parts of equipment.
- F. Text: Manufacturer's printed data, or typewritten data on 24 pound paper.
- G. Drawings: Provide with reinforced punched binder tab. Bind in with text; fold larger drawings to size of text pages.
- H. Arrange content by systems under section numbers and sequence of Table of Contents of this Project Manual.
- I. Contents: Prepare a Table of Contents for each volume, with each product or system description identified, in three parts as follows:
  - 1. Part 1: Directory, listing names, addresses, and telephone numbers of Architect, Contractor, Subcontractors, and major equipment suppliers.
  - 2. Part 2: Operation and maintenance instructions, arranged by system and subdivided by specification section. For each category, identify names, addresses, and telephone numbers of Subcontractors and suppliers. Identify the following:
    - a. Significant design criteria.
    - b. List of equipment.
    - c. Parts list for each component.
    - d. Operating instructions.
    - e. Maintenance instructions for equipment and systems.
    - f. Maintenance instructions for special finishes, including recommended cleaning methods and materials, and special precautions identifying detrimental agents.
  - 3. Part 3: Project documents and certificates, including the following:
    - a. Shop drawings and product data.

- b. Air and water balance reports.
  - c. Certificates.
  - d. Photocopies of warranties and bonds.
- J. Provide a listing in Table of Contents for design data, with tabbed dividers and space for insertion of data.
- K. Table of Contents: Provide title of Project; names, addresses, and telephone numbers of Architect, Consultants, and Contractor with name of responsible parties; schedule of products and systems, indexed to content of the volume.

### **3.06 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 Owner's permission, leave date of beginning of time of warranty until the Date of Substantial completion is determined.
- B. Verify that documents are in proper form, contain full information, and are notarized.
- C. Co-execute submittals when required.
- D. Retain warranties and bonds until time specified for submittal.
- E. Manual: Bind in commercial quality 8-1/2 by 11 inch three D side ring binders with durable plastic covers.
- F. Cover: Identify each binder with typed or printed title WARRANTIES AND BONDS, with title of Project; name, address and telephone number of Contractor and equipment supplier; and name of responsible company principal.
- G. Table of Contents: Neatly typed, in the sequence of the Table of Contents of the Project Manual, with each item identified with the number and title of the specification section in which specified, and the name of product or work item.
- H. Separate each warranty or bond with index tab sheets keyed to the Table of Contents listing. Provide full information, using separate typed sheets as necessary. List Subcontractor, supplier, and manufacturer, with name, address, and telephone number of responsible principal.

### **END OF SECTION**



**SECTION 01 78 23**  
**OPERATION AND MAINTENANCE DATA**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Format and content of operation and maintenance manuals.
  - 1. Data requirements for materials and finishes.
  - 2. Data requirements for equipment and operating systems.
- B. Instruction of Owner's personnel.
- C. Submission of operation and maintenance manuals.

**1.2 RELATED SECTIONS**

- A. Section 01 40 00 - Quality Requirements: Manufacturer's instructions; test and balance reports.
- B. Section 01 77 00 - Contract Closeout: Contract closeout procedures, project record documents and warranties and bonds.
- C. Individual Product Specifications Sections: Specific requirements for operation and maintenance data.

**1.3 QUALITY ASSURANCE**

- A. Preparation of data shall be done by persons:
  - 1. Trained and experienced in maintenance and operation of the described products.
  - 2. Familiar with requirements of this Section.
  - 3. Skilled in technical writing to the extent required to communicate essential data.
  - 4. Skilled as drafters competent to prepare required drawings.

**1.4 FORMAT AND CONTENT OF OPERATION AND MAINTENANCE MANUALS**

- A. Format for Operation and Maintenance Data Manuals: Prepare data in the form of an instructional manual. Comply with the general requirements specified below and comply with specific requirements for types of products in Articles following. See Article titled "SUBMISSION OF OPERATION AND MAINTENANCE MANUALS" for number of copies of manuals.
- B. Binders: 8-1/2 x 11 inch, standard three-ring binders with heavy duty vinyl covers with hard cardboard backing, black color, with provision on binder spine for inserting identification card; Maximum binder ring size shall be 3-inches. Use multiple binders as necessary to avoid overfilling. When multiple binders are used, correlate data into related consistent groupings.
- C. Cover: Identify each binder with typed or printed card inserted on binder spine, stating OPERATION AND MAINTENANCE DATA, the Project name and the general subject matter of the contents of the binder.
- D. Operation and Maintenance Data Organization: Organize operation and maintenance data in 3-ring binders and organize the contents of each binder following the organization of the Contract Specifications.

1. Organize the group of binders and the contents of individual binders in sequence according to the Section numbers and titles as listed in the Table of Contents of the Project Manual. Number the binders consecutively; coordinate with Paragraph below titled "Tables of Contents."
  2. Organize each binder with color-coded tabbed dividers for each distinct product and system, with typed inserts in tabs identifying the product or system.
  3. Organize the contents of each tabbed division according to the Article headings in PART 2 - PRODUCTS in each product Specification Section.
    - a. Within each tabbed division, organize the information according to major component parts of equipment and systems, as applicable, and to facilitate locating information.
    - b. Separate operation and maintenance data for each product under separate tabbed divisions, where feasible.
    - c. Within each tabbed division, include a cover sheet identifying the specific products and component parts included in the tabbed division.
  4. If the products of more than one Specification Section are included in the binder, provide separate, heavy cover stock dividers to separate information for each Section.
- E. Title Page: In each volume (binder) of operation and maintenance data, include a title page with the following:
1. Name of the Project.
  2. Names, addresses and telephone numbers of the responsible design professionals (Architect and Architect's or Owner's consultant, as applicable).
  3. Name, address and telephone numbers of Contractor, including names of contact persons.
- F. Table of Contents: In each volume (binder) of operation and maintenance data, include a listing of the contents of the volume. In a separate, first binder, provide a master Table of Contents of operation and maintenance data, identifying the product and systems, the applicable Specification Section number and title, and the operation and maintenance data binder number.
- G. Schedule of Products and Systems: In the first volume of the set of operation and maintenance data, include a schedule of products and systems, indexed to the Table of Contents of the volumes (binders) and cross-referenced to the Contract Drawings and Specifications.
- H. Operation and Maintenance Data: Include manufacturer's pre-printed data where feasible or provide typewritten data on 20 pound, correspondence quality bond paper.
- I. Drawings: When included, neatly fold drawings to size of text pages and provide reinforced, punched binding edge. Add binding strip as necessary to avoid punching through drawing content.
- J. Operation and Maintenance Data: In each tabbed division of operation and maintenance data for each product or system, provide the following:
1. On a cover page for each tabbed division, provide the following:
    - a. Identify by name, address and telephone number, the manufacturer, supplier and installer. Include names of contact persons, if known.
    - b. Identify by name, address and telephone number, local sources of supplies, replacement parts and factory-authorized service.

2. Within each tabbed division, include complete operation and maintenance data as published by the product manufacturer. All data shall be neatly typewritten. Strike-through information on printed literature not applicable.
  3. Supplement the manufacturer's printed data with neatly typewritten text and professionally drafted diagrams as necessary to suit the particular installation for the Project and to fully explain operation and maintenance procedures. Provide logical sequence of instructions for each procedure.
- K. Drawings: Supplement operation and maintenance data to illustrate configurations and relationships of component parts of equipment and systems, and to show control and flow diagrams, as applicable. Do not use Project Record Documents as maintenance drawings.
- L. Additional Data: As specified in individual product Specification Sections.

#### **1.5 DATA REQUIREMENTS FOR MATERIALS AND FINISHES**

- A. Data for Building Products, Applied Materials and Finishes: Include product data, with catalog number, size, composition, and color and texture designations. Provide information for re-ordering custom manufactured Products.
- B. Instructions for Care and Maintenance: Include manufacturer's recommendations for cleaning agents and methods, precautions against detrimental agents and methods, and recommended schedule for cleaning and maintenance.
- C. Data for Moisture Protection and Weather-Exposed Products: Include product data listing applicable reference standards, chemical composition, and details of installation. Provide recommendations for inspections, maintenance, and repair.
- D. Additional Requirements: As specified in individual product Specification Sections.

#### **1.6 DATA REQUIREMENTS FOR EQUIPMENT AND OPERATING SYSTEMS**

- A. Data for Equipment and Operating Systems: Include description of each unit or system, and component parts.
1. Include manufacturer's printed operation and maintenance instructions.
  2. Identify function, normal operating characteristics and limiting conditions.
  3. Include performance curves, with engineering data and tests.
  4. Include sequence of operation by controls manufacturer, as applicable.
  5. Provide diagrams by controls manufacturer for control systems, as applicable and as installed.
- B. Piping Data: Provide Contractor's coordination drawings, with piping diagrams as installed. Provide charts of valve tag numbers, with location and function of each valve, keyed to flow and control diagrams. Color code diagrams as necessary for clarity.
- C. Reports: Include test and balancing reports, as applicable and as specified in individual product Specification Sections.
- D. Panelboard Circuit Directories: Provide electrical service characteristics, controls and communications.
- E. Wiring Diagrams: Include diagrams of wiring as installed, with color coding as necessary for clarity.
- F. Operating Procedures: Include start-up, break-in, and routine normal operating instructions and sequences. Include regulation, control, stopping, shut-down, and emergency instructions. Include summer, winter, and any special operating instructions.
- G. Maintenance Requirements: Include routine procedures and guide for trouble-shooting; disassembly, repair, and reassembly instructions; and alignment, adjusting, balancing, and checking instructions.



- H. Servicing and Lubrication: Provide servicing and lubrication schedule, and list of lubricants required.
- I. Parts Data: Provide original manufacturer's parts list, illustrations, assembly drawings, and diagrams as necessary for service and maintenance. Include complete nomenclature and catalog numbers for consumable and replacement parts. Provide list of original manufacturer's spare parts, current prices, and recommended quantities to be maintained in stock by the Owner or operator.
- J. Additional Requirements: As specified in individual product Specification Sections.

#### **1.7 INSTRUCTION OF OWNER'S PERSONNEL**

- A. Instruction of Owner's Personnel: Prior to Substantial Completion review, complete instruction of Owner's designated personnel in the operation, adjustment and routine cleaning, service and maintenance of products, equipment, and systems. Schedule indoctrination and training sessions at times acceptable to Owner.
- B. Basis for Instruction: Use operation and maintenance manuals as basis for instruction. Review contents of manual with personnel in detail to explain all aspects of operation and maintenance.
- C. Instructional Material: Prepare and insert additional data in Operation and Maintenance Manual when need for such data becomes apparent during instruction.

#### **1.8 SUBMISSION OF OPERATION AND MAINTENANCE MANUALS**

- A. Preliminary Draft Submittal: Submit two (2) copies of preliminary draft or proposed formats and outlines of contents before start of Work. Show general arrangement, nature of contents in each portion, probable number of drawings and their size, and proposed method of binding and covering. Architect will review draft and return one copy with comments. Secure the Architect's review comments prior to proceeding.
- B. Preliminary Submittal: Submit two (2) copies of completed preliminary volumes in final form 15 days prior to indoctrination of operation and maintenance personnel and prior to Substantial Completion review. See Section 01 77 00 - Contract Closeout. One copy will be returned after Substantial Completion review with Architect's comments.
- C. Advance Submittals: For equipment and systems, or component parts of systems, put into service during construction and operated by Owner, submit documents within ten days of start of operation by Owner.
- D. Revisions: After completion of indoctrination of Owner's personnel, review all proposed revisions of the operation and maintenance manuals with the Architect. Revise content of documents in accordance with Architect's review comments and to include additional information as necessary from experience of instruction of Owner's personnel.
- E. Final Submittal: Submit three (3) copies of revised volumes in final form prior to submission of final Application for Payment.

**PART 2 - PRODUCTS** - (Not Applicable to this Section.)

**PART 3 - EXECUTION** - (Not Applicable to this Section.)

**END OF SECTION**

**SECTION 02 16 05  
PATCHING AND REPAIR**

**PART 1- GENERAL**

**1.1 SECTION INCLUDES**

- A. Patching and repair as required by damage during relocation. The Conditions of the Contract and Division 1 apply to this section as fully as if repeated herein.

**1.2 UNCOVERED CONDITIONS**

- A. If removal of finish materials discloses the presence of termites, the Contractor shall inform the District immediately. The District will make a determination at that time what measures for control will be taken. Do not cover suspect areas until directed by the Architect.

**PART 2- PRODUCTS**

Not Applicable to this Section.

**PART 3- EXECUTION**

**3.1 PATCHING AND REPAIRS**

- A. Patch areas requiring patching, damaged by moving operations.
- B. Chain Link Fence: Remove section of chain link fence as required. Install new galvanized steel post, to match existing, in 24 inch deep concrete footing. Re-stretch and fasten existing fabric to new post.
- C. Patch existing asphalt concrete paved areas indicated or damaged by work under this Contract. Patch shall be smooth, even with adjacent grades and match existing paving in depth and compaction. Paint all cut surfaces of existing paving, and all cold joints with an SS-1 asphalt emulsion before the new paving is laid.
- D. Patch portland cement concrete paving with 2500 psi concrete. Clean areas to be patched. Dampen adjacent cut concrete surfaces, or apply concrete bonding agent to exposed cuts. Place and compact concrete and finish flush with, and textured to match, adjacent concrete surfaces. Damp cure for at least 7 days.
- E. At buildings with plywood exteriors, provide T-1-11 plywood closures fabricated as indicated with wood frames faced with 5/8-inch plywood siding to match existing plywood.

**3.2 SITEWORK ALTERATIONS**

- A. Drawings showing existing construction, utilities, and irrigation system are based on casual field observation and existing record documents only.
  - 1. Verify that construction, utility, and irrigation arrangements are as shown.
  - 2. Report discrepancies to Architect before disturbing existing installation.
  - 3. Beginning of alterations work constitutes acceptance of existing conditions.
- B. Remove existing work as indicated and as required to accomplish new work.
  - 1. Remove rotted wood, corroded metals, and deteriorated masonry and concrete; replace with new construction specified and matching existing.
  - 2. Remove items indicated on drawings and where required by new construction.
  - 3. Relocate items indicated on drawings and where required by new construction.

- C. Services (Including but not limited to Landscape Planting and Irrigation): Remove, relocate, and extend existing systems to accommodate new construction.
  - 1. Maintain existing active systems that are to remain in operation; maintain access to equipment and operational components; if necessary, modify installation to allow access or provide new control valves.
  - 2. Contractor to relocate existing heads to provide 100% coverage.
  - 3. Where existing active systems are to be replaced with new services, maintain existing systems in service until new systems are complete and ready for service.
    - a. Disable existing systems only to make switchovers and connections; minimize duration of outages.
  - 4. Remove abandoned pipe, ducts, conduits, and equipment; remove back to source of supply where possible, otherwise cap stub and tag with identification.
- D. Protect existing work to remain.
  - 1. Perform cutting to accomplish removals neatly and as specified for cutting new work.
  - 2. Repair adjacent construction and finishes damaged during removal work.
- E. Adapt existing work to fit new work: Make as neat and smooth transition as possible.
  - 1. When existing finished surfaces are cut so that a smooth transition with new work is not possible, terminate existing surface along a straight line at a natural line of division and make recommendation to Architect.
  - 2. Where removal of planting and irrigation is required; provide new to match existing.
- F. Remove demolition debris and abandoned items from alterations areas and dispose of off-site; do not burn or bury.
- G. System Startup
  - 1. Notify Architect and District seven days prior to start-up of each item.
  - 2. Verify that each piece of irrigation heads or system has been checked for proper pressure and coverage.
  - 3. Execute start-up under supervision of applicable Contractor personnel in accordance with manufacturers' instructions.
  - 4. Adjust operating irrigation head coverage to ensure proper coverage at the correct time of day when the irrigation time clock activates the circuit.

**END OF SECTION**

## **SECTION 02 41 19**

### **SELECTIVE SITE DEMOLITION**

#### **PART 1 - GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Demolition and removal of existing site improvements within Project area, as indicated on Drawings and as necessary to accomplish the Work, including:
  - 1. Asphaltic concrete and portland cement concrete paving.
  - 2. Abandoned underground utility lines outside of utility easement.
  - 3. Pavement cutting and removal.
  - 4. Debris removal.
- B. Handling and disposal of removed materials.
- C. Dewatering of excavations as necessary to control surface and sub-surface water.

##### **1.02 RELATED SECTIONS (AS APPLICABLE)**

- A. Summary of Work: Requirements for scheduling and sequencing of Work.
- B. Construction Facilities: Barriers and barricades for protection of persons and property; temporary partitions to allow continued operation of adjoining facilities; run-off control.
- C. Division 2, 22, & 33 - Plumbing: Demolition of plumbing components.
- D. Division 2 & 23 - Mechanical: Demolition of mechanical components.
- E. Division 2, 26, 27, & 28 - Electrical: Demolition of electrical components.

##### **1.03 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 7700 - Contract Closeout. Indicate verified locations of underground utilities and storm drainage system on project record drawings.

##### **1.04 QUALITY ASSURANCE**

- A. Regulatory Requirements: Comply with California Building Code (CBC) including requirements of CCR Title 24, Volume 2, Part 2, Chapter 18A, 33 and 34 requirements with California Fire Code Chapter 33 for demolition activities and all applicable laws, ordinances and regulations of local, State and Federal authorities having jurisdiction, regarding environmental protection and waste management.
  - 1. Obtain required demolition and disposal permits from authorities having jurisdiction.
  - 2. Notify serving utility companies and agencies before starting demolition Work on utilities. Comply cutting and capping sequences and procedures of serving utility.
  - 3. Do not close or obstruct roadways sidewalks hydrants without permits. Maintain fire lanes and exitways clear at all times. Arrange for haul routes with local Public Works Department.
  - 4. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.
- B. Pre-Construction Conference:
  - 1. 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.
  - 2. Conference shall be attended by Owner and Architect, supervisory and quality control personnel of Contractor and all subcontractors performing this and directly-related Work.
  - 3. Submit minutes of meeting to Owner, Project Inspector and Architect, for Project record purposes.

## **1.05 PROJECT CONDITIONS**

- A. Field Measurements and Conditions: 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.
- B. Sequencing and Scheduling: Refer to sequence requirements specified in Section Summary of Work; and construction progress schedule requirements specified in Section Construction Schedule.
- C. Existing Conditions: Conduct demolition to minimize interference with continuing operation of adjoining facilities and to surrounding landscaped areas.
- D. Demolition:
  - 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 Owner.
  - 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.
- E. Protection: Protect existing construction and adjacent areas with temporary barriers and security devices in accordance with requirements specified in Section Construction Facilities.
  - 1. Review location and type of construction of temporary barriers with Owner 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 Building Services Department having jurisdiction.

## **PART 2 - PRODUCTS - (NOT APPLICABLE TO THIS SECTION.)**

## **PART 3 - EXECUTION**

### **3.01 PREPARATION**

- A. Preparation for Demolition: Erect and maintain temporary barriers to prevent spread of debris, to provide for continued use of adjacent properties.
  - 1. Protect existing construction which is not indicated to be altered.
  - 2. Refer to Division 1 Section - Construction Facilities.

### **3.02 DEMOLITION, GENERAL**

- A. 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 and Construction Manager.
  - 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. Utilities Demolition:
  - 1. Disconnect, remove, and cap designated utility services within demolition areas.
  - 2. Mark location of disconnected utilities. Identify and indicate capping locations on project record drawings.

3. Coordinate cutting and capping sequences and procedures with serving utility and those affected by such activities. Remove utilities in a manner to minimize disturbance of portions to remain.
- C. Cutting and Patching: Refer to requirements specified in Section 01 73 29 - Cutting and Patching.

### **3.03 SALVAGED MATERIALS**

- A. Ownership: Unless otherwise indicated, all materials demolished and removed shall become property of Contractor.
- B. Disposal of Materials: Contractor shall haul and dispose of all demolished and removed materials to offsite disposal sites in any legal manner.
  1. Except where noted otherwise, immediately remove demolished materials from site.
  2. Promptly remove from the site and properly dispose of all contaminated, vermin infested, or dangerous materials encountered.
  3. Do not burn or bury materials on site.

### **3.04 PORTLAND CEMENT CONCRETE AND ASPHALTIC 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: 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.

### **3.05 WELL ABANDONMENT**

- A. Existing wells shall be abandoned in accordance with California Well Standards - Bulletin 74-81 & Supplement Bulletin 74-90.
- B. Contractor shall have a C-57 California Contractors License and be registered with the County Environmental Health Department.
- C. Contractor shall obtain a Well Permit Application from the County Department of Environmental Health submitted in triplicate and signed by the Contractor and Owner.
- D. Well appurtenances shall be demolished, removed and disposed of offsite at no expense to the Owner.

### **3.06 UTILITY LINES, POSTS AND STRUCTURES**

- A. 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.
- B. Coordination: The Contractor shall arrange, schedule and coordinate work by utility companies and agencies.
- C. Payment: Costs, if any, imposed by utility companies and agencies shall be included in the Contract Sum.

### **3.07 DEWATERING**

- A. Dewatering: Dewater site in localized areas as Work progresses.
  1. Provide an adequate system to lower and control groundwater in order to permit excavation, construction of structures, and placement of fill materials under dry conditions.
  2. Install sufficient dewatering equipment to pre-drain waterbearing strata above and below bottom of structure foundations, drains, sewers, and other excavations.
  3. Maintain excavations free of standing water.

4. Provide dewatering 24 hours per day in advance of placement of concrete.
  5. Allow no concrete to be placed in standing water.
  6. Ensure that trenching and excavations do not cave in due to water.
- B. Surface Run-off Water Control:
1. Minimize flow of ground water from adjacent areas into Work areas.
  2. Do not restrict flow from adjacent properties such that natural flow is hindered.
- C. Water Disposal:
1. Dispose of run-off by legal means and as acceptable to authorities having jurisdiction.
  2. Dispose of water removed from excavations in a manner to avoid endangering public health, property, and portions of Work under construction or completed.
  3. Dispose of water in a manner to avoid inconvenience to others engaged in work about site.
  4. Provide sumps, sedimentation tanks, and other flow control devices as required by authorities having jurisdiction.

### **3.08 DUST CONTROL**

- A. Refer to requirements of Division 1 Section - Construction Facilities.

**END OF SECTION**

**SECTION 03 30 01**  
**CAST IN PLACE CONCRETE SYSTEM**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Cast in place reinforced concrete footings, foundations and foundation walls.
- B. Formwork with shoring, bracing and anchorage as necessary.
- C. Concrete reinforcement.

**1.2 RELATED SECTIONS**

- A. Section 32 13 13 - Portland Cement Concrete Paving: Concrete for pedestrian traffic, curbs, gutters and other concrete paving work.

**1.3 REFERENCES**

- A. American Concrete Institute (ACI): As noted throughout this Section.
- B. American Society for Testing and Materials (ASTM): As noted throughout this Section.
- C. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2013 is current; use 2003 as indicated in 2016 CBC Reference Standards.

**1.4 SUBMITTALS**

- A. Product Data: Proprietary admixtures, curing compounds, hardeners and sealers, form release agent.
- B. Mix Design: For Project record only, and not for review or approval, submit mix designs sealed and signed by a licensed California Civil or Professional Engineer.
- C. 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 for each load of concrete delivered to site. Include on the tickets the additional information specified in the ASTM document.

**1.5 QUALITY ASSURANCE**

- A. Industry Standards:
  - 1. Perform cast in place concrete Work in accordance with ACI 301, ACI 302.1 and ACI 318.
    - a. When outdoor ambient air temperature is higher than 90 degrees F, comply with ACI 305.
    - b. When air temperature in the shade and away from artificial heat falls below 40 degrees F, or when concrete without special protection is likely to be subject to freezing temperatures before expiration of specified curing period, comply with ACI 306.
  - 2. Formwork design and construction shall be in accordance with ACI 301 and ACI 318.
  - 3. Concrete reinforcement shall be in accordance with ACI 301, ACI 318, CRSI Manual of Standard Practice, CRSI 63 and CRSI 65.
- B. Regulatory Requirements: Conform to 2016 California Building Code (CBC) Chapter 19A requirement, as amended and adopted by authorities having jurisdiction. Chemical products field-applied to concrete shall comply with applicable air quality requirements of authorities having jurisdiction.
- C. 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.



## **1.6 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.
- C. Delivery: Deliver reinforcement bars new and free from rust and mill scale in original marked bundles.
- D. Storage: Store reinforcement to avoid excessive rusting or fouling with grease, oil, dirt or other bond-weakening coatings.

## **PART 2 - PRODUCTS**

### **2.1 CONCRETE MIX DESIGN**

- A. Mix Design: Contractor shall coordinate with the Testing Laboratory of Record, under supervision of California Registered Civil Engineer, to determine mix proportions to fulfill specified requirements for strength, aggregate, size and workability of concrete. Mix design shall bear signature and seal of the Civil or Structural Engineer licensed in the State of California.
- B. Concrete Mix and Delivery: ASTM C94 - Ready-Mixed Concrete, minimum compressive strength indicated below, unless identified otherwise on Drawings.
  - 1. Proportions: For normal weight concrete, in accordance with ACI 301.
  - 2. Concrete Strengths: 2500 psi unless noted otherwise on the Drawings.
  - 3. Water/Cement Ratio: Not to exceed 0.45.
  - 4. Slump: Not to exceed 4 inches.

### **2.2 CONCRETE MATERIALS**

- A. Concrete Materials, General: Acquire cement and aggregates from single source for all cast in place concrete.
- B. Portland Cement: ASTM C150, gray color. Type as indicated on Structural Drawings, or if not indicated, as required by Architect.
- C. Aggregates for Regular Weight Concrete: [Fine and coarse aggregates] [Pea gravel aggregates for pumping], CBC Title 24, Part 2, Sec. 1903A.3, ASTM C33, Class 2M and as follows.
  - 1. Structural and Non-Structural Concrete: Maximum size not larger than 1/4 of narrowest dimension between forms, 1/3 depth of slab nor 3/4 of minimum clear spacing between individual reinforcing bars. Maximum aggregate size shall be 1-1/2 inch.
- D. Water: Clean, fresh and potable, free of amounts of acids, alkalis and organic materials detrimental to concrete production.

### **2.3 ADMIXTURES**

- A. Chemical Admixtures, General: Admixtures which result in more than 0.1 percent of soluble chloride ions by weight of cement are prohibited. 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:
  - 1. Anti-Hydro Co., Inc., Newark, NJ (201/242-8000).
  - 2. Euclid Chemical Co., Cleveland, OH (216/531-9222 or 800/321-7628).
  - 3. Master Builders Technology, Inc., Cleveland, OH, (216/831-5500; local representative, California 800/228-3318).
  - 4. W.R. Meadows, Inc., Elgin, IL (700/683-4500; local representative Walnut, CA, 909/469-2606 or 800/342-5976).
  - 5. Sika Corporation, Lyndhurst, NJ (201/933-8800; local representative, Santa Fe Springs, CA, 310/941-0231).

- B. Air-Entraining Admixture: ASTM C260 and certified by manufacturer for compatibility with other mix components. The following products, providing they comply with the requirements of the Contract Documents, will be acceptable.
  - 1. Air-Mix or Perma-Air by Euclid Chemical Co.
  - 2. MB-VR or Micro-Air by Master Builders Technology, Inc.
  - 3. Sika AER by Sika Corporation.
- C. Water-Reducing Admixture: ASTM C494, Type A. The following products, provided they comply with requirements of the Contract Documents, will be acceptable:
  - 1. Eucon WR-75 by Euclid Chemical Co.
  - 2. Pozzolith Normal or Polyheed by Master Builders Technology, Inc.
  - 3. Plastocrete 161 by Sika Corporation.
- D. High-Range Water-Reducing Admixture (Superplasticizer): ASTM C494, Type F or G. The following products, provided they comply with requirements of the Contract Documents, will be acceptable:
  - 1. Super P by Anti-Hydro Co., Inc.
  - 2. Eucon 37 by Euclid Chemical Co.
  - 3. Rheobuild or Polyheed by Master Builders Technology, Inc.
  - 4. Sikament 300 by Sika Corporation.
- E. Water-Reducing, Accelerating Admixture: ASTM C494, Type E. The following products, or approved equals, provided they comply with requirements of the Contract Documents, will be acceptable:
  - 1. Accelguard 80 by Euclid Chemical Co.
  - 2. Pozzutec 20 by Master Builders Technology, Inc.
- F. Water-Reducing, Retarding Admixture: ASTM C494, Type D. The following products, provided they comply with requirements of the Contract Documents, will be acceptable:
  - 1. Eucon Retarder 75 by Euclid Chemical Co.
  - 2. Pozzolith R by Master Builders Technology, Inc.
  - 3. Plastiment by Sika Corporation.
- G. Evaporation Reducer: For use where the concrete surface evaporation rate exceeds the concrete bleed rate, such as in direct sunlight, low humidity or during hot and/or windy conditions. The following products, or approved equals will be acceptable:
  - 1. Atlas Finish Film by Atlas Construction Supply, Inc., San Diego, CA.
  - 2. Confilm by ChemRex, Shakopee, MN.
  - 3. Evapre by W.R. Meadows, Inc., Pomona, CA.
  - 4. Profilm 19 by ProMix Technologies, Allen, TX.
  - 5. Monofilm by Nox-Crete Products Group, Omaha, NB.
- H. Color Admixture for Integrally Colored Concrete: Colors will be selected by the Architect from manufacturer's full range of colors or as scheduled on Drawings. Acceptable products, or approved equal:
  - 1. Admixtures, Inc.; Colorfull.
  - 2. Davis Colors.
  - 3. L.M. Scofield; Chromix Admixture.

## 2.4 FORMING MATERIAL

- A. Panel type material, largest practical size to minimize joints, to provide continuous, straight, smooth, exposed surfaces.
- B. Formwork materials and installation shall conform to ACI 301 and 347, and shall be sufficient capacity to withstand pressures of concrete placement and to support concrete in place until cured, without distortion.
- C. Form release agent shall be commercial formulation, non-bonding, non-staining, and in compliance with SCAQMD.

## 2.5 CONCRETE REINFORCEMENT

- A. Reinforcing Bars: ASTM A615, Grade 60, deformed steel, unless indicated otherwise.
- B. Tie Wire: Black annealed type, 16 gage or heavier.

- C. Supports and Spacers: Non-corrosive types as required for spacing and clearance conforming to CRSI Manual of Practice.
- D. Welded Wire Fabric: Welded steel wire fabric, ASTM A185, Plain Type, flat sheets of gage and center-to-center spacing as indicated.

## 2.6 JOINT DEVICES, FILLER MATERIALS AND OTHER

- A. Control Joints: Sawcut joints after concrete placement and finish. Preformed joint materials are not required.
- B. Joint Filler, Non-Sealed Joints: Premolded bituminous type, ASTM D1751.
- C. Joint Filler, Sealed Joints: Non-bituminous rubber or cork, ASTM D1752.
- D. Expansion Joints: Pre-molded joint filler, 1/2-inch thick by full depth of slab less 3/4" for joint sealer and backer rod.
- E. Moisture-Retaining Cover: One of the following, complying with ASTM C171, for moist curing of concrete.
  - 1. Waterproof paper: ASTM C171, non-staining reinforced type, Sisalkraft Orange Label by Fortifiber Corp., Los Angeles, CA (213/268-6783 or 800/443-4079), or approved equal.
  - 2. Polyethylene film: 6 mil clear polyethylene sheet.
  - 3. White burlap-polyethylene sheeting.

## 2.7 BONDING COMPOUNDS

- A. Bonding Compounds, General: Products of the following manufacturers are specified and will be acceptable provided they comply with requirements of the Contract Documents:
  - 1. The Burke Group, Converse, TX (800/423-9140; local representative, Martinez, CA, 510/370-7937).
  - 2. Dayton Superior Chemical and Cement Products, Miamisburg, OH (877/823-4860; local office, Fontana, CA 909/829-2765 or 877/531-3344).
  - 3. Euclid Chemical Co., Cleveland, OH (216/531-9222 or 800/321-7628).
  - 4. Tamms Industries Co. (A.C. Horn), Mentor, OH (216/974-2399 or 800/218-2667; local representative, Los Angeles, CA, 213/269-1846).
  - 5. L&M Construction Chemicals, Inc., Omaha, NE (402/453-6600 or 800/362-3331).
  - 6. Larsen Products Corp., Rockville, MD (301/770-5200 or 800/633-6668)
  - 7. Master Builders Technology, Inc., Cleveland, OH, (216/831-5500; local representative, Rancho Cucamonga, CA, 909/987-1758).
  - 8. W.R. Meadows, Inc., Elgin, IL (700/683-4500; local representative Walnut, CA, 909/469-2606 or 800/342-5976).
  - 9. Sonneborn Building Products, Division of BASF Building Systems, Shakopee, MN (800/433-9517; local representative 562/799-6325).
  - 10. Stonhard, Inc., USA, Maple Shade, NJ (800/736-9300).
  - 11. Thoro System Products, Miami, FL (800/327-1570).
  - 12. Symons Corporation, Des Plaines, IL (708/298-3200; local representative, Industry, CA, 818/330-6855).
  - 13. US Mix Products Co., Denver, CO (303/778-7227 or 800/397-9903).
- B. Bonding Compound: Polyvinyl acetate, acrylic or styrene butadiene base. Provide polyvinyl acetate compound at interior locations only.
  - 1. Polyvinyl Acetate (Interior Only):
    - a. Superior Concrete Bonder by Dayton Superior Corp.
    - b. Deck-O-Weld by W.R. Meadows, Inc.
    - c. Euco Weld by Euclid Chemical Co.
    - d. Weld-Crete by Larsen Products Corp.
    - e. Everweld by L&M Construction Chemicals, Inc.
    - f. Ready Bond by Symons Corp.
    - g. US Spec Bondcoat by US Mix Products Co.
  - 2. Acrylic or Styrene Butadiene:
    - a. Acrylic Bondcrete by The Burke Co.
    - b. Day-Chem Ad Bond by Dayton Superior Corp.

- c. SBR Latex by Euclid Chemical Co.
- d. Hornweld by Tamms Industries Co. (A.C. Horn)
- e. Everbond by L&M Construction Chemicals, Inc.
- f. Acryl-Set by Master Builders Inc.
- g. Intralok by W.R. Meadows, Inc.
- h. Acryl 60 by Thero System Products.
- i. Stonlock LB2 by Stonhard, Inc.
- j. Strong Bond by Symons Corp.
- k. US Spec Acrylcoat by US Mix Products Co.

