MERCED COMMUNITY COLLEGE DISTRICT
BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT
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NOTICE CALLING FOR BIDS

DISTRICT	MERCED COMMUNITY COLLEGE DISTRICT
PROJECT DESCRIPTION	**BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**
PROJECT BUDGET	NA
LATEST TIME/DATE FOR SUBMISSION OF BID PROPOSALS	2:00 P.M. Monday, August 18, 2025
LOCATION FOR SUBMISSION OF BID PROPOSALS	Merced College, Purchasing Office (Corner University Drive and West Community College Drive) 3600 M Street, Merced, California 95348
LOCATION FOR OBTAINING BID AND CONTRACT DOCUMENTS	https://www.mccd.edu/about-merced-college/divisions/admin-services/purchasing/bids/

NOTICE IS HEREBY GIVEN that the Merced Community College District (District), acting by and through its Board of Trustees, will receive up to, but not later than the above-stated date and time, sealed Bid Proposals for the Contract for the Work generally described as:

BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT

1. Submittal of Bid Proposals. All Bid Proposals must be submitted on forms furnished by the District prior to the last time for submission of Bid Proposals and the District's public opening and reading of Bid Proposals.
2. Bid and Contract Documents. All Bid and Contract Documents are available through Merced College, through the link provided above.
3. Documents Accompanying Bid Proposal. Each Bid Proposal shall be accompanied by: (i) the required Bid Security; (ii) Subcontractors List; (iii) Statement of Qualifications; (iv) Non-Collusion Affidavit; and (v) DIR Registration Verification.
4. Project Budget. The Project Budget for the Work is set forth above. If bidding for the Work includes Alternate Bid Items, the selection of Alternate Bid Items for determination of the lowest priced Bid Proposal will be by priority of Alternate Bid Items, up to but not exceeding the Project Budget. If bidding for the Work does not include Alternate Bid Items, the Project Budget set forth above is for information purposes only.
5. Pre-Bid Inquiries. Bidders may submit pre-bid inquiries or clarification requests. Bidders are solely and exclusively responsible for submitting pre-bid inquiries or clarification requests no later than **2:00 PM SEVEN (7) Calendar days** before the latest date for submittal of Bid Proposals. Pre-bid inquiries or clarification requests shall be submitted to. PurchasingBids@mccd.edu
6. Prevailing Wage Rates. The Contractor and all Subcontractors shall pay not less than the applicable prevailing wage rate for the classification of labor provided by their respective workers to execute the Work. Copies of the prevailing wage rates in the locality where the Work is to be performed, entitled PREVAILING WAGE SCALE are available to any interested party on the INTERNET at http://www.dir.ca.gov/dlsr/statistics_research.html. In addition to compliance with prevailing wage

requirements, the successful Bidder shall comply with all other applicable provisions of the Labor Code, the California Code of Regulations and rulings or determinations of the California Department of Industrial Relations. During the Work and pursuant to Labor Code §1771.4(a)(4), the Department of Industrial Relations shall monitor compliance with prevailing wage rate requirements and enforce the Contractor's prevailing wage rate obligations.

7. Contractors' License Classification. Bidders must possess the following classification(s) of California Contractors License at the time that the Bid Proposal is submitted and at time the Contract for the Work is awarded: **C-8 Concrete.** The Bid Proposal of a Bidder who does not possess a valid and in good standing Contractors' License in the classification(s) set forth above will be rejected for non-responsiveness. Any Bidder not duly and properly licensed is subject to all penalties imposed by law. No payment shall be made for the Work unless and until the Registrar of Contractors verifies to the District that the Bidder awarded the Contract is properly and duly licensed for the Work.

8. Contract Time. Completion of the Work shall be achieved within the time set forth in Contract Documents after the date for commencement of the Work established in the Notice to Proceed issued by the District. Failure to achieve Completion within the Contract Time will result in the assessment of Liquidated Damages as set forth in the Contract.

9. Bid Security. Each Bid Proposal shall be accompanied by Bid Security in an amount equal to TEN PERCENT (10%) of the maximum amount of the Bid Proposal, inclusive of the value of any additive Alternate Bid Item(s). A Bid Proposal not accompanied by Bid Security in the form and in the amount required is non-responsive and will be rejected by the District.

10. Payment Bond; Performance Bond. Prior to commencement of the Work, the Bidder awarded the Contract shall deliver to the District a Payment Bond and a Performance Bond issued by a California Admitted Surety in the form and content included in the Contract Documents in a penal sum equal to One Hundred Percent (100%) of the Contract Price. The Payment Bond and the Performance Bond shall be issued by a California Admitted Surety in the form and content included in the Contract Documents.

11. No Withdrawal of Bid Proposals. Bid Proposals shall not be withdrawn by any Bidder for a period of thirty (30) **days** after the opening of Bid Proposals. During this time, all Bidders shall guarantee prices quoted in their respected Bid Proposals.

12. Return of Executed Agreement. The Bidder awarded the Contract shall execute the Agreement and return the executed Agreement to the District within three (3) **calendar days** from the date of receiving notification that it is the Bidder to whom the Contract has been awarded. If the successful Bidder fails to return the executed Agreement pursuant to the foregoing, the District may declare the Bidder's Bid Security forfeited as damages caused by the failure of the Bidder to enter into the Contract and may thereupon award the Contract for the Work to the responsible Bidder submitting the next lowest Bid Proposal or may call for new bids, in its sole and exclusive discretion.

13. Job-Walk. The District will **not** conduct a job walk for this project. If Contractors would like to visit the site, please contact Uriel Gonzalez, email: uriel.gonzalezvaldez@mccd.edu to schedule a visit. Contractors are to meet at Merced College Purchasing Department, for conduct of the Job Walk. If the Job Walk is mandatory, the Bid Proposal submitted by a Bidder whose representative(s) did not attend the entirety of the Mandatory Job Walk will be rejected by the District as being non-responsive. Access to the Job Walk will be available to Bidders for ten (10) minutes after the scheduled start time of the Job Walk; no access to the Job Walk will be permitted thereafter. A Bidder whose representative(s) arrive at the Job Walk location more than ten (10) minutes after the scheduled start of the Job Walk will be denied access and will not be deemed to have attended the Job Walk.

    DISTRICT MAP HYPERLINK

14. Waiver of Irregularities. The District reserves the right to reject any or all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.

15. Award of Contract. The Contract for the Work, if awarded, will be by action of the District's Board of Trustees to the responsible Bidder submitting the lowest priced responsive Bid Proposal. If the Bid Proposal requires Bidders to propose prices for Alternate Bid Items, the District's selection of Alternate Bid Items, if any, for determination of the lowest priced Bid Proposal and for inclusion in the scope of the Contract to be awarded shall be in accordance with the Instructions for Bidders.

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INSTRUCTIONS FOR BIDDERS

1. Preparation and Submittal of Bid Proposal.

1.1. Bid Proposal Preparation. All information required by the bid forms must be completely and accurately provided. Numbers shall be stated in both words and figures where required in the bid forms; conflicts between a number stated in words and in figures are governed by the words. Partially completed Bid Proposals or Bid Proposals submitted on other than the bid forms included herein are non-responsive and will be rejected. Bid Proposals not conforming to these Instructions for Bidders and the Notice to Contractors Calling for Bids ("Call for Bids") may be deemed non-responsive and rejected.

1.2. Bid Proposal Submittal. Bid Proposals shall be submitted at the place designated in the Call for Bids in sealed envelopes bearing on the outside the Bidder's name and address along with an identification of the Work for which the Bid Proposal is submitted. Bidders are solely responsible for timely submission of Bid Proposals to the District at the place designated in the Call for Bids.

1.3. Date and Time of Bid Proposal Submittal. A Bid Proposal is submitted only if the outer envelope containing the Bid Proposal is marked with the Project title and is received by a District Purchasing Department representative for logging-in at (or before) the latest date and time for submittal of Bid Proposals. The official U.S. time-clock website: https://www.time.gov/ is controlling and determinative as to the time of the Bidder's submittal of the Bid Proposal. The foregoing notwithstanding, whether or not Bid Proposals are opened exactly at the time fixed in the Call for Bids, no Bid Proposals shall be received or considered by the District after it has commenced the public opening and reading of Bid Proposals; Bid Proposals submitted after such time are non-responsive and will be returned to the Bidder unopened.

2. Bid Security. Each Bid Proposal shall be accompanied by Bid Security in the form of: (i) cash, (ii) a certified or cashier's check made payable to the District or (iii) a Bid Bond, in the form and included with the Contract Documents (the "Bid Security") in at least the amount set forth in the Call for Bids. A Bid Proposal submitted without the required Bid Security is non-responsive and will be rejected. If the Bid Security is in the form of a Bid Bond, the Bidder's Bid Proposal is deemed responsive only if the Bid Bond is in the form and content included herein and the Surety is an Admitted Surety Insurer under Code of Civil Procedure §995.120.

3. Documents Accompanying Bid Proposal; Signatures. The Bid Proposal and all other documents required to be submitted with the Bid Proposal shall be executed by an individual duly authorized to execute the same on behalf of the Bidder; failure of a Bid Proposal to conform to the foregoing will render the Bid Proposal non-responsive and rejected.

4. Bidder and Subcontractors' DIR Registered Contractor Status. Each Bidder must be a DIR Registered Contractor when submitting a Bid Proposal. The Bid Proposal of a Bidder who is not a DIR Registered Contractor when the Bid Proposal is submitted will be rejected for non-responsiveness. All Subcontractors identified in a Bidder's Subcontractors' List must be DIR Registered contractors at the time the Bid Proposal is submitted. The foregoing notwithstanding, a Bid Proposal is not subject to rejection for non-responsiveness for listing Subcontractor the Subcontractors List who is/are not DIR Registered contractor(s) if such Subcontractor(s) complete DIR Registration pursuant to Labor Code §1771.1(c)(1) or (2). Further, a Bid Proposal is not subject to rejection if the Bidder submitting the Bid Proposal lists any Subcontractor(s) who is/are not DIR Registered contractors and such Subcontractor(s) do not become DIR Registered pursuant to Labor Code §1771.1(c)(1) or (2) prior to award of the Contract, the Bidder, if awarded the Contract, must request consent of the District to substitute a DIR Registered Subcontractor for any non-DIR Registered Subcontractor(s) pursuant to Labor Code §1771.1(c)(3) without adjustment of the Contract Price or the Contract Time.

5. Modifications or Withdrawal of Bid Proposal. Changes to the bid forms which are not specifically called for or permitted may result in the District's rejection of the Bid Proposal as being non-responsive. No oral or telephonic modification of any submitted Bid Proposal will be considered.

After submittal of a Bid Proposal, a Bidder may modify or withdraw its Bid Proposal only by written request actually received by the District prior to the scheduled closing time for the receipt of Bid Proposals and the District's public opening and reading of Bid Proposals; written requests to withdraw or modify a submitted Bid Proposal received by the District after the scheduled closing time for receipt of Bid Proposals shall not be considered by the District, nor effective to withdraw such Bid Proposal.

6. Erasures; Inconsistent or Illegible Bid Proposals. Erasures, interlineations or other corrections to any document submitted with a Bid Proposal shall be suitably authenticated by affixing in the margin immediately opposite such erasure, interlineations or correction the surname(s) of the person(s) signing the Bid Proposal. Any Bid Proposal not conforming to the foregoing may be deemed by the District to be non-responsive. If any Bid Proposal or portions thereof, is determined by the District to be illegible, ambiguous or inconsistent, the District may reject such a Bid Proposal as being non-responsive.

7. Examination of Site and Contract Documents. Each Bidder shall, at its sole cost and expense, inspect the Site and to become fully acquainted with the Contract Documents and conditions affecting the Work. Failure of a Bidder to receive or examine any of the Contract Documents or to inspect the Site shall not relieve such Bidder from any obligation with respect to the Bid Proposal, or the Work required under the Contract Documents. The District assumes no responsibility or liability to any Bidder for, nor shall the District be bound by, any understandings, representations or agreements of the District's agents, employees or officers concerning the Contract Documents or the Work made prior to execution of the Contract which are not in the form of Bid Addenda duly issued by the District. The submission of a Bid Proposal shall be deemed prima facie evidence of the Bidder's full compliance with the requirements of this section.

8. Agreement and Bonds. The Agreement which the successful Bidder, as Contractor, will be required to execute along with the forms Payment Bond, Performance Bond and other documents and instruments which are required to be furnished are included in the Contract Documents and shall be carefully examined by the Bidder.

9. Interpretation of Drawings, Specifications or Contract Documents. The District will respond to any pre-bid inquiry submitted in accordance with requirements established in the Call for Bids. If in the sole discretion of the District, a response to a pre-bid inquiry affects or potentially affects other Bidders, the Work, the Contract Documents or other requirements, the District will issue addenda. A copy of any such addendum will be delivered by fax, email or mail to each Bidder receiving a set of the Contract Documents. No person is authorized to render an oral interpretation or correction of any portion of the Contract Documents to any Bidder, and no Bidder is authorized to rely on any such oral interpretation or correction. Failure to request interpretation or clarification of any portion of the Contract Documents pursuant to the foregoing is a waiver of any discrepancy, defect or conflict therein.

10. District's Right to Modify Contract Documents. Before the public opening and reading of Bid Proposals, the District may modify the Work, the Contract Documents, or any portion(s) thereof by the issuance of written addenda disseminated to all Bidders who have obtained a copy of the Specifications, Drawings and Contract Documents pursuant to the Call for Bids. If the District issues any addenda during the bidding, the failure of any Bidder to acknowledge such addenda in its Bid Proposal will render the Bid Proposal non-responsive and rejected.

11. Bidders Interested in More Than One Bid Proposal; Non-Collusion Affidavit. No person, firm, corporation or other entity shall submit or be interested in more than one Bid Proposal for the same Work; provided, however, that a person, firm or corporation that has submitted a sub-proposal to a Bidder or who has quoted prices for materials to a Bidder is not disqualified from submitting a sub-proposal, quoting prices to other Bidders or submitting a Bid Proposal for the proposed Work to the District. The form of Non-Collusion Affidavit included in the Contract Documents must be completed

and duly executed on behalf of the Bidder; failure of a Bidder to submit a completed and executed Non-Collusion Affidavit with its Bid Proposal will render the Bid Proposal non-responsive.

12. Award of Contract.

12.1. Waiver of Irregularities or Informalities. The District reserves the right to reject any and all Bid Proposals or to waive any irregularities or informalities in any Bid Proposal or in the bidding.

12.2. Award to Lowest Responsive Responsible Bidder. The award of the Contract, if made by the District through action of its Board of Trustees, will be to the responsible Bidder submitting the lowest responsive Bid Proposal on the basis of the Base Bid Proposal and Alternate Bid Items selected in accordance with these Instructions.

12.3. Selection of Alternate Bid Items. Additive Alternate Bid Items ("ALT"), if any, will be accepted by the District in the order of priority established by the District, with the highest prioritized ALT being ALT 1. The Contract for the Work will be awarded to the Bidder submitting the lowest priced responsive Bid Proposal for the Base Bid scope and the maximum number of ALTs up to but not exceeding the Project Budget set forth in the Call for Bids. In the following example, Bidder B proposes $19,000 for the Base Bid plus ALTS 1-3, Bidder A proposes $20,000 and Bidder C proposes for the Base Bid plus ALTS 1-3. Pricing for the Base Bid and ALT 4 to any Bidder exceeds the Project Budget. Hence: Bidder B submitted the lowest priced proposal for the Base Bid and the maximum number of ALTs within the Project Budget.