## **2.8 CURING, HARDENING AND SEALING MATERIALS**

- A. Specified Manufacturer: Sonneborn Building Products, Division of BASF Building Systems, Shakopee, MN (800/433-9517).
- B. Acceptable Manufacturers: Equivalent products of the manufacturers listed below will be acceptable in accordance with the "or equal" provision specified in Section 01600 - Product Requirements. Equivalent products of other manufacturers meeting or exceeding physical and performance characteristics of specified products will be considered in accordance with the substitution provisions specified in Section 01600 - Product Requirements.
  - 1. Dayton Superior Chemical and Cement Products, Miamisburg, OH (877/823-4860; local office, Fontana, CA 909/829-2765 or 877/531-3344).
  - 2. Euclid Chemical Co., Cleveland, OH (216/531-9222 or 800/321-7628).
  - 3. Master Builders Technology, Inc., Cleveland, OH, (216/831-5500; local representative, Rancho Cucamonga, CA, 909/987-1758).
  - 4. US Mix Products Co., Denver, CO (303/778-7227 or 800/397-9903).
  - 5. W.R. Meadows, Inc., Pomona, CA (800/342-5976 or 909/469-2606).
- C. Curing, Hardening and Sealing Materials, General: Provide materials suitable for concrete finish and not detrimental to materials to be applied to concrete. Materials shall be compatible with concrete admixtures, shall be recommended by manufacturer for intended use and shall comply with applicable air quality requirements of authorities having jurisdiction.
- D. Curing, Hardening and Dustproofing Compound: Sonneborn Sonosil, water-based inorganic silicate-base compound, to cure, harden and dustproof concrete, VOC-compliant.
- E. Surface Hardening and Dustproofing Compound: Sonneborn Lapidolith concrete hardening compound, chemically-active solution which interacts with free lime in concrete to form dense, impervious wearing surface, VOC-compliant.
- F. Mix Design: Contractor shall coordinate with the Testing Laboratory of Record, under supervision of Civil Engineer licensed in the State of California, to determine mix proportions to fulfill specified requirements for strength, aggregate, size and workability of concrete.

## **2.9 SCREED PINS AND CHAIRS**

- A. Manufacturers: Grann Adjustable Quick Screed (800/554-7266), or similar products by Dayton Richmond (800/745-3700), Aztek (877/531-3344), or equal.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Verify that concrete cover requirements are met in formwork construction and reinforcement placement.
- B. Verify that base material (sand, gravel or natural as specified or indicated on Drawings) level, vapor barrier/retarder properly placed and that required clearances to reinforcing steel have been maintained.
- C. Verify that all embedded products and formed openings and recesses are correctly placed.

### **3.2 PREPARATION**

- A. Soil Forms: Hand trim sides and bottom of soil forms. Remove loose soil prior to placing concrete.
- B. Constructed Formwork: Design to support all applied loads until concrete is adequately cured, within allowable tolerances and deflection limits.
  - 1. Minimize form joints of exposed concrete and make leak proof.
- C. Cleaning: Prepare previously placed concrete by cleaning with hydro-blasting or wet sand blasting to provide suitable surface for bonding. Provide minimum aggregate exposure of 1/4-inch.
- D. Bonding: Apply bonding agent in accordance with manufacturer's instructions and recommendations.
- E. Doweling: In locations where new concrete is to be doweled to existing concrete, drill holes and insert dowels, packing solid with non-shrink cement or polymer (epoxy) grout.

### **3.3 REINFORCEMENT**

- A. Placement: Place and secure as specified or noted on Drawings, and in compliance with CRSI - Placing Reinforcing Bars.
- B. Splices: Lap ends and tightly wire tie, complying with ACI 318 for minimum lap. Stagger horizontal bars so that adjacent splices are minimum 48 inches apart.
- C. Minimum Concrete Cover: 3 inches at earth forms, 2 inches below grade, 1-1/2 inches above grade, and center in concrete slab-on-grade.
- D. Wire Fabric Placement: Place sheets as long as possible, lap one full mesh, lace with 16 gage wire. Offset end laps. Extend fabric to within 1-inch of slab edge. Cut mesh at expansion joints or full-depth control joints.

### **3.4 CONCRETE MIXING**

- A. Concrete Mixing, General: Comply with ACI 304 - Guide for Measuring, Mixing, Transporting, and Placing Concrete. Introduce and mix admixtures in compliance with manufacturer's instructions and recommendations.
- B. No water shall be added during transit or at the job without specific instructions from engineer responsible for mix design. Concrete shall be placed within 90 minutes after addition of water and admixtures.

### **3.5 CONCRETE PLACEMENT**

- A. Notify District's Inspector and DSA at least 2 working days in advance of placing concrete to allow for inspection of formwork and reinforcing.
- B. Placement and Consolidation, General: Comply with ACI 304 and as follows:
  - 1. Schedule continuous placement of concrete to prevent the formation of cold joints.
  - 2. Provide construction joints if concrete for a particular element or component cannot be placed in a continuous operation.
  - 3. Deposit concrete as close as possible to its final location, to avoid segregation.
- C. Placement in Forms: Limit horizontal layers to depths which can be properly consolidated, but in no event greater than 24 inches.
  - 1. Consolidate concrete by means of mechanical vibrators, inserted vertically in freshly placed concrete in a systematic pattern at close intervals. Penetrate previously placed concrete to ensure that separate concrete layers are knitted together.
  - 2. Vibrate concrete sufficiently to achieve consistent consolidation without segregation of coarse aggregates.
  - 3. Do not use vibrators to move concrete laterally.
- D. Hot Weather Placement: Comply with recommendations of ACI 305 when ambient temperature before, during, or after concrete placement is expected to exceed 90 degrees F (32 deg C) 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 pounds per square foot per hour.

1. Use evaporation reducer.
  2. Do not add water to approved concrete mixes under hot weather 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.
- E. Cold-Weather Placement: Comply with provisions of ACI 306 when air temperature has fallen to or is expected to fall below 40 deg F (4 deg C). 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 (10 deg C) and not more than 80 deg F (27 deg C) 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.
- F. Protection: Ensure that reinforcement, embedded products, joint fillers and joint devices are not disturbed during concrete placement.
- E. Skateboard Deterrent at Seat Walls: Refer to Drawings for details and layout information.

### 3.6 JOINTS

- A. Construction Joints: Locate and install construction joints so they do not impair strength or appearance of the structure, as acceptable to Architect.
1. Locate construction joints perpendicular to main reinforcement. Continue reinforcement across construction joints except as indicated otherwise. Do not continue reinforcement through sides of strip placements.
    - a. Dowel Joints: Grease one end of dowel.
  2. Use bonding agent on existing concrete surfaces that will be joined with fresh concrete.

### 3.7 FINISHING FORMED SURFACES

- A. Repairs, General: 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. 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.
- B. Unexposed Form Finish: Repair tie holes and patch defective areas. Rub down or chip off fins or other raised areas exceeding 1/4-inch height.
- C. Exposed Form Finish: Repair and patch defective areas, with fins or other projections completely removed and smoothed.
1. Grout cleaned finish: Apply to surfaces indicated after all contiguous surfaces are accessible; do not clean as work progresses.
    - a. Prepare grout using 1 part portland cement, 1-1/2 parts fine sand, and enough water to produce a mixture with consistency of thick paint. Achieve grout color matching concrete surface color by blending normal and white portland cements.
    - b. Wet areas to be cleaned and apply grout mixture evenly by brush or spray. Scrub surface immediately after grout application to fill minor air bubbles, using cork float or stone, and remove excess grout while it is still plastic. After initial drying, rub surface vigorously with clean burlap, and keep moist for not less than 36 hours.
  2. Contiguous unformed surfaces: Strike smooth and float to a similar texture tops of walls, horizontal offsets, and other unformed surfaces adjacent to or contiguous with formed

surfaces. Continue final finish of formed surfaces across unformed surfaces, unless otherwise specifically indicated.

### **3.8 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.
- B. Curbs: Provide monolithic finish to interior curbs by stripping forms while concrete is still green and by steel-troweling surfaces to a hard, dense finish with corners, intersections, and terminations slightly rounded.
- C. Equipment Bases and Foundations: Provide machine and equipment bases and foundations as shown on Drawings. Set anchor bolts for machines and equipment to template at correct elevations, complying with diagrams or templates of manufacturer furnishing machines and equipment.

### **3.9 CONCRETE CURING AND SEALING**

- A. Curing, General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures.
  - 1. In hot, dry, and windy weather protect concrete from rapid moisture loss before and during finishing operations with an evaporation-reducing material.
  - 2. Start initial curing as soon as free water has disappeared from concrete surface after placing and finishing. Weather permitting, keep continuously moist for not less than 7 days, or as recommended by manufacturer.
  - 3. Apply curing compounds after screeding and bull floating, but before power floating and troweling.
  - 4. Moist cure interior concrete floor slabs on grade, prepared to receive finish flooring materials.
- B. Application of Liquid and Dust-On Agents: Apply agents in accordance with manufacturer's instructions and recommendations.

### **3.10 FIELD QUALITY CONTROL**

- A. Inspection and Testing: Field inspection and testing will be performed in accordance with ACI 301 and under provisions of General Conditions, Testing and Inspections.
- B. Field Tests of Concrete: Perform tests in accordance with applicable Building Code requirements, ACI 301 and requirements of authorities having jurisdiction.
- C. Compressive Strength Tests: Take four test cylinders for each 50 cubic yards of structural concrete with a minimum of one test for each day's placement of concrete placed.
  - 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.
- D. Slump Tests: Make slump test for each 10 cubic yards of concrete placed.
- 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. Special Inspection: Employ a special inspector during taking of test specimens and placing of pneumatically placed concrete and all reinforced foundation concrete which is required to have a compressive strength in excess of 2,500 psi. Additional inspections, if required, indicated on Structural Drawings.

### **3.11 FORMWORK REMOVAL**

- A. Provided that concrete has hardened sufficiently to prevent damage, and has achieved sufficient strength to support its own weight, forms may be removed after 24 hour curing period at not less than 50 degrees F.

### **3.12 DEFECTIVE CONCRETE**

- A. Defective Concrete: The following concrete will be deemed to be defective, and shall be removed promptly from the job site.
  - 1. Concrete which is not formed as indicated, is not true to intended alignment, is not plumb or level where so intended, is not true to intended grades and levels;
  - 2. Has voids or honeycomb that have been cut, resurfaced, or filled, unless with the approval of the Architect;
  - 3. Has sawdust, shavings, wood, or embedded debris;
  - 4. Does not conform fully to provisions of the Contract Documents.
- B. Repairs and Replacements:
  - 1. Where defective concrete is found after removal of the forms, cut out the defective concrete, if necessary, and make the surfaces match adjacent surfaces.
  - 2. Work uneven surfaces and angles of concrete to a surface matching adjacent concrete surfaces.

### **3.13 PROTECTION**

- A. Protection: Protect concrete from marring and damage due to weather and construction activities.
  - 1. Protective measures shall include providing temporary coverings and prohibiting all non-essential construction activities, including cleaning and maintenance of construction equipment.

### **3.14 SCHEDULE - CONCRETE TYPE AND FINISHES**

- A. Non-Structural concrete: Non-structural concrete strengths, aggregate sizes and slumps shall meet the following requirements unless noted otherwise on Drawings:
  - 1. Non-structural concrete topping.
    - a. Min. 28-day Compressive Strength: 2,500psi
    - b. Max. Aggregate Size: 3/8 inch (9.5 mm)
    - c. Max. Slump (+/- 1 inch): 4 inches.
    - d. Max. Water/Cement Ratio: 0.45

**END OF SECTION**





**SECTION 07 90 05**  
**JOINT SEALERS**

**PART 1 - GENERAL**

**1.1 SECTION INCLUDES**

- A. Exterior joints sealers in vertical surfaces and non-traffic horizontal surfaces

**1.2 SUBMITTALS**

- A. Product Data: Each joint sealant product required. Indicate sealant chemical characteristics, performance criteria, limitations, color availability.
- A. Installation Instructions: Instructions for joint preparation and joint sealer application. Note all deviations from SWRI recommendations.
- B. Samples:
  - 1. For initial selection purposes: Manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view.
  - 2. For verification purposes: Each type and color of joint sealant required. Install joint sealant samples in 1/2-inch-wide joints formed between two 6-inch-long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

**1.3 QUALITY ASSURANCE**

- A. Applicator's Qualifications: Company specializing in joint sealer work with minimum three years documented experience and approved by sealant manufacturer. Installer shall have successfully completed, within previous 3 years, at least 3 joint sealer installations of similar type and scope as that required for Project.
- B. Single Source Responsibility for Joint Sealer Materials: Obtain joint sealer materials from a single manufacturer for each different product required.
- C. Industry Standard: Conform to SWRI - Sealants: The Professionals Guide, requirements and recommendations for installation conditions, substrate materials and sealant product selection.

**1.4 DELIVERY, STORAGE AND HANDLING**

- A. Delivery: Deliver materials in original, tightly sealed containers or unopened packages with manufacturer's name, labels, product identification, lot numbers (where appropriate), color, expiration period for use, pot life, curing time, and mixing instructions for multi-component materials.
- B. Storage and Handling: Store and handle materials in compliance with manufacturers' instructions and recommendations, to prevent their deterioration or damage due to moisture, high and low temperatures, contaminants, or other causes. Store materials out of weather in original containers or unopened packages as recommended by manufacturer.

**1.5 WARRANTY**

- A. Extended Warranty: Contractor and sealant applicator shall jointly furnish a written warranty to the District stating that joints sealed as specified in this Section which fail to achieve and maintain air tight and watertight seal, exhibit loss of adhesion or cohesion, or

do not cure within a period of five years from the date established in "Notice of Completion", except for failure due to structural defects, will be repaired or reconstructed at no cost to District.

## **1.6 PROJECT CONDITIONS**

- A. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:
  - 1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer; below 40 degrees F or above 100 degrees F.
  - 2. When joint substrates are wet.
- B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than allowed by joint sealant manufacturer for application indicated.
- C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with their adhesion are removed from joint substrates.
- D. Project Conditions:
  - 1. Do not install solvent curing sealants in enclosed building spaces.
  - 2. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

## **PART 2 - PRODUCTS**

### **2.1 MATERIALS, GENERAL**

- A. Compatibility: Provide joint sealers, joint fillers and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.
- B. Colors: Standard or custom colors as selected by Architect to match or suit surrounding finish materials.

### **2.2 LATEX JOINT SEALANTS**

- A. Acrylic-Emulsion Sealant: Manufacturer's standard, one part, non-sag, mildew-resistant, acrylic-emulsion sealant complying with ASTM C834, formulated to be paintable and recommended for exposed applications on interior and on protected exterior locations involving joint movement of not more than plus or minus 5 percent.
  - 1. Acceptable Products and Manufacturers: As listed below. Products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01 60 00 - Product Requirements.
    - a. Chem-Calk 600, by Bostik Construction Products Div.
    - b. AC-20, by Pecora Corp.
    - c. Sonolac, by Sonneborn Building Products Div.; Rexnord Chemical Products, Inc.
    - d. Tremco Acrylic Latex 834, by Tremco Inc.

### **2.3 MISCELLANEOUS MATERIALS**

- A. Joint Sealant Backing, General: Provide sealant backings of material and type which are non-staining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

- B. Primer: Provide type recommended by joint sealer manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from pre-construction joint sealer-substrate tests and field tests.
- C. Cleaners for Non-porous Surfaces: Provide non-staining, chemical cleaners of type which are acceptable to manufacturers of sealants and sealant backing materials, which are not harmful to substrates and adjacent non-porous materials, and which do not leave oily residues or otherwise have a detrimental effect on sealant adhesion or in-service performance.
- D. Masking Tape: Provide non-staining, non-absorbent type compatible with joint sealants and to surfaces adjacent to joints.
- E. Plastic Foam Joint Fillers: Preformed, compressible, resilient, non-waxing, non-extruding strips of flexible, non-gassing plastic foam of material indicated below; non-absorbent to water and gas; and of size, shape and density to control sealant depth and otherwise contribute to producing optimum sealant performance.
  - 1. Specified Manufacturer and Product: Applied Technologies, Inc., Sof Rod, proprietary, reticulated, closed-cell polymeric foam, non-outgassing, with a density of 2.5 pcf and tensile strength of 35 psi per ASTM D1623, and with water absorption less than 0.02 gms/cc per ASTM C1247.
  - 2. Acceptable Manufacturer and Product: None identified. Equivalent products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.
- F. Elastomeric Tubing Joint Fillers: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D1056, non-absorbent to water and gas, capable of remaining resilient at temperatures down to -26 degrees F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and otherwise contribute to optimum sealant performance.
- G. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.
- H. Mineral Wool: For fire-rated joint construction, Partek Paroc Industrial Board 1240 or equal. Product shall be as required for UL-listed fire-rated joint construction.

## **PART 3 - EXECUTION**

### **3.1 EXAMINATION**

- A. Verify that surfaces are ready to receive work. Field verify condition and location in field.
- B. Examine joints to be sealed for construction defects which would adversely affect execution of Work. Correct all defects and detrimental conditions before proceeding with joint sealers.

### **3.2 PREPARATION**

- A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:
  - 1. Remove all foreign material from joint substrates which could interfere with adhesion of joint sealer, including dust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellents; water; surface dirt; and frost.

- B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealer manufacturer based on pre-construction joint sealer-substrate tests or prior experience. Apply primer to comply with joint sealer manufacturer's recommendations. Confine primers to areas of joint sealer bond, do not allow spillage or migration onto adjoining surfaces.
- C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

### 3.3 JOINT DIMENSIONS

- A. Butyl Base Type Sealant: Minimum joint width 1/4-inch and depth of 3 times width of joint, with maximum depth of 3/4-inch.
- B. Silicone Rubber Sealant: Minimum joint width 1/4-inch and depth of approximately one-half the width, but in no case less than 1/4-inch. Other wide-to-depth ratios as follows:

JOINT WIDTH:	JOINT DEPTH:	
<u>For Non-Porous Surfaces:</u>	<u>Minimum:</u>	<u>Maximum:</u>
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	1/2 of width	Equal to width
Over 1/2"	Not Permitted	
<u>For Porous Surfaces:</u>		
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	1/4"	Equal to width
1/2" to 1"	1/2"	Equal to width
Over 1"	Not Permitted	

- C. Acrylic and Polyurethane: Minimum joint width 1/4-inch and depth equal to width, but in no case deeper than 1/2-inch. Other width-to-depth ratios as follows:

JOINT WIDTH:	JOINT DEPTH:	
<u>For Non-Porous Surfaces:</u>	<u>Minimum:</u>	<u>Maximum:</u>
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	Equal to width	Equal to width
Over 1/2" to 1" maximum	1/2"	1/2"
<u>For Porous Surfaces:</u>		
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	1/4"	Equal to width
1/2" to 1"	1/2"	Equal to width
Over 1"	Not Permitted	

### 3.4 INSTALLATION OF JOINT SEALANTS

- A. Installation of Joint Sealants, General: Comply with joint sealant manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.
- B. Elastomeric Sealant Installation Standard: Comply with recommendations of ASTM C920 and C1193 for use of joint sealants as applicable to materials, applications and conditions indicated.
- C. Solvent-Release-Curing Sealant Installation Standard: Comply with requirements of ASTM C1311 for use of solvent-release-curing sealants.

- D. Latex Sealant Installation Standard: Comply with requirements of ASTM C834 and C1193 for use of latex sealants.
- E. Installation of Sealant Backings: Install sealant backings to comply with the following requirements:
  - 1. Install joint fillers of type specified, to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths which allow optimum sealant movement capability.
    - a. Do not leave gaps between ends of joint fillers.
    - b. Do not stretch, twist, puncture, or tear joint fillers.
    - c. Remove absorbent joint fillers which have become wet prior to sealant application and replace with dry material.
  - 2. Install bond breaker tape between sealants and joint fillers, compression seals, or back of joints where adhesion of sealant to surfaces at back of joints would result in sealant failure.
  - 3. Install compressible seals serving as sealant backings to comply with requirements indicated above for joint fillers.
- F. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths which allow optimum sealant movement capability.
- G. Tooling of Non-Sag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents which discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.
  - 1. Provide concave joint configuration in conformance to Figure 4 in ASTM C1193, unless otherwise indicated.
  - 2. Provide flush joint configuration in conformance to Figure 4 in ASTM C1193, where indicated. Use masking tape to protect adjacent surfaces of recessed tooled joints.
  - 3. Provide Recessed joint configuration in conformance to Figure 4 in ASTM C1193, of recess depth and at locations indicated.

### **3.5 CLEANING AND PROTECTION**

- A. Progress Cleaning: Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur.
  - 1. Clean joints by mechanical means or with solvent as recommended by sealant manufacturer and compatible with finish material, to eliminate soiling and overlap on adjacent surfaces.
  - 2. Clean adjacent soiled surfaces.
- B. Repairs: Repair or replace defaced or disfigured finishes caused by joint sealer Work.

### **3.6 PROTECTION**

- A. Protection: Protect joint sealants during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes.
  - 1. Joint sealers shall be without deterioration or damage at Substantial Completion review.

2. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so that and installations with repaired areas are indistinguishable from original work.

**END OF SECTION**

**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. The intent of this specification is to have only one contractor be responsible for the above functions.

**1.02 RELATED SECTIONS**

- A. 03 30 01 - Cast In Place Concrete Systems: Footings.

**1.03 REFERENCES**

- A. AWS D1.1 - American Welding Society Structural Welding Code
- B. AWS D1.2 - American Welding Society Structural Welding Code, Aluminum
- C. NFPA 701 - National Fire Protection Association Fire Test for Flame Propagation of Textiles and Films
- D. ASCE 7 - American Society of Civil Engineers, Minimum Design Loads for Buildings and other structures.
- E. ASTM A 500 - Cold-Formed Welded and Seamless Carbon Steel Structural Tubing in Rounds and Shapes.

**1.04 PERFORMANCE REQUIREMENTS**

- A. 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.
- B. Pre-Approval Bid Scope:
  - 1. Building Codes: Proposed structure shall be PC or A number approved and conform to the 2016 CBC using a minimum wind load based on 115 mph, 3 second gusts, exposure C, and a seismic (earthquake) load based on Category D. 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 2016, table 1804.2, soil type 5 (1500 lbs./sq. ft.)
  - 3. Concrete shall be tested per Section 01 45 33 - Code Required Special Inspection and Procedures, 2016 CBC section 1903A and inspected per 2016 CBC section 1704A.4
- C. Design Build Scope:
  - 1. Building Codes: Proposed structure shall be Division of the State Architect approved and conform to the 2016 CBC using a minimum wind load based on 115 mph, 3 second gusts, exposure C, and a seismic (earthquake) load based on  $S_s < 2.99g$  and  $S_1 < 1.389g$ . 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 2016, table 1804.2, soil type 5 (1500 #/sf2)
  - 3. Concrete shall be tested per Section 01 45 33 - Code Required Special Inspection and Procedures, 2016 CBC section 1903A and inspected per 2016 CBC section 1704A.4



## **1.05 SUBMITTALS**

- A. Product Data:
  - 1. Provide data in the form of manufacturing technical data and specifications.
  - 2. Provide a list of at least 5 DSA similar reference projects that have been installed a minimum of 8 years. At least 3 of these projects shall have utilized PVC the same membrane Fabric.
  - 3. Shop Drawings:
    - a. Provide minimum 11x17 copy of DSA Pre-Approved structural Drawings referencing PC or A number, 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.
  - 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 section 2.02 G.1.
    - b. Proof of IAS (International Accreditation Service) certification as per section 1.02 F.
    - c. The Tensioned Fabric Structure fabricator shall provide proof of an ongoing written Quality Assurance program for 5 years or more.

## **1.06 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 2016 CBC, sections 1704.A.2, 1704A.2.1, 1704A.2.2 and 1704A.3.1
- B. 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.
- C. Fabrication of the steel structures shall be performed by an authorized licensee. Material Testing (or mill certificates) and inspection of welding shall be conducted per CBC 2016 Sections 1704A, 1705A, 1705A.2 and Table 1705A.2.1.
- D. Welder Qualifications: The personnel manufacturing the metal frames must be certified welders.
- E. Professional Engineer Qualifications: A professional Civil or Structural Engineer who is licensed to practice in California and who is experienced in providing engineering services for installing Tensioned Fabric Structures similar to those indicated for this project and with a record of successful in service performance.

## **1.07 DELIVERY, STORAGE AND HANDLING**

- A. All materials shall be handled per manufacturer's recommendations and Section 01 60 00 - Product Requirements. The more restrictive requirements shall govern.
- B. Delivery and Storage: Deliver materials to site in manufacturer's original, unopened containers and packaging, with labels clearly identifying product name and manufacturer. Store materials in accordance with manufacturer's instructions, in a clean, dry, well ventilated area, above ground on blocking, and do not allow materials to become wet, stained, or dirty.
- C. Handling: Handle materials to protect materials, coatings, and finishes during transportation and installation to prevent damage or staining. Handle fabric in accordance with manufacturer's instructions.

Use care in handling of fabric to avoid damage to fabric material and coating. Do not damage, crush, or kink cables where occurs.

- D. All cables and end fittings shall be delivered clean and dry.

## **1.08 WARRANTY**

- A. A supplemental warranty from the manufacturer shall be provided for a period of 5 years on fabric and 10 years on the structural integrity of the steel from date of substantial completion.
- B. The warranty shall not deprive the Owner of other rights the Owner may have under the provisions of the Contract Documents and will be in addition to and run concurrent with other warranties made by the Contractor under requirements of the Contract Documents.

## **PART 2 - PRODUCTS**

### **2.01 MANUFACTURERS**

- A. Pre-Engineered Package: The proposed structure(s) manufactured by USA Shade & Fabric Structures, Inc., shall be modular and pre-fabricated, and include the structural steel frame, fabric roof, steel cables, all fasteners, and installation of structure(s) including foundations. Contact SHADE STRUCTURES, a brand of USA Shade & Fabric Structures, Inc., 350 Kalmus Drive, Costa Mesa CA Attn: Patti Abrecht ((714) 427-6981.
- B. Substitutions: See Section 01 60 00 - Product Requirements and Performance Requirements in Part 1. Substitutions are subject to DSA review and approval. Contractor shall be responsible for all related costs including DSA review fees.
- C. Approved equals must be pre-qualified and approved in accordance with Division 1 "Product Requirements". Please submit product documentation, fabric samples and quality assurance criteria as per Division 1 Section "Product Requirements" prior to bid to be considered.

### **2.02 PRODUCTS**

- A. Selected product for Basis of Design: The structures shall be manufactured by USA SHADE & FABRIC STRUCTURES, Inc., or approved equal and include engineering drawings and calculations, patterning and fabrication of architectural membrane, structural steel frame, architectural HDPE membrane roof, steel cables, all fasteners, and installation of structure(s) including foundations.
- B. Steel:
  - 1. All steel members of the shade structure shall conform to ASTM A-36 or ASTM A-500 Grade B (46Ksi), A500 Grade C (50Ksi) or A-53 Type E or S and be designed in strict accordance with the requirements of the "American Institute of Steel Construction" (AISC) Specifications and the "American Iron and Steel Institute" (AISI) Specifications for Cold Formed Members.
  - 2. All connections shall have a maximum internal sleeving tolerance of .0625 inches using high tensile strength steel sections with a minimum sleeve length of 6 inches.
  - 3. The structural members shall be fabricated in as large segments as possible to minimize field joints.
  - 4. All segments of the assembly will be welded or stamped with the appropriate part number in a manner that will still be visible after powder coating is applied.
  - 5. Grind all corners and sharp edges.
- C. Bolts:
  - 1. All structural field connections of the shade structure shall be designed and made with high strength bolted connections using ASTM A-325 structural bolts and ASTM A-307 stainless steel bolts on low stress connections. (Mill Certification will be required for all high strength bolts.)
  - 2. Fasteners used on main structural members shall be hot-dipped galvanized high-strength bolts including nuts and washers, and conforming with ASTM A325 as applicable. All other fasteners shall be adequately sized and treated for corrosion protection.
  - 3. Concrete anchor bolts shall conform to A307 and be stainless steel or hot-dipped galvanized.
- D. Welding:

1. All shop welded connections of the shade structure shall be designed and performed in strict accordance with the requirements of the "American Welding Society" (AWS) Specifications. Structural welds shall be made in compliance with the requirements of the "Prequalified" welded joints where applicable and by certified welders. No onsite or field welding shall be permitted.
  2. All full penetration welds shall be continuously inspected by an independent inspection agency and shall be tested to the requirement of 2016 CBC and AWS D1.1 for hot rolled and AWS D1.3 for cold rolled.
- E. Powder coating:
1. All steel shall be cleaned by abrasive blasting and primer applied prior to powder coating in accordance with the manufacturer's specifications.
  2. Powder coating shall be sufficiently applied, with a minimum 4 mils thickness, and cured at the recommended temperature to provide proper adhesion and stability to meet salt spray and adhesion tests as defined by the American Society of Testing Materials.
  3. Powder used in the powder coat process shall have the following characteristics:
    - a. Specific Gravity: 1.68 +/- 0.05.
    - b. Theoretical coverage: 114 +/- 4ft<sup>2</sup>/lb/mil
    - c. Mass loss during cure: <1%
    - d. Maximum storage temperature: 75oF
  4. Color: Color shall be as scheduled on Drawings or as selected by Architect from the manufacturer's standard color chart.
- F. 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; 1/4" (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. All structural wire rope shall be 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 2 on breaking strength.
    - b. Cables which are designated to be prestretched shall be prestretched per ASTM A603 for wire rope. Cables of the same type shall have the same modulus of elasticity.
    - c. All swaged and spltered fittings shall be designed 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 shall be electro-galvanized.
    - e. Spltered end fittings shall be hot dipped galvanized.
    - f. Attach a tag indicating the cable length and mark number to each cable assembly.
    - g. Cables shall be tensioned to double the design load before length is cut.
    - h. Cables shall be tensioned to the design load when measuring the cut length that is indicated on the shop drawings.
  3. Stainless Steel Cables and Fittings:
    - a. Cables shall be 1x19 Stainless Steel Open Strands, Grade 316.
    - b. Cables and fittings will be fabricated per the standard operating procedures of the manufacturers.
    - c. Attach a tag indicating the cable length and mark number to each cable assembly.
    - d. Cables shall be tensioned to double the design load before length is cut.
    - e. Cables shall be tensioned to the design load when measuring the cut length that is indicated on the shop drawings.
- G. Fabric Roof Systems:

1. UV Shade Fabric:
    - a. UV Shade fabric is made of a UV stabilized high-density polyethylene. Mesh shall be rachel-knitted with monofilament and tape yarn filler to ensure that material will not unravel if cut. Panels to be 10ft wide.
    - b. Fabric shall meet the following fire resistance tests:
      - 1) ASTM E84 Class A
      - 2) NFPA 701-97 (Weathered or unweathered)
      - 3) CA Fire Marshall Rating (Reg. # FA-52001)
    - c. Fabric shall meet the U.S. Standards for testing and labeling of UV Protective textiles ASTM D6603 Test Method AATCC 183.
  2. Stitching & Thread:
    - a. All sewing threads are to be double stitched.
    - b. Thread shall be GORE Tenara Sewing Thread manufactured from 100% expanded PTFE; mildew resistant exterior approved thread. Thread shall meet or exceed the following:
      - 1) Flexible temperature range
      - 2) Very low shrinkage factor
      - 3) Extremely high strength, durable in outdoor climates
      - 4) Resists flex and abrasion of fabric
      - 5) Unaffected by cleaning agents; acid rain, mildew, salt water and rot resistant, unaffected by most industrial pollutants.
      - 6) Treated for prolonged exposure to the sun.
  3. Shade and UV Factors:
    - a. Shade protection and UV screen protection factors shall be as follows:
 

Color	UV Block %	Shade %
Pacific Blue	84%	82%
Forest Green	83%	81%
Red	84%	85.5%
Silver	85%	81%
Desert Sand	86%	84.5%
Terracotta	85%	81%
Yellow	86%	84%
  4. Color: Color shall be as scheduled on Drawings or as selected by Architect from the manufacturer's standard color chart.
- H. Poured-in-place footings and piers: Concrete for footing and piers shall be minimum 3,000 psi per Division 3 Section "Concrete". Reinforced steel shall be as specified in Division 3 Section "Concrete Reinforcement".

## **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. Installation shall be performed in strict accordance with manufactures instructions for assembly, installation, and erection per approved drawings.
- B. Manufacturer shall prepare a full and comprehensive assembly procedure guide prior to installation.

### **3.03 ERECTION**

- A. Weather Conditions: 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. The Tensioned Fabric Structure shall not be installed when wind conditions are deemed in excess of manufacturer's determination of safe wind speed erection conditions. It shall be the manufacturer's sole discretion to determine acceptable and safe wind condition for installation.
- B. Framing and structural members: Anchor bolts shall be accurately set. Uniform bearing under base plates shall be provided using non shrink grouting compound where applicable. Members shall be accurately set to assure proper fitting and covering. As erection progresses, the work shall be securely fastened to resist the dead load and wind and erection stresses. Erected structural frame work shall be adequately guyed and secured to resist all possible loads due to wind and the installation process.
- C. Fabric: 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 and well rounded. Remove any potential causes for snagging or tearing of the fabric. Properly install all connections and provide all materials and equipment required for the erection and stressing of the fabric. Unroll the fabric in such a manner as to avoid snagging or dragging the fabric over sharp objects during installation. Adequate fabric prestress shall be confirmed by the fabric structure manufacturer and the appearance of the fabric membrane roof shall be smooth and wrinkle free. Creasing or folding the fabric around sharp corners shall be avoided at all times.
- D. Fabric tensioning system: Cables shall be free of all kinks and bends. Care shall be taken not to damage the cables during installation. Bolt holes shall be 1/16" 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**

## **SECTION 32 11 23**

### **AGGREGATE BASE COURSES**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Aggregate base course.
- B. Paving aggregates.
- C. Soil sterilization.