Project Budget: $19,000 (EXAMPLE)							
BID PRICING					**BASE BID + ALTS**		
	BIDDER A	BIDDER B	BIDDER C		BIDDER A	BIDDER B	BIDDER C
Base Bid	$5,000	$5,500	$4,800		$5,000	$5,500	$4,800
ALT 1	$8,000	$7,500	$7,800		$13,000	$13,000	$12,600
ALT 2	$1,000	$1,000	$1,200		$14,000	$14,000	$13,800
ALT 3	$6,000	$5,000	$7,000		$20,000	$19,000	$20,800
ALT 4	$150	$120	$200		$20,150	$19,150	$21,000

12.4. Alternate Bid Items Not Included in Award of Contract. Bidders are referred to the provisions of the Contract Documents permitting the District, during performance of the Work, to add or delete from the scope of the Work any or all of the Alternate Bid Items with the cost or credit of the same being the amount(s) set forth by in the Alternate Bid Items Bid on the Proposal.

12.5. Responsive Bid Proposal. A responsive Bid Proposal shall mean a Bid Proposal which conforms, in all material respects, to requirements of the Bid and Contract Documents.

12.6. Responsible Bidder. Determination of the responsibility of Bidders is based on the following evaluation criteria.

12.6.1. Bidder Capacity. Factors affecting the Bidder's capacity to perform and complete the Work will be assessed, including: (i) Bidder's access to labor, materials and other resources necessary to complete the Work; (ii) Bidder's ability to complete the Work within the time established for completion of the Work, or portions thereof; and (iii) Bidder's ability to complete warranty obligations.

12.6.2. Bidder Character, Integrity. Factors reflecting the character and integrity of the Bidder, including: (i) other public agency finding/determination, within the past five (5) years, that the Bidder is not responsible; (ii) currently debarred from bidding public works projects or

debarment from bidding within past five (5) years; and (iii) false claims liability within the past five (5) years under local, state or federal laws.

12.6.3. Bidder Financial Capability. Factors considered include: (i) sufficiency of the Bidder's financial resources; (ii) whether the Bidder is current in payment of debts and performance of other financial obligations; and (iii) bankruptcy or insolvency proceedings have been instituted within the past five (5) years.

12.6.4. Bidder Prior Performance. The Bidder's prior performance on prior public works contracts, including without limitation: (i) cost overruns; (ii) compliance with general conditions and other contractual requirements, including schedule development, schedule updates and coordination of labor, material/equipment procurements and subcontractors; (iii) completion within allocated time; (iv) submittal of unsubstantiated, unsupported or excessive cost proposals, claims or contract adjustment requests; (iv) completion of a project by a surety; (vi) owner's exercise of default remedies; and (vii) finding or determination by any public agency that the Bidder is not a responsible bidder.

12.6.5. Safety. Factors include: (i) findings of serious or willful safety violations of safety laws, regulations or requirements by any local, state or federal agency within the past five (5) years; (ii) adequacy and implementation of safety plans, programs for on-site and off-site construction and construction related activities; and (iii) Workers Compensation Insurance EMR rating exceeding 1.25.

13. Subcontractors.

13.1. Designation of Subcontractors; Subcontractors List. Each Bidder shall submit a list of its proposed Subcontractors for the proposed Work as required by the Subletting and Subcontracting Fair Practices Act (California Public Contract Code §§ 4100 et seq.) on the form furnished. The failure of any Bid Proposal to include all information required by the Subcontractors List will result in rejection of the Bid Proposal for non-responsiveness.

13.2. Work of Subcontractors. All Bidders are referred to the Contract Documents and the notation therein that all Contract Documents are intended to be complimentary and that the organization or arrangements of the Specifications and Drawings shall not limit the extent of the Work of the Contract Documents. Accordingly, all Bidders are encouraged to disseminate all of the Specifications, Drawings and other Contract Documents to all persons or entities submitting sub-bids to the Bidder. The omission of any portion or item of Work from the Bid Proposal or from the sub-bidders' sub-bids which is/are necessary to produce the intended results and/or which are reasonably inerrable from the Contract Documents is not a basis for adjustment of the Contract Price or the Contract Time.

13.3 Subcontractor Bonds. In accordance with California Public Contract Code §4108, if a Bidder requires a bond or bonds of its Subcontractor(s), whether the expense of procuring such bond or bonds are to be borne by the Bidder or the Subcontractor(s), such requirements shall be specified in the Bidder's written or published request for sub-bids. Failure of the Bidder to comply with these requirements shall preclude the Bidder from imposing bonding requirements upon its Subcontractor(s) or rejection of a Subcontractor's bid under California Public Contract Code §4108(b).

14. Workers' Compensation Insurance. Pursuant to California Labor Code § 3700, the successful Bidder shall secure Workers' Compensation Insurance for its employees engaged in the Work of the Contract. The successful Bidder shall execute and deliver to the District the form of Workers Compensation Certification included in the Contract Documents concurrently with such Bidder's delivery of the executed Agreement to the District.

15. Bid Security Return. The Bid Security of the Bidders submitting the three lowest priced Bid Proposals, the number being solely at the discretion of the District, will be held by the District for

ten (10) days after the period for which Bid Proposals must be held open (which is set forth in the Call for Bids) or until posting by the successful Bidder(s) of the bonds, certificates of insurance required and return of executed copies of the Agreement, whichever first occurs, at which time the Bid Security of such other Bidders will be returned to them.

16. Contractor's License. No Bid Proposal will be considered from a Bidder who, at the time Bid Proposals are opened, is not licensed to perform the Work of the Contract Documents, in accordance with the Contractors' License Law, California Business & Professions Code §§7000 et seq. This requirement is not a mere formality and will not be waived by the District or its Board of Trustees. The required California Contractors' License classification(s) for the Work is set forth in the Call for Bids.

17. Non-Discriminatory Practices. It is the policy of the District that there be no discrimination against any prospective or active employee engaged in the Work because of race, color, ancestry, national origin, religious creed, sex, age, marital status or other legally protected classification. All Bidders agree to comply with the District's non-discrimination policy and all applicable Federal and California anti-discrimination laws including but not limited to the California Fair Employment & Housing Act beginning with California Government Code §§ 12940 et seq. and California Labor Code § 1735. In addition, all Bidders agree to require like compliance by any Subcontractor employed by them on the Work of the Contract.

18. Bidder's Qualifications. Each Bidder shall submit with its Bid Proposal the form of Statement of Bidder's Qualifications, which is included within the Contract Documents. All information required by Statement of Bidder's Qualifications shall be completely and fully provided. Any Bid Proposal not accompanied by the Statement of Bidder's Qualifications completed with all information required and bearing the signature of the Bidder's duly authorized representative under penalty of perjury will render the Bid Proposal non-responsive and rejected. If the District determines that any information provided by a Bidder in the Statement of Bidder's Qualifications is false or misleading, or is incomplete so as to be false or misleading, the District may reject the Bid Proposal submitted by such Bidder as being non-responsive.

19. Job-Walk. The District will conduct a Job-Walk at the time(s) and place(s) designated in the Call for Bids. The District may, in its sole and exclusive discretion, elect to conduct one or more Job-Walk(s) in addition to that set forth in the Call for Bids, in which event the District shall notify all Bidders who have theretofore obtained the Contract Documents pursuant to the Call for Bids of any such additional Job-Walk. If the District elects to conduct any Job-Walk in addition to that set forth in the Call for Bids, the District shall, in its notice of any such additional Job-Walk(s), indicate whether Bidders' attendance at such additional Job-Walk(s) is/are mandatory. If attendance at the Job Walk is indicated in the Call for Bids as being mandatory, the failure of any Bidder to have its authorized representative present at the entirety of the Job-Walk will render the Bid Proposal of such Bidder to be non-responsive. Where the Job-Walk is mandatory, a Bidder may have more than one authorized representative and/or representatives of its Subcontractors present at the Job-Walk; provided, however that attendance by representatives of the Bidder's Subcontractors without attendance by a representative of the Bidder shall not be sufficient to meet the Bidder's obligations hereunder and will render the Bid Proposal of such Bidder to be non-responsive. The District will reject the Bid Proposal of a Bidder who obtains the Bid and Contract Documents after the date of the Mandatory Job-Walks set forth in the Call for Bids unless a Job-Walk is requested by such Bidder and a Job-Walk is conducted by the District in accordance with the following provisions. The District may, in its sole and exclusive discretion, conduct such requested Job-Walk taking into consideration factors such as the time remaining prior to the scheduled opening of Bid Proposals. Any such requested Job Walk will be conducted only upon the requesting Bidder's agreement to reimburse the District for the actual and/or reasonable costs for the District's staff and its agents and representatives in arranging for and conducting such additional Job-Walk.

20. Public Records. Bid Proposals and other documents responding to the Call for Bids become the exclusive property of the District upon submittal to the District. At such time as the District issues the Notice of Intent to award the Contract pursuant to these Instructions for Bidders, all Bid Proposals and other documents submitted in response to the Call for Bids become a matter of public record and shall be thereupon be considered public records, except for information contained in such Bid Proposals deemed to be Trade Secrets (as defined in California Civil Code § 3426.1) and information provided in response to the Statement of Qualifications. A Bidder that indiscriminately marks all or most of its Bid Proposal as exempt from disclosure as a public record, whether by the notations of "Trade Secret," "Confidential," "Proprietary," or other similar notations, may result in, or render, the Bid Proposal non-responsive and rejected. The District is not liable or responsible for the disclosure of such records, including those exempt from disclosure if disclosure is deemed required by law, by an order of Court, or which occurs through inadvertence, mistake or negligence on the part of the District or its officers, employees or agents. At such time as Bid Proposals are deemed a matter of public record, pursuant to the above, any Bidder or other party shall be afforded access for inspection and/or copying of such Bid Proposals, by request made to the District in conformity with the California Access to Public Records Act, California Government Code §§6250, et. seq. If the District is required to defend or otherwise respond to any action or proceeding wherein request is made for the disclosure of the contents of any portion of a Bid Proposal deemed exempt from disclosure hereunder, the Bidder submitting the materials sought by such action or proceeding agrees to defend, indemnify and hold harmless the District in any action or proceeding from and against any liability, including without limitation attorneys' fees arising therefrom. The party submitting materials sought by any other party shall be solely responsible for the cost and defense in any action or proceeding seeking to compel disclosure of such materials; the District's sole involvement in any such action shall be that of a stakeholder, retaining the requested materials until otherwise ordered by a court of competent jurisdiction.

21. Drug Free Workplace Certificate. In accordance with California Government Code §§ 8350 et seq., the Drug Free Workplace Act of 1990, the successful Bidder will be required to execute a Drug Free Workplace Certificate concurrently with execution of the Agreement. The successful Bidder will be required to implement and take the affirmative measures outlined in the Drug Free Workplace Certificate and in California Government Code §§8350 et seq. Failure of the successful Bidder to comply with the measures outlined in the Drug Free Workplace Certificate and in California Government Code §§ 8350 et seq. may result in penalties, including without limitation, the termination of the Agreement, the suspension of any payment of the Contract Price otherwise due under the Contract Documents and/or debarment of the successful Bidder.

22. Notice of Intent to Award Contract. Following the public opening and reading of Bid Proposals, the District will issue a Notice of Intent to Award the Contract, identifying the Bidder to whom the District intends to award the Contract and the date/time/place of the District's Board of Trustees meeting at which award of the Contract will be considered.

23. Bid Protest.

    23.1. Submittal of Bid Protest. Any Bidder submitting a Bid Proposal to the District may file a protest of the District's intent to award the Contract provided that all of the following are complied with: (i) the bid protest is in writing; (ii) the bid protest is filed and received by the District's Vice-President, Administrative Services not more than five (5) calendar days following the date of issuance of the District's Notice of Intent to Award the Contract; and (iii) the written bid protest sets forth, in detail, all grounds for the bid protest, including without limitation all facts, supporting documentation, legal authorities and argument in support of the grounds for the bid protest; any matters not set forth in the written bid protest shall be deemed waived. All factual contentions must be supported by competent, admissible and creditable evidence. Any bid protest not conforming to the foregoing shall be rejected by the District as invalid.

23.2. District Review and Disposition of Bid Protest. Provided that a bid protest is filed in strict conformity with the foregoing, the District's Vice-President, Administrative Services or such individual(s) as may be designated by him/her (Designee), shall review and evaluate the basis of the bid protest. The District's Vice-President, Administrative Services or Designee shall provide the Bidder submitting the bid protest with a written statement concurring with or denying the bid protest (Bid Protest Response). The Bid Protest Response is deemed the final action of the District and not subject to appeal or reconsideration by any other employee or officer of the District or the Board of Trustees of the District. The issuance of the Bid Protest Response by the District's Vice-President, Administrative Services or the Designee is an express condition precedent to the institution of any legal or equitable proceedings relative to the bidding process, the District's intent to award the Contract, the District's disposition of any bid protest or the District's decision to reject all Bid Proposals. If any such legal or equitable proceedings are instituted and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom.

[END OF SECTION]

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BID PROPOSAL

Project: BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT

Bidder Name	_____	
Bidder Representative(s)	_____ Name and Title _____ Name and Title	
Bidder Representative(s) Contact Information	Email Address(es) _____ _____	Phone/Fax (_____) _____ Telephone (_____) _____ Fax
Bidder Mailing Address	_____ Address _____ City/State/Zip Code	
California Contractors' License	_____ Number _____ Classification(s) and Expiration Date	

1. **Bid Proposal**.

   1.1 Bid Proposal Amount. The undersigned Bidder proposes and agrees to perform the Contract including, without limitation, providing and furnishing any and all of the labor, materials, tools, equipment and services necessary to perform all obligations under the Contract Documents and to complete the Work required for the sum of _____Dollars ($_____).

   1.2 Acknowledgment of Bid Addenda. The Bidder confirms that this Bid Proposal incorporates and is inclusive of, all items or other matters contained in Bid Addenda issued by or on behalf of the District.

   _____ **Addenda Nos. _____** received, acknowledged
   (initial) and incorporated into this Bid Proposal.

   1.3 Alternate Bid Items. The Bidder's proposed pricing for each Alternate Bid Item, if any, are set forth in the accompanying form of Alternate Bid Items Proposal. Failure of a Bidder to propose pricing for each Alternate Bid Item set forth in the accompanying Alternate Bid Items Proposal will result in the Bid Proposal being deemed non-responsive and rejected.

2. Documents Accompanying Bid Proposal. The Bidder has submitted with this Bid Proposal the following: (i) Bid Security; (ii) Subcontractors List; (iii) Statement of Qualifications; (iv) Non-Collusion Affidavit; and (v) DIR Registration Verification. The Bidder acknowledges that if this Bid Proposal and the foregoing documents are not fully in compliance with applicable requirements set forth in the Call for Bids, the Instructions for Bidders and in each of the foregoing documents, the Bid Proposal may be rejected as non-responsive.

3. Award of Contract. Concurrently with delivery of the executed Agreement to the District, the Bidder awarded the Contract shall deliver to the District: (i) Certificates of Insurance evidencing all insurance coverages required under the Contract Documents; (ii) Performance Bond; (iii)

Labor and Material Payment Bond; (ii) Certificate of Workers' Compensation Insurance; and (iv) Drug-Free Workplace Certificate. Failure of the Bidder awarded the Contract to strictly comply with the preceding may result in the District's rescinding award of the Contract and/or forfeiture of the Bidder's Bid Security.

4. Bidder Certifications. The Bidder certifies the following to the District:

4.1 Contractor License. The Bidder certifies that: (i) it is possesses a valid and in good standing Contractors' License, in the necessary class(es), for performing the Work as set for in the Call for Bids; (ii) that such license shall be in full force and effect throughout the duration of the performance of the Work; and (ii) that all Subcontractors providing or performing any portion of the Work are properly licensed to perform their respective portions of the Work at the time of submitting this Bid Proposal and at all times during their performance of the Work.

4.2 DIR Registration. The Bidder certifies to the District that the Bidder is a DIR Registered contractor and that during the Work, the Bidder will verify that all subcontractors, of any tier performing any portion of the Work are DIR Registered contractors. All Work will be performed and completed by DIR Registered contractors.

5. Agreement to Bidding Requirements and Attorneys' Fees. The undersigned Bidder acknowledges and confirms its receipt, review and agreement with, the contractual requirements set forth in this Bid Proposal and the Contract Documents. By executing this Bid Proposal hereinbelow, the Bidder expressly acknowledges and agrees that if the Bidder institutes any legal or equitable proceedings in connection with this Bid Proposal and the District is named as a party thereto, the prevailing party(ies) shall recover from the other party(ies), as costs, all attorneys' fees and costs incurred in connection with any such proceeding, including any appeal arising therefrom. This provision shall constitute a binding attorneys' fee agreement in accordance with and pursuant to California Civil Code §1717 which shall be enforceable against the Bidder and the District. This attorneys fee provision shall be solely limited to legal or equitable proceedings arising out of a bid protest or the bidding process and shall not extend to or have any force and effect on the Contract for the Work or to modify the terms of the Contract Documents for the Work.

6. Acknowledgment and Confirmation. The undersigned Bidder acknowledges its receipt, review and understanding of the Drawings, the Specifications and other Contract Documents pertaining to the proposed Work. The undersigned Bidder certifies that the Contract Documents are, in its opinion, adequate, feasible and complete for providing, performing and constructing the Work in a sound and suitable manner for the use specified and intended by the Contract Documents. The undersigned Bidder certifies that it has, or has available, all necessary equipment, personnel, materials, facilities and technical and financial ability to complete the Work for the amount bid herein within the Contract Time and in accordance with the Contract Documents.

By: _____

(Signature of Bidder's Authorized Officer or Representative)

_____

(Typed or Printed Name)

Title:

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SUBCONTRACTORS LIST

Project ("the Work")	**BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**
Bidder Name	_____
Bidder's Representative Signature	_____ (Signature) _____ (Typed or Printed Name)

Licensed Name of Subcontractor	Trade or Portion of Work	Address of Office, Mill or Shop	Subcontractor CSLB License No.	DIR Registration No.

DUPLICATE THIS PAGE AS NECESSARY FOR LISTING ADDITIONAL SUBCONTRACTORS

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VERIFICATION OF CONTRACTOR AND SUBCONTRACTORS' DIR REGISTRATION

I am the _____ of _____ ("Bidder")
(Title/Position) (Bidder Name)
submitting the accompanying Bid Proposal for the Work described as:

BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT

1. The Bidder is currently registered as a contractor with the Department of Industrial Relations ("DIR").
2. The Bidder's DIR Registration Number is: _____. The expiration date of the Bidder's DIR Registration is June 30, 20___.
3. If the expiration date of the Bidder's DIR Registration will occur prior to expiration of the Contract Time for the Work and the Bidder is awarded the Contract for the Work, prior to the Bidder's DIR Registration expiration, the Bidder will take all measures necessary to renew the Bidder's DIR Registration so that there is no lapse in the Bidder's DIR Registration.
4. The Bidder, if awarded the Contract for the Work will remain a DIR registered contractor for the entire duration of the Work.
5. The Bidder has independently verified that each Subcontractor identified in the Subcontractors List is currently a DIR registered contractor.
6. The Bidder's solicitation of subcontractor bids included notice to prospective subcontractors that: (i) all sub-tier subcontractors must be DIR registered contractors at all times during performance of the Work; and (ii) prospective subcontractors may only solicit sub-bids from and contract with lower-tier subcontractors who are DIR registered contractors.
7. If any of the statements herein are false or omit material facts rendering a statement to be false or misleading, the Bidder's Bid Proposal is subject to rejection for non-responsiveness.
8. I have personal first hand-knowledge of all of the foregoing.

I declare under penalty of perjury under California law that the foregoing is true and correct.

Executed this ____ day of _____, 20___ at _____.
(City and State)

_____
(Signature)

_____
(Name, typed or printed)

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STATEMENT OF QUALIFICATIONS

1. Bidder Information.

1.1. Contact Information

Mailing Address	_____ Street Address _____ City, State, Zip Code
Physical Location (if different from mailing address)	_____ Street Address _____ City, State, Zip Code
Telephone/Fax	(_____) _____ Telephone (_____) _____ Fax

1.2. Bidder Contacts.

Name	_____
Contact Information	Telephone: (_____)_____ Fax (_____)_____ Email _____

1.3. California Contractors' License.

License Number(s)	_____
License Classification(s)	_____
Responsible Managing Employee; Responsible Managing Officer	_____
Expiration Date(s)	_____

1.4. Bidder Form of Entity.

- ☐ Corporation
- ☐ General Partnership
- ☐ Limited Partnership
- ☐ Limited Liability Company
- ☐ Limited Liability Partnership
- ☐ Joint Venture
- ☐ Sole Proprietorship

[CONTINUED NEXT PAGE]

2. Revenue. Complete the following for the Applicant's construction operations; if any portion of the revenue disclosed is generated by non-construction operations or activities, the Applicant must identify the portion of revenue attributed to construction operations and generally describe business activities of the Applicant that generates non-construction operations related revenue.

Calendar Year/ Fiscal Year	Annual Gross Revenue	Average Dollar Value of all Contracts	Dollar Value of Largest Contract
Choose an item.			
Choose an item.			
Choose an item.			

3. References.

DSA Project Inspectors			
Firm Name	Address	Telephone No.	Contact Name
Owners (K-12 school districts or community colleges preferred)			
Owner Name	Address	Telephone No.	Contact Name
Architects (K-12 or Community College Projects)			
Architect Firm Name & Architect Firm Contact Name	Address	Telephone No.	Contact Name

[CONTINUED NEXT PAGE]

4. Insurance.

Commercial General Liability Insurance	Insurer: _____ Policy No. _____ Broker _____
Commercial General Liability Insurance Broker	(Contact Name) _____ _____ (Street Address) _____ (City, State & Zip Code) (_____) _____ (_____) _____ Telephone Fax _____ (Email address)
Bid, Performance and Labor & Materials Payment Bond Surety	Surety: _____ Surety Broker _____ _____ (Surety Broker Contact Name) _____ (Street Address) _____ (City, State & Zip Code) (_____) _____ (_____) _____ Telephone Fax _____ (Email address)
Workers Compensation Insurance	Insurer: _____ Policy No. _____ Broker _____
Workers Compensation Insurance Broker	(Contact Name) _____ _____ (Street Address) _____ (City, State & Zip Code) (_____) _____ (_____) _____ Telephone Fax _____ (Email address)

[CONTINUED NEXT PAGE]

5. Essential Requirements. A Bidder will not be deemed qualified if the answer to any of the following questions results in a "not qualified" response and the Bid Proposal submitted by such a Bidder will be rejected for non-responsiveness.

5.1. Bidder possesses a valid and currently in good standing California Contractors' license for the Classification(s) of Contractors' License required by the Call for Bids.
__ Yes __ No (Not Qualified)

5.2. Bidder is currently a DIR Registered contractor.
__ Yes __ No (Not Qualified)

5.3. Bidder has a current commercial general liability insurance policy with coverage limits which are equal to or greater than minimum coverage limits set forth in the Special Conditions.
__ Yes __ No (Not Qualified)

5.4. Bidder has a current workers' compensation insurance policy as required by the Labor Code or is legally self-insured pursuant to Labor Code §3700.
__ Yes __ No (Not Qualified)
__ Bidder is exempt from this requirement, because it has no employees

5.5. The Bidder ineligible or debarred from submitting Bid Proposals for public works projects or public works contracts pursuant Labor Code §1777.1 or Labor Code §1777.7.
__ Yes (Not Qualified) __ No

5.6. A public agency, within the past five (5) years conducted proceedings that resulted in a finding that the Bidder, or any predecessor to the Bidder, is not a "responsible" bidder for a public works project or a public works contract.
__ Yes (Not Qualified) __ No

5.7. During the last five (5) years, the Bidder or any predecessor to the Bidder, or any of the equity owners of the Bidder has been convicted of a federal or state crime involving fraud, theft, or any other act of dishonesty?
__ Yes (Not Qualified) __ No

5.8. During the past five (5) years a Surety has completed any project or the Bidder's obligations under a construction contract.
__ Yes (Not Qualified) __ No

5.9. During the past five (5) years the Bidder has been declared in default under any construction contract to which the Bidder was a party.
__ Yes (Not Qualified) __ No

5.10. The Bidder's Worker's Compensation Insurance average Experience Modification Rating ("EMR") rating over the past five (5) years is more than 1.25.
__ Yes (Not Qualified) __ No

5.11. The Bidder's Workers Compensation Insurance EMR for the current policy term is more than 1.25.
__ Yes (Not Qualified) __ No

6. Accuracy and Authority. The undersigned is duly authorized to execute this Statement of Qualifications under penalty of perjury on behalf of the above-identified Bidder. The undersigned warrants and represents that he/she has personal knowledge of each of the responses to this Statement of Qualifications and/or that he/she has conducted all necessary and appropriate inquiries to determine the truth, completeness and accuracy of responses to this Statement of Qualifications. The undersigned declares and certifies that the responses to this Statement of Qualifications are complete and accurate; there are no omissions of material fact or information that render any response to be false or misleading and there are no misstatements of fact in any of the responses. The above-identified Bidder acknowledges and agrees that if the District determines that any response herein is false or

misleading or contains misstatements of fact so as to be false or misleading, the Bidder's Bid Proposal may be rejected by the District for non-responsiveness.

Executed this___ day of _____ 20__ at_____.
(City and State)

I declare under penalty of perjury under California law that the foregoing is true and correct.

By: _____
(Signature of Bidder's Authorized Officer or Representative)

_____

Title: _____
(Typed or Printed Name)

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NON-COLLUSION AFFIDAVIT

STATE OF CALIFORNIA
COUNTY OF _____

I, _____, being first duly sworn, deposes and says that I am
(Typed or Printed Name)

the _____ of _____, the party submitting
(Title) (Bidder Name)

the foregoing Bid Proposal ("the Bidder"). In connection with the foregoing Bid Proposal, the undersigned declares, states and certifies that:

1. The Bid Proposal is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization or corporation.

2. The Bid Proposal is genuine and not collusive or sham.

3. The Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any other bidder or anyone else to put in sham bid, or to refrain from bidding.

4. The Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price, or that of any other bidder, or to fix any overhead, profit or cost element of the bid price or that of any other bidder, or to secure any advantage against the public body awarding the contract or of anyone interested in the proposed contract.

5. All statements contained in the Bid Proposal and related documents are true.

6. The bidder has not, directly or indirectly, submitted the bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any person, corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

Executed this ____ day of _____, 20__ at _____.
(City, County and State)

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

_____
Signature

_____
Name Printed or Typed

(_____) _____
(Area Code and Telephone Number)

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CERTIFICATE OF WORKERS' COMPENSATION INSURANCE

I,_____ the _____ of
(Name) (Title)
_____, declare, state and certify that:
(Contractor Name)

1. I am aware that California Labor Code § 3700(a) and (b) provides:

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

(a) By being insured against liability to pay compensation in one or more insurers duly authorized to write compensation insurance in this state.

(b) By securing from the Director of Industrial Relations a certificate of consent to self-insure either as an individual employer, or one employer in a group of employers, 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 his or her employees."

2. I am aware that the provisions of California Labor Code §3700 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 provisions before commencing the performance of this Contract.

_____
(Contractor Name)

By:_____
(Signature)

_____
(Typed or printed name)

DRUG-FREE WORKPLACE CERTIFICATION

I, _____, am the_____of
(Print Name) (Title)

_____
(Contractor Name)

I declare, state and certify to all of the following:

1. I am aware of the provisions and requirements of California Government Code §§8350 et seq.,the Drug Free Workplace Act of 1990.

2. I am authorized to certify, and do certify, on behalf of Contractor that a drug free workplace willbe provided by Contractor by doing all of the following:

   A. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession or use of a controlled substance is prohibited in Contractor's workplace and specifying actions which will be taken against employees for violation of the prohibition;

   B. Establishing a drug-free awareness program to inform employees about all of the following:

      i. The dangers of drug abuse in the workplace;

      ii. Contractor's policy of maintaining a drug-free workplace;

      iii. The availability of drug counseling, rehabilitation and employee-assistance programs; and

      iv. The penalties that may be imposed upon employees for drug abuse violations;

   C. Requiring that each employee engaged in the performance of the Contract be given a copyof the statement required by subdivision (A), above, and that as a condition of employmentby Contractor in connection with the Work of the Contract, the employee agrees to abide by the terms of the statement.

   D. Contractor agrees to fulfill and discharge all of Contractor's obligations under the terms and requirements of California Government Code §8355 by, inter alia, publishing a statement notifying employees concerning: (i) the prohibition of any controlled substance in the workplace, (ii) establishing a drug-free awareness program, and (iii) requiring that each employee engaged in the performance of the Work of the Contract be given a copy of the statement required by California Government Code §8355(a) and requiring that the employee agree to abide by the terms of that statement.

3. Contractor and I understand that if the District determines that Contractor has either: (i) made a false certification herein, or (ii) violated this certification by failing to carry out and to implementthe requirements of California Government Code §§8355, the Contract awarded herein is subject to termination, suspension of payments, or both. Contractor and I further understand that, should Contractor violate the terms of the Drug-Free Workplace Act of 1990, Contractor may be subject to debarment in accordance with the provisions of California Government Code §§8350, et seq.
4. Contractor and I acknowledge that Contractor and I are aware of the provisions of California Government Code §§8350, et seq. and hereby certify that Contractor and I will adhere to, fulfill, satisfy and discharge all provisions of and obligations under the Drug-Free Workplace Act of 1990.

I declare under penalty of perjury under the laws of the State of California that all of the foregoingis true and correct.

Executed at_____this____day of

1. (City and State)

_____, 20____.

_____

(Signature)

_____

(Printed or Typed Name)

AGREEMENT

THIS AGREEMENT is entered into Click here to enter a date. in the City of Merced, County of Merced, State of California, by and between **MERCED COMMUNITY COLLEGE DISTRICT**, a California Community College District hereinafter "District" and _____ ("Contractor").

WITNESSETH, that the District and the Contractor in consideration of the mutual covenants contained herein agree as follows:

The Work. Within the Contract Time and for the Contract Price, subject to adjustments thereto pursuant to the Contract Documents, the Contractor shall perform and provide all necessary labor, materials, tools, equipment, utilities, services and transportation to complete in a workmanlike manner all of the Work required in connection with the work of improvement commonly referred to as:

BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT

1. Contractor shall complete all Work covered by the Contract Documents, including without limitation, the Drawings and Specifications prepared by the Architect, _____ and other Contract Documents enumerated in Article 5 below, along with all modifications and addenda thereto issued in accordance with the Contract Documents.

2. Contract Time. The Work shall be commenced on the date stated in the District's Notice to Proceed; the Contractor shall achieve Completion of the Work within the Contract Time set forth in the Contract Documents.