##### **1.02 RELATED REQUIREMENTS**

- A. Section 32 13 13 - Concrete Paving.

##### **1.03 REFERENCE STANDARDS**

- A. ASTM D698 - Standard Test Methods for Laboratory Compaction Characteristics of Soil Using Standard Effort (12,400 ft-lbf/ft<sup>3</sup> (600 kN-m/m<sup>3</sup>)); 2007.
- B. ASTM D1556 - Standard Test Method for Density and Unit Weight of Soil in Place by the Sand-Cone Method; 2007.
- C. ASTM D2487 - Standard Practice for Classification of Soils for Engineering Purposes (Unified Soil Classification System); 2010.
- D. Standard Specifications for Public Works Construction, City of Beaumont, latest edition.
  - 1. Standard Specifications shall be as amended and adopted by authorities having jurisdiction, including the City of Beaumont.
  - 2. Where reference is made to Standard Details, such reference shall be to the Standard Details accompanying the Standard Specifications, as amended and adopted by the authorities having jurisdiction.
  - 3. Wherever term "Agency" occurs in Standard Specifications, it shall be understood to mean Owner (District) for purposes of the Contract.
  - 4. Wherever term "Engineer" occurs in Standard Specifications, it shall be understood to mean Architect for purposes of the Contract.

##### **1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Samples: 10 lb sample of each type of aggregate; submit in air-tight containers to testing laboratory.
- C. Materials Sources: Submit name of imported materials source.
- D. Certificates of Conformance: Aggregate and sterilant materials.
- E. Aggregate Composition Test Reports: Results of laboratory tests on proposed and actual materials used.
- F. Compaction Density Test Reports.

##### **1.05 QUALITY ASSURANCE**

- A. Regulatory Requirements: Where reference is made to Standard Specifications, the following shall apply.
  - 1. Perform off-site Work in public rights-of-way in accordance with requirements of authorities having jurisdiction, including Standard Specifications for Public Works Construction, as amended and adopted by those authorities. For conditions not indicated otherwise on Contract Drawings, conform to Standard Details adopted by authorities having jurisdiction, including Standard Details for Public Works Construction, as amended and adopted by those authorities.
  - 2. Perform on-site Work as indicated and referenced on Contract Drawings and as specified herein.

- B. The quantity of volatile organic compounds (VOC) used in weed killer, tack coat, primer and other materials shall not exceed limits permitted under current regulations of:
  - 1. Sacramento Metropolitan Air Quality Management District (SMQMD).
- C. Source Quality Control: Obtain materials from one source throughout.

#### **1.06 DELIVERY, STORAGE, AND HANDLING**

- A. When necessary, store materials on site in advance of need.
- B. When aggregate materials need to be stored on site, locate stockpiles where indicated.
  - 1. Separate differing materials with dividers or stockpile separately to prevent intermixing.
  - 2. Prevent contamination.
  - 3. Protect stockpiles from erosion and deterioration of materials.

### **PART 2 PRODUCTS**

#### **2.01 MATERIALS**

- A. Sub-Base Material: Existing or imported materials as recommended in geotechnical report.
- B. Aggregate: Coarse or crushed aggregate, conforming to City of Beaumont Public Works Department standard.
  - 1. Green Book Standard Specifications 200-2.2.
- C. Herbicide: Soil Sterilant; Comply with all applicable environmental protection and hazardous materials laws and regulations.
  - 1. Monobor-Chlorate non-selective weed and grass killer, by J.R. Simplot Co., Lathrop, CA;
  - 2. Poly-Bor Chlorate or Mono-Bor-Chlorate by United States Borax;
  - 3. B.Monobar-Chlorate by Occidental Chemical;
  - 4. Casoron 50W by Uniroyal Chemical Co., Inc.

#### **2.02 SOURCE QUALITY CONTROL**

- A. See Section 01 40 00 - Quality Control, for general requirements for testing and analysis of aggregate materials.
- B. Where aggregate materials are specified using ASTM D2487 classification, testing of samples for compliance will be provided 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.

### **PART 3 EXECUTION**

#### **3.01 EXAMINATION**

- A. Verify that survey bench marks and intended elevations for the work are as indicated.
- B. Verify substrate has been inspected, gradients and elevations are correct, and is dry.

#### **3.02 PREPARATION**

- A. Soil Sterilant: Sterilize soil areas to receive paving. Apply soil sterilant in accordance with manufacturer's instructions and applicable environmental regulations. Take care to confine application to the areas to be paved.
- B. Correct irregularities in substrate gradient and elevation by scarifying, reshaping, and re-compacting.
- C. Do not place aggregate on soft, muddy, or frozen surfaces.

### **3.03 INSTALLATION**

- A. Place and compact aggregate base material in accordance with Standard Specifications, Subsection 301-1.
  - 1. Place aggregate base below curbs and gutters and paving also, compacted to 95 percent at vehicular traffic and 90 percent at pedestrian-only traffic.
- B. Under Portland Cement Concrete Paving (Including Pervious Paving):
  - 1. Compact to 95 percent of maximum dry density and 90 percent at pedestrian-only traffic.
- C. Place aggregate in maximum 4 inch layers and roller compact to specified density.
- D. Level and contour surfaces to elevations and gradients indicated.
- E. Add small quantities of fine aggregate to coarse aggregate as appropriate to assist compaction.
- F. Add water to assist compaction. If excess water is apparent, remove aggregate and aerate to reduce moisture content.
- G. Use mechanical tamping equipment in areas inaccessible to compaction equipment.
- H. Apply herbicide to finished surface.

### **3.04 TOLERANCES**

- A. Flatness: Maximum variation of 1/4 inch measured with 10 foot straight edge.
- B. Scheduled Compacted Thickness: Within 1/4 inch.
- C. Variation From Design Elevation: Within 1/2 inch.

### **3.05 FIELD QUALITY CONTROL**

- A. See Section 01 40 00 - Quality Control, for general requirements for field inspection and testing.
- B. Compaction density testing will be performed on compacted aggregate base course in accordance with ASTM D1556.
- C. Results will be evaluated in relation to compaction curve determined by testing uncompacted material in accordance with ASTM D 698 ("standard Proctor").
- D. If tests indicate work does not meet specified requirements, remove work, replace and retest.
- E. Proof roll compacted aggregate at surfaces that will be under slabs-on-grade and paving.

### **3.06 CLEANING**

- A. Remove unused stockpiled materials, leave area in a clean and neat condition. Grade stockpile area to prevent standing surface water.
- B. Leave borrow areas in a clean and neat condition. Grade to prevent standing surface water.

**END OF SECTION**





## **SECTION 32 13 13**

### **CONCRETE PAVING**

#### **PART 1 GENERAL**

##### **1.01 SECTION INCLUDES**

- A. Concrete sidewalks, integral curbs, gutters, and miscellaneous site footings.

##### **1.02 RELATED REQUIREMENTS**

- A. Section 07 90 05 - Joint Sealers: Sealant for joints.

##### **1.03 REFERENCE STANDARDS**

- A. ACI 211.1 - Standard Practice for Selecting Proportions for Normal, Heavyweight, and Mass Concrete; American Concrete Institute International; 1991 (Reapproved 2002).
- B. ACI 301 - Specifications for Structural Concrete for Buildings; American Concrete Institute International; 2010.
- C. ACI 304R - Guide for Measuring, Mixing, Transporting, and Placing Concrete; American Concrete Institute International; 2000.
- D. ACI 305R - Hot Weather Concreting; 2010.
- E. ACI 306R - Cold Weather Concreting; 2010.
- F. ACI 503 - Standard Specification for Bonding Plastic Concrete to Hardened Concrete with a Multi-Component Epoxy Adhesive.
- G. ASTM A615/A615M - Standard Specification for Deformed and Plain Billet-Steel Bars for Concrete Reinforcement; use 2012 as indicated in 2016 CBC Referenced Standards.
- H. ASTM C33/C33M - Standard Specification for Concrete Aggregates; 2011a is current; use 2003 as indicated in 2010 CBC Referenced Standards.
- I. ASTM C39/C39M - Standard Test Method for Compressive Strength of Cylindrical Concrete Specimens; 2012a.
- J. ASTM C94/C94M - Standard Specification for Ready-Mixed Concrete; 2012 is current; use 2004a as indicated in 2010 CBC Referenced Standards.
- K. ASTM C150/C150M - Standard Specification for Portland Cement; 2012 is current; use 2007 as indicated in 2010 CBC Referenced Standards.
- L. ASTM C309 - Standard Specification for Liquid Membrane-Forming Compounds for Curing Concrete; 2011.
- M. ASTM C494/C494M - Standard Specification for Chemical Admixtures for Concrete; 2013.
- N. ASTM D1751 - Standard Specification for Preformed Expansion Joint Filler for Concrete Paving and Structural Construction (nonextruding and Resilient Bituminous Types); 2004 (Reapproved 2008).
- O. ASTM D1752 - Standard Specification for Preformed Sponge Rubber Cork and Recycled PVC Expansion Joint Fillers for Concrete Paving and Structural Construction; 2004a (Reapproved 2008).
- P. Standard Specifications for Public Works Construction ("Green Book"), by Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and the Southern California Districts of the Associated General Contractors of California. Standard Specifications is published by and available from Building News, Division of BNI Publications, Inc., Los Angeles, CA, (213/202-7775).

#### **1.04 SUBMITTALS**

- A. See Section 01 30 00 - Administrative Requirements, for submittal procedures.
- B. Mix Design: Design mixes for each concrete mix.
- C. Product Data: Provide data on joint filler, admixtures, and curing compound.
  - 1. Material Certificates signed by manufacturers for each of the following:
    - a. Cementitious materials and aggregates.
    - b. Steel reinforcement and reinforcement accessories.
    - c. Admixtures.
    - d. Curing compounds.
    - e. Joint fillers.
  - 2. Colored concrete product data and color selections.
- D. Samples: Submit 6 sample panels, 6 x 6 inch in size illustrating each finish.
  - 1. Samples can be of sufficient size for color selection and/or verification.
- E. Shop drawings: For pattern layout and verification.

#### **1.05 QUALITY ASSURANCE**

- A. Industry Standard: Perform concrete paving Work in accordance with ACI 301.
- B. Regulatory Requirements: Where reference is made to Standard Specifications, the following shall apply.
  - 1. Where reference is made to Standard Specifications, the following shall apply:
    - a. Perform off-site Work in public rights-of-way as indicated on the Contract Drawings and in accordance with requirements of authorities having jurisdiction, including Standard Specifications for Public Works Construction, as amended and adopted those authorities. For conditions not indicated otherwise on Contract Drawings, conform to Standard Details adopted by authorities having jurisdiction, including Standard Details for Public Works Construction, as amended and adopted those authorities.
    - b. Perform on-site Work as indicated and referenced on the Contract Drawings and as specified herein.
  - 2. Conform to California Department of Transportation (CalTRANS) standard specifications.
  - 3. Conform to California Code of Regulations (CCR), Volume 2, Part 2, Chapters 18, 18A, 19 and 19A.
  - 4. Conform to California Building Code (CBC), Chapter 11B and ADAAG for accessibility requirements.
    - a. Portland cement concrete paving shall be stable, firm and slip resistant. Comply with Sections 11B-302 and 11B-403.
    - b. 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 11B-403.2.
  - 5. Comply with OSHA and Cal-OSHA requirements.
  - 6. Continuous surfaces, including walks and sidewalks, shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2-inch (CBC 11B-303.3) and shall have a minimum width of 48 inches; CBC 11B-403.5.1.
  - 7. Surface cross slopes shall not exceed 2 percent on any accessible path of travel.
- C. Source Quality Control: Obtain like materials from one source throughout.
- D. 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.

## **1.06 DELIVERY, STORAGE AND HANDLING**

- A. Delivery, Storage and Handling: Comply with requirements specified by manufacturer.

## **PART 2 PRODUCTS**

### **2.01 BASE MATERIAL**

- A. Sub-Base and Aggregate Base Material under Portland Cement Concrete Paving: For pavement subject to vehicular traffic, provide sub-base and aggregate base material as indicated on the Drawings. Aggregate base is not required under portland cement concrete paving subject only to pedestrian traffic in normal use.

### **2.02 PAVING ASSEMBLIES**

- A. Comply with applicable requirements of ACI 301.
- B. Concrete Sidewalks and Median Barrier: 3,000 psi 28 day concrete, 4 inches thick, buff color Portland cement, exposed aggregate finish.

### **2.03 FORM MATERIALS**

- A. Wood form material, profiled to suit conditions.
- B. Joint Filler: Preformed; non-extruding bituminous type (ASTM D 1751) or sponge rubber or cork (ASTM D 1752).
  - 1. Thickness: 1/2 inch.

### **2.04 REINFORCEMENT**

- A. General: As indicated on Drawings and specified following. Reinforcement for portland cement concrete paving in public rights-of-way shall comply with all applicable requirements in the Standard Specifications for Public Works Construction and Standard Details, as adopted by local authorities having jurisdiction.
- B. Reinforcing Steel: ASTM A615/A615M Grade 60 (420); deformed billet steel bars; unfinished finish.
- C. Welded Wire Mesh: ASTM A185, welded plain cold-drawn steel wire fabric, minimum 6 x 6 / 1.9 x 1.9 or as noted on Drawings or required by reference standards and details. Furnish reinforcement in flat sheets, not rolls.
- D. Tie Wires: 18 gage minimum, black annealed steel.
- E. Dowels: ASTM A615/A615M Grade 60 (420); deformed billet steel bars; unfinished finish.

### **2.05 PERFORMANCE REQUIREMENTS**

- A. Albedo reflectance of finish concrete shall be minimum 0.30.

### **2.06 CONCRETE MATERIALS**

- A. Obtain cementitious materials from same source throughout.
- B. Cement: ASTM C150/C150M Normal - Type I portland type, grey color.
- C. Fine and Coarse Mix Aggregates: ASTM C33.
- D. Water: Clean, and not detrimental to concrete.
- E. Chemical Admixtures: ASTM C494/C494M, Type A - Water Reducing, Type B - Retarding, Type D - Water Reducing and Retarding, Type F - Water Reducing, High Range, 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.

## **2.07 JOINT SEALANT**

- A. Concrete Paving Joint Sealant: Polyurethane, self-leveling; ASTM C920, Class 25, Uses T, I, M and A; single component.
  1. Color: Gray.
  2. Applications: Use for:
    - a. Joints in sidewalks and vehicular paving.
  3. Products:
    - a. Pecora Corporation; NR-201 Self-Leveling Traffic and Loop Sealant: [www.pecora.com](http://www.pecora.com).
    - b. Sherwin-Williams Company; Stampede 1SL Polyurethane Sealant: [www.sherwin-williams.com](http://www.sherwin-williams.com).
    - c. Substitutions: See Section 01 60 00 - Product Requirements.

## **2.08 ACCESSORIES**

- A. Liquid Curing Compound: ASTM C 309, Type 1, Class A. Comply with all applicable air pollution requirements.
  1. Tennis Courts: Curing compounds should not be used unless the curing compound manufacturer specifically states the surface may be coated with water based acrylic coatings.
- B. Integral Colored Concrete:
  1. Color Additive, Integral Colored Concrete: Chromix by L.M. Scofield Company, Los Angeles, CA. (800) 800-9900 or approved equal, color as indicated or, if not indicated, as selected by Architect from manufacturer's standard color line. Provide in pre-measured, pre-packaged units to suite concrete mix design to achieve required color saturation.
  2. Color Hardener: Lithochrome color Hardener by L.M. Scofield Company or Bomanite Color Hardener by Bomanite Corporation, Madera, CA. (209/673-8246) or approved equal.
  3. Color Wax Curing Agent for project without continued maintenance: Lithochrome Colorwax by L.M. Scofield Company, or approved equal, color as indicated or, if not indicated, as selected by Architect for full color line. Provide as color matched curing and finishing material for integral color portland cement concrete paving.
  4. Concrete Cleaner for Colored Concrete: Clean with a mild detergent and damp mop.
  5. Color Additive, Natural Color Concrete Paving: Carbon black, harmless to set and strength of concrete, amount per cubic yard of concrete as required by Standard Specifications and details adopted by authorities having jurisdiction.
  6. Liquid Curing Compound: ASTM C309 Type I. Comply with all applicable air pollution requirements.
  7. Liquid Curing, Sealing and Hardening Materials: Natural color concrete pedestrian areas shall have applied Ashford Formula (801/489-5663), or approved equal, as recommended by manufacturer for intended use.

## **2.09 CONCRETE MIX DESIGN**

- A. Proportioning Normal Weight Concrete: Comply with ACI 211.1 recommendations.
- B. Concrete Mix for Pedestrian (Sidewalk) Pavements, Natural Color, unless indicated otherwise: Standard Specification for Public Works Construction, Section 201-1.1.2 - Class 520-B-2500, with minimum slump of 4-inches, except concrete paving in public rights of way shall be as required authorities having jurisdiction.

- C. Concrete Mix for Trash Enclosure and other Exterior Slabs on Grade: ASTM C94 - Ready-Mixed Concrete, Alternative No. 2, minimum 28 day compressive strength as indicated on Drawings or, if not indicated, 3000 psi.
- D. 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.
  - 1. For trial mixtures method, employ independent testing agency acceptable to Architect for preparing and reporting proposed mix designs.
- E. Admixtures: Add acceptable admixtures as recommended in ACI 211.1 and at rates recommended by manufacturer.
  - 1. Use accelerating admixtures in cold weather or set retarding admixtures in hot weather only when approved by Architect/Engineer. Do not use calcium chloride.
- F. Concrete Properties:
  - 1. Compressive Strength, when tested in accordance with ASTM C39/C39M at 28 days: 3,000 psi.
  - 2. Water-Cement Ratio: Maximum 40 percent by weight.
    - a. Concrete mix for Tennis Courts: Shall be placed with a water/cement ratio of .45.
  - 3. Maximum Slump: 3 inches.

## **2.10 MIXING**

- A. Transit Mixers: Comply with ASTM C94/C94M.

## **2.11 ACCESSORY MATERIALS**

- A. Soil Sterilant: As specified in Standard Specifications for Public Works Construction. Soil sterilant shall comply with all applicable environmental protection and hazardous materials laws and regulations. See Section 32 1313 - Aggregate Base Course for product.
- B. Headers and Stakes: Pressure preservative treated douglas fir, 2x6 nominal size except at curves provide laminated 1x6. Use hot dipped galvanized nails only.
- C. Expansion Joint Filler: ASTM D1751, premolded, compressible 1/2-inch thick non-extruding bituminous type resilient filler, compatible with joint backing and sealing products.
- D. Joint Backing and Sealer: As specified in Section 07 90 05 - Joint Sealers.

# **PART 3 EXECUTION**

## **3.01 EXAMINATION**

- A. Verify compacted subgrade is acceptable and ready to support paving and imposed loads.
- B. Fine grading, checking, shaping, and compacting of subgrade shall be complete before start of concrete paving Work.
- C. Verify gradients and elevations of base are correct.

## **3.02 SUBBASE**

- A. Prepare subbase in accordance with County of Riverside standards.

## **3.03 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.
  - 2. Do not place pavement when base surface or ambient temperature is less than 40 degrees F (4 degrees C) or if base surface is wet or frozen.

3. Maintain environmental conditions (temperature, humidity, and ventilation) within limits recommended by manufacturer for optimum results. Do not install products under environmental conditions outside manufacturer's absolute limits.
- B. Moisten base to minimize absorption of water from fresh concrete. Do not place concrete on standing water.
- C. Curbs and Gutters: Schedule portland cement concrete curbs and gutters to be in place and cured prior to start of adjoining asphaltic concrete and portland cement concrete paving Work.

### **3.04 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.

### **3.05 FORMING**

- A. Place and secure forms to correct location, dimension, profile, and gradient.
  1. Surfaces and Edges: Except where special finishes and tooled edges are indicated, provide all exposed finish surfaces of dense concrete with sharp arises and outside corners.
  2. Recesses and Openings: As indicated on Drawings or as directed.
- B. Concrete Formwork:
  1. Construct formwork accurately and to configurations and dimensions indicated for finish concrete Work.
  2. Formwork shall be substantial, mortar-tight and braced to maintain position and shape during placement of reinforcing and concrete.
  3. Hold forms rigidly in place by stakes, clamps, spreaders and braces where required to ensure rigidity.
  4. Construct curb forms with smooth side placed next to exposed concrete face.
  5. Curb forms shall have true, smooth upper edge.
  6. Depth of curb forms at back of curbs shall be equal to full depth of curb.
  7. Depth of face forms shall be equal to full face height of curb.
  8. Benders or thin plank forms may be used to form curves and at grade changes and curb returns.
  9. Back forms for curb returns may be made of 1/2-inch thick benders cleated together for full depth of the curb.
  10. Formwork shall not deviate more than 1/4-inch maximum from required positions and levels.
  11. Verify formwork alignment and levels as Work proceeds, promptly making adjustments and adding bracing as necessary.
- C. Assemble formwork to permit easy stripping and dismantling without damaging concrete.
  1. Remove the form on the front of curbs in not less than one hour nor more than 6 hours after the concrete has been placed.
  2. Remove side forms for sidewalks, gutter depressions, island paving and driveways, not less than 12 hours after the finishing has been completed.
- D. Place joint filler vertical in position, in straight lines. Secure to formwork during concrete placement.

### **3.06 REINFORCEMENT**

- A. Place reinforcement at midheight of slabs-on-grade.

- B. Reinforcement Placement, General: Locate reinforcement as indicated on Drawings or in Standard Specifications, whichever is more stringent.
  - 1. Locate reinforcement to provide required cover by concrete. If not otherwise indicated on Drawings or in Standard Specifications, provide concrete cover in compliance with ACI 318, Table 3.3.2.3.
  - 2. Place, support and secure reinforcement against displacement.
- C. 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 inches nor less than 1-1/3 times maximum size aggregate.
- D. Coordination: Locate reinforcement to accommodate embedded products and formed openings and recesses.
- E. Reinforcement Supports: Provide load bearing pads under supports or provide precast concrete block bar supports.
- F. Wire Fabric Placement: Place fabric in sheets as long as practicable, lapping adjoining pieces at least one full mesh and lace splices with 16 gage wire. Offset end laps in adjacent widths to prevent continuous laps. Extend fabric to within 1-inch of edge at slabs on grade. Cut mesh at expansion joints and full depth control joints.
- G. Interrupt reinforcement at contraction and expansion joints.
- H. Place dowels to achieve pavement and curb alignment as detailed.
  - 1. Secure tie dowels in place before depositing concrete. Provide No. 3 bars for securing dowels where no other reinforcement is provided.

### **3.07 COLD AND HOT WEATHER CONCRETING**

- A. Follow recommendations of ACI 305R when concreting during hot weather.
- B. Follow recommendations of ACI 306R 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.

### **3.08 PLACING CONCRETE**

- A. Mixing: If batch plant is within travel time not exceeding maximum limits, transit mix concrete in accordance with ASTM C94. If travel time exceeds limits, provide alternative means for mixing and submit for review and approval.
- B. Place concrete in accordance with ACI 304R.
- C. Do not place concrete when base surface is wet.
- D. Ensure reinforcement, inserts, embedded parts, formed joints are not disturbed during concrete placement.
- E. Concrete Conveying and Placement: Convey and place concrete in accordance with ACI 301.
- F. 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.
- G. Place concrete to pattern indicated.

### **3.09 JOINTS**

- A. Align curb, gutter, and sidewalk joints.
- B. Place 1/2 inch wide expansion / contraction/ construction joints at 20 foot intervals and to separate paving from vertical surfaces and other components and in pattern indicated. Place in all concrete walks, other exterior flatwork and concrete curbs and gutters. If expansion joints



are not indicated, comply with standard details and specifications of authorities having jurisdiction, including Standard Details for Public Works Construction and Standard Specification for Public Works Construction, as applicable.

1. Place expansion control filler to correct elevation and profile. Form joints with joint filler extending from bottom of pavement to within 1/2 inch of finished surface.
  2. Secure to resist movement by wet concrete.
  3. Coordinate locations to align expansion joints in adjoining concrete walks, curbs, gutters and other exterior flatwork.
  4. Provide expansion joints also at beginning and end of all curved segments.
  5. Provide expansion joints also at intersections of concrete curbs and gutters and building footing.
  6. Provide expansion joints also at intersections of concrete paving and building footing.
  7. Lay out expansion joint locations to occur where possible at penetrations such as handrail posts and columns.
  8. Place expansion control filler to correct elevation and profile.
  9. Align curb, gutter, and sidewalk expansion joints.
  10. Construction (cold) joints should consist of thickened butt joints with 1/2 inch dowels at 18 inches on center or a thickened keyed-joint to resist vertical deflection at the joint.
- C. Provide scored control joints:
1. As indicated on Drawings. If not indicated, locate joints in compliance with Standard Details.
    - a. Control joints shall be provided in all concrete slabs-on-grade at a maximum spacing of 36 times the slab thickness ("X" feet maximum on-center, each way) as recommended by American Concrete Institute [ACI] guidelines.
  2. Evenly spaced at maximum 5 feet intervals.
  3. Between sidewalks and curbs.
  4. Between curbs and pavement.
  5. Lay out control joint locations to occur at penetrations such as handrail posts and columns and where shown on Drawings.
  6. Refer to Architectural, Landscape and Civil Drawings for additional information and joint locations.
- D. Provide keyed joints as indicated.
- E. Saw cut contraction joints 1/8 inch wide at an optimum time after finishing. Cut 1/3 into depth of slab.
1. Contraction joints in the slabs should be tooled at the time of the pour or saw cut within 8 hours of concrete placement.

### **3.10 FINISHING**

- A. Concrete Paving Finish: ACI 301, two-step trowel finish, followed after surface has achieved initial set by flooding of surface and light rubbing with bristle brush so that concrete fines are exposed slightly.
1. Finish surfaces less than 6 percent slope shall receive medium broom finish resembling medium grit sandpaper. CBC 11B-403.2.
  2. Finish surfaces greater than 6 percent slope shall receive heavy broom finish. CBC 11B-403.2.
  3. Surfaces shall have static coefficients of friction of 1.3 to 1.6 (dry) and 1.2 to 1.4 (wet) when field tested in accordance with ASTM C1028.
- B. Sidewalk Paving: Light broom, texture perpendicular to direction of travel with troweled and radiused edge 1/8 inch radius.

1. Broomed: Pull broom across freshly floated concrete to produce medium texture in straight lines perpendicular to main line of traffic. Do not dampen brooms.
  2. Tooled Joints: 1-inch deep by 3/16-inch wide tooled joints with 1/8-inch radius corners.
- C. Curbs and Gutters: Comply with Standard Specifications.
- D. Specific Finishes:
1. Trowel: Precautions should be taken to ensure that the surface is uniformly troweled so that it is not slippery. Do not over-trowel or burnish the surface.
- E. Curing and Sealing:
1. Place curing compound on exposed concrete surfaces immediately after finishing. Apply in accordance with manufacturer's instructions.
  2. Curing, Concrete Curbs and Gutters: Apply curing compound immediately after finishing. Apply compound in accordance with manufacturer's instructions.
  3. Precautions shall be taken in hot weather to prevent plastic cracking resulting from excessively rapid drying at surface as described in CIP 5 Plastic Shrinkage Cracking published by the National Ready Mixed Concrete Association.
  4. Do not cover concrete with plastic sheeting.

### **3.11 JOINT SEALING**

- A. See Section 07 90 05 for joint sealer requirements.

### **3.12 TOLERANCES**

- A. ACI 301, Class B, except paving in public rights-of-way shall comply with the Standard Specifications.
- B. Maximum Variation of Surface Flatness: 1/4 inch in 10 ft.
- C. Maximum Variation From True Position: 1/4 inch.

### **3.13 FIELD QUALITY CONTROL**

- A. An independent testing agency will perform field quality control tests, as specified in Section 01 45 33.
1. Provide free access to concrete operations at project site and cooperate with appointed firm.
  2. Tests of concrete and concrete materials may be performed at any time to ensure conformance with specified requirements.
- B. Compressive Strength Tests: ASTM C 39/C 39M. 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 each day.
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.

### **3.14 PROTECTION**

- A. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury.
- B. Do not permit pedestrian traffic over pavement until 75 percent design strength of concrete has been achieved.

- C. Provide lumber ramping and plywood covering where curbs and gutters are subject to vehicular and equipment traffic during construction.

**END OF SECTION**

**SECTION 33 41 11**  
**SITE STORM DRAINAGE SYSTEM**

**PART 1 - GENERAL**

**1.01 DESCRIPTION OF WORK:**

- A. Extent of storm drainage systems work is indicated on drawings and schedules, and by requirements of this section.
- B. Refer to Drawings for excavation and backfill required for storm drainage systems; not work of this section.
- C. Refer to Division 3 sections for concrete work required for storm drainage systems; not work of this section.

**1.02 QUALITY ASSURANCE:**

- A. Manufacturer's Qualifications: Firms regularly engaged in manufacture of storm drainage system's products of types, materials, and sizes required, whose products have been in satisfactory use in similar service for not less than 5 years.
- B. Installer's Qualifications: Firm with at least 3 years of successful installation experience on projects with storm drainage work similar to that required for project.
- C. Codes and Standards:
  - 1. Comply with the applicable portions of the California Building Codes, See Division 1 Section - Regulatory Requirements.
  - 2. Coordinate work of this Section with Permit provisions of the State of California Water Resources Control Board Order Number 92-08-DWQ.
  - 3. The District's Storm Water Pollution Prevention Plan.
  - 4. Cal-OSHA.
  - 5. OSHA.
  - 6. ASTM F 477, Elastomeric Seals (Gaskets) for Joining Plastic Pipe.
  - 7. ASTM C 12, Practice for installing Vitrified Clay Pipe Lines.
  - 8. ASTM C 425, Compression Joints for Vitrified Clay Pipe and Fittings.
  - 9. ASTM C 700, Vitrified Clay Pipe, Extra Strength, Standard Strength, and Perforated.
  - 10. ASTM D 2321, Recommended Practice for Underground Installation of Flexible Thermoplastic Storm drain Pipe.
  - 11. ASTM D 3034, Type PSM Polyvinyl Chloride (PVC) Storm drain Pipe and Fittings.
  - 12. AWWA Publications regarding pipe and installation;
    - a. AWWA C 110.
    - b. AWWA C 111.
    - c. AWWA C 115.
    - d. AWWA C 151.
    - e. AWWA C 153.
    - f. AWWA C 200
    - g. AWWA C 218
    - h. AWWA C 205
    - i. AWWA C 207
    - j. AWWA C 208
    - k. AWWA C 214
    - l. AWWA C 503.
    - m. AWWA C 509.
    - n. AWWA C 511.
    - o. AWWA C 600.
    - p. AWWA C 651.

- q. AWWA C 900.
- r. AWWA C 901.
- s. UNI - B - 3 with AWWA C 900.
- 13. Plumbing Code Compliance: Comply with applicable portions of National Standard Plumbing Code pertaining to selection and installation of storm drainage system's materials and products.
- 14. Environmental Compliance: Comply with applicable portions of local Environmental Agency regulations pertaining to storm drainage systems.

### **1.03 SUBMITTALS:**

- A. Product Data: Submit manufacturer's technical product data and installation instructions for storm drainage system materials and products.
- B. Shop Drawings: Submit shop drawings for storm drainage systems, showing piping materials, size, locations, and inverts. Include details of underground structures, connections, and manholes. Show interface and spatial relationship between piping and proximate structures.
- C. Record Drawings: At project close-out, submit record drawings of installed storm drainage piping and products, in accordance with Division 1.
- D. Maintenance Data: Submit maintenance data and parts lists for storm drainage system materials and products. Include this data, product data, shop drawings, and record drawings in maintenance manual; in accordance with requirements of Division 1.

## **PART 2 - PRODUCTS**

### **2.01 IDENTIFICATION:**

- A. Underground-Type Plastic Line Marker: Manufacturer's standard permanent, bright-colored, continuous-printed plastic tape, intended for direct-burial service; not less than 6" wide x 4 mils thick. Provide green tape with black printing reading "CAUTION STORM DRAIN LINE BURIED BELOW."
  - 1. Available Manufacturers: Subject to compliance with requirements, manufacturers offering identification markers which may be incorporated in the work include, but are not limited to, the following:
    - a. Allen Systems Inc.
    - b. Emed Co., Inc.
    - c. Seton Name Plate Corp.

### **2.02 PIPES AND PIPE FITTINGS:**

- A. General: Provide pipes of one of the following materials, of weight/class indicated. Provide pipe fittings and accessories of same material and weight/class as pipes, with joining method as indicated.
- B. Cast-Iron Soil Pipe: ASTM A 74, hub and spigot ends, service weight unless otherwise indicated.
  - 1. Fittings: Cast-iron hub and spigot complying with ASTM A 74; lead/oakum calked joints, or compression joints with rubber gaskets complying with ASTM C 564.
- C. Reinforced Concrete Pipe: ASTM C 76, Class II, D- Load 2000 unless otherwise indicated.
  - 1. Fittings: Reinforced concrete, same strength as adjoining pipe, tongue-and-groove gasketed joints complying with ASTM C 443.
- D. Polyvinyl Chloride (PVC) storm drain Pipe: ASTM D 3033, Type PSP, SDR 35; or ASTM D 3034, Type PSM, SDR 35.
  - 1. Fittings: PVC, ASTM D 3033 or D 3034, solvent cement joints complying with ASTM D 2855 using solvent cement complying with ASTM D 2564; or elastomeric joints complying with ASTM D 3212 using elastomeric seals complying with ASTM F 477.

### **2.03 STORM DRAIN MANHOLES AND CLEANOUTS**

- A. General: Place precast concrete sections as indicated. Where manholes and cleanouts occur in pavements, set tops of frames and covers flush with finish surface. Elsewhere, set tops 2" above finish surface, unless otherwise indicated.
- B. Form bottom of excavation clean and smooth to correct elevation.
- C. Form and place cast-in-place concrete base pad, with provision for sanitary sewer pipe end sections.
- D. Form and place cast-in-place concrete base pad over existing sewer line with provisions for both existing flow direction and realigned flow direction. Existing flows shall be diverted and or temporarily blocked during construction of new manhole.
- E. Install cleanouts at the minimum frequency dictated by the Uniform Plumbing Code regardless if they are indicated on the plans or not. Unless approved by the Civil Engineer of Record cleanouts are to be placed at a minimum frequency of every 100 feet.
- F. Reconstruct existing manhole base to accommodate new flow direction of relocated sewer where indicated.
- G. Install in accordance with ASTM C 891.
- H. Provide rubber joint gasket complying with ASTM C 443 at joints of sections.
- I. Apply bituminous mastic coating at joints of sections.
- J. Establish elevations and pipe inverted for inlets and outlets as indicated.
- K. Mount lid and frame level in grout, secured to top cone section to elevation indicated.

### **2.04 TAP CONNECTIONS**

- A. Make connections to existing piping and underground structures, so that finished work will conform as nearly as practicable to requirements specified for new work.
- B. Use commercially manufactured wyes for branch connections. Field cutting into piping will not be permitted. Spring wyes into existing line and encase entire wye, plus 6" overlap, with not less than 6" of 3,000 psi 28-day compressive strength concrete.
- C. Branch connections made from side into existing 4" to 21" piping shall have wye sprung into existing line, and entire wye encased with not less than 6" of 3,000 psi 28-day compressive strength concrete.
- D. Take care while making tap connections to prevent concrete or debris from entering existing piping or structure. Remove debris, concrete, or other extraneous material, which may accumulate.
- E. General: Provide concrete cast in place manholes as indicated in the project construction documents.

### **2.05 CATCH BASINS:**

- A. General: Provide cast in place catch basins as indicated in the project construction documents.
- B. Provide reinforcement in PCC base as indicated in construction document details.
- C. Frame and Grate: Ductile-iron, heavy- duty, vandal proof, and ADA compliant.
- D. Sediment Filter: Provide sediment filter compliant with BMP practice for NPDES II, as indicated on Drawings.
  - 1. Transpo Industries, Inc.; Product, Storm Water Sediment Control Grate Insert: [www.transpo.com](http://www.transpo.com)
- E. Provide pre-manufactured basins in landscape areas as indicated in the project construction documents.

### **2.06 HEADWALLS & OUTLETS:**

- A. Provide cast in place PCC headwalls as indicated in the project construction documents.
- B. Provide grouted rock slope protection at all storm drain outlets per the project construction documents.

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION OF IDENTIFICATION:**

- A. General: During back-filling/top-soiling of storm drainage systems, install continuous underground-type plastic line marker, located directly over buried line at 6" to 8" below finished grade.

### **3.02 INSTALLATION OF PIPE AND PIPE FITTINGS:**

- A. General: Install piping in accordance with governing authorities having jurisdiction, except where more stringent requirements are indicated.
- B. Inspect piping before installation to detect apparent defects. Mark defective materials with white paint and promptly remove from site.
- C. Lay piping beginning at low point of system, true to grades and alignment indicated, with unbroken continuity of invert.
- D. Place bell ends or groove ends of piping facing upstream.
- E. Install gaskets in accordance with manufacturer's recommendations for use of lubricants, cements, and other special installation requirements.
- F. Concrete Pipe: Install in accordance with applicable provisions of ACPA "Concrete Pipe Installation Manual".
- G. Plastic Pipe: Install in accordance with manufacturer's installation recommendations, and in accordance with ASTM D 2321.
- H. Cleaning Piping: Clear interior of piping of dirt and other superfluous material as work progresses. Maintain swab or drag in line and pull past each joint as it is completed.
  - 1. In large, accessible piping, brushes and brooms may be used for cleaning.
  - 2. Place plugs in ends of uncompleted conduit at end of day or whenever work stops.
  - 3. Flush lines between manholes if required to remove collected debris.
- I. Joint Adaptors: Make joints between different types of pipe with standard manufactured adapters and fittings intended for that purpose.
- J. Alignment: Inspector of Record shall verify both horizontal and vertical locations of all underground utilities prior to beginning backfill. District's agent shall provide all construction staking in accordance with industry standards for construction staking of underground utilities. All survey hubs as provided shall be preserved for reference and verification of installation location.
- K. Interior Inspection: Inspect piping to determine whether line displacement or other damage has occurred.
  - 1. Make inspections after lines between manholes, or manhole locations, have been installed and approximately 2' 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.

### **3.03 INSTALLATION OF CATCH BASINS:**

- A. General: Construct catch basins to sizes and shapes indicated.
- B. Pour base of catch basins with steel reinforcement as indicated. Place pre-fabricated drain box before PCC base sets to allow box to imbed into base.
- C. Set frames and grates to elevations indicated. All grates shall be tamper proof, ADA approved and installed with slots perpendicular to the direction of travel.

### **3.04 HEADWALLS & OUTLETS:**

- A. PCC headwalls shall be constructed per Caltrans Standard Details and Specifications as indicated in the project construction documents.
- B. Construct grouted "Facing Class" rock slope protection at all storm drain outlets per Caltrans Standard Details and Specifications as indicated in the project construction documents.

### **3.05 TAP CONNECTIONS:**

- A. Make connections to existing piping and underground structures, so that finished work will conform to the requirements specified by the Plans and City Public Works Department.
- B. Use commercially manufactured wyes for branch connections. Field cutting into piping will not be permitted. Spring wyes into existing line and encase entire wye, plus 6" overlap, with not less than 6" of 3000 psi 28-day compressive strength concrete.
- C. Take care while making tap connections to prevent concrete or debris from entering existing piping or structure. Remove debris, concrete, or other extraneous material which may accumulate.

### **3.06 BACKFILLING:**

- A. General: Conduct backfill operations of open-cut trenches closely following laying, jointing, and bedding of pipe, and after initial inspection and testing are completed.
  - 1. To minimize local area traffic interruptions, allow no more than 100' between pipe laying and point of complete backfilling.
  - 2. Bedding requirements as shown on Drawings.

### **3.07 FIELD QUALITY CONTROL:**

- A. Testing: Perform testing of completed site piping in accordance with the Uniform Plumbing Code using water or air pressure test.
- B. Inspection: Perform video inspection of all piping prior to final acceptance of work. All video operations shall be recorded on tape or disk for playback if required. All video inspections will include a detailed narrative identifying exact locations of the installed lines and limits of areas to be re-installed.

**END OF SECTION**







# SHADE STRUCTURES AT MT. SAN JACINTO COLLEGE MENIFEE VALLEY CAMPUS for Mt. San Jacinto Community College District

<table><tr><td>ANGLE</td><td>MACHINE</td></tr><tr><td>ANCHOR BOLT</td><td>MAXIMUM</td></tr><tr><td>ABSOLUTE</td><td>MACHINE BOLT</td></tr><tr><td>ASPHALTIC CONCRETE</td><td>MCB METAL CORNER BEAD</td></tr><tr><td>ACCESSIBLE</td><td>MECH MECHANICAL</td></tr><tr><td>ACOUSTIC PANEL</td><td>MFR MANUFACTURER</td></tr><tr><td>ACOUSTIC TILE</td><td>MH HANDLE</td></tr><tr><td>ACF ABOVE FINISHED FLOOR</td><td>MIN MINIMUM</td></tr><tr><td>ALUM ALUMINUM</td><td>MISC MISCELLANEOUS</td></tr><tr><td>AN ANODIZED</td><td>MO MASONRY OPENING</td></tr><tr><td>AWP ACOUSTIC WALL PANEL</td><td>MTL METAL</td></tr><tr><td></td><td>MBS MEMBERS</td></tr><tr><td>BD BOARD</td><td>NIC NOT IN CONTRACT</td></tr><tr><td>BLDG BUILDING</td><td>NTS NOT TO SCALE</td></tr><tr><td>BLKG BLOCKING</td><td>OH OPPOSITE HAND</td></tr><tr><td>BM BENCHMARK</td><td>OC ON CENTER</td></tr><tr><td>BUR BUILT-UP ROOFING</td><td>OD OUTSIDE DIAMETER</td></tr><tr><td></td><td>OF OWNER FURNISHED</td></tr><tr><td>CAB CABINET</td><td>OCI 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ARCHITECT</td><td></td></tr><tr><td>EA EACH</td><td>R RADIUS/RISER/REMOVABLE MULLION</td></tr><tr><td>EJ EXPANSION JOINT</td><td>RB RUBBER BASE</td></tr><tr><td>ELEC ELECTRIC</td><td>RD ROOF DRAIN</td></tr><tr><td>ELEV ELEVATION</td><td>REF REFERENCE</td></tr><tr><td>ENCL ENCLOSURE</td><td>REINF REINFORCING</td></tr><tr><td>EQ EQUAL</td><td>REQD REQUIRED</td></tr><tr><td>ES EXPOSED STRUCTURE</td><td>RM ROOM</td></tr><tr><td>ESP EGGSHELL PAINT</td><td>RO ROUGH OPENING</td></tr><tr><td>EXP EXPANSION/EXPOSED</td><td>RSB RESILIENT BASE</td></tr><tr><td>EXT EXTERIOR</td><td>REF REFRIGERATOR</td></tr><tr><td>EWG ELECTRIC WATER COOLER</td><td></td></tr><tr><td></td><td>SB SBR BLOCK</td></tr><tr><td>FD FLOOR DRAIN</td><td>SC SOLID CORE</td></tr><tr><td>FEC FIRE EXTINGUISHER CABINET</td><td>SCHED SCHEDULE</td></tr><tr><td>FF FINISH FLOOR</td><td>SD STORM DRAIN</td></tr><tr><td>FG FINISH GRADE</td><td>SEMI SEMI-GLOSS PAINT</td></tr><tr><td>FHC FIRE HOSE CABINET</td><td>SHT SHEET</td></tr><tr><td>FN FINISH</td><td>SHTH SHEATHING</td></tr><tr><td>FL FLOWLINE</td><td>SKS SIMILAR</td></tr><tr><td>FLR FLOOR</td><td>SPEC SPECIFICATIONS</td></tr><tr><td>FOC FACE OF CONCRETE</td><td>SQ SQUARE</td></tr><tr><td>FOF FACE OF FINISH</td><td>SRS SEAMLESS RESILIENT FLOORING</td></tr><tr><td>FOM FACE OF MASONRY</td><td>STC SOUND TRANSMISSION CLASS</td></tr><tr><td>FOS FACE OF STUD</td><td>STD STANDARD</td></tr><tr><td>FRA FIRE RATED ASSEMBLY</td><td>STL STEEL</td></tr><tr><td>FRP FIBERGLASS REINFORCED PANEL</td><td>STN STAIN</td></tr><tr><td>FRT FIRE RETARDANT TREATED</td><td>STR STRUCTURAL/STRUCTURE</td></tr><tr><td>FURN FURNISH/FURNITURE</td><td>SUSP SUSPENDED</td></tr><tr><td>FOW FACE OF WINDOW</td><td></td></tr><tr><td>FOD FACE OF DOOR</td><td>TB TACKBOARD</td></tr><tr><td>GA GAUGE</td><td>TC TOP OF CURB</td></tr><tr><td>GALV GALVANIZED</td><td>TER TERRAZZO</td></tr><tr><td>GI TOP OF GRATE</td><td>TG TOP OF GRATE</td></tr><tr><td>GLUAM GLUE LAMINATED</td><td>TJ TOELED JOINT</td></tr><tr><td>GPL GYPSUM PLASTER</td><td>TOM TOP OF MASONRY</td></tr><tr><td>GSM GALVANIZED SHEET METAL</td><td>TOP TOP OF PARAPET</td></tr><tr><td>GWB GYPSUM WALLBOARD</td><td>TOW TOP OF WALL</td></tr><tr><td>GWV WATER RESISTANT GWB</td><td>TOSHIT TOP OF SHEATHING</td></tr><tr><td></td><td>TOS TOP OF STEEL</td></tr><tr><td>HB HOSE BIBB</td><td>TYP TYPICAL</td></tr><tr><td>HDW HARDWARE</td><td>T TEMPERED GLASS</td></tr><tr><td>HDWD HARDWOOD</td><td></td></tr><tr><td>HC HOLLOW CORE</td><td>UC UNDER CUT</td></tr><tr><td>HM HOLLOW METAL</td><td>UNO UNLESS NOTED OTHERWISE</td></tr><tr><td>HORIZ HORIZONTAL</td><td></td></tr><tr><td>HR HOUR</td><td>VAR VARIES</td></tr><tr><td>INSUL INSULATION</td><td>VERT VERTICAL</td></tr><tr><td>INT INTERIOR</td><td>VNT VINYL COMPOSITION TILE</td></tr><tr><td>INV INVERT</td><td>VT VINYL TILE</td></tr><tr><td></td><td>VVF VINYL SHEET FLOORING</td></tr><tr><td>JT JOINT</td><td>WV VINYL WALL COVERING</td></tr><tr><td>JST JOIST</td><td>W WITH</td></tr><tr><td></td><td>WC WATERCLOSET</td></tr><tr><td>KCPL KEENES CEMENT PLASTER</td><td>WD WOOD</td></tr><tr><td></td><td>WGL WIREGLASS</td></tr><tr><td>LAB LABORATORY</td><td>WH WATER HEATER</td></tr><tr><td>LAV LAVATORY</td><td>WV WOOD VENEER</td></tr><tr><td>LMB LAMINATED MARKER BOARD</td><td>WWF WELDED WIRE FABRIC</td></tr><tr><td>LP LAMINATED PLASTIC</td><td>X FACTORY FINISHED PREFINISHED</td></tr></table>	ANGLE	MACHINE	ANCHOR BOLT	MAXIMUM	ABSOLUTE	MACHINE BOLT	ASPHALTIC CONCRETE	MCB METAL CORNER BEAD	ACCESSIBLE	MECH MECHANICAL	ACOUSTIC PANEL	MFR MANUFACTURER	ACOUSTIC TILE	MH HANDLE	ACF ABOVE FINISHED FLOOR	MIN MINIMUM	ALUM ALUMINUM	MISC MISCELLANEOUS	AN ANODIZED	MO MASONRY OPENING	AWP ACOUSTIC WALL PANEL	MTL METAL		MBS MEMBERS	BD BOARD	NIC NOT IN CONTRACT	BLDG BUILDING	NTS NOT TO SCALE	BLKG BLOCKING	OH OPPOSITE HAND	BM BENCHMARK	OC ON CENTER	BUR BUILT-UP ROOFING	OD OUTSIDE DIAMETER		OF OWNER FURNISHED	CAB CABINET	OCI CONTRACTOR INSTALLED	CI CAST IRON	O OVER	CJ CONSTRUCTION/COLD JOINT	OH OPPOSITE HAND	CLR CENTERLINE		CMU CONCRETE MASONRY UNIT	P PA	COL COLUM	PAF POWDER ACTUATED FASTENER	CONC CONCRETE	PCPL PORTLAND CEMENT PLASTER	CPL CEMENT PLASTER	PPFN PREFINISHED	CPT CARPET	PH PANIC HARDWARE	CT CERAMIC TILE	PI PAINT		PL PLASTER	DET DETAIL	PLAM PLASTIC LAMINATE	DF DRINKING FOUNTAIN	PLD PLYWOOD	DG DECOMPOSED GRANITE	PL PLATE/PROPERTY LINE	DIA DIAMETER	PR PAIR	DM DIMENSION	PSM PAINTED SHEET METAL	DN DOWN	PT PRESSURE TREATED	DR DOOR	QT QUARRY TILE	DSA DIVISION OF STATE ARCHITECT		EA EACH	R RADIUS/RISER/REMOVABLE MULLION	EJ EXPANSION JOINT	RB RUBBER BASE	ELEC ELECTRIC	RD ROOF DRAIN	ELEV ELEVATION	REF REFERENCE	ENCL ENCLOSURE	REINF REINFORCING	EQ EQUAL	REQD REQUIRED	ES EXPOSED STRUCTURE	RM ROOM	ESP EGGSHELL PAINT	RO ROUGH OPENING	EXP EXPANSION/EXPOSED	RSB RESILIENT BASE	EXT EXTERIOR	REF REFRIGERATOR	EWG ELECTRIC WATER COOLER			SB SBR BLOCK	FD FLOOR DRAIN	SC SOLID CORE	FEC FIRE EXTINGUISHER CABINET	SCHED SCHEDULE	FF FINISH FLOOR	SD STORM DRAIN	FG FINISH GRADE	SEMI SEMI-GLOSS PAINT	FHC FIRE HOSE CABINET	SHT SHEET	FN FINISH	SHTH SHEATHING	FL FLOWLINE	SKS SIMILAR	FLR FLOOR	SPEC SPECIFICATIONS	FOC FACE OF CONCRETE	SQ SQUARE	FOF FACE OF FINISH	SRS SEAMLESS RESILIENT FLOORING	FOM FACE OF MASONRY	STC SOUND TRANSMISSION CLASS	FOS FACE OF STUD	STD STANDARD	FRA FIRE RATED ASSEMBLY	STL STEEL	FRP FIBERGLASS REINFORCED PANEL	STN STAIN	FRT FIRE RETARDANT TREATED	STR STRUCTURAL/STRUCTURE	FURN FURNISH/FURNITURE	SUSP SUSPENDED	FOW FACE OF WINDOW		FOD FACE OF DOOR	TB TACKBOARD	GA GAUGE	TC TOP OF CURB	GALV GALVANIZED	TER TERRAZZO	GI TOP OF GRATE	TG TOP OF GRATE	GLUAM GLUE LAMINATED	TJ TOELED JOINT	GPL GYPSUM PLASTER	TOM TOP OF MASONRY	GSM GALVANIZED SHEET METAL	TOP TOP OF PARAPET	GWB GYPSUM WALLBOARD	TOW TOP OF WALL	GWV WATER RESISTANT GWB	TOSHIT TOP OF SHEATHING		TOS TOP OF STEEL	HB HOSE BIBB	TYP TYPICAL	HDW HARDWARE	T TEMPERED GLASS	HDWD HARDWOOD		HC HOLLOW CORE	UC UNDER CUT	HM HOLLOW METAL	UNO UNLESS NOTED OTHERWISE	HORIZ HORIZONTAL		HR HOUR	VAR VARIES	INSUL INSULATION	VERT VERTICAL	INT INTERIOR	VNT VINYL COMPOSITION TILE	INV INVERT	VT VINYL TILE		VVF VINYL SHEET FLOORING	JT JOINT	WV VINYL WALL COVERING	JST JOIST	W WITH		WC WATERCLOSET	KCPL KEENES CEMENT PLASTER	WD WOOD		WGL WIREGLASS	LAB LABORATORY	WH WATER HEATER	LAV LAVATORY	WV WOOD VENEER	LMB LAMINATED MARKER BOARD	WWF WELDED WIRE FABRIC	LP LAMINATED PLASTIC	X FACTORY FINISHED PREFINISHED	<ol style="list-style-type: none"><li>CONTRACTOR TO VERIFY ALL DIMENSIONS AND LOCATIONS OF EXISTING CONDITIONS ON THE JOB SITE PRIOR TO THE START OF THIS CONTRACT. NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND INFORMATION SHOWN ON THE CONSTRUCTION DOCUMENTS. EXISTING CONDITIONS ARE INDICATED BASED ON INFORMATION SHOWN ON AVAILABLE DOCUMENTS. ANY DAMAGE TO EXISTING CONDITIONS IS THE SOLE RESPONSIBILITY OF THE APPLICABLE CATEGORY CONTRACTOR.</li><li>THE EXISTENCE OR LOCATION OF ANY UNDERGROUND UTILITIES, PIPES, AND/OR STRUCTURE SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, EXISTING UTILITIES ARE AS SHOWN ON THESE PLANS. THE APPLICABLE CATEGORY CONTRACTOR SHALL ASCERTAIN THE TRUE VERTICAL AND HORIZONTAL LOCATION AND SIZE OF ALL UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR ANY DAMAGE TO PUBLIC OR PRIVATE UTILITIES, SHOWN OR NOT SHOWN HEREIN.</li><li>CONTRACTOR SHALL NOTIFY THE ARCHITECT IMMEDIATELY OF ANY DISCREPANCIES, ERRORS, OMISSIONS, OR INCONSISTENCIES IN THE CONTRACT DOCUMENTS. THE APPLICABLE CATEGORY CONTRACTOR SHALL NOT PROCEED WITH THE WORK UNTIL NOTIFICATION HAS BEEN ISSUED BY THE ARCHITECT.</li><li>UNDER NO CIRCUMSTANCE SHALL WORKING DIMENSIONS BE SCALED FROM THE PLANS, SECTIONS OR DETAILS ON THE DRAWINGS.</li><li>ALL STANDARDS, MATERIALS AND WORKMANSHIP SHALL COMPLY WITH THE STATE BUILDING CODE AND ALL OTHER GOVERNING CODES, ORDINANCES, REGULATIONS AND LAWS.</li><li>OCCUPATIONAL SAFETY AND HEALTH: THESE DOCUMENTS, AND THE CONSTRUCTION HEREBY CONTEMPLATED, SHALL BE GOVERNED AT ALL TIMES BY THE APPLICABLE PROVISIONS OF THE CALIFORNIA OCCUPATIONAL SAFETY AND HEALTH ACT OF 1973, (CAL/OSHA) AND ALL UPDATES SINCE.</li><li>DETAILS MARKED "TYPICAL" SHALL APPLY IN ALL CASES UNLESS SPECIFICALLY INDICATED OTHERWISE.</li><li>NOT ALL ITEMS OF DEMOLITION ARE SHOWN OR INDICATED. THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF EXISTING CONDITIONS AND COMPARISON WITH NEW CONSTRUCTION TO BE EXECUTED UNDER THIS CONTRACT PRIOR TO SUBMISSION OF BID. NO ADDITIONAL COSTS WILL BE APPROVED FOR ITEMS READILY VISIBLE WHICH WERE REQUIRED TO BE REMOVED OR REWORKED TO FACILITATE FINISHED CONDITIONS.</li><li>CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY WRITTEN ADDENDUM OR A CCB APPROVED BY THE DIVISION OF THE STATE ARCHITECT, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, C.C.R.</li><li>A PROJECT INSPECTOR EMPLOYED BY THE DISTRICT, (OWNER) AND APPROVED BY THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, C.C.R. THE INSPECTOR OF RECORD SHALL BE "CLASS 2" (IOR).</li><li>THE ARCHITECTURAL SITE DRAWINGS SHALL BE REFERENCED FOR DETERMINING THE INTENDED LIMITS OF CONSTRUCTION.</li><li>WHERE CONFLICTS EXIST IN THE DRAWINGS PERTAINING TO QUANTITIES OF EQUIPMENT OR DEVICES SHOWN, THE LARGER QUANTITY SHALL GOVERN.</li><li>CERTIFICATION OF THIS DSA PROJECT IS CONTINGENT ON ALL PREVIOUS DSA PROJECTS BEING CERTIFIED.</li><li>FIRE SAFETY DURING DEMOLITION AND CONSTRUCTION SHALL COMPLY WITH CFC 2016, CHAPTER 33.</li><li>WHILE SCHOOL IS IN SESSION, CONSTRUCTION CREW SHALL ONLY OCCUPY SPACES RELATED TO THE WORK AND SHALL MINIMIZE DISRUPTION TO STUDENTS AND STAFF.</li><li>CONSTRUCTION CREW SHALL WEAR APPROPRIATE SAFETY GEAR AND COMPLY WITH CURRENT APPLICABLE SAFETY REGULATIONS.</li><li>CONSTRUCTION CREW SHALL ADHERE TO BEHAVIOR AND DRESS CODE THAT IS APPROPRIATE FOR SCHOOL AND ACCEPTABLE WITH DISTRICT REPRESENTATIVES.</li><li>SMOKING SHALL NOT BE ALLOWED ON CAMPUS.</li><li>THERE SHALL BE NO POSSESSION OR CONSUMPTION OF DRUGS OR ALCOHOLIC BEVERAGES ON THE JOB SITE BY ANY PERSON. ANYONE WHO DOES NOT COMPLY WITH THESE REQUIREMENTS SHALL BE DIRECTED TO LEAVE THE JOB SITE AND WILL NOT BE PERMITTED TO RETURN DURING THE REMAINDER OF THE CONTRACT.</li><li>THE CONTRACTOR SHALL PROVIDE TEMPORARY FENCING AS NEEDED TO PROTECT HIS WORK AREA AND REMAINING WORK FROM WEATHER AND OTHER INCLEMENT CONDITIONS. ANY DAMAGE INCURRED DUE TO FAILURE BY THE CONTRACTOR TO PROPERLY PROTECT SUCH WORK SHALL BE REPAIRED AT CONTRACTOR EXPENSE.</li><li>ALL AREAS IN WHICH WORK IS DONE SHALL BE LEFT CLEAN AND IN GOOD REPAIR. ANY DAMAGE DONE TO THE EXISTING WORK BY THE CONTRACTOR OR ANY OF HIS SUBCONTRACTORS OR EMPLOYEES SHALL BE REPAIRED TO THE SATISFACTION OF THE ARCHITECT AND AT NO COST TO THE OWNER.</li><li>THIS COVER SHEET CONTAINS A LIST OF DRAWINGS WHICH COMPRISE A FULL SET OF DRAWINGS FOR THIS PROJECT. THIS FULL DRAWING SET ALONG WITH THE SPECIFICATIONS COMPRISE A WHOLE BIDDING PACKAGE THAT IS NEVER TO BE SPLIT AND BID IN PARTS OR SECTIONS. ANY CONTRACTOR, SUB-CONTRACTOR, VENDOR OR ANY OTHER PERSON PARTICIPATING IN OR BIDDING ON THE PROJECT SHALL BE RESPONSIBLE FOR THE INFORMATION CONTAINED IN ANY AND ALL THE SHEETS OF THIS DRAWING SET AND SPECIFICATIONS. IF ANY PERSON, PARTY OR ENTITY ELECTS TO SUBMIT BIDS FOR ANY PORTION, OR ALL OF THIS PROJECT, THAT PERSON, PARTY OR ENTITY SHALL BE RESPONSIBLE FOR ANY AND ALL INFORMATION CONTAINED IN THESE DRAWINGS AND SPECIFICATIONS, BUT NOT LIMITED TO, ANY SUBSEQUENT ADDENDUMS OR CLARIFICATIONS THAT MAY BE ISSUED IN RELATION TO THE RESPECTIVE BIDDERS DISCIPLINE.</li><li>ANY SYMBOL OR LEGEND ITEM SHOWN IN THIS DRAWING SET REPRESENTS A COMPLETE FUNCTIONAL SYSTEM INCLUDING NEEDED HEAD, END, SUPPLY AND CONNECTIONS TO SHOWN FIXTURES.</li><li>ALL WORK SHALL CONFORM TO 2016 EDITION TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR).</li><li>A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.</li><li>GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.</li><li>FABRICATION AND INSTALLATION OF DEFERRED SUBMITTAL ITEMS SHALL NOT BE STARTED UNTIL CONTRACTOR'S DRAWINGS, SPECIFICATIONS AND ENGINEERING CALCULATIONS FOR THE ACTUAL SYSTEMS TO BE INSTALLED HAVE BEEN ACCEPTED AND SIGNED BY ARCHITECT OR STRUCTURAL ENGINEER AND APPROVED BY THE DIVISION OF STATE ARCHITECT.</li><li>THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-337(C), PART 1, TITLE 24, C.C.R.)</li><li>CONTRACTOR OPERATIONS SHALL NOT BLOCK, HINDER, IMPEDE OR OTHERWISE INHIBIT THE USE OF REQUIRED EXITS AT ANY TIME. CONTRACTOR SHALL MAINTAIN UNOBSTRUCTED ACCESS TO FIRE EXTINGUISHERS, FIRE HYDRANTS, TEMPORARY FIRE PROTECTION FACILITIES, STAIRWAYS AND OTHER ACCESS ROUTES FOR FIRE-FIGHTING EQUIPMENT AND OR PERSONNEL.</li></ol>	<p>CLIMATE ZONE 10</p> <p>SITE SEISMIC DESIGN CRITERIA:</p> <p>S<sub>S</sub> = 1.500g S<sub>M</sub> = 1.500g S<sub>D1</sub> = 0.600g</p> <p>SITE WIND DESIGN CRITERIA:</p> <p>WIND (ULT) = 110 MPH WIND (ASD) = 85 MPH EXPOSURE = 'C'</p> <p>MT. SAN JACINTO COLLEGE MENIFEE VALLEY CAMPUS 28237 La Piedra Road Menifee, Ca 92584</p>	<p>BUILDING SECTION</p> <p>EXTERIOR ELEVATION</p> <p>DETAIL REFERENCE TO DRAWINGS</p> <p>ROOM IDENTIFICATION</p> <p>INTERIOR ELEVATION IDENTIFICATION</p> <p>WALL IDENTIFICATION</p> <p>DOOR IDENTIFICATION</p> <p>WINDOW IDENTIFICATION</p> <p>CONSTRUCTION KEY NOTE</p> <p>ACCESSORY IDENTIFICATION</p> <p>COLOR / TEXTURE IDENTIFICATION</p> <p>FIRE EXTINGUISHER AND CABINET</p> <p>CASEWORK IDENTIFICATION</p> <p>HEIGHT</p> <p>DEPTH</p> <p>W.I.C. #</p> <p>LOCK</p> <p>EXPLANATION OF SPECIAL CONDITION ONLY IF NEEDED</p>	<p><b>OWNER</b> MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT 1499 NORTH STATE STREET, SAN JACINTO, CA 92583 (951) 487-6752</p> <p><b>CONTACT:</b> LYNN PURPER, FACILITIES PLANNING LYPURPER@MSJC.EDU</p> <p><b>ARCHITECT</b> RUHNAU CLARKE ARCHITECTS 3775 TENTH STREET, RIVERSIDE, CA 92501 (951) 684-4664</p> <p><b>CONTACT:</b> ROGER CLARKE, PRINCIPAL RCLARKE@RUHNAUCLARKE.COM JUAN CANTORAN, PROJECT MANAGER JCANTORAN@RUHNAUCLARKE.COM</p> <p><b>CIVIL</b> EPIC ENGINEERS 101 E. REDLANDS BLVD., SUITE 146, REDLANDS, CA 92373 (909) 792-5969</p> <p><b>CONTACT:</b> TROY MOLAUG, PRINCIPAL TROY@EPICRCE.COM</p>
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3	11/6/18	ISSUE NO. 3	3	11/6/18	ISSUE NO. 3
4	11/6/18	ISSUE NO. 4	4	11/6/18	ISSUE NO. 4
5	11/6/18	ISSUE NO. 5	5	11/6/18	ISSUE NO. 5
6	11/6/18	ISSUE NO. 6	6	11/6/18	ISSUE NO. 6
7	11/6/18	ISSUE NO. 7	7	11/6/18	ISSUE NO. 7
8	11/6/18	ISSUE NO. 8	8	11/6/18	ISSUE NO. 8
9	11/6/18	ISSUE NO. 9	9	11/6/18	ISSUE NO. 9
10	11/6/18	ISSUE NO. 10	10	11/6/18	ISSUE NO. 10