3. Contract Price. The District shall pay the Contractor as full consideration for the Contractor's full, complete and faithful performance of the Contractor's obligations under the Contract Documents, subject to adjustments of the Contract Price in accordance with the Contract Documents, the Contract Price of _____ **Dollars ($_____)**. The District's payment of the Contract Price shall be in accordance with the Contract Documents. The Contract Price is based upon the Contractor's Base Bid Proposal and the following Alternate Bid Items, if any: _____.

4. Liquidated Damages. If the Contractor fails to achieve Completion of the Work within the Contract Time, including adjustments thereto authorized by the Contract Documents, the Contractor shall be subject to assessment of Liquidated Damages in accordance with the Contract Documents. Failure of the Contractor to complete Punchlist items noted upon Completion within the time established to complete the Punchlist items will result in the District's assessment of Liquidated Damages in accordance with the Contract Documents.

5. The Contract Documents. The documents forming a part of the Contract Documents consist of the following, all of which are component parts of the Contract Documents.

Section	Description		Section	Description
00 01 10	Table of Contents		00 61 10	Bid Bond
00 11 13	Notice Calling for Bids		00 61 13	Performance Bond
00 21 13	Instructions for Bidders		00 61 14	Labor & Materials Payment Bond
00 41 22	Bid Proposal		00 62 90	Verification of Certified Payroll Records Submittal to Labor Commissioner
00 43 13	Bid Proposal; Alternate Bid Items Proposal		00 65 01	Conditional Waiver & Release on Progress Payment
00 43 36	Subcontractors List		00 65 02	Unconditional Waiver & Release on Progress Payment
00 45 10	DIR Registration Verification		00 65 03	Conditional Waiver & Release on Final Payment
00 45 13	Statement of Qualifications		00 65 04	Unconditional Waiver & Release on Final Payment
00 45 19	Non-Collusion Affidavit		00 65 36	Contractor Guarantee Form
00 45 23	Certificate of Workers Compensation Insurance		00 65 37	Contractor Certification of Subcontractor Claim
00 45 27	Drug-Free Workplace Certification		00 72 13	General Conditions

Section	Description		Section	Description
00 52 00	Agreement		00 73 13	Special Conditions

6. Authority to Execute. The individual(s) executing this Agreement on behalf of the Contractor is/are duly and fully authorized to execute this Agreement on behalf of Contractor and to bind the Contractor to each and every term, condition and covenant of the Contract Documents.

CONTRACTORS ARE REQUIRED BY LAW TO BE LICENSED AND REGULATED BY THE CONTRACTORS' STATE LICENSE BOARD. ANY QUESTIONS CONCERNING A CONTRACTOR MAY BE REFERRED TO THE REGISTRAR, CONTRACTORS' STATE LICENSE BOARD, P.O. BOX 2600, SACRAMENTO, CALIFORNIA 95826

IN WITNESS WHEREOF, this Agreement has been duly executed by the District and the Contractor as of the date set forth above.

District
Merced Community College District

By: _____

Title: _____

Contractor
[Contractor Name]

By: _____

Title: _____

BID BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **MERCED COMMUNITY COLLEGE DISTRICT** ("the Obligee") for payment of the penal sum hereof in lawful money of the United States, as more particularly set forth herein.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Principal has submitted the accompanying Bid Proposal to the Obligee for the Work commonly described as **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**

WHEREAS, subject to the terms of this Bond, the Surety and the Principal are jointly and severally firmly bound unto the Obligee in the penal sum equal to Ten Percent (10%) of the maximum amount of the Bid Proposal submitted by the Principal to the Obligee, inclusive of amounts proposed for Alternate Bid Items, if any.

NOW THEREFORE, if the Principal shall not withdraw said Bid Proposal within the period specified therein after the opening of the same, or, if no period be specified, for sixty (60) days after opening of said Bid Proposal; and if the Principal is awarded the Contract, and shall within the period specified therefore, or if no period be specified, within five (5) days after the prescribed forms are presented to him for signature, enter into a written contract with the Obligee, in accordance with the Bid Proposal as accepted and give such bond(s) with good and sufficient surety or sureties, as may be required, for the faithful performance and proper fulfillment of such Contract and for the payment for labor and materials used for the performance of the Contract, or in the event of the withdrawal of said Bid Proposal within the period specified for the holding open of the Bid Proposal or the failure of the Principal to enter into such Contract and give such bonds within the time specified, if the Principal shall pay the Obligee the difference between the amount specified in said Bid Proposal and the amount for which the Obligee may procure the required Work and/or supplies, if the latter amount be in excess of the former, together with all costs incurred by the Obligee in again calling for Bids, then the above obligation shall be void and of no effect, otherwise to remain in full 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, the Work to be performed there under, the Drawings or the Specifications accompanying the same, or any other portion of the Contract Documents shall in no way affect its obligations 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, the Call for Bids, the Work, the Drawings or the Specifications, or any other portion of the Contract Documents.

If suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal shall be jointly and severally liable for payment to the Obligee all costs, expenses and fees

[CONTINUED NEXT PAGE]

incurred by the Obligee in connection therewith, including without limitation, attorneys' fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20___ by their duly authorized agents or representatives.

_____
(Bidder/Principal Name)

By: _____
(Signature)

_____
(Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

_____
(Surety Name)

By: _____
(Signature of Attorney-In-Fact for Surety)

_____
(Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

_____
(Contact Name)

_____
(Street Address)

_____
(City, State & Zip Code)

(_____) _____ (_____) _____
Telephone Fax

_____
(Email address)

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **MERCED COMMUNITY COLLEGE DISTRICT** ("the Obligee") for payment of the penal sum the penal sum of _____ Dollars ($_____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**

WHEREAS, the Principal, has entered into an agreement with the Obligee for performance of the Work; the Agreement and all other Contract Documents set forth therein are incorporated herein and made a part hereof by this reference.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond ensuring the Principal's prompt, full and faithful performance of the Work of the Contract Documents.

NOW THEREFORE, if the Principal promptly, fully and faithfully performs each and all of the obligations and things to be done and performed by the Principal in strict accordance with the terms of the Contract Documents as they may be modified or amended from time to time; and if the Principal shall indemnify, defend and hold harmless the Obligee and all of its officers, agents and employees from any and all losses, liability and damages, claims, judgments, liens, costs, and fees of every description, which may be incurred by the Obligee by reason of the failure or default on the part of the Principal in the performance of any or all of the terms or the obligations of the Contract Documents, including all modifications, and amendments, thereto, and any warranties or guarantees required thereunder; then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The Surety, for value received, stipulates and agrees that no change, adjustment of the Contract Time, adjustment of the Contract Price, alterations, deletions, additions, or any other modifications to the terms of the Contract Documents, the Work, or to the Specifications or the Drawings shall limit, restrict or otherwise impair Surety's obligations or Obligee's rights hereunder; Surety waives notice from the Obligee of any such changes, adjustments of Contract Time, adjustments of Contract Price, alterations, deletions, additions or other modifications to the Contract Documents, the Work, or the Drawings or the Specifications.

In the event of the Obligee's termination of the Contract due to the Principal's breach or default of the Principal's obligations thereunder, within twenty (20) days after written notice from the Obligee to the Surety of the Principal's breach or default of the Contract Documents and Obligee's termination of the Contract, the Surety shall notify Obligee in writing of Surety's assumption of obligations hereunder by its election to either remedy the default or breach of the Principal or to take charge of the Work of the Contract Documents and complete the Work at its own expense ("the Notice of Election"); provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this

[CONTINUED NEXT PAGE]

Bond shall be subject to the advance written approval of the Obligee, which approval shall not be unreasonably withheld, limited or restricted. The insolvency of the Principal or the Principal's denial of a failure of performance or default under the Contract Documents shall not by itself, without the Surety's prompt, diligent inquiry and investigation of such denial, be justification for Surety's failure to give the Notice of Election or for its failure to promptly remedy the failure of performance or default of the Principal or to complete the Work.

If the Surety fails to issue its Notice of Election to Obligee within the time provided for hereinabove, the Obligee may thereafter cause the cure or remedy of the Principal's failure of performance or default or to complete the Work. The Principal and the Surety are jointly and severally liable to the Obligee for all damages and costs sustained by the Obligee as a result of the Principal's failure of performance under the Contract Documents or default in its performance of obligations thereunder, including without limitation the costs of cure or completion of the Work exceeding the then remaining balance of the Contract Price; provided that the Surety's liability hereunder for the costs of performance, damages and other costs sustained by the Obligee upon the Principal's failure of performance or default under the Contract Documents is limited to the penal sum hereof, which includes the costs or value of any Changes to the Work which increases the Contract Price.

If suit or other proceeding is brought upon this Bond by the Obligee, the Surety and Principal are jointly and severally liable for payment to the Obligee of all costs, expenses and fees incurred by the Obligee therewith, including without limitation, attorneys' fees.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____day of _____, 20____ by their duly authorized agent or representative.

_____
(Contractor-Principal Name)

By: _____
(Signature)

_____
(Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

_____
(Surety Name)

By: _____
(Signature of Attorney-In-Fact for Surety)

_____
(Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature.)

Contact name, address, telephone number and email address for notices to the Surety

_____
(Contact Name)

_____
(Street Address)

_____
(City, State & Zip Code)

(_____) _____ (_____) _____
Telephone Fax

_____
(Email address)

LABOR AND MATERIAL PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS that we, _____, as Surety and _____, as Principal, are jointly and severally, along with their respective heirs, executors, administrators, successors and assigns, held and firmly bound unto **MERCED COMMUNITY COLLEGE DISTRICT** ("the Obligee") for payment of the penal sum the penal sum of _____ Dollars ($_____) in lawful money of the United States, well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT:

WHEREAS, the Obligee, by resolution of its Board of Trustees has awarded to the Principal a Contract for the Work described as **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**

WHEREAS, the Principal, has entered into an Agreement with the Obligee for performance of the Work, the Agreement and all other Contract Documents set forth therein are incorporated herein by this reference and made a part hereof.

WHEREAS, by the terms of the Contract Documents, the Principal is required to furnish a bond for the prompt, full and faithful payment to any Claimant, as hereinafter defined, for all labor materials or services used, or reasonably required for use, in the performance of the Work.

NOW THEREFORE, if the Principal shall promptly, fully and faithfully make payment: (i) to any Claimant for all labor, materials or services used or reasonably required for use in the performance of the Work; (ii) of amounts due under the Unemployment Insurance Code for work or labor performed under the Contract; and (iii) of amounts required to be deducted, withheld and paid to the Employment Development Department from wages of the employees of the Principal and its Subcontractors under Section 13020 of the Unemployment Insurance Code with respect to work and labor under the Contract then this obligation shall be void; otherwise, it shall be, and remain, in full force and effect.

The term "Claimant" shall refer to any person, corporation, partnership, proprietorship or other entity including without limitation, all persons and entities described in California Civil Code §9100, providing or furnishing labor, materials or services used or reasonably required for use in the performance of the Work under the Contract Documents, without regard for whether such labor, materials or services were sold, leased or rented. This Bond shall inure to the benefit of all Claimants so as to give them, or their assigns and successors, a right of action upon this Bond.

If suit is brought on this Bond by any Claimant for amounts due such Claimant for labor, materials or services provided or furnished by such Claimant, the Surety shall pay for the same and reasonable attorneys' fees pursuant to California Civil Code §9554.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, deletion, addition, or any other modification to the terms of the Contract Documents, the Work to be performed thereunder, the Specifications or the Drawings, or any other portion of the Contract Documents, shall in any way limit, restrict or otherwise affect its obligations under this Bond; the Surety hereby waives notice from the Obligee of any such change, extension of time, alteration

[CONTINUED NEXT PAGE]

deletion, addition or other modification to the Contract Documents, the Work to be performed under the Contract Documents, the Drawings or the Specifications of any other portion of the Contract Documents.

IN WITNESS WHEREOF, the Principal and Surety have executed this instrument this _____ day of _____, 20__ by their duly authorized agent or representative.

_____
(Contractor-Principal Name)

By: _____
(Signature)

_____
(Typed or Printed Name)

Title: _____

(Attach Notary Public Acknowledgement of Principal's Signature)

_____
(Surety Name)

By: _____
(Signature of Attorney-In-Fact for Surety)

_____
(Typed or Printed Name of Attorney-In-Fact)

(Attach: (i) Attorney-In-Fact Certification; (ii) Notary Public Acknowledgment of Authorizing Signature on Attorney-Fact Certification; and (iii) Notary Public Acknowledgement of Attorney-In-Fact's Signature)

Contact name, address, telephone number and email address for notices to the Surety

_____
(Contact Name)

_____
(Street Address)

_____
(City, State & Zip Code)

(_____) _____ (_____) _____
Telephone Fax

_____
(Email address)

VERIFICATION OF CERTIFIED PAYROLL RECORDS SUBMITTAL TO LABOR COMMISSIONER

I am the _____ for _____ in
(Superintendent/Project Manager) (Contractor)
connection with **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**

1. This Verification is submitted to Merced Community College District concurrently with the Contractor's submittal of an Application for Progress Payment to the District, identified as Application For Progress Payment No. _____ ("the Pay Application").
2. The Pay Application requests the District's disbursement of a Progress Payment for the value of Work performed between _____, 20___ and _____, 20___.
3. The Contractor has submitted Certified Payroll Records ("CPR") to the Labor Commissioner for all employees of the Contractor engaged in performance of Work subject to prevailing wage rate requirements for the period of time covered by the Pay Application.
4. All Subcontractors who are entitled to any portion of payment to be disbursed pursuant to the Pay Application have submitted their CPRs to the Labor Commissioner for all of their employees performing Work subject to prevailing wage rate requirements for the period of time covered by the Pay Application.
5. I have reviewed the Contractor's CPRs submitted to the Labor Commissioner. The CPRs submitted to the Labor Commissioner by the Contractor are complete and accurate for the period of time covered by the Pay Application.
6. I have reviewed the Subcontractors' CPRs submitted to the Labor Commissioner. The CPRs submitted to the Labor Commissioner by the Subcontractors are complete and accurate for the period of time covered by the Pay Application.

I declare under penalty of perjury under California law that the foregoing is true and correct. I executed this Certification on the ____ day of _____, 20___ at _____ _____.
(City) and State)

By: _____

_____
(Typed or Printed Name)

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CONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT (Civil Code §8132)

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

Identifying Information

Name of Claimant	
Name of Customer	
Job Location	
Owner	
Through Date	

Conditional Waiver and Release

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

Maker of Check	
Amount of Check	
Check Payable To	

Exceptions

This document does not affect any of the following:

1. Retentions.
2. Extras for which the claimant has not received payment.
3. The following payments for which the claimant has previously given a conditional waiver and release but has not received payment:
   Date(s) of waiver and release: _____
   Amount(s) of unpaid payment(s): _____
4. Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Signature

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

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UNCONDITIONAL WAIVER AND RELEASE ON PROGRESS PAYMENT (Civil Code §8134)

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

Identifying Information

Name of Claimant	
Name of Customer	
Job Location	
Owner	
Through Date	

Unconditional Waiver and Release

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

Exceptions

This document does not affect any of the following:

1. Retentions.
2. Extras for which the claimant has not received payment.
3. Contract rights, including (A) a right based on rescission, abandonment, or breach of contract, and (B) the right to recover compensation for work not compensated by the payment.