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TITLE SHEET

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GRADING GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST ADOPTED EDITION OF THE CALIFORNIA BUILDING CODE. ALL CONSTRUCTION MATERIALS AND WORKMANSHIP SHALL CONFORM TO THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (APWA GREEN BOOK), LATEST EDITION AND AMENDMENTS. UNLESS SPECIFIC REQUIREMENTS CONFLICT ON ANY SUBJECT MATTER, THE ENGINEER OF RECORD AND/OR HIS REPRESENTATIVE WILL DETERMINE WHICH SPECIAL REQUIREMENT AND/OR CODE WILL GOVERN.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE CLEARING AND DISPOSAL OF THE PROPOSED WORK AREA.
3. DUST SHALL BE CONTROLLED BY WATERING OR OTHER APPROVED METHODS IN ACCORDANCE WITH CITY, COUNTY, AND STATE ORDINANCES AND STATUTES.
4. NO FILL SHALL BE PLACED ON THE EXISTING GROUND UNLESS THE GROUND HAS BEEN CLEARED OF WEEDS, BRUSH, AND OTHER VEGETATION AND PREPARED PER THE PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT.
5. CUT AND FILL SLOPES SHALL BE NO STEEPER THAN TWO HORIZONTAL TO ONE VERTICAL. ANY CUT SLOPE THAT IS NOT STABLE SHALL BE OVERSEEDING AND RECOMPACT AS INDICATED BY PROJECT SPECIFICATIONS AND GEOTECHNICAL REPORT.
6. FILLS SHALL BE COMPACTED THROUGHOUT TO 90% OF THE MAXIMUM DENSITY AS DETERMINED BY ASTM D1557-91 AND CONTROLLED BY THE GEOTECHNICAL ENGINEER.
7. AREAS TO RECEIVE FILL SHALL BE PROPERLY PREPARED AND APPROVED BY THE GEOTECHNICAL ENGINEER OR HIS REPRESENTATIVE PRIOR TO PLACING OF FILL.
8. ALL EXISTING FILLS SHALL BE APPROVED BY THE GEOTECHNICAL ENGINEER AND STATE INSPECTOR OR HIS REPRESENTATIVE BEFORE ANY ADDITIONAL FILLS ARE ADDED.
9. THE EXISTING IRRIGATION LINES AND CISTERNS SHALL BE REMOVED, BACKFILLED, AND APPROVED BY THE GRADING INSPECTOR AND GEOTECHNICAL ENGINEER.
10. SLOPES EXCEEDING FIVE FEET IN HEIGHT MUST BE PLANTED WITH AN APPROVED IRRIGATION SYSTEM UNLESS OTHERWISE NOTED ON LANDSCAPE ARCHITECTS PLANS.
11. THE STOCKPILING OF EXCESS MATERIAL SHALL BE APPROVED BY THE OWNER IF IT IS TO BE CROTE AND THE AGENCY WITH JURISDICTION IF IT IS TO BE OFF-SITE.
12. ALL TRENCH BACKFILLS SHALL BE TESTED AND APPROVED BY THE SITE GEOTECHNICAL ENGINEER AND PER THE APWA.
13. ALL CUT SLOPES SHALL BE INVESTIGATED BOTH DURING AND AFTER GRADING BY AN ENGINEERING GEOLOGIST TO DETERMINE IF ANY SLOPE STABILITY PROBLEM EXISTS. SHOULD EXCAVATION DISCLOSE ANY GEOLOGICAL HAZARDS OR POTENTIAL GEOLOGICAL HAZARDS, THE ENGINEERING GEOLOGIST SHALL RECOMMEND NECESSARY TREATMENT TO THE PROJECT ARCHITECT FOR APPROVAL.
14. WHEN CUT PADS ARE BROUGHT TO NEAR GRADE, THE ENGINEERING GEOLOGIST SHALL DETERMINE IF THE BEDROCK IS EXTENSIVELY FRACTURED OR FAULTED AND WILL READILY TRANSMIT WATER. IF CONSIDERED NECESSARY BY THE ENGINEERING GEOLOGIST AND GEOTECHNICAL ENGINEER, A COMPACTED FILL BLANKET WILL BE PLACED.
15. THE FINAL COMPACTION REPORT AND APPROVAL FROM THE GEOTECHNICAL ENGINEER SHALL CONTAIN THE TYPE OF FILL TESTING PERFORMED, THE METHOD OF OBTAINING THE IN-PLACE DENSITY, WHETHER SAND CONE, NUCLEAR GAGE, OR DRIVE RING SHALL BE SO NOTED FOR EACH TEST. SUFFICIENT MAXIMUM DENSITY DETERMINATIONS SHALL BE PERFORMED TO VERIFY THE ACCURACY OF THE MAXIMUM DENSITY CURVES USED BY THE FIELD TECHNICIAN.
16. SANITARY FACILITIES SHALL BE MAINTAINED ON THE SITE.
17. THE LOCATION AND PROTECTION OF ALL UTILITIES IS THE RESPONSIBILITY OF THE CONTRACTOR.
18. ALL EXISTING DRAINAGE COURSES ON THE PROJECT SITE MUST CONTINUE TO FUNCTION, ESPECIALLY DURING STORM CONDITIONS AND APPROVED PROTECTIVE MEASURES DURING THE GRADING. DRAINAGE PROVISIONS MUST BE USED TO PROTECT ADJACENT PROPERTIES DURING THE GRADING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING DRAINAGE COURSES. THE CONTRACTOR SHALL BE HELD LIABLE FOR ANY DAMAGE DUE TO OBSTRUCTING NATURAL DRAINAGE PATTERNS.
19. ANY WATER WELLS SHALL BE ABANDONED IN COMPLIANCE WITH THE COUNTY STANDARDS AND IN ACCORDANCE WITH THE STATE DEPARTMENT OF WATER RESOURCES.
20. ANY EXISTING SEWERS, CESSPOOLS, AND SEPTIC TANKS OR OTHER SEWAGE DISPOSAL FACILITIES SHALL BE ABANDONED IN COMPLIANCE WITH THE CALIFORNIA PLUMBING CODE AND TO THE APPROVAL OF THE GEOTECHNICAL ENGINEER AND GRADING INSPECTOR.
21. EXPORT SOILS MUST GO TO A LEGAL DUMP SITE OR TO A PERMITTED SITE APPROVED BY THE LOCAL AGENCY HAVING JURISDICTION.
22. PERMISSION IS REQUIRED FROM THE ADJACENT PROPERTY OWNER WHENEVER WORK IS PROPOSED ACROSS THE PROPERTY LINE.
23. ANY DIRT, ROCK, OR CONSTRUCTION MATERIAL THAT MAY BE TRACKED OR DROPPED WITHIN THE PUBLIC RIGHT-OF-WAY DURING THE TRANSPORTATION OF SAID MATERIAL OR EQUIPMENT ASSOCIATED WITH THE PROJECT SHALL BE CLEANED OR REMOVED DAILY.
24. DIRT ACCESS RAMPS OVER CURB AND GUTTER TO CONSTRUCTION SITE ARE NOT ALLOWED. WHEN NECESSARY FOR ENTRANCE BY SUCH CONSTRUCTION SITES, ASPHALT RAMPS WITH A MINIMUM 3" DIAMETER PIPE WILL BE CONSTRUCTED TO CONVEY GUTTER DRAINAGE. ALL BASE, GRANUL, SOIL OR OTHER MATERIAL CARRIED INTO THE ROADWAY BY CONTRACTORS PERSONNEL OR EQUIPMENT WILL BE CLEANED AS NECESSARY AND NO LESS THAN ONCE A DAY. TRUCKS HAULING GRASS, GRAVEL, FILL OR EXPORT MATERIALS WITHIN CITY LIMITS WILL BE TAPED AS NECESSARY TO PREVENT MATERIAL FROM SPILLING INTO THE ROADWAY.
25. PRIOR TO ANY CONSTRUCTION WHICH INVOLVES HAZARDOUS CONDITIONS, THE CONTRACTOR SHALL FIRST OBTAIN A PERMIT FROM THE DIVISION OF OCCUPATIONAL SAFETY AND HEALTH (DOSH).
26. PROPOSED REVISIONS TO THE GRADING PLAN SHALL BE DRAWN IN RED PENCIL ON BLUELINES OF THE APPROVED PLAN. THE BLUELINES SHALL BE SUBMITTED TO THE OWNERS REPRESENTATIVES FOR REVIEW AND APPROVAL. ONLY AFTER THE BLUELINE APPROVAL IS GIVEN SHOULD THE ORIGINALS BE AS-BUILT BY THE ENGINEER/ARCHITECT.
27. RULE 403, AIR QUALITY CONTROL MANAGEMENT DISTRICT, MUST BE IMPLEMENTED BY CONTRACTORS DURING CONSTRUCTION.
28. CONSTRUCTION ACTIVITIES SHALL OCCUR ONLY BETWEEN THE HOURS OF 7:00 A.M. AND 7:00 P.M. MONDAY THROUGH FRIDAY, AND BETWEEN THE HOURS OF 8:00 A.M. AND 6:00 P.M. ON SATURDAYS. NO CONSTRUCTION ACTIVITIES SHALL BE PERMITTED OUTSIDE OF THESE PERMITTED HOURS OR ON SUNDAY AND FEDERAL HOLIDAYS.
29. CONSTRUCTION PARKING SHALL BE ON-SITE. TRAFFIC CONTROL AND ACCESS SHALL BE IN ACCORDANCE WITH THE GENERAL LOCATION REQUIREMENTS.
30. TRUCKS AND LARGE CONSTRUCTION VEHICLES WILL OBTAIN APPROVED TRUCK ROUTES FROM THE CITY AND/OR THE COUNTY.
31. THE CONTRACTOR SHALL CONTROL DUST IN AREAS USED FOR OFF-ROAD PARKING, MATERIALS LAYDOWN OR TRUCK WAITING. FREQUENTLY ACCESSSED AREAS SHALL BE PAVED AS EARLY AS POSSIBLE TO MINIMIZE DIRT TRACKOUT TO THE PUBLIC RIGHT OF WAY.
32. THE CONTRACTOR SHALL UTILIZE MEASURES TO PREVENT DIRT FROM BEING TRACKED, WASHED BLOWN, OR OTHERWISE CONVEYED ONTO ADJACENT ROADWAYS, AND SHALL WASH OR GREET CONSTRUCTION ACCESS POINTS ON A ROUTINE BASIS AS SPECIFIED BY THE COUNTY. AT FREQUENT MEETING AS WELL AS WHENEVER DIRT IS VISIBLE MORE THAN 50 FEET FROM THE ACCESS POINT INDEPENDENT OF THE ROUTINE CLEAN-UP SCHEDULE.
33. TRUCKS USED IN HAULING DIRT TO OR FROM THE SITE ON PUBLIC ROADS WILL BE COVERED OR WILL MAINTAIN A SIX INCH DIFFERENTIAL BETWEEN THE MAXIMUM HEIGHT OF ANY HAULED MATERIAL AND THE TOP OF THE TRAILER. DIRT TRACKERS WILL LEAD PRIOR TO LEAVING THE SITE TO PREVENT SOIL LOSS DURING TRANSPORTATION.

DEMOLITION GENERAL NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION OF THE SITE AND SHALL REMOVE AND DISPOSE OF ALL STRUCTURES ABOVE AND OR BELOW GROUND. ANY HAZARDOUS MATERIALS ENCOUNTERED SHALL BE HANDLED AND REMOVED AS REQUIRED BY LOCAL AND OR STATE LAWS.
2. EXISTING WATER LATERALS AND IRRIGATION LINES SHALL BE CUT AND CAPPED AT THE LIMIT OF THE DEMO AREA SHOWN. ALL WATER SERVICES SHALL BE TERMINATED IN A FLUSH UTILITY BOX FOR FUTURE ACCESS.
3. EXISTING SEWER LATERALS SHALL BE CUT AND PLUGGED AT THE LIMIT OF THE DEMO AREA SHOWN. ALL PLUGGED ENDS FOR LATERALS WILL BE BROUGHT TO GRADE WITH A STANDARD SEWER CLEAN OUT.
4. EXISTING ELECTRICAL LINES SHALL BE TEMPORARILY REROUTED AROUND THE LIMITS OF THE DEMO AREA. ALL TEMPORARY WIRING CONNECTIONS SHALL BE TERMINATED IN AN ABOVE GROUND RISER.
5. THE CONTRACTOR SHALL EXERCISE DUE CARE TO AVOID DAMAGE TO EXISTING LANDSCAPE IMPROVEMENTS, UTILITY FACILITIES, AND LANDSCAPING FEATURES THAT ARE NOT TO BE REMOVED.
6. ALL JOIN LINES SHALL BE SAW CUT ON A NEAT, STRAIGHT LINE PARALLEL WITH THE JOIN. THE CUT EDGE SHALL BE PROTECTED FROM CRUSHING, AND ALL BROKEN EDGES SHALL BE RE CUT PRIOR TO JOINING.
7. ALL EXISTING OBJECTIONABLE MATERIALS THAT CONFLICT WITH PROPOSED IMPROVEMENTS INCLUDING, BUT NOT LIMITED TO, BUILDING FOUNDATIONS, UTILITIES AND APPURTENANCES, TREES, SIGNS, AND STRUCTURES, ETC. SHALL BE REMOVED AND DISPOSED BY THE CONTRACTOR, UNLESS OTHERWISE INDICATED HEREIN, OR AS DIRECTED BY THE ARCHITECT OR ENGINEER.
8. THE CONTRACTOR SHALL PROTECT ALL EXISTING CONCRETE FROM DAMAGE CAUSED BY HIS OPERATIONS. ANY CONCRETE DAMAGED DURING HIS OPERATIONS SHALL BE SAWCUT AND REPLACED AT NO COST TO THE OWNER. ANY EXISTING CONCRETE IDENTIFIED AS POTENTIALLY NEEDING TO BE REPLACED SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER OR THE OWNERS REPRESENTATIVE PRIOR TO THE COMMENCEMENT OF WORK.
9. THE CONTRACTOR SHALL PERFORM AND BE RESPONSIBLE FOR ALL CLEARING AND GRUBBING OPERATIONS AS NECESSARY TO COMPLETE THE WORK, INCLUDING TRANSPORTATION AND DISPOSAL OF ALL REMOVED MATERIALS, AND ALL ASSOCIATED COSTS.
10. THE CONTRACTOR SHALL ABANDON EXISTING WELLS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS AND SHALL HAVE A C-57 CALIFORNIA CONTRACTORS LICENSE.
11. IT IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO VISIT THE SITE AND DETERMINE THE EXTENT OF DEMOLITION BASED ON THE PROPOSED IMPROVEMENTS SHOWN IN THIS SET OF PLANS.

ACCESSIBILITY NOTES

1. ALL SLOPES IN THE DIRECTION OF TRAVEL SHOWN ON THIS PLAN WERE DESIGNED BELOW THE MAXIMUM ALLOWED GRADES BY THE AMERICANS WITH DISABILITIES ACT ACCESS GUIDE (ADAAG OR CBC) IN ORDER TO ALLOW FOR CONSTRUCTION TOLERANCES. IT IS THE RESPONSIBILITY OF THE CONTRACTORS TO FAMILIARIZE THEMSELVES WITH THE ADAAG AND CBC AND IN THE EVENT THAT A DESIGN QUESTION SHOULD ARISE, OR A FIELD CONDITION PRESENT ITSELF THAT IS DIFFERENT THAN SHOWN ON THESE PLANS, WORK SHOULD CEASE AND THE DESIGN ENGINEER SHALL BE NOTIFIED SO THAT AN ACCEPTABLE SOLUTION CAN BE DETERMINED.
2. THE CONTRACTOR IS ADVISED TO CAREFULLY CHECK ALL PHASES OF WORK RELATING TO ACCESSIBILITY FOR THIS PROJECT, SINCE THE CODE DOES NOT ALLOW FOR A CONSTRUCTION TOLERANCE. ANY CONSTRUCTION THAT EXCEEDS MAXIMUMS AND SLOPES AS CALLED OUT BY CBC OR ADAAG ARE SUBJECT TO REJECTION BY THE INSPECTOR AND SHALL BE REMOVED AND REPLACED.
3. SINCE THE CIVIL ENGINEER OR SURVEYOR CANNOT CONTROL THE EXACT METHODS OR MEANS USED BY THE GENERAL CONTRACTOR OR THEIR SUB-CONTRACTORS DURING THE GRADING AND CONSTRUCTION OF THE PROJECT, THE CIVIL ENGINEER OR SURVEYOR ASSUMES NO RESPONSIBILITY FOR THE FINAL ACCEPTANCE OF ADAAG RELATED ITEMS OF THIS PROJECT BY THE INSPECTING AUTHORITY OR OTHER AFFECTED PARTIES.
4. COMPLIANCE WITH THE CONSTRUCTION REQUIREMENTS FOR ACCESSIBILITY WILL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND HIS SUB-CONTRACTORS.



PROJECT NO. : 1-51-07  
10/10/2018 10:08 AM

ISSUE No.	DATE	DESCRIPTION	REVISION No.	DATE	DESCRIPTION

UTILITY GENERAL NOTES

1. ALL WATER LINES 3" AND SMALLER SHALL BE SCHEDULE 80 PVC PER ASTM D-1784 WITH SOLVENT WELD FITTINGS. ALL WATER LINES 4" AND GREATER SHALL BE CLASS 150 DUCTILE IRON PIPE WITH FLANGES. ALL WATER LINES SHALL BE INSTALLED WITH A MINIMUM COVER OF 36" IN TRAFFIC AREAS PER MPA 24.
2. WATER MAIN AND SEWER MAIN CROSSINGS SHALL COMPLY WITH STATE AND COUNTY HEALTH DEPARTMENT REGULATIONS. WATER SERVICE LINES AND SEWER LATERALS SHALL NOT BE IN THE SAME TRENCH. WATER AND SEWER LINES CISTERS SHALL HAVE A TEN FOOT MINIMUM HORIZONTAL CLEARANCE. WHENEVER POSSIBLE, WATER MAINS SHALL CLEAR ABOVE ALL SEWER LATERALS BY A MINIMUM OF ONE FOOT VERTICAL CLEARANCE OR UNDER BY 3" MINIMUM. WHEN WATER LINE CROSSINGS UNDER SEWERS, OR MINIMUM CLEARANCE OVER SEWER IS NOT ACHIEVED, SEWER SHALL BE ENCASED IN CONCRETE TO EACH SIDE OF CROSSING.
3. MINIMUM WATER LINE COVER FROM FINISH GRADE TO THE TOP OF PIPE SHALL BE 36" OF COVER. MINIMUM FIRE LINE COVER FROM FINISH GRADE TO THE TOP OF PIPE SHALL BE 48" COVER. WHERE REQUIRED, FIRE LINES SHALL HAVE A MINIMUM COVER OF 30" IN NON TRAFFIC AREAS AND A MINIMUM COVER OF 36" IN TRAFFIC AREAS PER MPA 24.
4. THE UTILITY CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING COMPARISON TESTS OF ALL TRENCH BACKFILL AND SUBMIT THEM TO THE CONSTRUCTION MANAGER FOR APPROVAL. ALL BEDDING SHALL HAVE A SAND EQUIVALENT OF 30 OR BETTER.
5. WATER SERVICE CONNECTION TO THE BUILDINGS SHALL BE INSTALLED BY THE BUILDING PLUMBING CONTRACTOR.
6. MINIMUM BEARING AREA FOR THRUST BLOCKS SHALL BE ACCORDING TO THE THRUST BLOCK SCHEDULE SHOWN ON THESE PLANS.
7. A PIPE "DEFLECTOR" OR "BEROUDGER" SHALL NOT BE USED TO REDUND OVERDEFLECTED PIPES.
8. ALL VALVE AND CLEAN OUT COVERS TO HAVE TRAFFIC RATED MANHOLE COVER COVERS AND ADJUSTED BY CONTRACTOR TO FINISH GRADE AFTER PAVING. ALL COVERS SHALL INDICATE "S" FOR SEWER, "W" FOR WATER, AND "SOT" FOR STORM DRAIN.
9. ALL UNDERGROUND FERROUS METALS ARE TO BE PROTECTED FROM CORROSION WITH 40 MIL CATHODIC POLYETHYLENE, 35 MIL PLASTIC TAPE OVER PRIMER PER APWA STANDARD C209, OR HOT APPLIED COAL TAR ENAMEL OR TAPE PER APWA STANDARD C203.
10. BARE STEEL APPURTENANCES SUCH AS BOLTS, JOINT, HARNESSES OR FLEXIBLE COUPLINGS SHOULD BE COATED WITH A COAL TAR OR FLUOROCARBON BASED PAINT AFTER ASSEMBLY.
11. CONTRACTOR SHALL EXPOSE ALL EXISTING WATER & SEWER PIPELINES AT PROPOSED CONNECTION POINTS TO CONFIRM MATERIAL, TYPES LOCATION, AND ELEVATION PRIOR TO BEGINNING CONSTRUCTION.
12. ALL UNDERGROUND PIPELINES SHALL HAVE UNDERGROUND WARNING TAPE PLACED 12" ABOVE THE LINES IN THE TRENCH. NON-METALLIC LINES SHALL HAVE METALLIC LINED TAPE.
13. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO ARRANGE FOR AND COORDINATE THE RELOCATION OF ANY EXISTING UTILITIES DEEMED NECESSARY BY THE PROPOSED IMPROVEMENTS.
14. WHENEVER IT BECOMES NECESSARY TO TUNNEL UNDER EXISTING IMPROVEMENTS, THE CONTRACTOR SHALL SUPPORT THOSE IMPROVEMENTS IN A MANNER APPROVED BY THE PROJECT ENGINEER OR THE CONTRACTOR SHALL SAWCUT, REMOVE AND REPLACE THOSE IMPROVEMENTS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
15. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES (BY POT-HOLING OR OTHER MEANS). CONTRACTORS SHALL NOTIFY UNDERGROUND SERVICE ALERT (U.S.A.) 800/227-2600 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION TO LOCATE EXISTING UTILITIES.
16. CONTRACTOR SHALL OBTAIN ANY REQUIRED U.S.H.A. PERMITS PRIOR TO ANY EXCAVATIONS.
17. CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND DIMENSIONS BEFORE STARTING WORK. SHOULD CONDITIONS EXIST WHICH ARE CONTRARY TO THOSE SHOWN ON PLANS, THE ENGINEER SHALL BE NOTIFIED BEFORE PROCEEDING WITH WORK.
18. PURSUANT TO SECTION 8771 OF THE BUSINESS AND PROFESSIONS CODE, EXISTING SURVEY MONUMENTS SHALL BE NOTED AND DOCUMENTED BEFORE CONSTRUCTION. IF MONUMENTS ARE DISTURBED DURING CONSTRUCTION, THE CONTRACTOR SHALL PAY A REGISTERED LICENSED LAND SURVEYOR OR ENGINEER TO RESET SUCH MONUMENTS, UNLESS OTHERWISE SPECIFIED OR DESIGNATED.
19. ALL SEWER PIPES SHALL BE INSTALLED AT STRAIGHT GRADES BETWEEN INVERT ELEVATIONS INDICATED. ALL SEWER AND STORM DRAIN CONNECTIONS SHALL BE MADE WITH WYES. TEES SHALL NOT BE USED WITH ALL PIPES SHALL BE LAD WITH BELL END OF PIPE FACING UPSTREAM.
20. ALL CHANGES IN HORIZONTAL ALIGNMENT OF SEWER PIPES SHALL BE ACCOMPLISHED BY USE OF MANUFACTURED FITTINGS AND ELBOWS, AND WHERE ADDITIONALLY NECESSARY, PIPE JOINT DEFLECTIONS WITHIN ALLOWABLE LIMITS PER THE PRODUCT SPECIFICATIONS.
21. ALL WET UTILITY TRENCHES, BEDDING AND BACKFILL SHALL CONFORM TO SECTION 306-12.1.1 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION. SUBSTITUTION OF BEDDING MATERIAL SHALL BE APPROVED BY THE PROJECT CIVIL ENGINEER.
22. THE CONTRACTOR SHALL PERFORM TESTING, FLUSHING AND DISINFECTING OF SYSTEMS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
23. THE CONTRACTOR SHALL PREPARE A COMPLETE SET OF "AS-BUILT" DRAWINGS IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
24. ALL PIPE SIZE REFERENCES ARE MINIMUM INSIDE DIAMETER SIZE. HORIZONTAL DIMENSIONS SHOWN ON THESE PLANS ARE TO CENTERLINE OF PIPES.
25. NATURAL GAS SERVICE LINES MAY BE INSTALLED IN A COMMON TRENCH WITH WATERLINES IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.
26. DRINKING FOUNTAIN AND IRRIGATION APPURTENANCES SHOWN HEREON ARE APPROXIMATE AND THE CONTRACTOR SHALL REFER TO THE ARCHITECTS AND LANDSCAPE ARCHITECTS PLANS FOR THE EXACT LOCATION.
27. CLEANOUTS FOR SEWER AND STORM DRAIN UTILITIES SHALL BE INSTALLED PER THE UPC, LATEST EDITION, WHETHER GRAPHICALLY INDICATED OR NOT, AT INTERVALS OF 100 FEET IN STRAIGHT RUNS, OTHERWISE AT EVERY HORIZONTAL AND VERTICAL ANGLE POINT AND AT ALL CHANGES IN PIPE SIZE. ALL OTHER CLEANOUTS SHOWN ON PLAN ARE AS DEEMED NECESSARY BY THE DESIGN ENGINEER AND ARE NOT TO BE OMITTED.

PRIVATE ENGINEER'S NOTICE TO CONTRACTOR

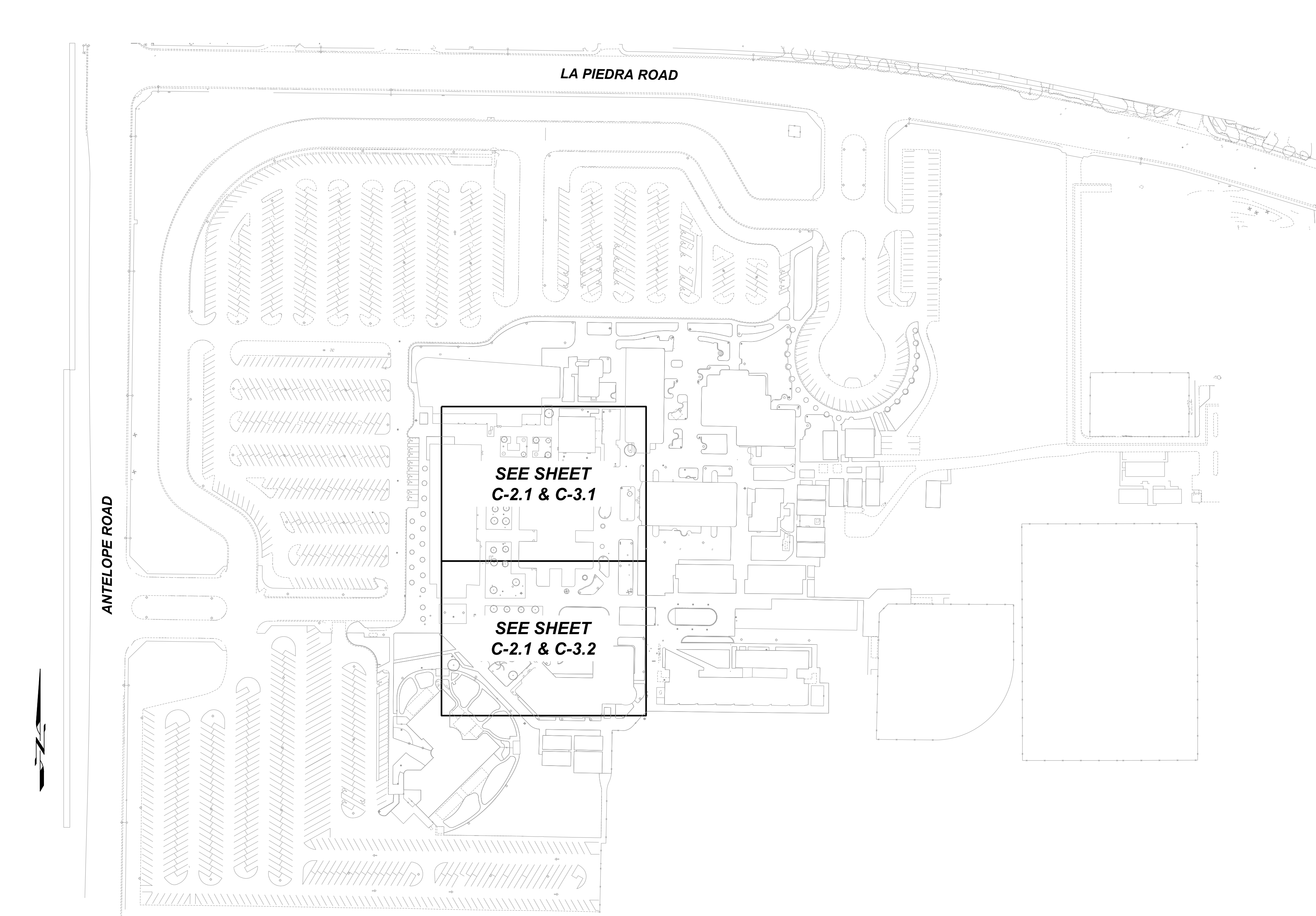
ALL CONTRACTORS AND SUBCONTRACTORS PERFORMING WORK SHOWN ON OR RELATED TO THESE PLANS SHALL CONDUCT THEIR OPERATIONS SO THAT ALL EMPLOYEES ARE PROVIDED A SAFE PLACE TO WORK AND THE PUBLIC IS PROTECTED. ALL CONTRACTORS AND SUBCONTRACTORS SHALL COMPLY WITH THE "OCCUPATIONAL SAFETY AND HEALTH REGULATIONS" OF THE U.S. DEPARTMENT OF LABOR AND THE STATE OF CALIFORNIA DEPARTMENT OF INDUSTRIAL RELATIONS "CONSTRUCTION SAFETY ORDERS". THE CIVIL ENGINEER SHALL NOT BE RESPONSIBLE IN ANY WAY FOR THE CONTRACTORS AND SUBCONTRACTORS COMPLIANCE WITH SAID REGULATIONS AND ORDERS.

CONTRACTOR FURTHER AGREES THAT HE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB-SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE CIVIL ENGINEER HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM THE SOLE NEGLIGENCE OF THE OWNER OR ENGINEER.

THE EXISTENCE AND APPROXIMATE LOCATIONS OF ANY UNDERGROUND UTILITIES OR STRUCTURES SHOWN ON THESE PLANS ARE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. THE CIVIL ENGINEER ASSUMES NO LIABILITY AS TO THE EXACT LOCATION OF SAID LINES NOR FOR UTILITY OR IRRIGATION LINES WHOSE LOCATIONS ARE NOT SHOWN. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING ALL UTILITY AND IRRIGATION COMPANIES PRIOR TO WORK OR EXCAVATION TO DETERMINE THE EXACT LOCATIONS OF ALL LINES AFFECTING THIS WORK, WHETHER OR NOT SHOWN HEREON, AND FOR ANY DAMAGE OR PROTECTION TO THESE LINES.

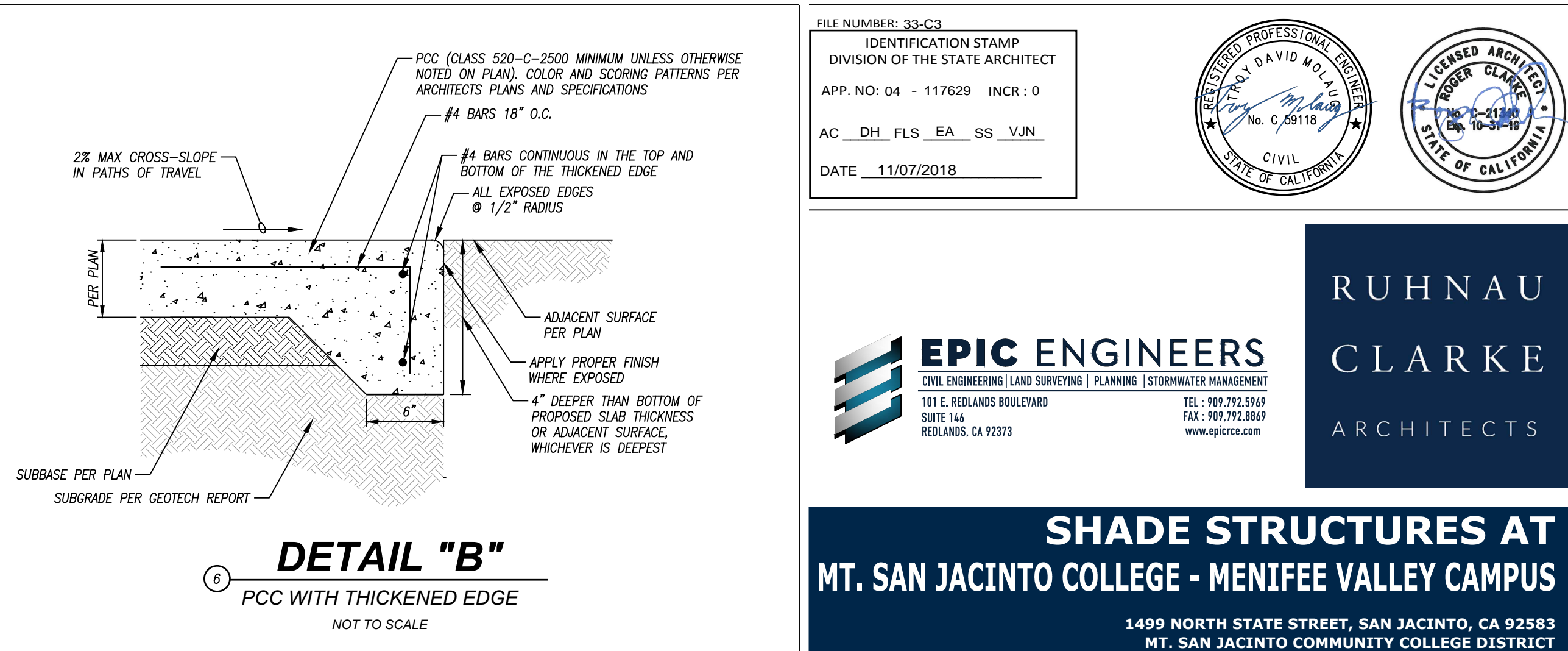
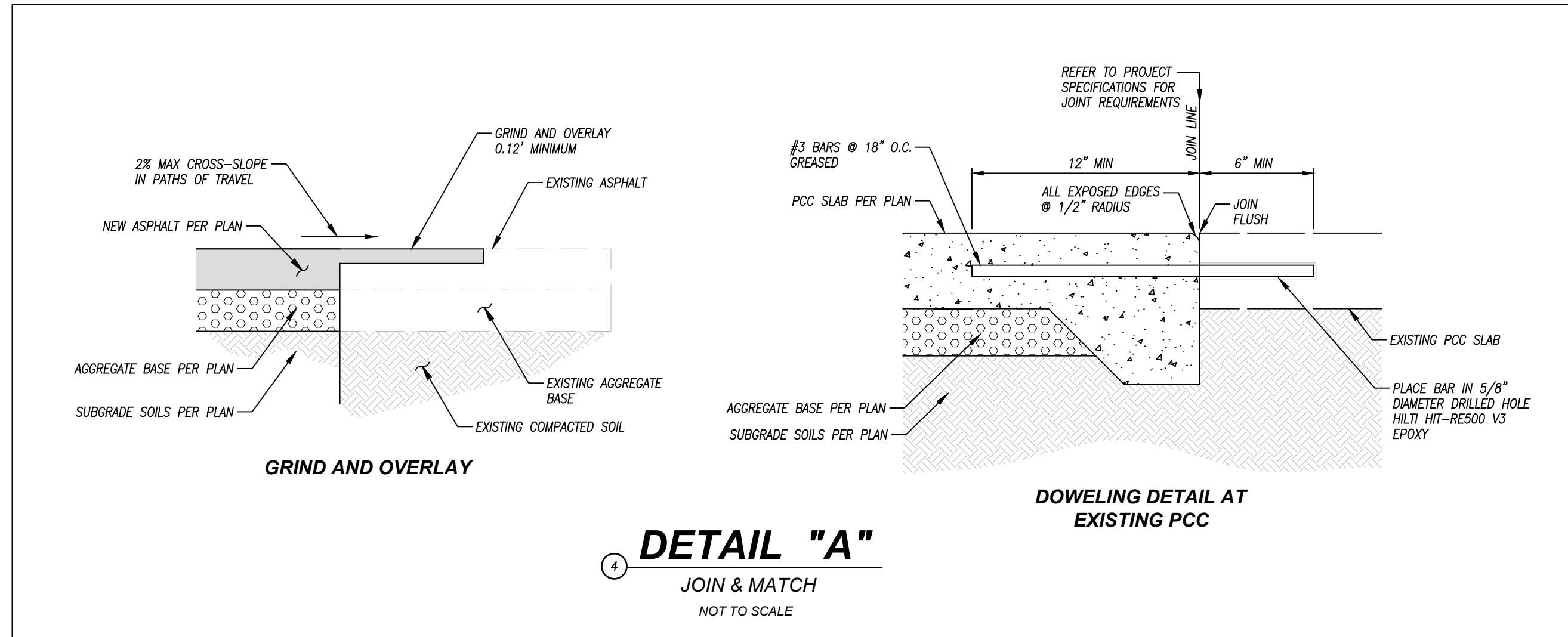
LEGEND:

AC	ASPHALT CONCRETE	—●—	EXISTING POWER POLE
ADA	AMERICAN DISABILITIES ACT	—●—	EXISTING SIGN
BFD	BACK FLOW DEVICE	—●—	TREE
CLF	CHAIN LINK FENCE	—●—	CONTROL POINT
CO	CLEAN OUT	—●—	DRAIN BOX
CC	CONCRETE	—●—	EXISTING EDGE OF PAVEMENT
CDG	DOUBLE CHECK DETECTOR ASSEMBLY	—●—	GRADED SHALE
ELEC	ELECTRIC	—●—	EDGE OF CONCRETE
EDC	EDGE OF CONCRETE	—●—	EXISTING EDGE OF CONCRETE
EP	EDGE OF PAVEMENT	—●—	GRADE BREAK/RIDGE LINE
FF	FINISHED FLOOR	—●—	PROPOSED SEAT WALL/PLANTER WALL
FG	FINISHED GROUND	—●—	EXISTING STORM DRAIN LINE
FS	FIRE HYDRANT	—●—	EXISTING SEWER LINE
FL	FLOWLINE	—●—	EXISTING FIRE LINE
FDC	FIRE DEPARTMENT CONNECTION	—●—	EXISTING WATER LINE
FS	FINISHED SURFACE	—●—	EXISTING GAS LINE
HP	HIGH POINT	—●—	EXISTING ELECTRICAL LINE
IE	INVERT (SEWER)	—●—	EXISTING TELEPHONE LINE
INV	INVERT (SO)	—●—	PROPOSED STORM DRAIN LINE
PIV	POST INDICATOR VALVE	—●—	PROPOSED PCC SURFACE
PP	POWER POLE	—●—	
SW	SEWER	—●—	
TB	TOP OF BERM	—●—	
TC	TOP OF CURB	—●—	
TF	TOP OF FOOTING	—●—	
TG	TOP OF GRADE	—●—	
TP	TOP OF PAVEMENT	—●—	
TW	TOP OF WALL	—●—	
UTL	UTILITY	—●—	
WM	WATER METER	—●—	
WV	WATER VALVE	—●—	



INDEX MAP

SCALE: 1"=100'



FILE NUMBER: 33-C3  
IDENTIFICATION STAMP  
DIVISION OF THE STATE ARCHITECT  
APP. NO. 04 - 117629 INCR.: 0  
AC: DH, FLS, EA, SS, VLN  
DATE: 11/07/2018

STATE OF CALIFORNIA  
REGISTERED PROFESSIONAL ARCHITECT  
DAVID M. RUHNAU  
No. C-99118  
EXPIRATION DATE: 12-31-2019

STATE OF CALIFORNIA  
REGISTERED ARCHITECT  
CLARKE  
No. C-99118  
EXPIRATION DATE: 12-31-2019

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TEL: 951.792.2949  
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**SHADE STRUCTURES AT MT. SAN JACINTO COLLEGE - MENIFEE VALLEY CAMPUS**

1499 NORTH STATE STREET, SAN JACINTO, CA 92583  
MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT

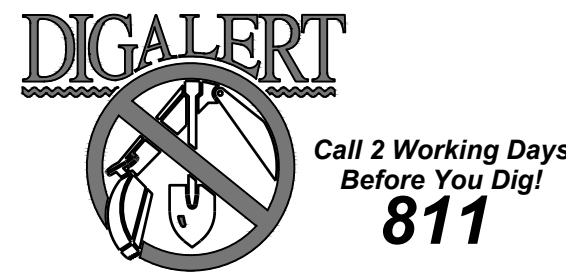
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**C-1.1**



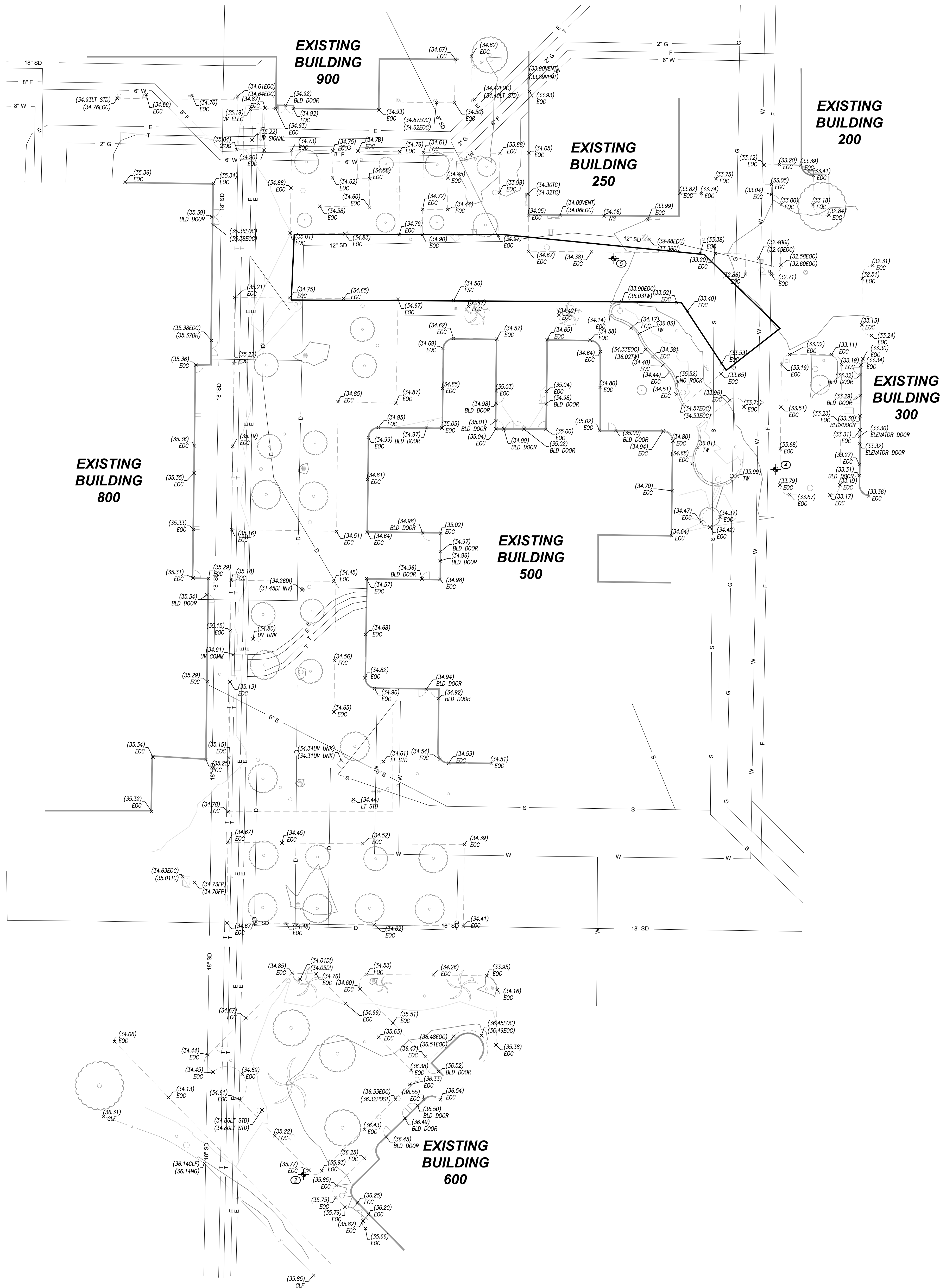
October 10, 2019 at 10:08am J:\21-148 K&S Steel Structures\_Col ID\PLM - 010\121-148-C-02.dwg by Jagan on 8/10/2019



PROJECT No. : 1-51-07  
10/10/2018 10:08 AM

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REVISION No.	DATE	DESCRIPTION	REVISION No.	DATE	DESCRIPTION



**GENERAL NOTES:**  
THE FIELD TOPOGRAPHY SHOWN HEREON WAS COMPILED 05/01/2018 BY FIELD SURVEY PERFORMED 3/5/2018 - 3/26/2018 BY EPIC ENGINEERS.

**BENCHMARK:**  
THE BENCHMARK USED IS PER NGS DATASHEET 'PD D0813', DESIGNATION 'V 1143'

2.5 MILES NORTHWEST OF SAN JACINTO, 243 FEET WEST ALONG RECORD ROAD FROM THE INTERSECTION WITH STATE STREET (HIGHWAY 78), 17 FEET SOUTH OF RECORD RD. ON A SQUARE MANHOLE 4 FEET ABOVE GROUND. A STANDARD USGS BRASS MONUMENT SET FLUSH ON NORTHWEST CORNER OF MANHOLE AT STATION 27+26.6.

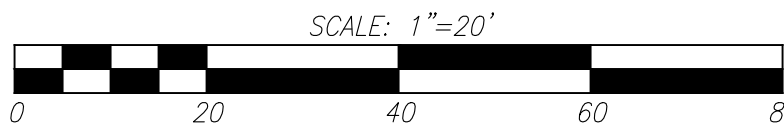
ELEVATION = 1507.32 FEET (NAVD88)

**BASIS OF BEARING:**  
THE BASIS OF BEARINGS FOR THIS SURVEY IS THE CALIFORNIA STATE PLANE COORDINATE SYSTEM, 'CCS83, ZONE VI, BASED LOCALLY ON CONTINUOUS OPERATING REFERENCE STATIONS (CORS) 'P400', 'P474' AND 'P474' AND 83 (2011) EPOCH 2010.00. ALL BEARINGS SHOWN ON THIS MAP ARE GRID. ALL DISTANCES ARE GROUND DISTANCES UNLESS SPECIFIED OTHERWISE. GRID DISTANCES MAY BE OBTAINED BY MULTIPLYING THE GROUND DISTANCE BY A COMBINATION FACTOR OF 0.99992056. CALCULATIONS ARE MADE AT THE BASE CONTROL POINT NO. 1 WITH COORDINATES OF:

N: 2238136.454 E: 6343136.125, USING AN ELEVATION OF 1520.620 FEET.

**TOPOGRAPHIC LEGEND:**

ADA	AMERICANS WITH DISABILITIES ACT	PIV	POST INDICATOR VALVE
BB	BASKETBALL	PP	POWER POLE
BLD	BUILDING	PS	PAINTED STRIPE
BM	BENCHMARK	RD	ROOT DRAIN
BSG	BACK SIDEWALK GROOVE	RG	RIBBON GUTTER
CAB	CABINET	RM	RUBBER MAT
CB	CATCH BASIN	RMP	RAMP
CTL	CURB FLOWLINE	SB	SPEED BUMP
CLF	CHAIN LINK FENCE	SCD	SEWER CLEANOUT
CONT	CONTAINER	SDMH	STORM DRAIN MANHOLE
CO	CLEANOUT	SMH	SEWER MANHOLE
COL	COLUMN	STD	STANDARD
COMM	COMMUNICATION	TC	TOP OF CURB
CONC	CONCRETE	TCA	TOP OF CURB ASPHALT
COR	CORNER	TD	TRUNCATED DOMES
CP	CONTROL POINT	TELE	TELEPHONE
DD	DOWN DRAIN	TS	TOP OF GRATE
DF	DRINKING FOUNTAIN	TL	TRAFFIC LIGHT
DG	DRAIN GRATE	TP	TOP OF PAVEMENT
DH	DOOR HANSE	TW	TOP OF WALL
DI	DRAIN INLET	UB	UTILITY BOX
EDC	EDGE OF CONCRETE	UNK	UNKNOWN
EDC	EDGE OF DIRT	UTIL	UTILITY
ELEC	ELECTRIC	UV	UTILITY VAULT
EQ	EQUIPMENT	VB	VOLLEYBALL
EOT	EDGE OF TILE	VLT	VAULT
EP	EDGE OF PAVEMENT	WC	WALL CORNER
ET	EDGE OF TRUCK	WIF	WROUGHT IRON FENCE
FA	FIRE ALARM	WTR	WATER UTILITY
FD	FOUND		
FF	FINISHED FLOOR		
FH	FIRE HYDRANT		
FL	FLOWLINE		
FSC	FINISH SURFACE CONCRETE		
FST	FINISH SURFACE TILE		
GA	CUT WIRE ANCHOR		
GL	GUTTER LIP		
HB	HOSE BIB		
ICV	IRRIGATION CONTROL VALVE		
INV	INVERT		
L/S	LANDSCAPE		
LT	LIGHT		
MB	MAIL BOX		
MH	MANHOLE		
MX	MARKER X		
MN	MANUAL		
NG	NATURAL GROUND		
P/A	PLANTER AREA		
PG	PLANTER GROUND		
PIL	PILLAR		



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CONTROL TABLE				
POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	2190238.27	6282137.14	1435.50	SET DREMEL X
2	2190177.25	6282330.81	1435.78	SET DREMEL X
4	2190459.41	6282519.72	1433.84	SET DREMEL X
5	2190543.84	6282454.92	1434.25	SET DREMEL X

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TOPOGRAPHIC MAP

**C-2.1**



GRADING CONSTRUCTION NOTES

- PROTECT IN PLACE SPECIFIED ITEM
- ADJUST EXISTING ITEM TO PROPOSED FINISHED GRADE
- REMOVE/RELOCATE SPECIFIED ITEM PER APPROPRIATE CONSULTANTS PLAN
- JOIN PROPOSED SURFACE TO EXISTING SURFACE WITH FLUSH TRANSITION, MATCH GRADE, DOWELING FOR PCC ONLY PER DETAIL "A" ON SHEET C-1.1
- SAWCUT, REMOVE AND DISPOSE OF PCC SURFACE
- CONSTRUCT 4" PCC (505-C-2500) WITH 6X6-W2.9/W2.9 WELDED WIRE MESH OR EQUIVALENTS WITH THICKENED EDGE PER DETAIL "B" ON SHEET C-1.1, OVER 12" SUBGRADE, COMPACTED TO 95% RELATIVE COMPACTION, SCORING PATTERNS COLOR AND FINISH PER ARCHITECTS PLANS AND SPECIFICATIONS
- CONSTRUCT SEAT WALL PER ARCHITECTS PLANS AND SPECIFICATIONS

HORIZONTAL CONTROL TABLE			
Point #	Northing	Easting	Description
3	21905771.00	6282337.29	CONCRETE CORNER
4	2190570.88	6282410.12	WALL CORNER
5	2190552.15	6282388.92	WALL CORNER
6	2190520.36	6282486.21	WALL CORNER
7	2190504.75	6282496.14	WALL CORNER
8	2190257.58	6282355.84	WALL CORNER
9	2190242.50	6282350.67	WALL CORNER
10	2190206.59	6282306.29	WALL CORNER

MATCHLINE - SEE SHEET C-3.2

October 10, 2018 at 10:08am J:\21-148 K&S Shop Structures\Col 3D\PLN - 0101E121\_148-C-03.dwg by Jagan on 8/10/2018



PROJECT No. : 1-51-07		10/10/2018 10:08 AM	
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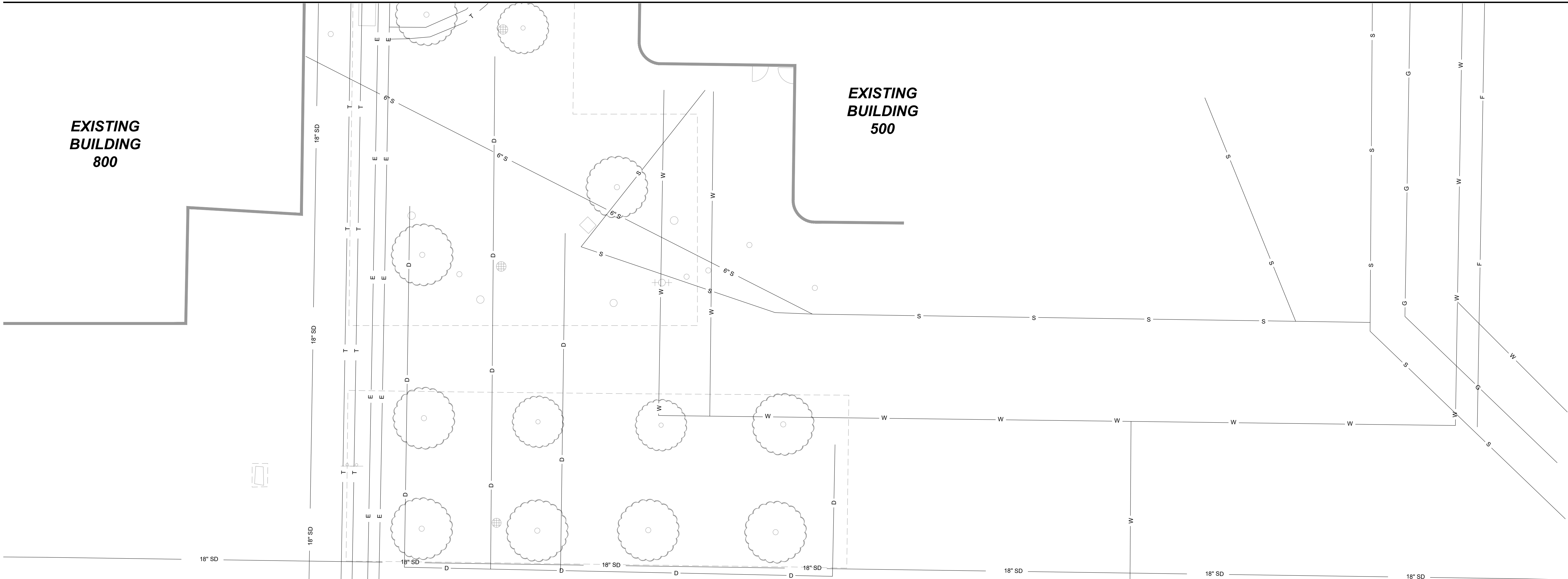
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SHADE STRUCTURES AT  
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PRECISE GRADING PLAN

C-3.1





GRADING CONSTRUCTION NOTES

- PROTECT IN PLACE SPECIFIED ITEM
- ADJUST EXISTING ITEM TO PROPOSED FINISHED GRADE
- REMOVE/RELOCATE SPECIFIED ITEM PER APPROPRIATE CONSULTANTS PLAN
- JOIN PROPOSED SURFACE TO EXISTING SURFACE WITH FLUSH TRANSITION, MATCH GRADE, DOWELING FOR PCC ONLY PER DETAIL "A" ON SHEET C-1.1
- SAWCUT, REMOVE AND DISPOSE OF PCC SURFACE
- CONSTRUCT 4" PCC (520-C-2500) WITH 6X6-W2.9 WELDED WIRE MESH OR EQUIVALENTS WITH THICKENED EDGE PER DETAIL "B" ON SHEET C-1.1, OVER 12" SUBGRADE, COMPACTED TO 95% RELATIVE COMPACTION, SCORING PATTERNS COLOR AND FINISH PER ARCHITECTS PLANS AND SPECIFICATIONS
- CONSTRUCT SEAT WALL PER ARCHITECTS PLANS AND SPECIFICATIONS

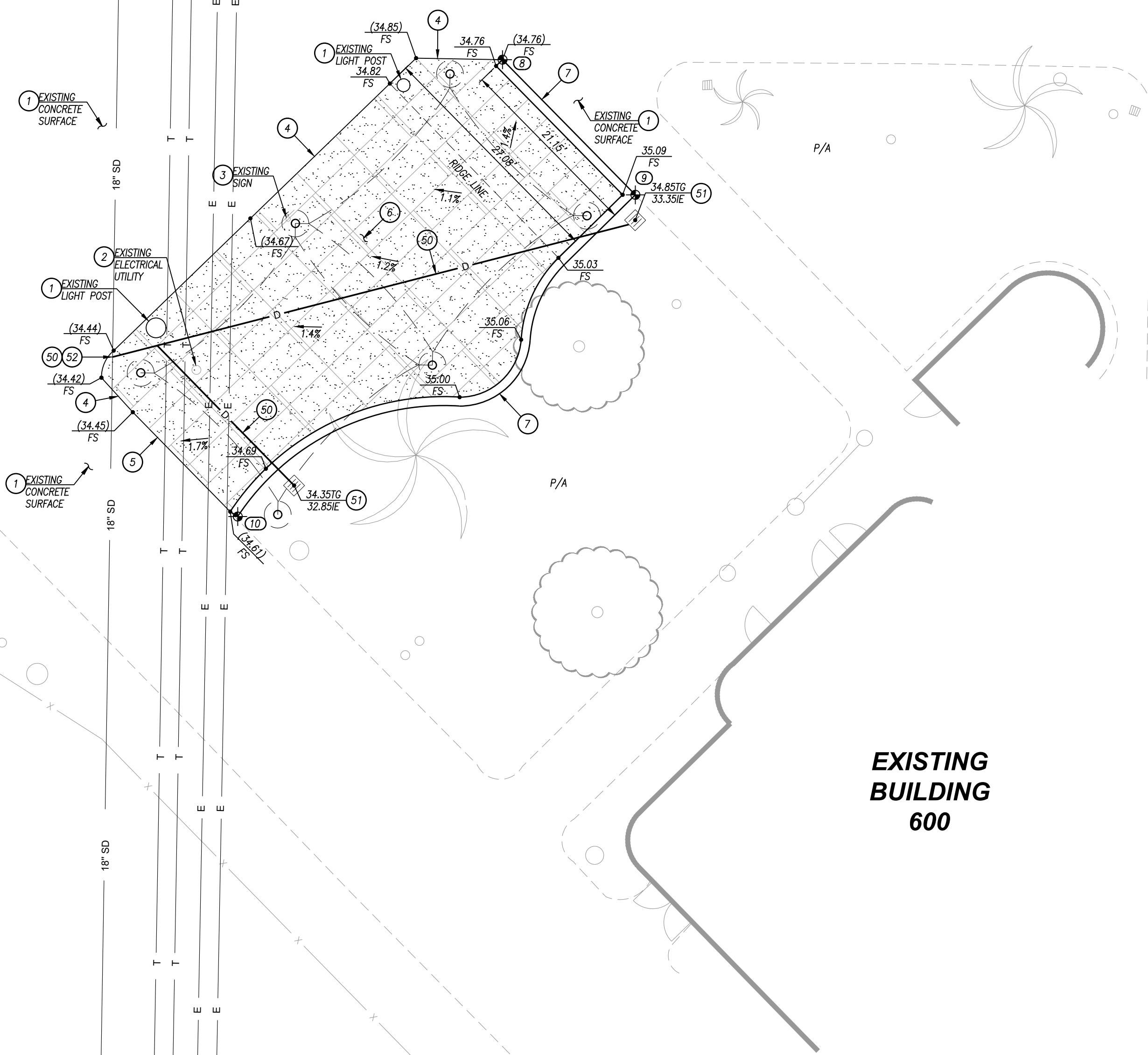
UTILITY CONSTRUCTION NOTES

STORM DRAIN

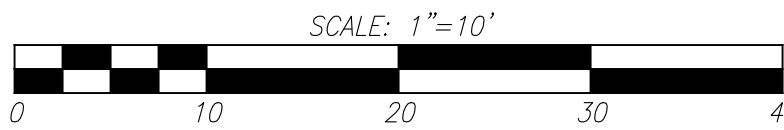
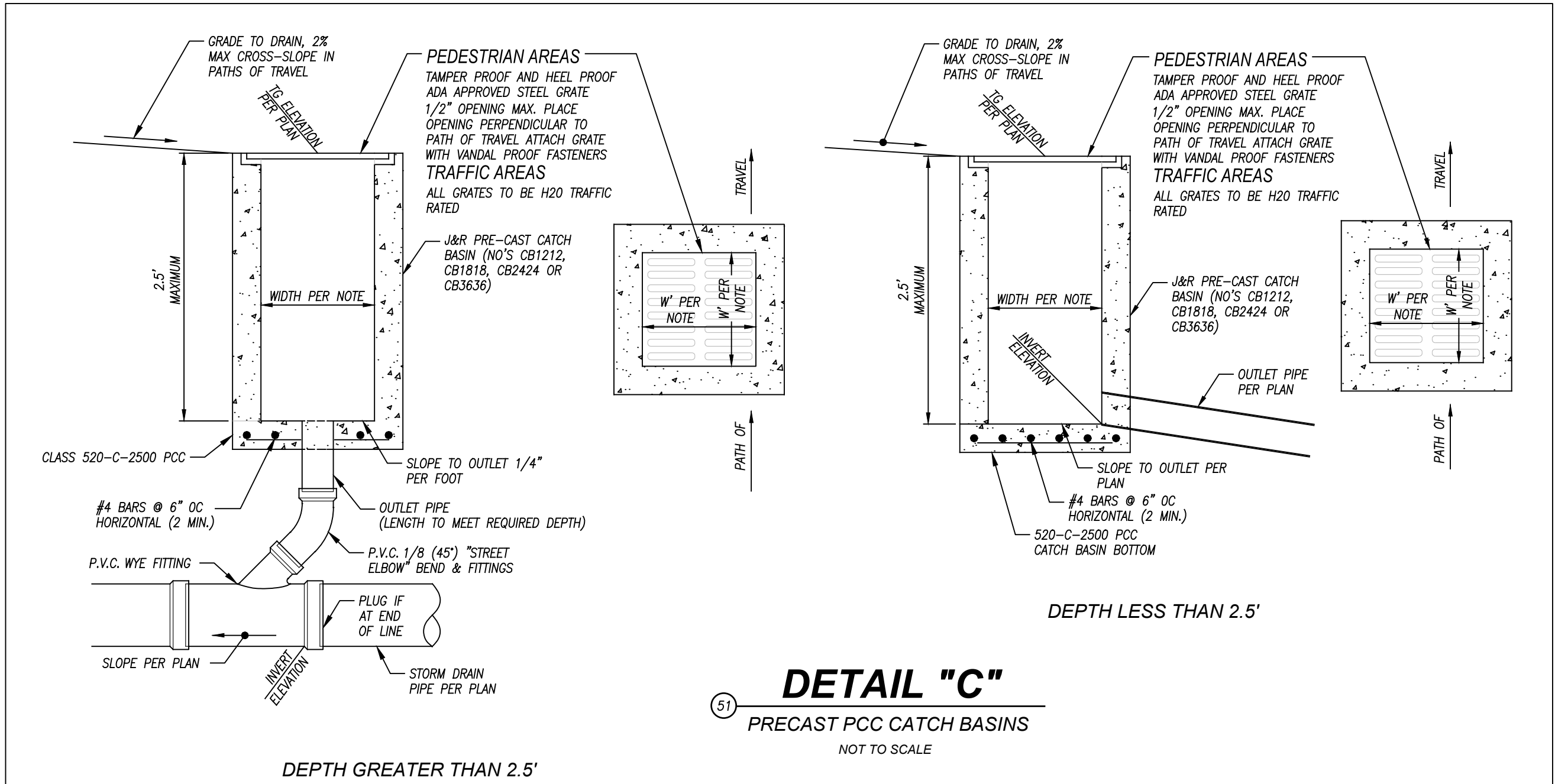
- FURNISH & INSTALL 6" SDR 35 PVC STORM DRAIN PIPE
- FURNISH & INSTALL 12" X 12" PREFABRICATED CATCH BASIN (A/R CB1212 OR APPROVED EQUAL) PER DETAIL "C" ON SHEET C-3.2
- CONNECT TO EXISTING STORM DRAIN

HORIZONTAL CONTROL TABLE

Point #	Northing	Easting	Description
3	2190577.00	6282337.29	CONCRETE CORNER
4	2190570.88	6282410.12	WALL CORNER
5	2190552.15	6282388.92	WALL CORNER
6	2190520.36	6282486.21	WALL CORNER
7	2190504.75	6282486.14	WALL CORNER
8	2190257.58	6282335.84	WALL CORNER
9	2190242.50	6282350.67	WALL CORNER
10	2190206.59	6282306.29	WALL CORNER



EXISTING  
BUILDING  
600



FILE NUMBER: 33-C3  
IDENTIFICATION STAMP  
DIVISION OF THE STATE ARCHITECT  
APP. NO. 04 - 117629 INCR : 0  
AC DH FLS EA SS VJN  
DATE 11/07/2018



**EPIC ENGINEERS**  
CIVIL ENGINEERING | LAND SURVEYING | PLANNING | STORMWATER MANAGEMENT  
101 E. RIVINGTON BOULEVARD  
SUITE 144  
RIVERSIDE, CA 92503  
TEL: 951.792.2849  
FAX: 951.792.2849  
www.epicinc.com

**RUHNAU  
CLARKE  
ARCHITECTS**

**SHADE STRUCTURES AT  
MT. SAN JACINTO COLLEGE - MENIFEE VALLEY CAMPUS**  
1499 NORTH STATE STREET, SAN JACINTO, CA 92583  
MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT







NO PARKING - FIRE LANE - CVC 22500.1

AT CURB  
(WHERE OCCURS)

PAINT RED (TWO COATS)  
ENTIRE CURB

2" MIN. HIGH WHITE LETTERS  
(TWO COATS) @ 30" O.C.

NO PARKING - FIRE LANE - CVC 22500.1

AT PAVING

8" MIN. RED STRIPE  
(TWO COATS)

AC OR CONC.  
PAVING

FIRE LANE STRIPING.DWG

FIRE LANE STRIPING

1"=1'-0"

26

NOT USED

27

NOT USED

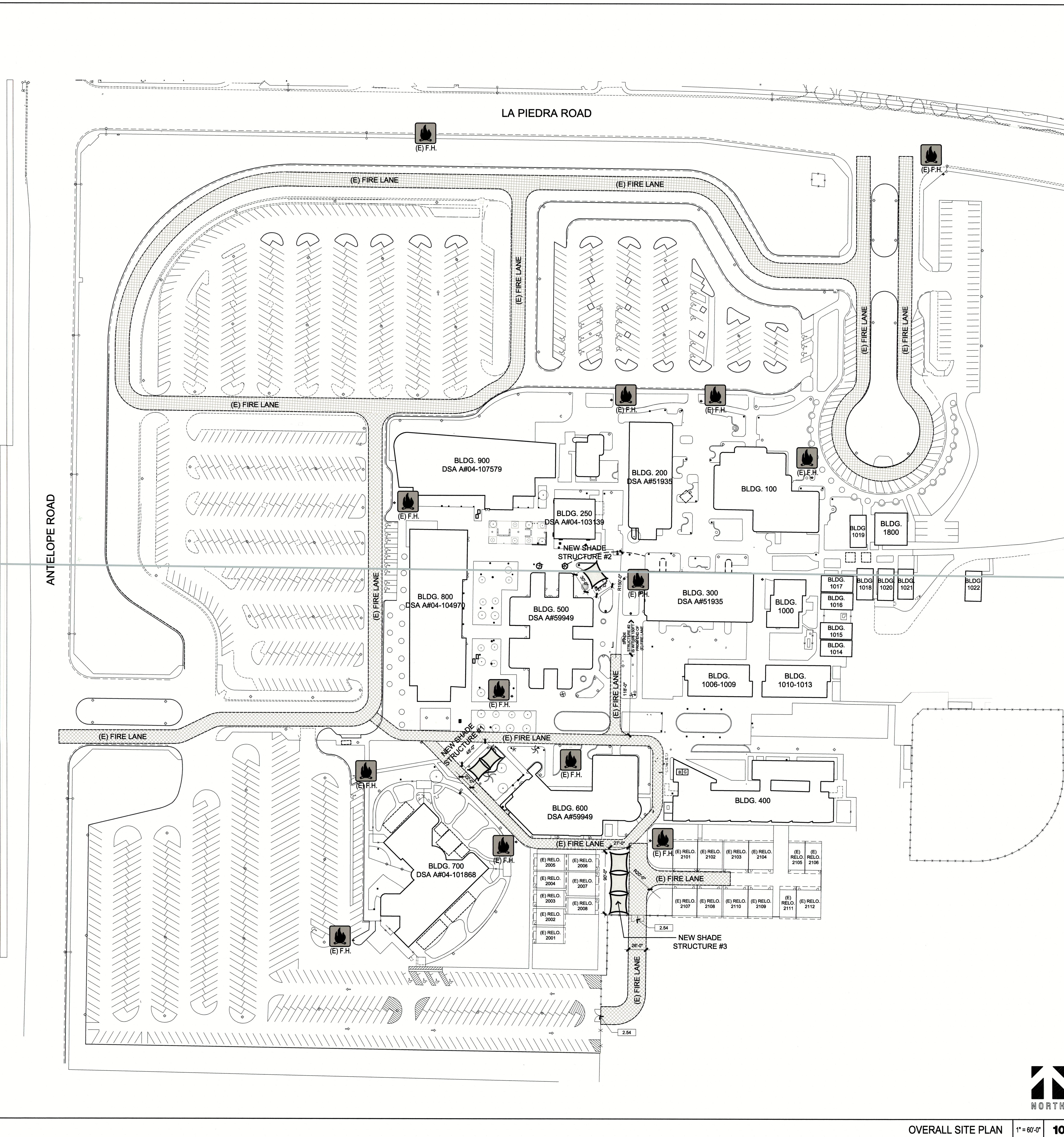
28

NOT USED

29

NOT USED

30



DSA

810

LOCAL FIRE AUTHORITY REVIEW

To facilitate the Division of the State Architect's (DSA) approval of the Fire/Life Safety portion of a project, DSA requires Local Fire Authority (LFA) review of certain elements as identified in this form. Use of this form is mandatory for projects that add square footage to a campus or if any item on this form is relevant to the project. For additional information, see DSA-810 Instructions and DSA Policy (2021).

PROJECT INFORMATION

School District/Owner: MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT

Project Name/School: SHADE STRUCTURES AT MT. SAN JACINTO COLLEGE - MENIFEE VALLEY CAMPUS

Project Address: 28237 LA PIEDRA RD, MENIFEE, CA 92584

LOCAL FIRE AUTHORITY (LFA)

LFA Agency Name: RIVERSIDE COUNTY FIRE DEPARTMENT

LFA Reviewer Name: Paul R. Villalobos

Title: Fire Marshal

Email: paul.villalobos@rcfd.org

Telephone Number: 951-723-3765

I have reviewed and responded to the applicable items for this project as listed below.

Note: Only sign this form when it is stamped onto the site plan. A loose form is not acceptable to DSA.