Signature

Claimant's Signature: _____

Claimant's Title: _____

Date of Signature: _____

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CONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT (Civil Code §8136)

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

Identifying Information

Name of Claimant	
Name of Customer	
Job Location	
Owner	
Through Date	

Conditional Waiver and Release

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

Maker of Check	
Amount of Check	
Check Payable To	

Exceptions

This document does not affect any of the following:
Disputed claims for extras in the amount of: $_____

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

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UNCONDITIONAL WAIVER AND RELEASE ON FINAL PAYMENT (Civil Code §8138)

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

Identifying Information

Name of Claimant	
Name of Customer	
Job Location	

Unconditional Waiver and Release

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

Exceptions

This document does not affect the following:
Disputed claims for extras in the amount of: $_____

Signature

Claimant's Signature: _____
Claimant's Title: _____
Date of Signature: _____

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Contractor Guarantee

District: **Merced Community College District**

Project Name: **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**

Contractor Name: _____

The Contractor hereby warrants and guarantees to the District that all work, materials, equipment and workmanship provided, furnished or installed by or on behalf of Contractor in connection with the above-referenced Project (the "Work") have been provided, furnished and installed in strict conformity with the Contract Documents for the Work, including without limitation, the Drawings and the Specifications. Contractor further warrants and guarantees that all work, materials, equipment and workmanship as provided, furnished and/or installed are fit for use as specified and fulfill all applicable requirements of the Contract Documents including without limitation, the Drawings and the Specifications. Contractor shall, at its sole cost and expense, repair, correct and/or replace any or all of the work, materials, equipment and/or workmanship of the Work, together with any other items which may be affected by any such repairs, corrections or replacement, that may be unfit for use as specified or defective within a period of one (1) year from the date of the District's Final Acceptance of the Work, ordinary wear and tear and unusual abuse or neglect excepted.

In the event of the Contractor's failure and/or refusal to comply with the provisions of this Guarantee, within the period of time set forth in the Contract Documents after the District's issuance of the Notice to the Contractor of any defect(s) in the Work, materials, equipment or workmanship, Contractor authorizes the District, without further notice to Contractor, to repair, correct and/or replace any such defective item at the expense of the Contractor. The Contractor shall reimburse the District for all costs, expenses or fees incurred by the District in providing or performing such repairs, corrections or replacements within ten (10) days of the District's presentation of a demand to the Contractor for the same.

The provisions of this Guarantee and the provisions of the Contract Documents for the Work relating to the Contractor's Guarantee(s) and warranties relating to the Work shall be binding upon the Contractor's Performance Bond Surety and all successors or assigns of Contractor and/or Contractor's Performance Bond Surety.

The provisions of this Guarantee are in addition to, and not in lieu of, any provisions of the Contract Documents for the Work relating to the Contractor's guarantee(s) and warranties or any guarantee(s) or warranties provided by any material supplier or manufacturer of any equipment, materials or other items forming a part of, or incorporated into the Work, or any other guarantee or warranty obligation of the Contractor, prescribed, implied or imposed by law.

The undersigned individual executing this Guarantee on behalf of Contractor warrants and represents that he/she is duly authorized to execute this Guarantee on behalf of Contractor and to bind Contractor to each and every provision hereof.

Dated: _____ By: _____
(Signature)

_____
(Typewritten or Handwritten Name)

_____
(Title)

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CONTRACTOR CERTIFICATION OF SUBCONTRACTOR CLAIM

TO: MERCED COMMUNITY COLLEGE DISTRICT ("DISTRICT")

RE: BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT (Project)
YYYY (Contractor)
ZZZZ (Subcontractor)
Subcontractor Claim

This Contractor Certification of Subcontractor Claim is submitted by YYYY relating to **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT** to the District on behalf of ZZZZ.

1. I am the _____ of the Contractor in connection with the above-described Project.
2. The Subcontractor has submitted the accompanying Subcontractor Claim to the Contractor for presentation to the District pursuant to Public Contract Code §9204.
3. I have personally reviewed the entirety of the Subcontractor Claim and all substantiating documentation in support of the Subcontractor Claim.
4. The Subcontractor Claim is made by the Subcontractor in good faith.
5. The Subcontractor Claim is supported by reasonable documentation establishing entitlement to the relief requested and District liability therefor.
6. The Subcontractor Claim does not incorporate any request constituting a False Claim under applicable law, including the California False Claim Act (Government Code §12650 et. seq.).
7. I am authorized: (i) to execute this Certification on behalf of the Contractor; and (ii) to submit this Certification and the accompanying Subcontractor Claim to the District.
8. I have personal first-hand knowledge of all of the foregoing.

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

Executed at _____, California, on _____, 20___.

_____
(Signature)

_____
(Print Name)

_____
(Title)

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GENERAL CONDITIONS
BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT

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GENERAL CONDITIONS

ARTICLE 1: DEFINITIONS

1.1 District. The "District" refers t**o Merced Community College District** and unless otherwise stated, includes the District's authorized representatives, including the Project Manager, if a Project Manager is designated, the District's Board of Trustees and the District's officers, employees, agents and representatives.

1.2 Contractor. The Contractor is the person or entity identified as such in the Agreement; references to "Contractor" include the Contractor's authorized representative.

1.3 Architect. The Architect is the person or entity identified as such in the Agreement; references to the "Architect" include, as required by context of usage, the Architect's employees and authorized representative(s) and the Architect's Consultants and their employees and authorized representative(s).

1.4 The Work. The Work is the construction and services required by the Contract Documents, whether completed or partially completed, and includes all other labor, materials, equipment or services provided or to be provided by the Contractor to fulfill the Contractor's obligations under the Contract Documents. The Work may constitute the whole or a part of the Project.

1.5 The Project. The Project is the total construction of which the Work performed by the Contractor under the Contract Documents may be the whole or a part of the Project and which may include construction by the District or by separate contractors.

1.6 Surety. The Surety is the person or entity that executes, as surety, the Contractor's Labor and Material Payment Bond and/or Performance Bond.

1.7 Subcontractors; Sub-Subcontractors. A Subcontractor is a person or entity who has a direct contract with the Contractor to perform a portion of the Work. "Subcontractor" does not include a separate contractor to the District or subcontractors of any separate contractor. A Sub-Subcontractor is a person or entity of any tier, who has a direct or indirect contract with a Subcontractor to perform a portion of the Work at the Site. References to "Subcontractor" herein include all subcontractors of any tier.

1.8 Material Supplier. A Material Supplier is any person or entity who only furnishes materials, equipment or supplies for the Work without fabricating, installing or consuming them in the Work.

1.9 Drawings and Specifications. The Drawings are the graphic and pictorial portions of the Contract Documents, wherever located and whenever issued, showing generally, the design, location and dimensions of the Work and may include without limitation, plans, elevations, sections, details, schedules or diagrams. The Specifications are that portion of the Contract Documents consisting of the written requirements for materials, equipment, construction systems, standards, criteria and workmanship for the Work and related services. The Drawings and Specifications are intended to delineate and describe the Work and its component parts so as to permit skilled and competent contractors to bid upon the Work and prosecute the same to completion.

1.10 Special Conditions; Supplemental Conditions. Special Conditions and/or Supplemental Conditions, if any are special or supplemental provisions, not otherwise provided for in the Agreement or the General Conditions.

1.11 Contract Documents. The Contract Documents consist of the Agreement between the District and the Contractor, Conditions of the Contract (whether General, Special, Supplemental or otherwise), Drawings, Specifications, including addenda thereto issued prior to execution of the Agreement and any other documents listed in the Agreement. The Contract Documents shall include modifications issued after execution of the Agreement. The Contract Documents form

the Contract for Construction.

1.12 Intent and Correlation of Contract Documents.

1.12.1 Work of the Contract Documents. The intent of the Contract Documents is to include all items necessary for the proper execution and completion of the Work by the Contractor. The Contract Documents are complementary and what is required by one shall be as binding as if required by all; performance by the Contractor shall be required to the extent consistent with the Contract Documents and reasonably inferable therefrom as being necessary to produce the intended results. Organization of the Specifications into divisions, sections or articles, and the arrangement of Drawings shall not control the Contractor in dividing the Work among Subcontractors or in establishing the extent of Work to be performed by any trade. Where any portion of the Contract Documents is silent and information appears elsewhere in the Contract Documents, such other portions of the Contract Documents shall control.

1.12.2 Technical Terms. Unless otherwise stated in the Contract Documents, words or terms which have well-known technical or construction industry meanings are used in the Contract Documents in accordance with such recognized meanings.

1.12.3 Conflict in Contract Documents. Conflicts, inconsistencies or ambiguities in the Contract Documents shall be resolved by the Architect in accordance with Article 3.1.9 of the General Conditions; where conflicts or inconsistencies arise between the Drawings and the Specifications, in resolving such conflicts or inconsistencies, the Architect will be governed generally by the following standards: the Drawings are intended to describe matters relating to placement, type, quantity and the like; the Specifications are intended to describe matters relating to quality, materials, compositions, manufacturers and the like. If conflicts exist between portions of the Contract Documents regarding the quality of any item, product, equipment or materials, unless otherwise directed or authorized by the District, the Contractor shall provide the item, product, equipment or material of the highest or more stringent quality.

1.13 Shop Drawings; Samples; Product Data ("Submittals"). Shop Drawings are diagrams, schedules and other data specially prepared for the Work by the Contractor or a Subcontractor, Material Supplier, or others to illustrate some portion of the Work. Samples are physical examples of materials, equipment or workmanship forming a part of, or to be incorporated into the Work. Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate materials or equipment for some portion of the Work. Shop Drawings, Samples and Product Data prepared or furnished by the Contractor, Subcontractors or Material Suppliers are collectively referred to as "Submittals".

1.14 Division of State Architect ("DSA"). DSA is the California Division of the State Architect including without limitation DSA's Office of Construction Services, Office of Design Services and the Office of Regulatory Services; references to the DSA in the Contract Documents shall mean the DSA, its offices and its authorized employees and agents. The authority of the DSA over the Work and the performance thereof shall be as set forth in the Contract Documents and Title 24 of the California Code of Regulations.

1.15 District's Inspector. The District's Inspector is the individual designated and employed by the District in accordance with the requirements of Title 24 of the California Code of Regulations. The District's Inspector shall be authorized to act on behalf of the District as provided for in the Contract Documents and in Title 24 of the California Code of Regulations, as the same may be amended from time to time.

1.16 Contract Document Terms. The term "provide" means "provide complete in place" or to "furnish and install" such item. Unless otherwise provided in the Contract Documents, the terms "approved;" "directed;" "satisfactory;" "accepted;" "acceptable;" "proper;" "required;" "necessary"

and "equal" shall mean as approved, directed, satisfactory, accepted, acceptable, proper, required, necessary and equal, in the opinion of the Architect. The term "typical" as used in the Drawings shall require the installation or furnishing of such item(s) of the Work designated as "typical" in all other areas similarly marked as "typical"; Work in such other areas shall conform to that shown as "typical" or as reasonably inferable therefrom.

1.17 Contractor's Superintendent. The Contractor's Superintendent is the individual employed by the Contractor whose principal responsibility shall be the supervision and coordination of the Work; the Contractor's Superintendent shall not perform routine construction labor.

1.18 Record Drawings. The Record Drawings are a set of the Drawings marked by the Contractor during the performance of the Work to indicate completely and accurately the actual as-built condition of the Work. The Record Drawings shall be sufficient for a capable and qualified draftsman to modify the Drawings to reflect and indicate the Work actually in place at Final Completion of the Work.

1.19 Project Manager. The Project Manager, if any, is the individual or entity designated as such in the Special Conditions. The Project Manager is an independent contractor retained by the District and shall be authorized and empowered to act on behalf of the District. In the event that a Project Manager is not designated in the Special Conditions, the District reserves the right to designate a Project Manager at any time during Contractor's performance of the Work. The District reserves the right to remove or replace the Project Manager during Contractor's performance of the Work. The designation of a Project Manager, if one has not been designated in the Special Conditions, or the removal or replacement of the designated Project Manager shall not result in adjustment of the Contract Price or the Contract Time or otherwise affect, limit or restrict Contractor's obligations hereunder.

1.20 Construction Equipment. Construction Equipment is equipment utilized for the performance of any portion of the Work, but which is not incorporated into the Work.

1.21 Site. The Site is the physical area designated in the Contract Documents for Contractor's performance, construction and installation of the Work.

1.22 Field Clarifications. A written or graphic document consisting of supplementary details, instructions or information issued on behalf of the District which clarifies or supplements the Contract Documents and which becomes a part of the Contract Documents upon issuance. Field Clarifications do not constitute an adjustment of the Contract Time or the Contract Price, unless a Change Order relating to a Field Clarification is authorized and issued under the Contract Documents.

1.23 Defective or Non-Conforming Work. Defective or Non-Conforming Work is any Work which is unsatisfactory, faulty or deficient by: (i) not conforming to the requirements of the Contract Documents; (ii) not conforming to the standards of workmanship of the applicable trade or industry; (iii) not being in compliance with the requirements of any inspection, reference, standard, test, or approval required by the Contract Documents; or (iv) damage occurring prior to Final Completion of all of the Work.

1.24 Delivery. Delivery used in conjunction with any equipment, materials or other items to be incorporated into the Work shall mean the unloading and storage in a protected condition at the Site pending incorporation into the Work.

1.25 Notice to Proceed. The Notice to Proceed is the written notice issued by or on behalf of the District to the Contractor authorizing the Contractor to proceed with commencement of the Work and which establishes the date for commencement of the Contract Time.

1.26 Progress Reports; Verified Reports. Progress Reports, if required, are written reports prepared by the Contractor and periodically submitted to the District in the form and content as required

by the Contract Documents. Verified Reports are periodic written reports prepared by the Contractor and submitted to the DSA; Verified Reports shall be in such form and content as required by the applicable provisions of Title 24 of the California Code of Regulations. A material obligation of the Contractor is the preparation of complete and accurate Progress Reports, if required, and Verified Reports as well as the timely submission of the same.

1.27 Laws. Laws refer to all laws, ordinances, codes, rules and/or regulations promulgated by any governmental or quasi-governmental agency with jurisdiction over any portion of the Work and which apply to any portion of the Work, including those in effect as of the execution of the Agreement, amendments thereto and subsequently enacted Laws that take effect during the performance of the Work. No adjustment of the Contract Time or the Contract Price shall be allowed for the Contractor's compliance with the Laws.

1.28 Construction Change Directive. A Construction Change Directive is a written instrument issued by or on behalf of the District to the Contractor directing a Change to the Work prior to the Contractor and District reaching full agreement on an adjustment of the Contract Time and/or Contract Price on account of such Change. A material obligation of the Contractor is timely performance of Work noted in a Construction Change Directive.

ARTICLE 2: DISTRICT

2.1 Information Required of District.

2.1.1 Surveys; Site Information. Information, if any, concerning physical characteristics of the Site, including without limitation, surveys, soils reports, and utility locations, to be provided by the District are set forth in the Contract Documents. Information not provided by the District or necessary information in addition to that provided by the District concerning physical characteristics of the Site which is required shall be obtained by Contractor without adjustment to the Contract Price or the Contract Time.

2.1.2 Permits, Licenses, Approvals. Except as otherwise provided in the Contract Documents, the District shall secure and pay for necessary approvals, easements, assessments and charges required for construction, use or occupancy of permanent structures or for permanent changes in existing facilities which relate to the Work of the Contractor under the Contract Documents. If permits, licenses, approvals or similar approvals relating to the Work, or the installation/construction thereof are designated as the responsibility of the Contractor under the Contract Documents, the Contractor shall obtain the same without adjustment of the Contract Price or the Contract Time.

2.1.3 Drawings and Specifications. Except as otherwise provided for in the Contract Documents, the District shall furnish the Contractor, free of charge, the number of copies of the Drawings and the Specifications as set forth in the Special Conditions. All of the Drawings and the Specifications provided by the District to the Contractor remain the property of the District; the Contractor shall not use the Drawings or the Specifications in connection with any other work of improvement other than the Work.