LFA Reviewer's Signature: [Signature]

Date: 8-2-18

Review Key: "Y" = Complies with LFA requirements "N" = No approved (complete Section B)

"NA" = Not applicable to the project "NR" = LFA elects not to review

Description	Y	N	NA	NR
1 Where an elevator does not meet medical emergency service cab size, per the California Building Code (CBC), use of stairways for emergency rescue and patient transport is acceptable.				X
2 Access roads, fire lane markings, pavers and gate entrances are in accordance with Title 19, California Code of Regulations and the California Fire Code, Chapter 5.	X			
3 Fire hydrant location and distribution complies with the California Fire Code (or see # 4).			X	
4 Fire hydrant location and distribution complies with NFPA 1142, "Alternate Means." If "NR" is checked, DSA can only approve on-site water storage as an alternate. The signature of the school district official is required to acknowledge the use of alternate means.				X
Signature of School District Official: _____ Date: _____				
Print the School District Official's Name: _____				
5 The location(s) of the proposed post indicator valve and fire department connection meet the requirements of this jurisdiction.	X			
6 The location(s) of the detector check valve assembly meet the requirements of this jurisdiction.	X			
7 Is the project located in a hazard severity zone area? (CBC, Chapter 7A, Section 701A.) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				
Check type if "Yes": <input type="checkbox"/> Moderate <input type="checkbox"/> High <input type="checkbox"/> Very High <input type="checkbox"/> WFA (if one of these boxes is checked, the project design must meet the requirements of Chapter 7A.)				
COMMENTS (note deficiencies):				

DSA-810 (rev. 05/10/14) DIVISION OF THE STATE ARCHITECT DEPARTMENT OF GENERAL SERVICES STATE OF CALIFORNIA Page 1 of 1

LOCAL FIRE AUTHORITY REVIEW (DSA-810)

INDICATES EXISTING 20'-0" MIN. WIDE FIRE TRUCK ACCESS LANE WITH NOT LESS THAN 13'-6" VERTICAL CLEARANCE PER 2016 C.F.C. 503.2.1. CONTRACTOR TO VERIFY THAT EXISTING LANE HAS ALL REQUIRED PAINTING OF CURBS AND REQUIRED SIGNAGE PER LOCAL FIRE AUTHORITY.

INDICATES MINIMUM TURNING RADIUS FOR FIRE TRUCK ACCESS LANE

EXISTING FIRE HYDRANT

NEW SHADE STRUCTURE

NOTE: FOR MORE INFORMATION ON FIRE LANE STRIPING, REFER TO DETAIL 26 AS-1.2

FIRE DEPT. ACCESS LEGEND

SCOPE OF WORK:  
NEW CONSTRUCTION OF (3) SHADE STRUCTURES  
• SHADE STRUCTURE #1 = 22'-0" x 48'-0" / 1,056 SQ.FT. / 15'-0" H  
• SHADE STRUCTURE #2 = 27'-0" x 30'-0" / 810 SQ.FT. / 15'-0" H  
• SHADE STRUCTURE #3 = 27'-0" x 80'-0" / 2,160 SQ.FT. / 15'-0" H

NOTES:  
ASSESSORS' PARCEL NUMBER (APN) = 364-070-031, 364-070-032  
CONSTRUCTION TYPE = V-B  
OCCUPANCY TYPE = A-3

SCOPE OF WORK & NOTES

2 SITE WORK  
2.54 EXISTING KNOX BOX TO REMAIN.

KEYNOTES

FILE NUMBER: 33-C3  
IDENTIFICATION STAMP  
DIVISION OF THE STATE ARCHITECT  
APP. NO: 04 - 117629 INCR: 0  
AC\_DH\_FLS\_EA\_SS\_VJN  
DATE 11/07/2018

CITY OF MENIFEE  
APPROVAL:  
RIVERSIDE COUNTY FIRE DEPARTMENT  
OFFICE OF THE FIRE MARSHAL  
By: [Signature] 8-2-18  
THE APPROVAL OF PLANS AND SPECIFICATIONS DOES NOT PERMIT THE VIOLATION, DELETION, OMISSION, OR FAULTY INSTALLATION OF ANY REQUIREMENTS OF TITLE 24 OR ANY LOCAL ORDINANCES. CONSTRUCTION SHALL REMAIN ACCESSIBLE AND EXPOSED FOR INSPECTION PURPOSES UNTIL APPROVED BY THE FIRE DEPARTMENT.

RUHNAU CLARKE ARCHITECTS

SHADE STRUCTURES AT  
MT. SAN JACINTO COLLEGE - MENIFEE VALLEY CAMPUS  
28237 LA PIEDRA ROAD, MENIFEE, CA 92584  
MT. SAN JACINTO COMMUNITY COLLEGE DISTRICT

OVERALL SITE PLAN 1"=60'-0" 10

RUHNAUCLARKE.COM

SITE PLAN  
LOCAL FIRE AUTHORITY APPROVAL

AS-1.2

PROJECT No. : 1-51-07  
7/30/2018 10:36 AM

J:\MSanJacinto\CCD\_5115107\_SanJacinto&MenifeeCampuses\_ShadeStructures\DESIGN\15107MV\_AS-1.2\_LFA SITE PLAN.dwg

DRAWN BY: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_

ISSUE No. DATE DESCRIPTION

REVISION No. DATE DESCRIPTION

ISSUE No. DATE DESCRIPTION

REVISION No. DATE DESCRIPTION

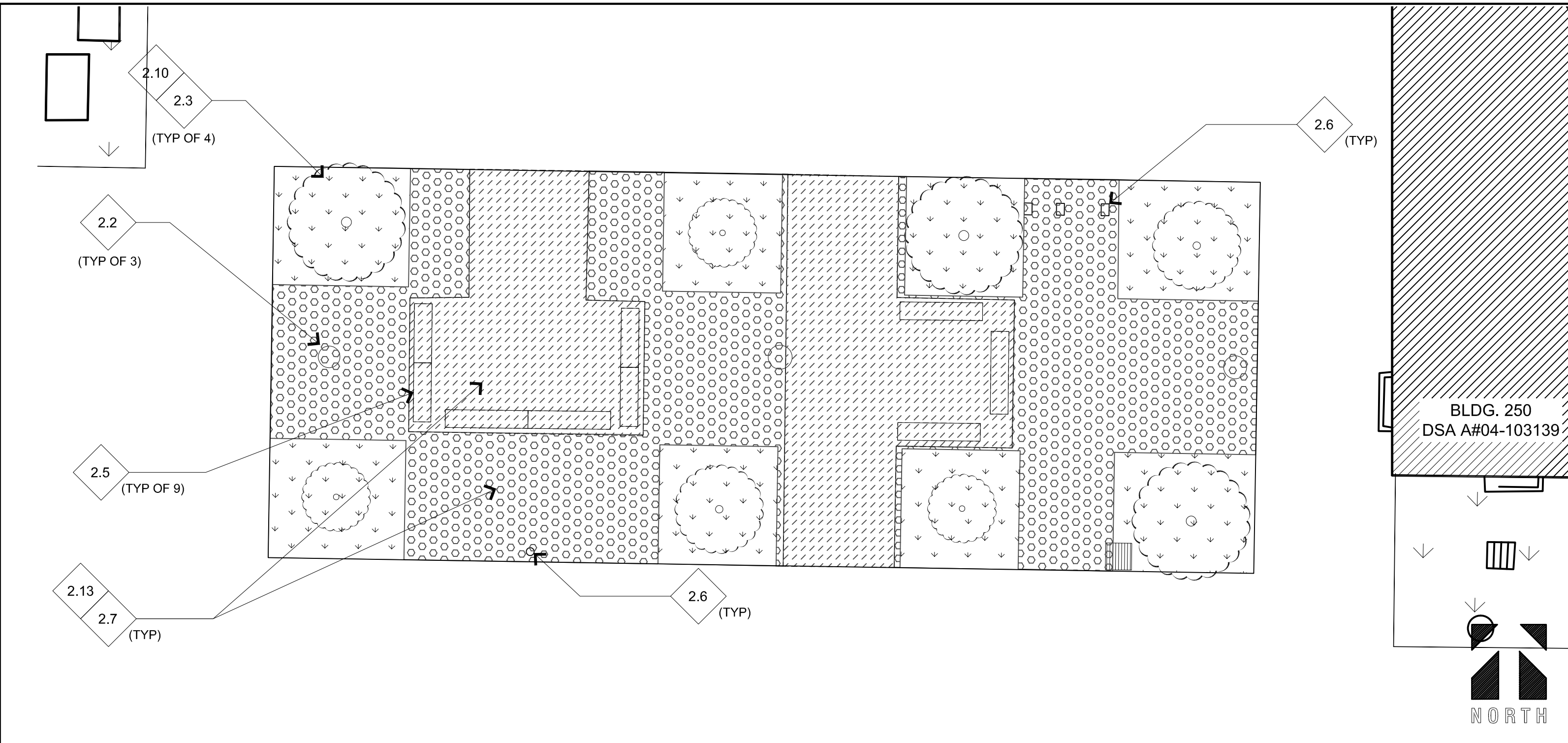
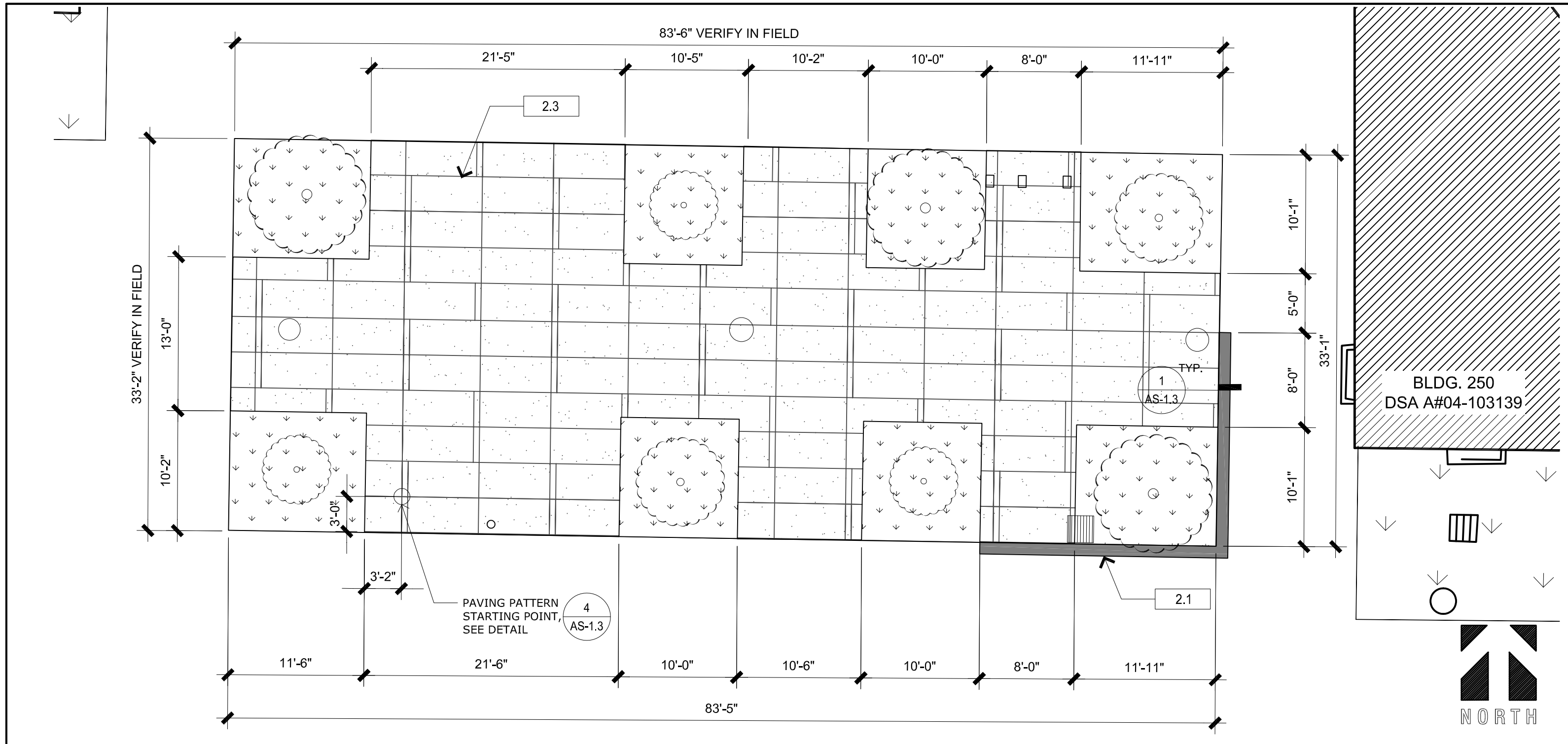
ISSUE No. DATE DESCRIPTION

REVISION No. DATE DESCRIPTION

3775 TENTH STREET, RIVERSIDE CALIFORNIA 92501 (951) 504-4644 / 5751 PALMER WAY, SUITE C, CARLSBAD CALIFORNIA 92008 (760) 439-5809

1-51-07





DEMOLITION KEYNOTES

2 SITE WORK

2.2 (E) LIGHT POLE TO REMAIN

2.3 (E) TREE TO REMAIN, TRIM AS REQUIRED TO ACCOMMODATE NEW SHADE STRUCTURE

2.4 (E) TREE TO BE REMOVED

2.5 (E) CONCRETE BENCH TO BE REMOVED

2.6 REMOVE AND RELOCATE EXISTING IRRIGATION AWAY FROM THE AREA OF NEW CONSTRUCTION, REWORK AND INSTALL IRRIGATION AS REQUIRED TO MAINTAIN EXISTING SYSTEM OPERATIONAL.

2.7 (E) TURF/DECOMPOSED GRANITE / LANDSCAPE TO BE REMOVED.

2.8 (E) CONCRETE SEAT TO REMAIN

2.10 (E) TURF TO REMAIN

2.11 (E) LIGHT POLE WITH CONCRETE BASE TO REMAIN

2.12 REMOVE EXISTING PAVING/LANDSCAPE AS REQUIRED TO INCLUDE NEW WORK, PATCH/REPAIR SURROUNDING AREAS AS NEEDED.

2.13 CONTRACTOR TO EXERCISE EXTREME CAUTION DURING DEMO, & EXCAVATION, EXISTING UNDERGROUND UTILITIES ARE LOCATED UNDER THIS AREA AT UNKNOWN DEPTH.

NEW CONSTRUCTION KEYNOTES

2 SITE WORK

2.1 NEW CONCRETE SEAT WALL.

2.2 NEW SHADING STRUCTURE, SEE PC DRAWINGS

2.3 NEW PAVING, LOCATE STARTING POINT AND LAYOUT PER DETAIL 4AS-1.3.

2.4 (E) PAVING FROM A#04-115905, TO REMAIN, PROTECT IN PLACE.

KEYNOTES

1

(E) BUILDING

(N) SHADE STRUCTURE OR (N) SEATING

(E) TURF / LANDSCAPE / DECOMPOSED GRANITE TO REMAIN

(E) ASPHALT PAVING

(E) DECOMPOSED GRANITE

(E) CONCRETE PAVING TO REMAIN, U.N.O.

(E) CONCRETE PAVING TO BE REMOVED

(E) TURF / LANDSCAPE / DECOMPOSED GRANITE TO BE REMOVED

(E) CHAINLINK FENCE TO REMAIN

EXISTING TREE/SHRUBS TO BE REMOVED

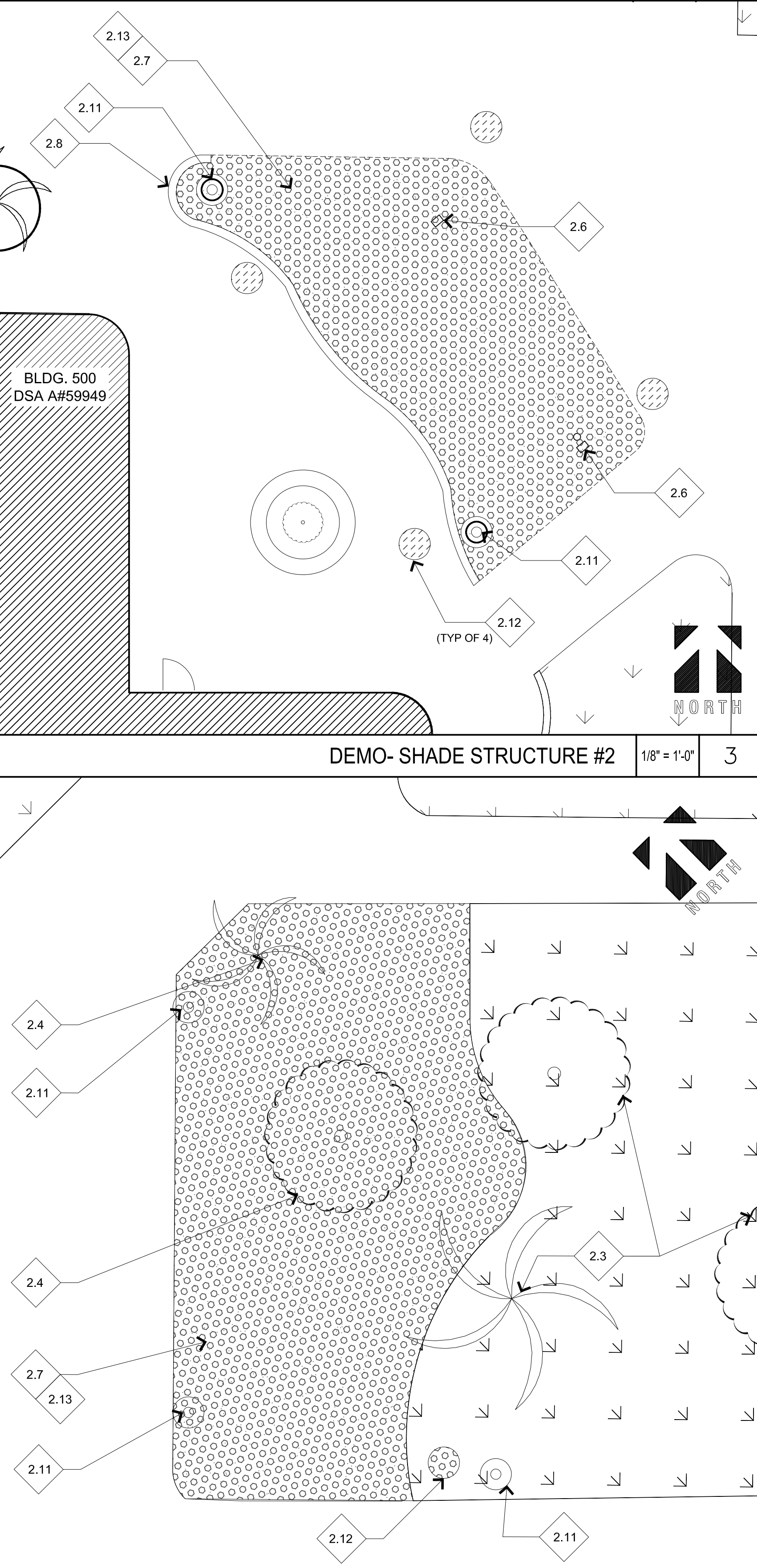
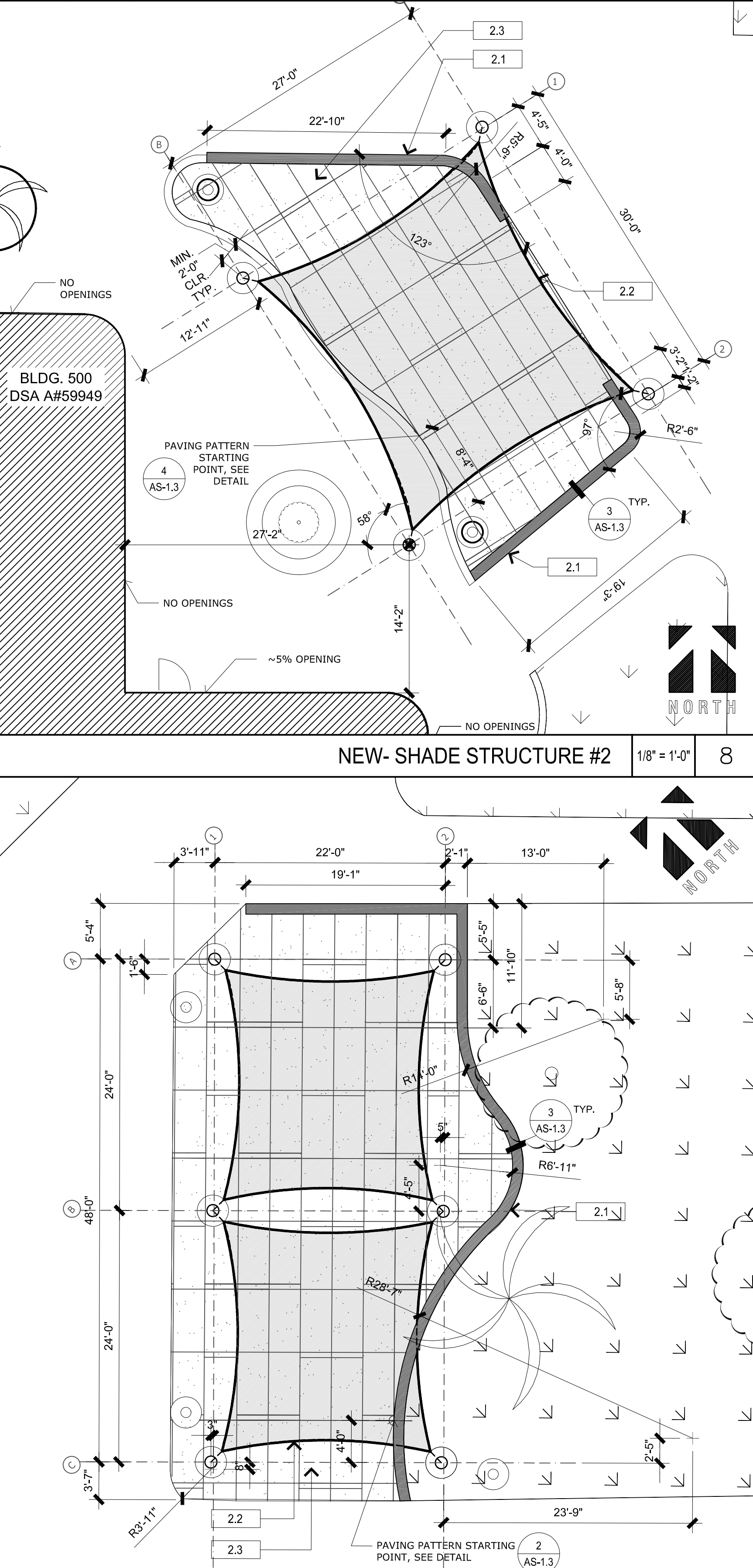
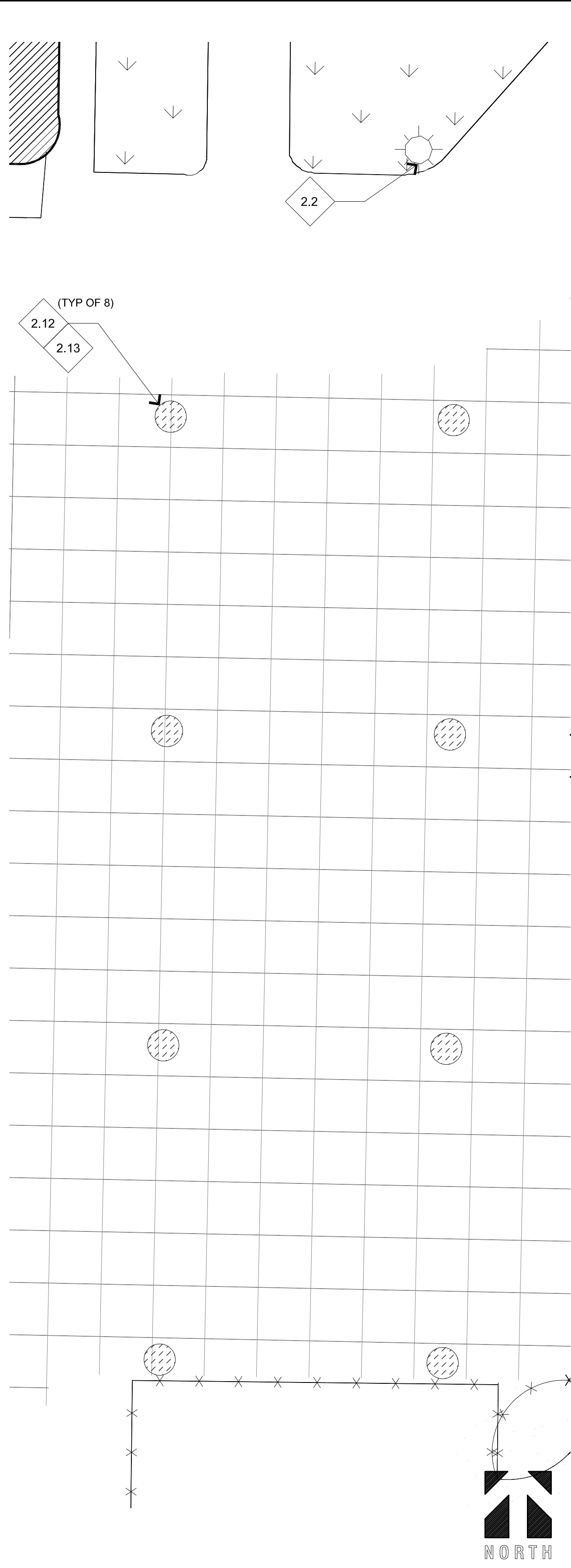
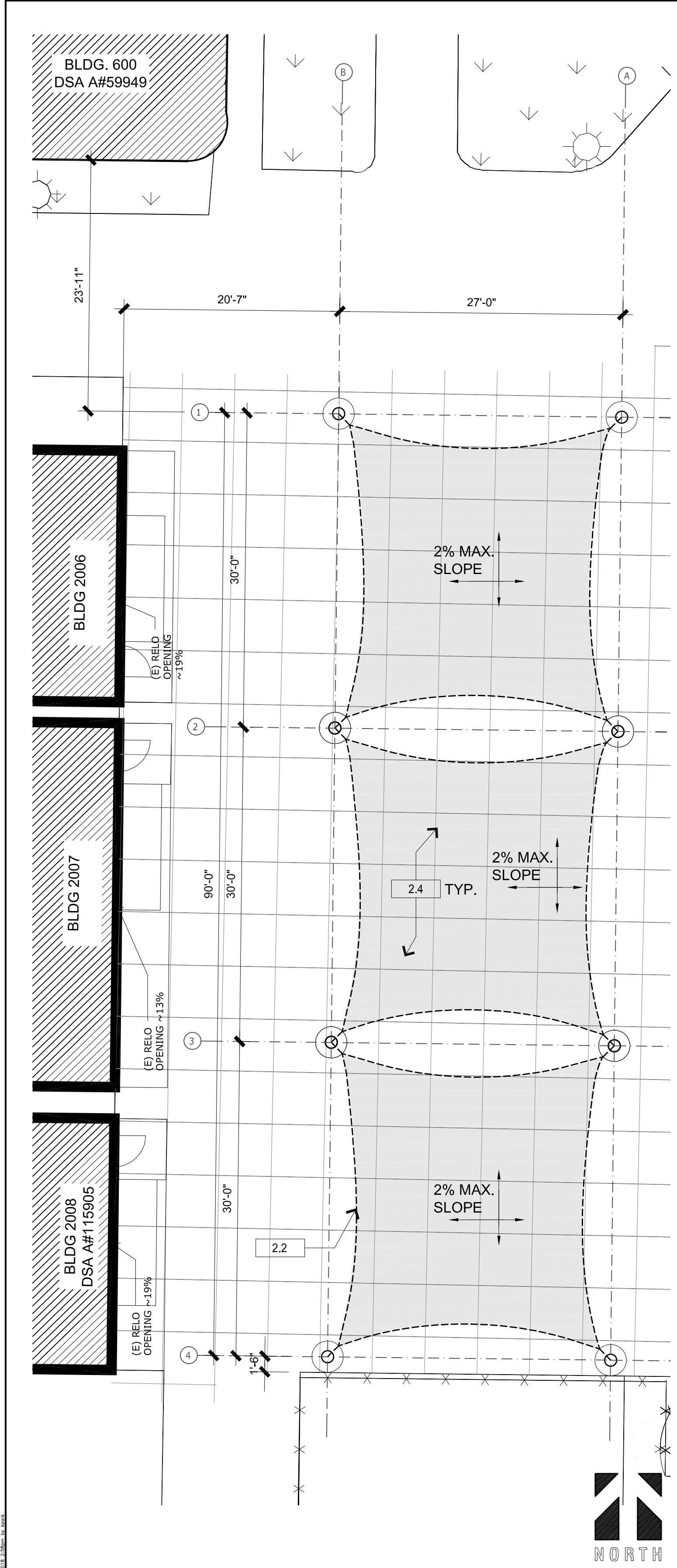
(E) TREE/SHRUBS TO REMAIN, PROTECT IN-PLACE

(N) CONCRETE PAVING PER CIVIL DWGS. FOR PAVING AND JOINTS SEE ARCH. DETAILS

27 AS-1.1 28 AS-1.1 4 AS-1.3

SITE LEGEND

2



RAISED CONCRETE SEAT WALL 3/4\"=1'-0\" 3

25'-0\" TYP. PATTERN CELL

JOINTS SEE DETAIL

ACCENT COLOR 1, TBD BY ARCHITECT

MEDIUM BROOM CONCRETE FINISH

ACCENT COLOR 2, TBD BY ARCHITECT

CELL PATTERN TO BE REPEATED:

1 CELL 1 CELL

1/2 CELL 1 CELL 1 CELL

STARTING POINT

CONCRETE PAVING 1/8\"=1'-0\" 4

FILE NUMBER: 33-C3

IDENTIFICATION STAMP

DIVISION OF THE STATE ARCHITECT

APP. NO: 04 - 117629 INCR : 0

AC\_DH\_FLS\_EA\_SS\_V\_N

DATE 11/07/2018

REGISTERED ARCHITECT

STATE OF CALIFORNIA

11-3349





# SHADE STRUCTURE

## DSA P.C. 04-113245

DRAWING DESCRIPTION	STRUCTURE TYPE	MAX SIZE	MODEL NUMBER	DRAWING NUMBER
<input checked="" type="checkbox"/> P.C. TITLE SHEET	WITH PARTIAL 103 FORMS			P.C. T-1.0
<input type="checkbox"/> P.C. TITLE SHEET	ADDITIONAL 103 FORMS			P.C. T-2.0
<input type="checkbox"/> PRODUCT INFORMATION	HIP	20 X 30	DSA4012030-13	35735-1.2
<input type="checkbox"/> PRODUCT INFORMATION	HIP	30 X 30	DSA4013030-13	35735-2.2
<input type="checkbox"/> PRODUCT INFORMATION	HIP	30 X 40	DSA4013040-13	35735-3.2
<input type="checkbox"/> PRODUCT INFORMATION	HIP (20# SNOW LOAD)	20 X 30	DSA401S2030-13	37726-5.2
<input type="checkbox"/> PRODUCT INFORMATION	SINGLE POST PYRAMID	14 X 14	DSA1031414-13	36324-1.2
<input type="checkbox"/> PRODUCT INFORMATION	MARINER PEAK	30 X 30	DSA4073030-13	36324-2.2
<input type="checkbox"/> PRODUCT INFORMATION	MARINER PEAK JOINED	30 X 30	DSA407J3030-13	37229-1.2
<input type="checkbox"/> PRODUCT INFORMATION	MARINER PEAK QUAD	60 X 60	DSA407Q6060-13	37229-2.2
<input type="checkbox"/> PRODUCT INFORMATION	FULL CANTILEVER HIP SINGLE	20 X 30	DSA2022030-13	37726-1.2
<input type="checkbox"/> PRODUCT INFORMATION	FULL CANTILEVER HIP JOINED	20 X 30	DSA3022030-13	37726-2.2
<input type="checkbox"/> PRODUCT INFORMATION	TRI TRUSS HIP SINGLE WIDE	20 X 30	DSA2062030-13	37726-3.2
<input type="checkbox"/> PRODUCT INFORMATION	TRI TRUSS HIP SINGLE WIDE JOINED	20 X 30	DSA3062030-13	37726-4.2
<input type="checkbox"/> PRODUCT INFORMATION	TENSION SAILS	30 X 60	DSA30730-13	36377-1.2
<input type="checkbox"/> PRODUCT INFORMATION	TENSION SAILS	20 X 60	DSA4182020-13	36377-2.2
<input checked="" type="checkbox"/> PRODUCT INFORMATION	TENSION SAILS	30 X 90	DSA4183030-13	36377-3.2

### P.C. DRAWING SHEET INDEX

- SITE SPECIFIC APPLICATION SITE PLAN SHALL INCLUDE:
- ACTUAL DIMENSIONS OF SHADE STRUCTURES.
  - DIMENSIONS FROM ADJACENT STRUCTURES AND PROXIMITY OF ASSUMED OR ACTUAL PROPERTY LINES.
  - ACTUAL SHADE AREA (SQ. FT.) OCCUPANCY TYPE (A3), AND TYPE OF CONSTRUCTION (V-B).
  - INDICATE OCCUPANT LOADS BASED ON AN OCCUPANT LOAD FACTOR OF 15 SQ. FT. PER OCCUPANT.
  - INDICATE LOCATIONS OF FIRE EXTINGUISHER WITHIN 75 FEET.
  - SHOW LOCATIONS OF AUDIBLE FIRE ALARM.
  - INDICATE DIMENSIONS FROM THE ROOF TO THE HIGHER STRUCTURE OR TERRAIN FEATURE. MINIMUM DIMENSION OF 20' FOR SNOW LOAD MODEL (ASCE 7-10).
  - ACTUAL SITE ELEVATION (FT.) TO DETERMINE SITE OCCURS AT OR BELOW THE UPPER ELEVATION LIMIT FOR THE GROUND SNOW LOAD SHOWN IN ASCE 7-10 (FOR SNOW LOAD MODEL).
  - FOR RECESSED BASE PLATE (RBP) OPTION: ARCHITECT/ENGINEER OF RECORD TO SPECIFY THE LOWEST ANTICIPATED SERVICE TEMPERATURE (LAST), AS DEFINED IN AISI 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 (STRUCTURAL STEEL NOTE #14).
  - COMPLETE SCOPE OF WORK INCLUDING THE SHADE STRUCTURE MODEL NUMBER, P.C. NUMBER, AND SPECIFIC SIZE OF SHADE STRUCTURE.
  - ALL SADDLES, CLAMPS AND FITTINGS SHALL CONFORM TO THE GUIDELINES AS SPECIFIED IN APPENDICES 'A', 'B' & 'C' RESPECTIVELY IN ASCE 19-10, 'STRUCTURAL APPLICATIONS OF STEEL CABLES FOR BUILDINGS'.