2.1.4 Furnishing of Information. Information or services to be provided by the District under the Contract Documents shall be furnished by the District with reasonable promptness to avoid delay in the orderly progress of the Work. Information about existing conditions furnished by the District under the Contract Documents is obtained from sources believed to be reliable, but the District neither guarantees nor warrants that such information is complete and accurate. The Contractor shall verify all information provided by the District. If the Contract Documents depict existing conditions on or about the Site, or the Work involves the renovation, removal or remodeling of existing improvements or the Work involves any tie-in or other connection with existing improvements, the conditions and/or existing improvements depicted in the Contract Documents are as they are believed to exist. The Contractor shall bear the risk of any variations

between conditions or existing improvements depicted in the Contract Documents and those conditions or existing improvements actually encountered in the performance of the Work. The existence of any variations between conditions or existing improvements depicted in the Contract Documents and those actually encountered in the performance of the Work shall not result in any District liability therefor, nor shall any such variations result in an adjustment of the Contract Time or the Contract Price.

2.2 District's Right to Stop the Work. In addition to the District's right to suspend the Work or terminate the Contract pursuant to the Contract Documents, the District, may, by written order, direct the Contractor to stop the Work, or any portion thereof, until the cause for such stop work order has been eliminated if the Contractor: (i) fails to correct Work which is not in conformity and in accordance with the requirements of the Contract Documents, or (ii) otherwise fails to carry out the Work in conformity and accordance with the Contract Documents. The right of the District to stop the Work hereunder shall not be deemed a duty on the part of the District to exercise such right for the benefit of the Contractor or any other person or entity, nor shall the District's exercise of such right: (i) waive or limit the exercise of any other right or remedy of the District under the Contract Documents or the Laws; or (ii) result in adjustment of the Contract Time or Contract Price.

2.3 Partial Occupancy or Use.

2.3.1 District's Right to Partial Occupancy. The District may occupy or use any completed or partially completed portion of the Work, provided that: (i) the District has obtained the consent of, or is otherwise authorized by, public authorities with jurisdiction thereof, to so occupy or use such portion of the Work and (ii) the District and the Contractor have accepted, in writing, the responsibilities assigned to each of them for security, maintenance, utilities, damage to the Work, insurance, the period for correction of the Work and commencement of warranties required by the Contract Documents for such portion of the Work partially used or occupied by the District. If the Contractor and the District are unable to agree upon the matters set forth in (ii) above, the District may nevertheless use or occupy any portion of the Work, with the responsibility for such matters subject to resolution in accordance with the Contract Documents. Immediately prior to such partial occupancy or use of the Work, or portions thereof, the District, the District's Inspector, the Contractor and the Architect shall jointly inspect the portions of the Work to be occupied or to be used to determine and record the condition of the Work. Repairs, replacements or other corrective action noted in such inspection shall be promptly performed and completed by the Contractor so that the portion of the Work to be occupied or used by the District is in conformity with the requirements of the Contract Documents and the District's occupancy or use thereof is not impaired. The District's use or occupancy of the Work or portions thereof pursuant to the preceding shall not be deemed "completion" of the Work as that term is used in Public Contract Code §7107.

2.3.2 No Acceptance of Defective or Nonconforming Work. The District's partial occupancy or use of the Work or any portion thereof, shall not constitute the District's acceptance of the Work which is defective or non-conforming.

2.4 District's Inspector.

2.4.1 Authority of District's Inspector. In addition to the authority and rights of the District's Inspector as provided for elsewhere in the Contract Documents and/or the Laws, all of the Work shall be performed under the observation of the District's Inspector. The foregoing notwithstanding, the Contractor shall not perform any Work deviating from the Contract Documents solely on the basis of direction by the District's Inspector; such deviations shall be deemed defective or non-conforming Work subject to correction or replacement at the sole cost of the Contractor and without adjustment of the Contract Time. The performance of the duties of the District's Inspector shall not relieve or limit the Contractor's performance of its obligations under the Contract Documents.

2.4.2 Limitations on District's Inspector. The does not have authority to interpret the Contract Documents or to modify the Work depicted in the Contract Documents. The District's Inspector has no authority relative to the content or scope of the Contractor's safety plan/program. The Contractor shall not perform any Work deviating from the Contract Documents solely on the basis of direction by the District's Inspector; such deviations shall be deemed Defective or Non-Conforming Work subject to correction or replacement at the sole cost of the Contractor and without adjustment of the Contract Time.

2.4.3 Contractor Access for District's Inspector. The Contractor shall provide the District's Inspector with access to all parts of the Work at any time, wherever located and whether partially or completely fabricated, manufactured, furnished or installed.

2.4.4 Contractor and District Responsibilities for Costs and Fees of District's Inspector. The District is responsible only for payment of the fees of the District's Inspector for standard eight (8) hour work day Mondays through Fridays, excepting holiday days ("District's Inspector Standard Workdays"). Unless the District directs the Contractor to perform Work exceeding the District's Inspector Standard Workdays, for any Work performed by the Contractor outside the District's Inspector Standard Workdays, the Contractor shall be responsible for payment of District's Inspector fees for District's Inspector services relating to such Work. All services provided by the District's Inspector exceeding an eight (8) hour workday Mondays through Fridays and/or the first eight (8) hours on Saturdays shall be at one and one-half (1½) times the District's Inspector's basic hourly rate. All hours of service provided by the District's Inspector in excess of eight (8) hours on Saturdays, and all hours of service provided by the District's Inspector on holiday days or on Sundays are at two (2) times the District's Inspector's basic hourly rate. Fees for services provided by the District's Inspector beyond the District's Inspector Standard Workdays set forth above are the sole responsibility of the Contractor; the District may deduct such fees from the Contract Price then or thereafter due the Contractor.

ARTICLE 3: ARCHITECT

3.1 Architect's Administration of the Contract.

3.1.1 Administration of Contract. The Architect will provide administration of the Contract as described in the Contract Documents, and will be one of the District's representatives during construction until the time that Final Payment. The Architect will advise and consult with the District, the Project Manager, if any, and the District's Inspector with respect to the administration of the Contract and the Work. The Architect is authorized to act on behalf of the District to the extent provided for in the Contract Documents; and shall have the responsibilities and authority established by the Laws.

3.1.2 Periodic Site Inspections. The Architect will visit the Site at intervals appropriate to the stage of construction to become generally familiar with the progress and quality of the completed Work and to determine, in general, if the Work is being performed in a manner indicating that the Work, when completed, will be in accordance with the Contract Documents. The Architect is not required to make exhaustive or continuous Site inspections to check quality or quantity of the Work. On the basis of Site observations as an architect, the Architect will keep the District informed of the progress of the Work, and will endeavor to guard the District against defects and deficiencies in the Work.

3.1.3 Contractor Responsibility for Construction Means, Methods and Sequences. The Architect will not have control over or charge of and will not be responsible for construction means, methods, techniques, sequences or procedures, or for safety precautions and programs in connection with the Work, these being solely the Contractor's responsibility. The Architect will not have control over or charge of and will not be responsible for acts or omissions of the Contractor, Subcontractors, or their agents or employees, or of any other persons performing portions of the Work.

3.1.4 Review of Applications for Payment. Pursuant to Article 8 hereof, the Architect will

review the Contractor's Payment Applications and for Final Payment, evaluate the extent of Work performed and verify to the District the amount properly due the Contractor on such Application for Payment.

3.1.5 Rejection of Work. The Architect is authorized to reject Work which is defective or does not conform to the requirements of the Contract Documents. Whenever the Architect considers it necessary or advisable, for implementation of the intent of the Contract Documents, the Architect is authorized to require additional inspections or testing of the Work, whether or not such Work is fabricated, installed or completed. Neither this authority of the Architect nor a decision made in good faith by the Architect to exercise or not to exercise such authority shall modify requirements of the Contract Documents or any obligation of the Contractor under the Contract Documents.

3.1.6 Submittals.

3.1.6.1 Architect's Review. The Architect will review and approve or take other appropriate action upon Submittals for the limited purpose of checking for general conformance with information given and the design concept expressed in the Contract Documents. Review of Submittals is not for the purpose of determining the accuracy and completeness of other details such as dimensions and quantities, or for substantiating instructions for installation or performance of equipment or systems, all of which remain the responsibility of the Contractor. The Architect's review of the Contractor's Submittals shall not: (i) modify or limit the Contractor's obligations under the Contract Documents; (ii) requirements of the Contract Documents relating to the Work; (iii) approval of safety measures, programs or precautions; or (iv) construction means, methods, techniques, sequences or procedures. The Architect's acceptance of a specific item in a Submittal shall not indicate approval of an assembly of which the item is a component with the Submittal(s) required and relating to such assembly have been reviewed by the Architect.

3.1.6.2 Time for Architect's Review. The Architect's review of Submittals will be conducted promptly so as not to delay or hinder the progress of the Work or the activities of the Contractor, the District or the District's separate contractors while allowing sufficient time, in the Architect's reasonable professional judgment, to permit adequate review of Submittals. The foregoing notwithstanding, the Architect's review and return of Submittals will conform with the time limits and other conditions, if any, set forth in the Specifications or the Submittal Schedule if the Submittal Schedule is required by other provisions of the Contract Documents.

3.1.7 Issuance of Construction Change Directive. The Architect is authorized to issue Construction Change Directives.

3.1.8 Changes to the Work; Change Orders. The Architect will prepare Change Orders, and may authorize minor Changes in the Work which do not result in adjustment of the Contract Time or the Contract Price.

3.1.9 Completion. In conjunction with the District, District's Inspector, Project Manager, if any, and the Contractor, the Architect will conduct observations of the Work to determine the date(s) of Completion and Final Completion. If the District does not designate a Project Manager for the Work, the Architect shall: (i) be authorized to enforce the Contractor's close-out obligations; and (ii) receive from the Contractor and the records, written warranties and related close-out materials assembled by the Contractor in accordance with the Contract Documents.

3.1.10 Interpretation of Contract Documents. The Architect will interpret and decide matters concerning the requirements of the Contract Documents on written request of either the District or the Contractor. The Architect's response to such requests will be made with reasonable promptness and within the time limits agreed upon, if any. If no agreement is reached establishing the time for the Architect's review and response to requests under this Article 3.1.10, the Architect shall be afforded a fifteen (15) day period after receipt of such request to review and respond thereto. Interpretations and decisions of the Architect will: (i) be consistent

with the intent of and reasonably inferable from the Contract Documents and will be in writing or in the form of drawings. When making such interpretations and decisions; (ii) endeavor to secure faithful performance by both the District and the Contractor; (iii) not show partiality to either the District or Contractor; and (iv) not result in liability for results of interpretations or decisions so rendered in good faith. The Architect's decisions on matters relating to aesthetic effect will be final if consistent with the intent expressed in the Contract Documents.

3.1.11 Request for Information. If the Contractor encounters any condition which the Contractor believes, in good faith and with reasonable basis, is the result of an ambiguity, conflict, error or omission in the Contract Documents (collectively "the Conditions"), Contractor shall timely notify the Architect, in writing, of the Conditions encountered and to request information from the Architect necessary to address and resolve any such Conditions before proceeding with any portion of the Work affected or which may be affected by such Conditions. If the Contractor fails to timely notify the Architect in writing of any Conditions encountered and the Contractor proceeds to perform any portion of the Work containing or affected by such Conditions the Contractor shall bear all costs associated with or required to correct, remove, or otherwise remedy any portion of the Work affected thereby without adjustment of the Contract Time or the Contract Price. In requesting information of the Architect to address and resolve any Conditions the Contractor shall act with promptness in submitting any such written request so as to allow the Architect a reasonable period of time to review, evaluate and respond to any such request, taking into account the then current status of the progress and completion of the Work and the actual or potential impact of any such Conditions upon the completion of the Work within the Contract Time. The Contract Time shall not be subject to adjustment in the event that the Contractor shall fail to timely request information from the Architect. The Architect's responses to any such Contractor request for information shall conform to the standards and time frame set forth in Article 3.1.10 of these General Conditions. The foregoing provisions notwithstanding, if the Architect reasonably determines that any of Contractor's request(s) for information: (i) does not reflect adequate or competent supervision or coordination by the Contractor or any Subcontractor; (ii) does not reflect the Contractor's adequate or competent knowledge of the requirements of the Work or the Contract Documents; or (iii) is not justified for any other reason, Contractor shall be liable to the District for all costs incurred by the District associated with the processing, reviewing, evaluating and responding to any such request for information, including without limitation, fees of the Architect. In responding to any of Contractor's request(s) for information, the Architect shall, in the response, indicate if the Architect has made the determination pursuant to the preceding sentence and, if so, the costs to be borne by the Contractor for the processing, review, evaluation and response to the request for information. Thereafter, the District is authorized to deduct such costs from any portion of the Contract Price then or thereafter due the Contractor.

3.2 Communications; Architect's Role. All communications regarding the Work, the performance thereof or the Contract Documents shall be in writing; verbal communications shall be reduced to writing. If the District does not designate a Project Manager for the Work, communications between the Contractor and the District shall be through the Architect. Communications between separate contractors, if any, shall be through the Architect.

3.3 Termination of Architect; Substitute Architect. In case of termination of employment of the Architect, the District shall appoint a substitute architect whose status under the Contract Documents shall be that of the Architect.

3.4 Project Manager. If a Project Manager is designated for the Work, the Project Manager shall be a representative of the District until Final Completion is achieved and Final Payment is due the Contractor. The Project Manager is authorized to act on behalf of the District and in connection with the Work as set forth in the Contract Documents, including without limitation: (i) review of the Contractor's Construction Schedule and updates thereto; (ii) review of the Contractor's Applications for

Payment and verification of the amount due the Contractor under an Application for Payment; (iii) conducting the Pre-Construction Meeting, Progress Meetings and/or Special Meetings and maintaining minutes thereof; and (iv) enforcement of the Contractor's obligations under the Contract Documents, including the Contractor's close-out obligations.

ARTICLE 4: THE CONTRACTOR

4.1 Contractor Review of Contract Documents.

4.1.1 Examination of Contract Documents. The Contractor shall carefully study and compare the Contract Documents with each other and with information furnished by the District pursuant to the Contract Documents and shall at once report to the Architect any errors, inconsistencies or omissions discovered. If the Contractor performs any Work knowing, or with reasonable diligence should have known that, it involves an error, inconsistency or omission in the Contract Documents without prior notice to the Architect of the same, the Contractor shall assume full responsibility for such performance and shall bear all costs for correction of the same without adjustment of the Contract Price.

4.1.2 Field Measurements. Prior to commencement of the Work, or portions thereof, the Contractor shall take field measurements and verify field conditions at the Site and shall carefully compare such field measurements and conditions with information provided in the Contract Documents. Errors, inconsistencies or omissions discovered shall be immediately reported to the Architect along with request for clarification or direction.

4.1.3 Dimensions; Layouts and Field Engineering. Unless otherwise expressly provided, dimensions indicated in the Drawings are intended for reference only. The Drawings are intended to be diagrammatic and schematic in nature; the Contractor is solely responsible for dimensioning and coordinating the Work of the Contract Documents. All field engineering required for laying out the Work and establishing grades for earthwork operations shall be by the Contractor at its expense. Any field engineering or other engineering to be provided or performed by the Contractor under the Contract Documents and required or necessary for the proper execution or installation of the Work shall be provided and performed by the an engineer duly registered under the laws of the State of California in the engineering discipline for such portion of the Work.

4.1.4 Work in Accordance With Contract Documents. The Contractor shall perform all of the Work in strict conformity with the Contract Documents, the Laws and Architect accepted Submittals.

4.2 Site Investigation; Subsurface Conditions.

4.2.1 Contractor Investigation. The Contractor is responsible for, and by executing the Agreement acknowledges, that it has carefully examined the Site and has taken all steps it deems reasonably necessary to ascertain all conditions which may affect the Work, or the cost thereof, including, without limitation, conditions bearing upon transportation, disposal, handling or storage of materials; availability of labor or utilities; access to the Site; and the physical conditions and the character of equipment, materials, labor and services necessary to perform the Work. Any failure of the Contractor to do so will not relieve it from the responsibility for fully and completely performing all Work without adjustment to the Contract Price or the Contract Time. The District assumes no responsibility to the Contractor for any understandings or representations concerning conditions or characteristics of the Site, or the Work, made by any of its officers, employees or agents prior to the execution of the Agreement, unless such understandings or representations are expressly set forth in the Contract Documents.

4.2.2 Subsurface Data. By executing the Agreement, the Contractor acknowledges that it has examined the boring data and other subsurface data available and satisfied itself as to the character, quality and quantity of surface and subsurface materials, including without limitation, obstacles which may be encountered in performance of the Work, insofar as this information is reasonably ascertainable from an inspection of the Site, review of available subsurface data and

analysis of information furnished by the District under the Contract Documents. Subsurface data or other soils investigation report provided by the District hereunder are not a part of the Contract Documents. Information contained in such data or report regarding subsurface conditions, elevations of existing grades or below grade elevations are approximate only and are neither guaranteed or warranted by the District to be complete and accurate. The Contractor shall examine all boring and other subsurface data to make its own independent interpretation of the subsurface conditions and acknowledges that its bid is based upon its own opinion of the conditions which may be encountered. The District assumes no responsibility for any conclusions or interpretations made by Contractor on the basis of available subsurface data or other information furnished by District under the Contract Documents.

4.2.3 Subsurface Conditions. If the Work involves digging trenches or other excavations that extend deeper than four feet below the surface, the Contractor shall promptly and before the following conditions are disturbed, notify the District's Inspector, in writing, of any: (i) material that the Contractor believes may be material that is hazardous waste, as defined in California Health and Safety Code §25117, that is required to be removed to a Class I or Class II or Class III disposal site in accordance with provisions of existing law; (ii) subsurface or latent physical conditions at the site differing from those indicated; or (iii) unknown physical conditions at the site of any unusual nature, different materially from those ordinarily encountered and generally recognized as inherent in the Work or the character provided for in the Contract Documents. If upon notice to the District of the conditions described above and upon the District's investigation thereof, the District determines that the conditions so materially differ or involve such hazardous materials which require an adjustment to the Contract Price or the Contract Time, the District shall issue a Change Order in accordance with Article 9 hereof. In accordance with California Public Contract Code §7104, any dispute arising between the Contractor and the District as to any of the conditions listed in (i), (ii) or (iii) above, shall not excuse the Contractor from the completion of the Work within the Contract Time and the Contractor shall proceed with all Work to be performed under the Contract Documents. The District reserves the right to terminate the Contract pursuant to Article 15.2 hereof should the District determine not to proceed because of any condition described in (i), (ii) or (iii) above.

4.3 Supervision and Construction Procedures.

4.3.1 Supervision of the Work. During progress of the work, the Contractor/Superintendent shall be on site to supervise and direct performance of 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 and procedures and for coordinating all portions of the Work under the Contract Documents, unless Contract Documents give other specific instructions concerning these matters. The Contractor shall be responsible for inspection of completed or partially completed portions of Work to determine that such portions are in proper condition to receive subsequent Work.

4.3.2 Responsibility for the Work. The Contractor is responsible to the District for acts and omissions of the Contractor's employees, Subcontractors and their agents and employees, and all other persons performing any portion of the Work under a contract with the Contractor. The Contractor is not relieved from its obligation to perform the Work in accordance with the Contract Documents either by activities or duties of the Project Manager, District's Inspector or the Architect, or by tests, inspections or approvals required or performed by persons other than the Contractor.

4.3.3 Surveys. The Contractor shall prepare or cause to be prepared all detailed surveys necessary for performance of the Work, including without limitation, slope stakes, points, lines and elevations. The Contractor is responsible for the establishment, location, maintenance and preservation of benchmarks, reference points and stakes for the Work without adjustment of the Contract Price. The Contractor is solely responsible for all loss or costs resulting from the loss, destruction, disturbance or damage of benchmarks, reference points or stakes.

4.3.4 Construction Utilities. The District will furnish and pay the costs of utility services for the Work as set forth in the Special Conditions; all other utilities necessary to complete the Work and the Contractor's obligations hereunder shall be obtained by the Contractor without adjustment of the Contract Price or the Contract Time. The Contractor shall furnish and install necessary or appropriate temporary distributions of utilities, including utilities furnished by the District. Any such temporary distributions shall be removed by the Contractor upon completion of the Work. The costs of all such utility services, including the installation, relocations and removal of temporary distributions thereof, shall be borne by the Contractor and included in the Contract Price.

4.3.5 Existing Utilities; Removal, Relocation and Protection. In accordance with California Government Code §4215, the District assumes responsibility for the timely removal, relocation, or protection of existing main or trunkline utility facilities located on the Site which are not identified in the Drawings, Specifications or other Contract Documents. Contractor shall be compensated for the costs of locating, repairing damage not due to the Contractor's failure to exercise reasonable care, and removing or relocating such utility facilities not indicated in the Drawings, Specifications and other Contract Documents with reasonable accuracy and for equipment on the Site necessarily idled during such work. Contractor shall not be assessed Liquidated Damages for delay in completion of the Work when such delay is caused by the failure of the District or the owner of the utility to provide for removal or relocation of such utility facilities. The foregoing notwithstanding, the District is not required to indicate the presence of existing service laterals or appurtenances whenever the presence of such utilities can be inferred from the presence of other visible facilities, such as buildings, meters and junction boxes, on or adjacent to the Site. If the Contractor encounters utility facilities not identified by the District in the Drawings, Specifications, or other Contract Documents, the Contractor shall immediately notify, in writing, the District, the District's inspector, the Architect, the Project Manager and the utility owner. If utility facilities are owned by a public utility, the public utility shall have the sole discretion to perform repairs or relocation work or permit the Contractor to do such repairs or relocation work at a reasonable price.

4.3.6 Conferences and Meetings. A material obligation of the Contractor under the Contract Documents is the attendance by the Contractor's supervisory personnel for the Work and the Contractor's management personnel as required by the Contract Documents or as requested by the District. The Contractor's personnel participating in conferences and meetings relating to the Work shall be authorized to act on behalf of the Contractor and to bind the Contractor. The Contractor is solely responsible for arranging for the attendance by Subcontractors, Material Suppliers at meetings and conferences relating to the Work as necessary, appropriate or as requested by the District.

4.3.6.1 Pre-Construction Conference. The Contractor's representatives (and representatives of Subcontractors as requested by the District) shall attend a Pre-Construction Conference at such time and place as designated by the District. The Pre-Construction Conference will address items such as the Contractor's access to the Site, review of construction procedures and requirements and other matters pertaining generally to construction of the Work.

4.3.6.2 Progress Meetings. Progress meetings will be conducted on regular intervals (weekly unless otherwise expressly indicated elsewhere in the Contract Documents). The Contractor's representatives and representatives of Subcontractors (as requested by the District) shall attend Progress Meetings. Progress Meetings will be chaired by the Architect or the Project Manager and will generally include as agenda items: Site safety, field issues, coordination of Work, construction progress and impacts to timely completion, if any. The purposes of the Progress Meetings include: a formal and regular forum for discussion of the status and progress of the Work by all Project participants, a review of progress or resolution of previously raised issues and action items assigned to

the Project participants, and reviews of the Construction Schedule and Submittals.

4.3.6.3 Special Meetings. As deemed necessary or appropriate by the District, Special Meetings will be conducted with the participation of the Contractor, Subcontractors and other Project participants as requested by the District.

4.3.6.4 Minutes of Meetings. Following conclusion of the Pre-Construction Conference, Progress Meetings and Special Meetings, the Architect or the Project Manager will prepare and distribute minutes reflecting the items addressed and actions taken at a meeting or conference. Unless the Contractor notifies the Architect or the Project Manager in writing of objections or corrections to minutes prepared hereunder within five (5) days of the date of distribution of the minutes, the minutes as distributed shall constitute the official record of the meeting or conference. No objections or corrections of any Subcontractor or Material Supplier shall be submitted directly to the Architect or the Project Manager; such objections or corrections shall be submitted to the Architect and the Project Manager through the Contractor. If the Contractor timely interposes objections or notes corrections, the resolution of such matters shall be addressed at the next scheduled Progress Meeting.

4.4 Labor and Materials.

4.4.1 Payment for Labor, Materials and Services. Unless otherwise provided in the Contract Documents, the Contractor shall provide and pay for labor, materials, equipment, tools, Construction Equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for proper execution and completion of the Work, whether temporary or permanent and whether or not incorporated in the Work.

4.4.2 Employee Discipline. The Contractor shall enforce strict discipline and good order among the Contractor's employees, the employees of any Subcontractor or Sub-subcontractor, and all other persons performing any part of the Work at the Site. The Contractor shall not permit employment of unfit persons or persons not skilled in tasks assigned to them. The Contractor shall dismiss from its employ and direct any Subcontractor or Sub-subcontractor to dismiss from their employment any person deemed by the District to be unfit or incompetent to perform Work and thereafter, the Contractor shall not employ nor permit the employment of such person for performance of any part of the Work without the prior written consent of the District, which consent may be withheld in the reasonable discretion of the District.

4.4.3 Compliance with Immigration Reform and Control Act of 1986. The Contractor is solely and exclusively responsible for employment of individuals for the Work of the Contract in conformity with the Immigration Reform and Control Act of 1986, 8 USC §§1101 et seq. (the "IRCA"); the Contractor shall also require Subcontractors and any other person or entity employing labor in connection with any of the Work to so similarly comply with the IRCA. The foregoing includes without limitation, verification that individuals engaged in any Work are legally entitled to do so.

4.4.4 Contractor's Supervisory Personnel. Prior to start of Work at the Site, the Contractor shall submit to the District, Architect and Project Manager, a written statement of the qualifications of the Contractor's proposed Superintendent and Project Manager for the Work. Acceptance of the Contractor's proposed Superintendent and Project Manager is subject to establishing their: (i) skills, experience and other capabilities to supervise, coordinate and manage the Work; (ii) fluent verbal and written English language capabilities; (iii) competency in reading, comprehending and understanding drawings, specifications and other technical construction-related materials; and (iv) recent experience of in completing construction projects similar to the Work within the budget and time established for such other construction projects. Upon acceptance of the Contractor's Superintendent or Project Manager by the District, the Contractor shall not be change such personnel without prior consent of the District, unless such personnel: (i) are unsatisfactory to the Contractor and ceases to be employed by the Contractor for the Work; or (ii) is determined by the District to be unfit, incompetent or incapable of

performing functions and responsibilities assigned.

4.4.5 Prohibition on Harassment.

4.4.5.1 District's Policy Prohibiting Harassment. The District is committed to providing a campus and workplace free of sexual harassment and harassment based on factors such as race, color religion, national origin, ancestry, age, medical condition, marital status, disability, veteran status or other legally protected classification. Harassment includes without limitation, verbal, physical or visual conduct which creates an intimidating, offensive or hostile environment such as racial slurs; ethnic jokes; posting of offensive statements, posters or cartoons or similar conduct. Sexual harassment includes without limitation the solicitation of sexual favors, unwelcome sexual advances, or other verbal, visual or physical conduct of a sexual nature.

4.4.5.2 Contractor's Adoption of Anti-Harassment Policy. Contractor shall adopt and implement all appropriate and necessary policies prohibiting any form of discrimination in the workplace, including without limitation harassment on the basis of any classification protected under local, state or federal law, regulation or policy. Contractor shall take all reasonable steps to prevent harassment from occurring, including without limitation affirmatively raising the subject of harassment among its employees, expressing strong disapproval of any form of harassment, developing appropriate sanctions, informing employees of their right to raise and how to raise the issue of harassment and informing complainants of the outcome of an investigation into a harassment claim. Contractor shall require that any Subcontractor or Sub-subcontractor performing any portion of the Work to adopt and implement policies in conformity with this Article 4.4.4.

4.4.5.3 Prohibition on Harassment at the Site. Contractor shall not permit any person, whether employed by Contractor, a Subcontractor, or any other person or entity, performing any Work at or about the Site to engage in any prohibited form of harassment. Any such person engaging in a prohibited form of harassment directed to any individual performing or providing any portion of the Work at or about the Site shall be subject to appropriate sanctions in accordance with the anti-harassment policy adopted and implemented pursuant to Article 4.4.4.2 above. Any person, performing or providing Work on or about the Site engaging in a prohibited form of harassment directed to any student, faculty member or staff of the District or directed to any other person on or about the Site shall be subject to immediate removal and shall be prohibited thereafter from providing or performing any portion of the Work. Upon the District's receipt of any notice or complaint that any person employed directly or indirectly by Contractor in performing or providing the Work has engaged in a prohibited form of harassment, the District will promptly undertake an investigation of such notice or complaint. If the District, after such investigation, reasonably determines that a prohibited form of harassment has occurred, the District shall promptly notify the Contractor of the same and direct that the person engaging in such conduct be immediately removed from the Site. Unless the District's determination that a prohibited form of harassment has occurred is grossly negligent or without reasonable cause, District shall have no liability for directing the removal of any person determined to have engaged in a prohibited form of harassment nor shall the Contract Price or the Contract Time be adjusted on account thereof. Contractor and the Surety shall defend, indemnify and hold harmless the District and its employees, officers, board of trustees, agents, and representatives from any and all claims, liabilities, judgments, awards, actions or causes of actions, including without limitation, attorneys' fees, which arise out of, or pertain in any manner to: (i) the assertion by any person dismissed from performing or providing work at the direction of the District pursuant to this Article 4.4.4.3; or (ii) the assertion by any person that any person directly or indirectly under the employment or direction of the Contractor has engaged in a prohibited form of harassment directed to or affecting such person. The obligations of the Contractor and

the Surety under the preceding sentence are in addition to, and not in lieu of, any other obligation of defense, indemnity and hold harmless whether arising under the Contract Documents, at law or otherwise; these obligations survive completion of the Work or the termination of the Contract.

4.5 Taxes. The Contractor shall pay, without adjustment of the Contract Price, all sales, consumer, use and other taxes for the Work or portions thereof provided by the Contractor under the Contract Documents.

4.6 Permits, Fees and Notices; Compliance With Laws.

4.6.1 Payment of Permits, Fees. Unless otherwise provided in the Contract Documents, the Contractor shall secure and pay for the building permits, other permits, governmental fees, licenses and inspections necessary or required for the proper execution and completion of the Work.

4.6.2 Compliance With Laws. The Contractor shall comply with and give notices required by laws, ordinances, rules, regulations and other orders of public authorities bearing on performance of the Work.

4.6.3 Notice of Variation From Laws. If the Contractor knows, or has reason to believe, that any portion of the Contract Documents are at variance with applicable laws, statutes, ordinances, building codes, regulations or rules, the Contractor shall promptly notify the Architect and the District's Inspector, in writing, of the same. If the Contractor performs Work knowing, or with reasonable diligence should have known, it to be contrary to laws, statutes, ordinances, building codes, rules or regulations applicable to the Work without such notice to the Architect and the District's Inspector, the Contractor shall assume full responsibility for such Work and shall bear the attributable costs arising or associated therefrom, including without limitation, the removal, replacement or correction of the same.