MODEL: DSA4012030-13 STRUCTURE: 20'X30'X12" (MAX) HIP UNIT MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY = 40	MODEL: DSA4013030-13 STRUCTURE: 30'X30'X12" HIP UNIT MAX. AREA - 900 SQ. FT. MAX. OCCUPANCY = 60	MODEL: DSA2022030-13 STRUCTURE: 20'X30'X12" FULL CANTI HIP SINGLE MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY = 40	MODEL: DSA2062030-13 STRUCTURE: 20'X30'X12" TRI TRUSS HIP SINGLE WIDE MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY = 40	MODEL: DSA3022030-13 STRUCTURE: 20'X30'X12" TRI TRUSS HIP SINGLE WIDE JOINED MAX. AREA - 136 SQ. FT. MAX. OCCUPANCY = 15	MODEL: DSA3062030-13 STRUCTURE: 20'X30'X12" TRI TRUSS HIP SINGLE WIDE JOINED MAX. AREA - 136 SQ. FT. MAX. OCCUPANCY = 15	MODEL: DSA4073030-13 STRUCTURE: 30'X30'X12" MARINER PEAK JOINED MAX. AREA - 1800 SQ. FT. MAX. OCCUPANCY = 120	MODEL: DSA407J3030-13 STRUCTURE: 30'X30'X12" MARINER PEAK JOINED MAX. AREA - 1800 SQ. FT. MAX. OCCUPANCY = 120
MODEL: DSA4012030-13 STRUCTURE: 20'X30'X14" (MAX) MARINER PEAK UNIT MAX. AREA - 600 SQ. FT. MAX. OCCUPANCY = 40	MODEL: DSA4013030-13 STRUCTURE: 30'X30'X14" (MAX) MARINER PEAK UNIT MAX. AREA - 900 SQ. FT. MAX. OCCUPANCY = 60	MODEL: DSA2022030-13 STRUCTURE: 20'X30'X14" (MAX) CANTI HIP JOINED MAX. AREA - 1200 SQ. FT. MAX. OCCUPANCY = 80	MODEL: DSA2062030-13 STRUCTURE: 20'X30'X14" (MAX) TRI TRUSS HIP JOINED MAX. AREA - 1200 SQ. FT. MAX. OCCUPANCY = 80	MODEL: DSA3022030-13 STRUCTURE: 20'X30'X14" (MAX) TRI TRUSS SAILS JOINED MAX. AREA - 480 SQ. FT./SAIL MAX. OCCUPANCY = 60	MODEL: DSA3062030-13 STRUCTURE: 20'X30'X14" (MAX) TRI TRUSS SAILS JOINED MAX. AREA - 480 SQ. FT./SAIL MAX. OCCUPANCY = 60	MODEL: DSA4073030-13 STRUCTURE: 30'X30'X14" (MAX) TENSION SAILS JOINED MAX. AREA - 540 SQ. FT./SAIL MAX. OCCUPANCY = 120	MODEL: DSA407J3030-13 STRUCTURE: 30'X30'X14" (MAX) TENSION SAILS JOINED MAX. AREA - 540 SQ. FT./SAIL MAX. OCCUPANCY = 120

HIGGINSON + CARTOZIAN ARCHITECTS, INC.  
1455 WEST PARK AVENUE  
REDLANDS, CALIFORNIA 92373  
Ph. (909) 793-3100 Fax: (909) 793-3140  
website: hcarhinc.com

ARCHITECT

ENGINEER

- ### GENERAL NOTES
- SITE SPECIFIC APPLICATION TITLE SHEET SHALL INCLUDE:
- APPLICABLE CODES
- 2013 BUILDING STANDARDS ADMINISTRATIVE CODE (CBC), PART 1, TITLE 24 C.C.R. \*
  - 2013 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
  - (2012 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
  - (2011 NATIONAL ELECTRICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24 C.C.R.
  - (2012 UNIFORM MECHANICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
  - (2012 UNIFORM PLUMBING CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R. \*
  - 2013 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
  - (2012 INTERNATIONAL FIRE CODE AND 2013 CALIFORNIA AMENDMENTS)
  - 2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
  - 2013 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
  - TITLE 19 C.C.R., PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS
  - 2007 ASME A17.1 (W/ A17.1a/CSA 444-08 ADDENDA) SAFETY CODE FOR ELEVATORS AND ESCALATORS
- PARTIAL LIST OF APPLICABLE STANDARDS
- |          |   |              |
|----------|---|--------------|
| NFPA 13  | AUTOMATIC SPRINKLER SYSTEMS             | 2013 EDITION |
| NFPA 14  | STANDPIPE SYSTEMS                       | 2013 EDITION |
| NFPA 17  | DRY CHEMICAL EXTINGUISHING SYSTEMS      | 2013 EDITION |
| NFPA 17A | WET CHEMICAL SYSTEMS                    | 2013 EDITION |
| NFPA 20  | STATIONARY PUMPS                        | 2013 EDITION |
| NFPA 22  | WATER TANKS FOR PRIVATE FIRE PROTECTION | 2013 EDITION |
| NFPA 24  | PRIVATE FIRE MAINS                      | 2013 EDITION |
| NFPA 72  | NATIONAL FIRE ALARM CODE                | 2013 EDITION |
- (NOTE: SEE UL STANDARD 1971 FOR "VISUAL DEVICES")
- |           |   |              |
|-----------|---|--------------|
| NFPA 80   | FIRE DOOR AND OTHER OPENINGS PROTECTIVES  | 2013 EDITION |
| NFPA 92   | STANDARD FOR SMOKE CONTROL SYSTEMS  | 2012 EDITION |
| NFPA 253  | CRITICAL RADIANT FLUX OF FLOOR COVERING SYSTEMS                                       | 2006 EDITION |
| NFPA 2001 | CLEAN AGENT FIRE EXTINGUISHING SYSTEMS  | 2012 EDITION |
| ICC 300   | STANDARDS ON BLEACHERS, FOLDING AND TELESCOPING SEATING, AND GRAND STANDS             | 2005 EDITION |
| UL 300    | FIRE TESTING OF FIRE EXTINGUISHING SYSTEMS FOR PROTECTION OF RESTAURANT COOKING AREAS | 2005 EDITION |
| UL 464    | AUDIBLE SIGNAL APPLIANCES   | 2003 EDITION |
| UL521     | HEAT DETECTORS FOR FIRE PROTECTIVE SIGNALING SYSTEMS                                  | 1999 EDITION |
- REFERENCE CODE SECTION FOR NFPA STANDARDS-2013 CBC (SFM) CHAPTER 35. SEE CHAPTER 35 FOR STATE OF CALIFORNIA AMENDMENTS TO NFPA STANDARDS
- \*ALL PARTS OF THE 2013 CALIFORNIA BUILDING CODE BECOMES EFFECTIVE JANUARY 1, 2013 EXCEPT THE EFFECTIVE DATE FOR THE USE OF THE 2013 BUILDING ENERGY EFFICIENCY STANDARDS (TITLE 24, PART 1, CHAPTER 10 AND PART 6, AND AFFECTED PROVISIONS IN PART 11 CAL. GREEN BUILDING STANDARDS CODE) IS JULY 1, 2014 AND THE EFFECTIVE DATE FOR CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 IS FEBRUARY 28, 2013

Page 1 of 4

DSA-103 rev 10/2013

INCREMENT #

DSA File No.: \_\_\_\_\_

Application No.: \_\_\_\_\_

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

Revised: \_\_\_\_\_

Test: \_\_\_\_\_

Lab: \_\_\_\_\_

DSA-103 rev 10/2013

INCREMENT #

DSA File No.: \_\_\_\_\_

Application No.: \_\_\_\_\_

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

Revised: \_\_\_\_\_

Test: \_\_\_\_\_

Lab: \_\_\_\_\_

DSA-103 rev 10/2013

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Revised: \_\_\_\_\_

Test: \_\_\_\_\_

Lab: \_\_\_\_\_

STATEMENT OF STRUCTURAL TESTS & SPECIAL INSPECTIONS - 2013 CBC

ALL MODEL EXCEPT: DSA4012030-13, DSA4013030-13, DSA4013040-13, DSA401S2030-13

IMPORTANT: This form is only a summary of structural tests and special inspections required for the project. The actual tests and inspections must be performed as detailed on the DSA approved documents. The project engineer is responsible for providing inspection of all items of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-low roof discharges, cold-formed steel, framing, attachments of non-structural components, etc. per Title 24, Part 2, Chapter 17A. NOTE: This form is also available for project submission per revision under the 2007 and 2010 CBC.

INSTRUCTIONS: Check a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. An "X" before a listed item indicates that it is a mandatory requirement. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other factors. A shaded box can be added indicating your selection of that test. Note: A minus (-) category or subcategory heading indicates that it can be dropped. However, any subcategory you may have made will be cleared. Click on the "COMPILE" button to show only the tests and special inspections. For more information on use of this form, see DSA-103.03BTR.

TEST OR SPECIAL INSPECTION

CODE REFERENCE AND NOTES

1. GENERAL

2. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS)

3. CAST-IN-PLACE CONCRETE

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GENERAL NOTES

DESIGN LOADS

BUILDING CODE	CBC 2013 (BASED ON IBC 2012)
LIVE LOADS	5 PSF
SNOW LOAD	5 PSF
WIND LOADS	115 MPH (3-Sec. Gust)
	EXPOSURE C
	TOPOGRAPHIC FACTOR , Kzt = 1.0

1.- SPECIAL INSPECTION REQUIREMENTS SHALL FOLLOW THE ATTACHED TEST AND INSPECTION LIST (T & I LIST) APPROVED BY DSA. THE SHOP FABRICATION 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 2013 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 2013, TABLE 1806A.2, SOIL CLASS 5 (ALLOWABLE FOUNDATION PRESSURE 1500 PSF)

4.- DESIGN PER FOLLOWING CODES:  
- CBC 2013  
- ASCE7-10  
- AISC ASD 14TH EDITION

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 2013 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 CONSTRUCTION SHALL COMPLY WITH CBC 2013.

4.- ALL SHAPED STRUCTURAL STEEL TUBE PRODUCTS FOR THIS STRUCTURE SHALL BE COLD FORMED HSS, AND CONFORM TO ASTM A500-10: GRADE "B", IN ITS ENTIRETY. TYPICAL MECHANICAL PROPERTIES ARE :  
HSS Ø14.00 x 0.625 42,000 PSI YIELD STRESS / 58,000 PSI TENSILE STRESS

5.- ALL PLATES PRODUCTS SHALL COMPLY WITH ASTM A572 GRADE 50.

6.- STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH A.I.S.C. SPECIFICATIONS.

7.- 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.

8.- ALL FULL PENETRATION WELD SHALL BE CONTINUOUSLY INSPECTED PER AWS D1.1 & D1.8.

9.- 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" ER70Sx ELECTRODES UNLESS OTHERWISE NOTED. EITHER SMAW OR GMAW IS ACCEPTABLE.

10.- ALL STRUCTURAL STEEL SHALL BE PAINTED WITH ONE SHOP COAT (2.5 TO 3.5 MILS THICK MIN). THIS COAT IS A WEATHER RESISTANT POWDER COATING BASED ON POLYESTER TGIC (MANUFACTURED BY SHERWIN WILLIAMS 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. SOFTNES.

11.- DEMAND CRITICAL WELD (AISC 341-10, SECTION A5.4.6)  
WELDS DESIGNATED AS DEMAND CRITICAL, SHALL BE MADE WITH A FILLER METAL CAPABLE OF PROVIDING A MINIMUM CHARPY V-NOTCH (CVN) TOUGHNESS OF 20FT-LB AT -20°F AND 40FT-LB AT 70°F, WHEN THE STEEL MAINTAINED AT A TEMPERATURE OF 50°F OR HIGHER. FOR STRUCTURES WITH SERVICE TEMPERATURES LOWER THAN 50°F, THE QUALIFICATION TEMPERATURE SHALL BE 20°F ABOVE THE LOWEST ANTICIPATED SERVICE TEMPERATURE, OR AT A LOWER TEMPERATURE.

CONCRETE SPECIFICATION

1.- CONCRETE SHALL BE TESTED PER CBC 2013, SECTION 1903A & SHALL BE INSPECTED PER SECTION 1903A.

2.- CONCRETE TO BE F'c= 3000 PSI PER ACI 318-11 CHAPTER 5. REINFORCING STEEL TO BE Fy= 60000 PSI , MIN. GR. 60

3.- ALL ANCHOR BOLTS SET IN NEW CONCRETE (WHEN APPLICABLE) SHALL COMPLY WITH ASTM F-1554 GRADE 55 (GALVANIZED). ANCHOR BOLT'S EMBEDMENT NEEDS TO BE AS FOLLOV:

A) ANCHOR BOLT Ø1 1/4" 30 IN (MINIMUM EMBEDMENT)

4.- CERTIFIED MILL TEST REPORTS ARE TO BE PROVIDED FOR EACH SHIPMENT OF REINFORCEMENT.

CLOTH SPECIFICATION

1.- FABRIC SHALL BE MANUFACTURED BY MULTIKNIT LTD. OR OTHER COMPANY WHO CAN MANUFACTURE FABRIC, WHICH MEETS THE SPECIFICATIONS LISTED BELOW, AND SHALL BE FABRICATED FROM POLYETHYLENE MATERIALS.

2.- THE FABRIC SHALL ACHIEVE AN ULTIMATE TENSILE CAPACITY WHEN TESTED PER ASTM D-5034, IN THE:  
\* WARP DIRECTION OF 100 LBS PER INCH AT 66% MAXIMUM ELONGATION  
\* FILL DIRECTION OF 50 LBS PER INCH AT 33% MAXIMUM ELONGATION  
\* ACROSS SEAMS OF STITCHING OF 80 LBS PER INCH AT 80% MAXIMUM ELONGATION

3.- THE FABRIC SHALL ACHIEVE AN AVERAGE TEARING STRENGTH, WHEN TESTED PER ASTM D-2261, IN THE:  
\* WARP DIRECTION OF 14 LBS  
\* FILL DIRECTION OF 11.5 LBS

4.- 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.

5.- PROVIDE CERTIFICATION BY MANUFACTURER AND STATE FIRE MARSHALL TO DSA AT SITE SPECIFIC INSTALLATION.

6.- FABRIC SHALL REQUIRE ANNUAL INSPECTION AND MAINTENANCE. FABRICS SAMPLES OF THE SAME MATERIAL WHICH ARE MAINTAINED AT THE PROJECTS SITE SHALL BE TESTED TO BE IN COMPLIANCE WITH ASTM D5034 AND D2281. THE ANNUAL TESTING ON THE APPROVED PLANS SHALL BE COMPARED TO THE FABRIC SPECIFICATIONS INDICATED IN NOTE 2 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 2 OF "CLOTH SPECIFICATION".

7.- 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.

8.- A VISUAL INSPECTION LOOKING FOR TEAR AND ABNORMAL WEAR IN FABRIC MATERIAL AND THREAD IS REQUIRED PRIOR TO RE-INSTALLATION. SHADE STRUCTURE 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, CABLE SHALL BE TENSIONED TO 250 LBS MINIMUM.

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 TAUNT APPEARANCE. ANY LONG TERM CABLE SAG SHALL BE MINIMIZED DURING THE MAINTENANCE RE-TIGHTENING VISITS AS REQUIRED.

3.- THE SHACKLES SHALL COMPLY WITH SPECIFICATION RR-C-271D TYPE IVA GRADE A, CLASS 3.

4.- THE THIMBLES SHALL COMPLY WITH SPECIFICATIONFF-T-276B, TYPE II.

5.- THE CABLE CLAMPS SHALL COMPLY WITH SPECIFICATION FF-C-450 TYPE 1 CLASS 1.

2013 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/F BELOW NATURAL GRADE, PER TABLE 1806A.2	

ROOF SNOW LOAD	5 PSF
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FLOOD HAZARD AREA	NO
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WIND DESIGN DIRECTIONAL PROCEDURE: ASCE 7-10, SECTION 27.4.3		
-ULTIMATE DESIGN WIND SPEED (3 SEC GUST)	V	115 MPH
-WIND EXPOSURE FACTOR	C	1
-TOPOGRAPHIC FACTOR	Kzt	
-RISK CATEGORY	II	
-VELOCITY PRESSURE EXPOSURE COEFFICIENT	Kz	0.85

SEISMIC DESIGN:		
-SITE CLASS	D	

	Ss	2.99g
	S1	1.389g
	Sds	1.97
	Sd1	1.24

G.1 CANTILEVERED COLUMN SYSTEM, SPECIAL STEEL MOMENT FRAME.

-SEISMIC IMPORTANCE FACTOR	I	1.0
-DESIGN BASE SHEAR	V	8608 LB
-SEISMIC RESPONSE COEFFICIENTS	Cs	0.797
-RESPONSE MODIFICATION FACTOR	R	2.5
-ANALYSIS PROCEDURE		STATIC

-RISK CATEGORY	II	
-SEISMIC DESIGN CATEGORY	D	
-SITE COEFFICIENT CATEGORY	Fa	1
	Fv	1.5

-SPECTRAL RESPONSE COEFFICIENTS		
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-LATERAL FORCE RESISTING SYSTEM		
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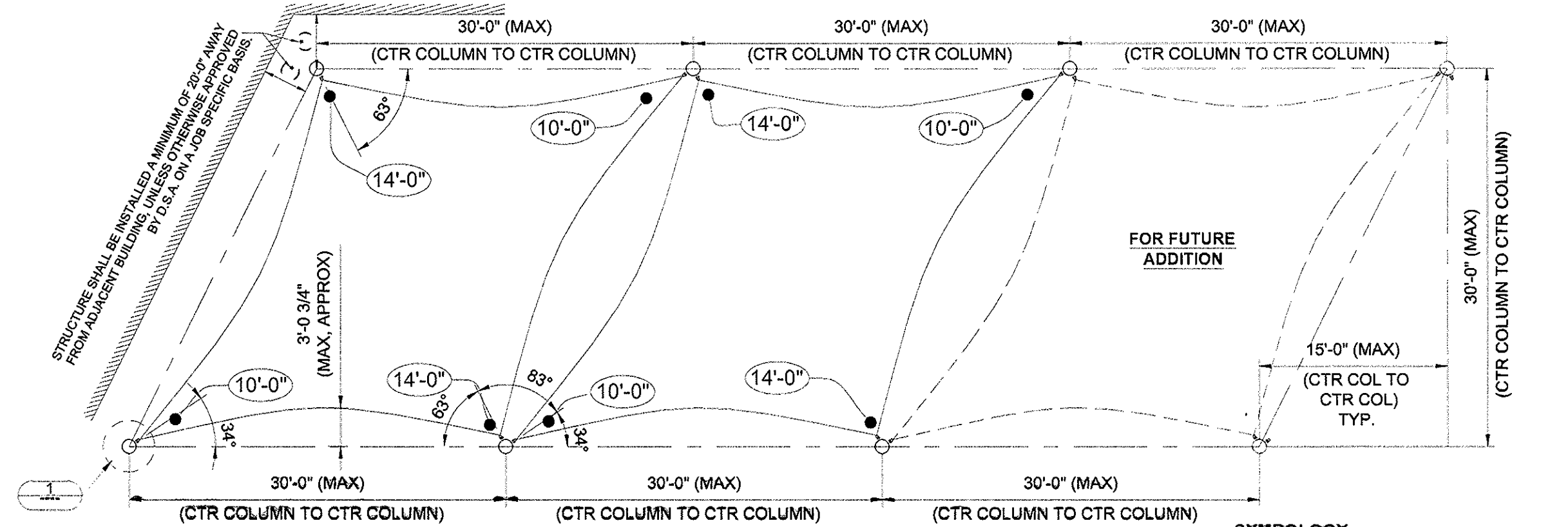
CODE ANALYSIS

BUILDING	OCCUPANCY	CONSTRUCTION TYPE	AREA (SQF)	OCCUPANT LOAD
SHADE STRUCTURE 30' x 90'(MAX.)			2700 (MAX.)	

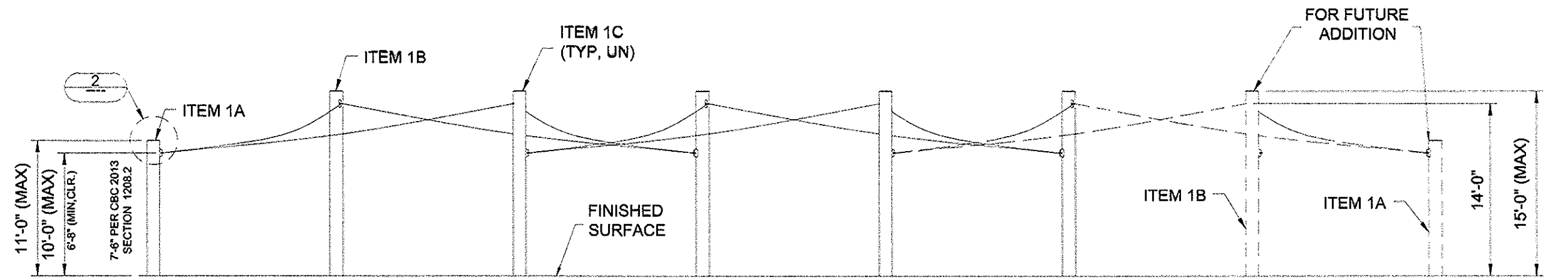
LIST OF MATERIALS

ITEM	QTY.	DESCRIPTION	MATERIAL
(*) 1A		COLUMN 1A (L = 11 FT)	HSS 14.00 x 0.625
(*) 1B		COLUMN 1B (L = 15 FT)	HSS 14.00 x 0.625
(*) 1C		COLUMN 1C (L = 15 FT)	HSS 14.00 x 0.625
2		FABRIC TOP	COLOURSHADE Z25
3		STEEL CABLE (Ø3/8")	GALVANIZED CABLE
(**) 4		A.SHACKLE-PIN (WLL=6.5 KIPS)	Ø5/8" GALVANIZED
5		CABLE CLAMP	GALVANIZED STEEL
6		THIMBLE (Ø3/8")	THIMBLE GALVANIZED
7		CAP PLATE (3/8" THK)	---
8		GUSSET PLATE (3/4" THK)	---

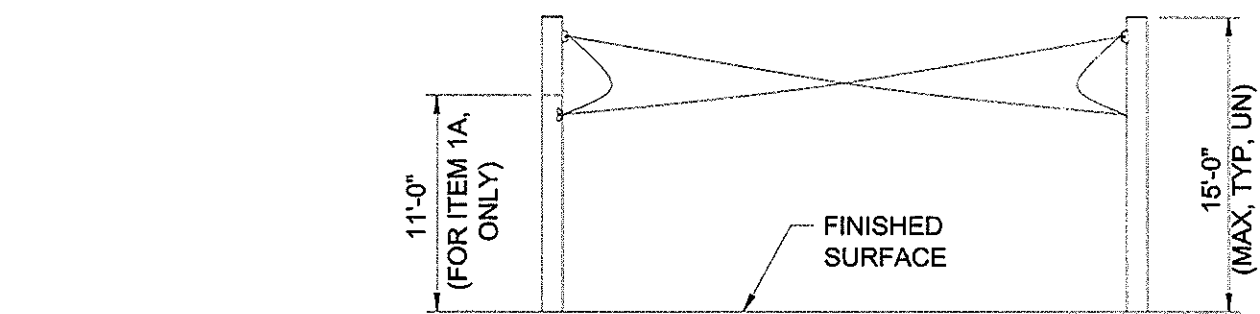
(\*) MAXIMUM COLUMNS' LENGTH MEASURED ONLY FROM FINISHED SURFACE  
(\*\*) CONFIRMING TO FED. SPEC. RRC 271



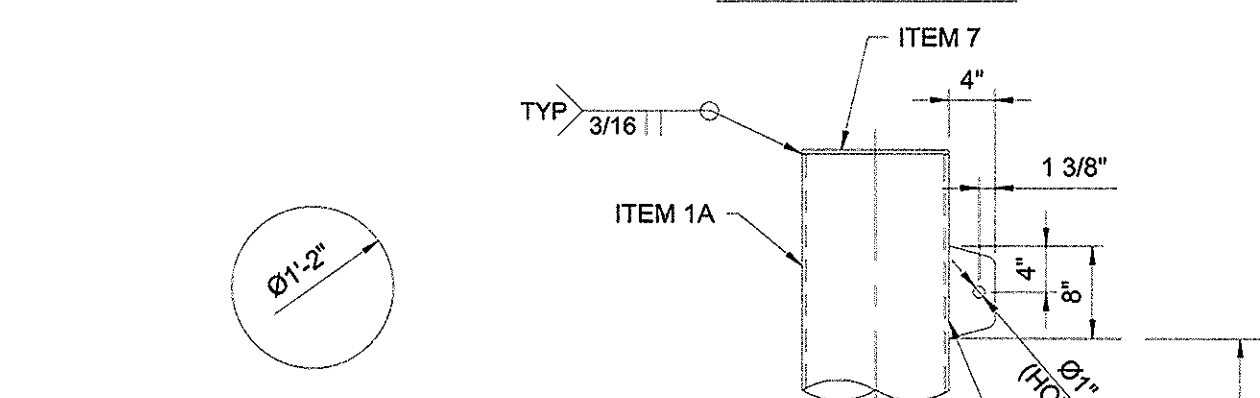
TOP VIEW  
(ANLGLES SHOWN WILL VARY  
DEPENDING OF MODULES SIZES)



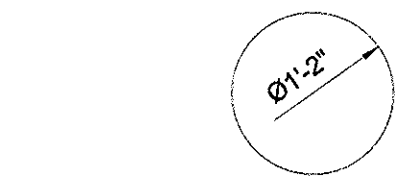
FRONT ELEVATION



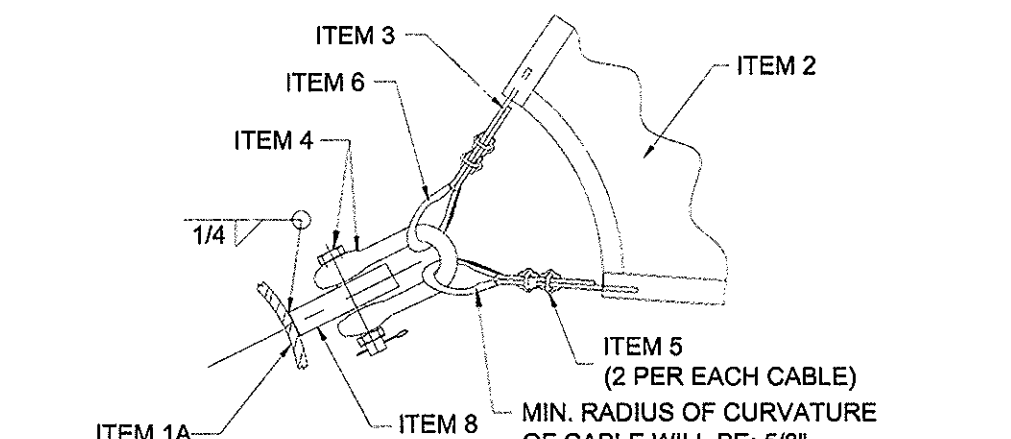
SIDE ELEVATION



BASE PLATE DETAIL-PIH  
(3/8" THK.)



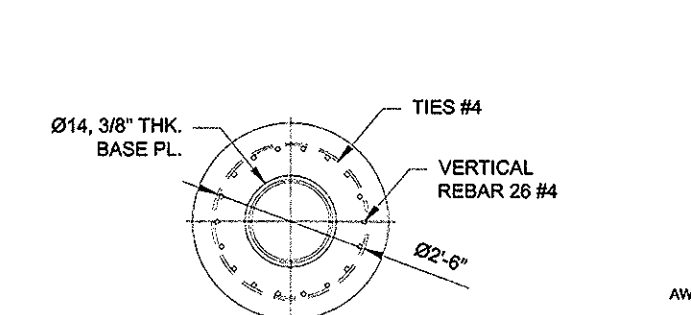
DETAIL 2  
(TYPICAL)



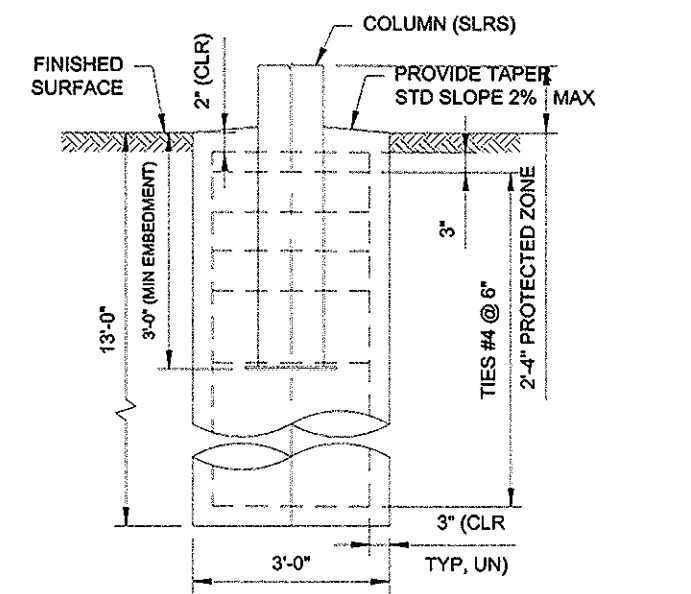
DETAIL 1  
(TYPICAL)



CABLE ASSEMBLY  
(TYPICAL)

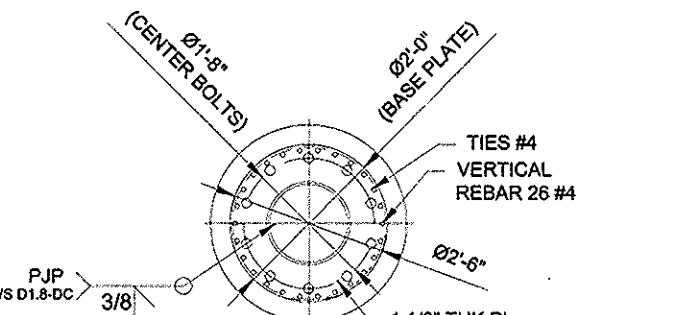


TOP VIEW

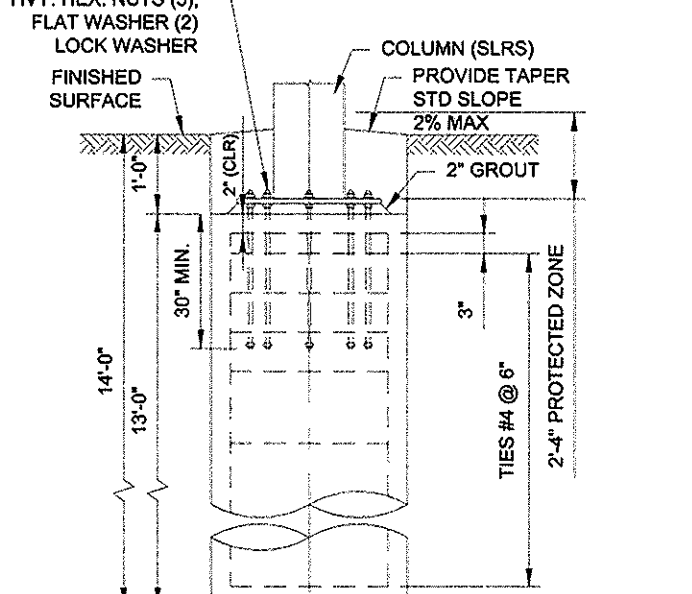


FOOTING  
(EMBEDDED, PIH)

(USE FOR NON-CONSTRAINED CASES)



TOP VIEW



FOOTING  
(RECESSED BASE PLATE, RBP)

(USE FOR NON-CONSTRAINED CASES)  
(OPTIONAL)

THESE PLANS AND SPECIFICATIONS ARE THE PROPERTY OF USA SHADE AND FABRIC STRUCTURES AND SHALL NOT BE REPRODUCED WITHOUT THEIR WRITTEN PERMISSION.



CORPORATE HEADQUARTERS  
8505-A CHANCELLOR ROW  
DALLAS, TX, 75247  
800-966-5005

CERTIFICATIONS:  
IAS CERTIFICATION No: FA-428  
CLARK COUNTY MANUFACTURER  
CERTIFICATION NUMBER (NEVADA): 355

CUSTOMER:  
San Jacinto Community  
College District  
PROJECT NAME:  
Mt. San Jacinto College

LOCATION:  
28237 La Piedra Rd.  
Menifee, CA 92584  
MODEL NUMBER:  
DSA4183030-13

STRUCTURE TYPE:  
TENSION SAILS

SIZE:  
MAXIMUM  
30' x 90' (MAX.) x 14'e

SCALE : NONE

DRAWING SIZE: D

FILE NUMBER: 33-C3
IDENTIFICATION STAMP DIVISION OF THE STATE ARCHITECT APP. NO: 04 - 117629 INCR: 0 AC _DH_ FLS _EA_ SS _VJN_ DATE 11/07/2018

IDENTIFICATION STAMP DIV. OF THE STATE ARCHITECT OFFICE OF DESIGN REVIEW - CIVILS
04 113245 AC 02 rev 02 DATE JUN 24 2014

PRE-CHECK (PC)  
DOCUMENT  
Code : 2013 CBC  
A separate project application  
for construction is required.

Eng. By : JO-WW	10/12/13
Design By : WW	10/12/13
Approved By : JO	10/12/13

DRAWING DESCRIPTION:

PRODUCT INFORMATION

DWG. 36377-3.2

SHEET

REV.