4.7 Submittals.

4.7.1 Purpose of Submittals. Submittals are not Contract Documents. Submittals are for the purpose of demonstrating, for those portions of the Work for which Submittals are required, the manner in which the Contractor proposes to provide or incorporate such item of the Work in conformity with the information given and the design concept expressed in the Contract Documents.

4.7.2 Contractor's Submittals.

4.7.2.1 Prompt Submittals. The Contractor shall review, approve and submit to the Architect or such other person or entity designated by the District or the Contract Documents, the number of copies of Submittals required by the Contract Documents. All Submittals required by the Contract Documents shall be prepared, assembled and submitted by the Contractor within the time frames set forth in the Submittal Schedule incorporated and made a part of the Approved Construction Schedule. Contractor's submission of Submittals in conformity with the Submittal Schedule is a material obligation of the Contractor. If the Contractor fails or refuses to deliver Submittals in accordance with the Submittal Schedule, the Contractor shall be subject to per diem assessments in the amount set forth in the Special Conditions for each day of delayed submission for any Submittal beyond the date set forth in the Submittal Schedule for Contractor's submission of such Submittal. Contractor and the District acknowledge and agree that the per diem assessment for delayed submission of Submittals set forth in the Special Conditions represents a reasonable estimate of costs and expenses the District will incur as a result of delayed submission of Submittals and that the same is not a penalty. Notwithstanding Contractor's submission of all required Submittals in accordance with the Submittal Schedule, in the event that the District or the Architect reasonably determines that all or any portion of such Submittals fail to comply with the requirements of Articles 4.7.2.2, 4.7.2.3 and 4.7.2.4 of these General Conditions and/or

such Submittals are not otherwise complete and accurate so as to require re-submission, Contractor shall bear all costs associated with the review and approval of resubmitted Submittals, including without limitation Architect's fees incurred in connection therewith; provided that such costs are in addition to, and not in lieu of, Liquidated Damages imposed under this Article 4.7.2.1 for Contractor's delayed submission of Submittals. If Liquidated Damages are assessed for the Contractor's delayed submission of Submittals or if the Contractor is assessed Architect fees to review incomplete or inaccurate Submittals, the District may deduct the same from any portion the Contract Price then or thereafter due the Contractor. Submittals not required by the Contract Documents or which do not otherwise conform to the requirements of the Contract Documents may be returned without action. No adjustment to the Contract Time or the Contract Price shall be granted to the Contractor on account of its failure to timely submit of any Submittal.

4.7.2.2 Approval of Subcontractor Submittals. All Submittals prepared by Subcontractors, Material Suppliers, manufacturers or distributors shall bear the written approval of the Contractor thereto prior to submission to the Architect for review. Any Submittal not bearing the Contractor's written approval shall be subject to return to the Contractor for re-submittal in conformity herewith, with the same being deemed to not have been submitted. Any delay, impact or cost associated therewith shall be the sole and exclusive responsibility of the Contractor without adjustment to the Contract Time or the Contract Price.

4.7.2.3 Verification of Submittal Information. By approving and submission of Submittals, the Contractor represents to the District and Architect that the Contractor has determined and verified materials, field measurements, field construction criteria, catalog numbers and similar data related thereto and has checked and coordinated the information contained within such Submittals with the requirements of the Work and of the Contract Documents.

4.7.2.4 Information Included in Submittals. All Submittals shall be accompanied by a written transmittal or other writing by the Contractor providing an identification of the portion of the Drawings or the Specifications pertaining to the Submittal, with each Submittal numbered consecutively for ease of reference along with the following information: (i) date of submission; (ii) project name; (iii) name of submitting Subcontractor; and (iv) if applicable, the revision number. The foregoing information is in addition to, and not in lieu of, any other information required by the Contract Documents for the Architect's review, evaluation and acceptance of the Contractor's Submittals.

4.7.2.5 Contractor Responsibility for Deviations. The Contractor shall not be relieved of responsibility for correcting deviations from the requirements of the Contract Documents by the Architect's review of Submittals unless the Contractor has specifically informed the Architect in writing of such deviation at the time of submission of the Submittal and the Architect has given written approval to the specific deviation. The Contractor shall not be relieved of responsibility for errors or omissions in Submittals by the Architect's review thereof.

4.7.2.6 No Performance of Work Without Architect Review. The Contractor shall perform no portion of the Work requiring the Architect's review of Submittals until the Architect has completed its review and returned the Submittal to the Contractor indicating "No Exception Taken" to such Submittal. The Contractor shall not perform any portion of the Work forming a part of a Submittal or which is affected by a related Submittal until the entirety of the Submittal or other related Submittal has been fully processed. Such Work shall be in accordance with the final action taken by the Architect in review of Submittals and other applicable portions of the Contract Documents.

4.7.3 Architect Review of Submittals. The purpose of the Architect's review of Submittals and the time for the Architect's return of Submittals to the Contractor shall be as set forth elsewhere

Notation	Action Required
No Exceptions Taken	No formal revision required
Make Corrections Noted	Make revision noted; re-submission of revised Submittal not required
Revise and Re-Submit	Revise Submittal in accordance with notations and re-submit for revision
Rejected Re-Submit	Prepare new alternative Submittal and re-submit for review

in the Contract Documents. If the Architect returns a Submittal as rejected or requiring correction(s) with re-submission, the Contractor, so as not to delay the progress of the Work, shall promptly thereafter resubmit a Submittal conforming to the requirements of the Contract Documents; the resubmitted Submittal shall indicate the portions thereof modified in accordance with the Architect's direction. When professional certification of performance criteria of materials, systems or equipment is required by the Contract Documents, the Architect shall be entitled to rely upon the accuracy and completeness of such calculations and certifications accompanying Submittals. The Architect's review of the Submittals is for the limited purposes described in the Contract Documents. The following notations or notations of a similar nature noted on a reviewed Submittal will require the Contractor action noted below.

4.7.4 Deferred Approval Items. If any portion of the Work is designated in the Contract Documents as a "Deferred Approval" item, Contractor shall be solely and exclusively responsible for: (i) the design, engineering and specifying the materials/equipment forming any part of the Deferred Approval Item; (ii) integrating and/or coordinating the Deferred Approval Item with other portions of the Work; (iii) preparation of Submittals for such item(s) in a timely manner so as not to delay or hinder the completion of the Work within the Contract Time; and (iv) timely obtaining DSA approval thereof.

4.8 Materials and Equipment.

4.8.1 Specified Materials, Equipment. References in the Contract Documents to any specific article, device, equipment, product, material, fixture, patented process, form, method or type of construction, by name, make, trade name, or catalog number, with or without the words "or equal" shall be deemed to establish a minimum standard of quality or performance, and shall not be construed as limiting competition.

4.8.2 Approval of Substitutions or Alternatives. The Contractor may propose to furnish alternatives or substitutes for a particular item specified in the Contract Documents, provided that: (i) such proposed substitution or alternative complies with the requirements of the Specifications relating to substitutions of specified items; (ii) the Contractor certifies to the Architect and District that the quality, performance capability and functionality (including visual and/or aesthetic effect) of the proposed alternative or substitute meet or exceed the quality, performance capability and functionality of the item or process specified; and (iii) demonstrate to the reasonable satisfaction of the Architect and District that the use of the substitution or alternative is appropriate and will not delay completion of the Work or result in an increase to the Contract Price. The Contractor shall submit calculations engineering, construction, dimension, visual, aesthetic and performance data to the Architect to permit its proper evaluation of the proposed substitution or alternative. If requested by the Architect, Contractor shall promptly furnish any additional information or data regarding a proposed substitution or alternative which the Architect deems reasonably necessary for the evaluation of the proposed substitution or alternative. The Contractor shall not provide, furnish or install any substitution or alternative without the Architect's review and final action on the proposed substitution or alternative; any alternative or substitution installed or incorporated into the Work without first

obtaining the Architect's review and final action of the same shall be subject to removal pursuant to Article 12 hereof. The Architect's decision evaluating the Contractor's proposed substitutions or alternatives shall be final. Neither the Contract Time nor the Contract Price shall be increased on account of any substitution or alternative proposed by the Contractor and which is accepted by the Architect; provided, however, that in the event a substitution or alternative accepted by the Architect and purchase, fabrication and/or installation or such accepted substitution or alternative shall be less expensive than the originally specified item, the Contract Price shall be reduced by the actual cost savings realized by the Contractor's furnishing and/or installation of such approved substitution or alternative. The Contractor shall be solely responsible for all costs and fees incurred by the District to review a proposed substitution or alternative, including without limitation fees of the Architect, and/or governmental agencies to review and/or approve any proposed substitution or alternative. The Contractor shall be solely responsible for any increase in the cost of any accepted substitution or alternative or any Work affected by such alternative or substitution. The foregoing notwithstanding, all requests for the Architect's review and approval of any proposed substitution or alternative and all engineering, construction, dimension and performance data substantiating the equivalency of the proposed substitution or alternative shall be submitted by Contractor not later than thirty-five (35) days following the date of the District's award of the Contract to Contractor by action of the District's Board of Trustees; any request for approval of proposed alternatives or substitutions submitted thereafter may be rejected summarily. The foregoing process and time limits shall apply to any proposed substitution or alternative regardless of whether the substitute or alternate item is to be provided, furnished or installed by Contractor, any Subcontractor, any Sub-Subcontractor, Material Supplier or Manufacturer.

4.8.3 Placement of Material and Equipment Orders. Contractor shall, after award of the Contract, promptly and timely place all orders for materials and/or equipment necessary for completion of the Work so that delivery of the same shall be made without delay or interruption to the timely completion of the Work. Contractor shall require that any Subcontractor similarly place orders for all materials and/or equipment to be furnished by any such Subcontractor in a prompt and timely manner so that delivery of the same shall be made without delay or interruption to the timely completion of the Work. Upon request of the District, Project Manager or the Architect, the Contractor shall furnish reasonably satisfactory written evidence of the placement of orders for materials and/or equipment necessary for completion of the Work, including without limitation, orders for materials and/or equipment to be provided, furnished or installed by any Subcontractor.

4.8.4 District's Right to Place Orders for Materials and/or Equipment. Notwithstanding any other provision of the Contract Documents, if the Contractor shall, upon request of the District, Project Manager or the Architect, fails or refuses, for any reason, to provide reasonably satisfactory written evidence of the placement of orders for materials and/or equipment necessary for completion of the Work, or should the District determine, in its sole and reasonable discretion, that any orders for materials and/or equipment have not been placed in a manner so that such materials and/or equipment will be delivered to the Site so the Work can be completed without delay or interruption, the District shall have the right, but not the obligation, to place such orders on behalf of the Contractor. If the District exercises the right to place orders for materials and/or equipment pursuant to the foregoing, the District's conduct shall not be deemed to be an exercise, by the District, of any control over the means, methods, techniques, sequences or procedures for completion of the Work, all of which remain the responsibility and obligation of the Contractor. Notwithstanding the right of the District to place orders for materials and/or equipment pursuant to the foregoing, the election of the District to exercise, or not to exercise, such right shall not relieve the Contractor from any of Contractor's obligations under the Contract Documents, including without limitation, completion of the Work within the Contract Time and for the Contract Price. If the District exercises the right hereunder to place orders for materials and/or equipment on behalf of Contractor pursuant to the foregoing, Contractor shall reimburse

the District for all costs and fees incurred by the District in placing such orders; such costs and fees may be deducted by the District from the Contract Price then or thereafter due the Contractor.

4.8.5 Contractor and Subcontractor Communication. All written communications between the Contractor and any Subcontractor, Material Supplier or others directly or indirectly engaged by the Contractor to perform or provide any portion of the Work shall be available to the District, the Project Manager and the Architect for review, inspection and reproduction as may be requested from time to time. The foregoing is a material obligation of the Contractor hereunder.

4.9 Safety.

4.9.1 Safety Programs. The Contractor shall be solely responsible for initiating, maintaining and supervising all safety programs required by applicable law, ordinance, regulation or governmental orders in connection with the performance of the Contract, or otherwise required by the type or nature of the Work. The Contractor's safety program shall include all actions and programs necessary for compliance with California or federally statutorily mandated workplace safety programs, including without limitation, compliance with the California Drug Free Workplace Act of 1990 (California Government Code §§8350 et seq.). Without limiting or relieving the Contractor of its obligations hereunder, the Contractor shall require that its Subcontractors similarly initiate and maintain all appropriate or required safety programs.

4.9.2 Contractor Safety Plan. Prior to commencement of Work at the Site, the Contractor shall submit to the District and the Project Manager, if any, the Contractor's Safety Plan for the Work for review and acceptance by the District. Acceptance by the District is subject to the Safety Plan conforming to requirements of the Laws, conditions at or about the Site and the nature of the Work. The Contractor shall modify its Safety Plan as necessary to obtain the District's acceptance thereof. Notwithstanding the District's acceptance of the Contractor's Safety Plan, the Contractor shall remain solely responsible for implementing the Safety Plan and implementing measures as necessary to maintain safety of persons and property at and about the Site. The District's acceptance of the Contractor's Safety Plan shall not limit, restrict or otherwise modify the Contractor's obligations relating to safety at or about the Site in accordance with the Contract Documents and the Laws.

4.9.3 Safety Precautions. The Contractor shall be solely responsible for initiating and maintaining reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to: (i) employees on the Work and other persons who may be affected thereby; (ii) the Work and materials and equipment to be incorporated therein, whether in storage on or off the Site, under care, custody or control of the Contractor or Subcontractors; and (iii) other property or items at the Site, or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement.

4.9.4 Safety Signs, Barricades. The Contractor shall erect and maintain, as required by existing conditions and conditions resulting from performance of the Contract, reasonable safeguards for safety and protection of property and persons, including, without limitation, posting danger signs and other warnings against hazards, barricades, promulgating safety regulations and notifying owners and users of adjacent sites and utilities.

4.9.5 Safety Notices. The Contractor shall give or post all safety notices required by the Laws and comply with the Laws bearing on safety of persons or property or their protection from damage, injury or loss.

4.9.6 Safety Coordinator. The Contractor shall designate a responsible member of the Contractor's organization at the Site whose duty shall be the prevention of accidents and the implementation and maintenance safety precautions and programs. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the Project Manager, District's Inspector and the Architect.

4.9.7 Emergencies. In an emergency affecting safety of persons or property, the Contractor

shall act, to prevent threatened damage, injury or loss.

4.9.8 Hazardous Materials.

4.9.8.1 General. If the Contractor, any Subcontractor or anyone employed directly or indirectly by them shall use, at the Site, or incorporate into the Work, any material or substance deemed to be hazardous or toxic under any law, rule, ordinance, regulation or interpretation thereof (collectively "Hazardous Materials"), the Contractor shall comply with all Laws applicable thereto and shall exercise all necessary safety precautions relating to the use, storage or disposal thereof.

4.9.8.2 Prohibition on Use of Asbestos Construction Building Materials ("ACBMs"). Notwithstanding any provision of the Drawings or the Specifications to the contrary, it is the intent of the District that ACBMs not be used or incorporated into any portion of the Work. In the event that any portion of the Work depicted in the Drawings or the Specifications shall require materials or products which the Contractor knows, or should have known with reasonably diligent investigation, to contain ACBMs, Contractor shall promptly notify the Architect and the District's Inspector of the same so that an appropriate alternative can be made in a timely manner so as not to delay the progress of the Work. Contractor warrants to the District that there are no materials or products used or incorporated into the Work which contain ACBMs. Whether before or after completion of the Work, if it is discovered that any product or material forming a part of the Work or incorporated into the Work contains ACBMs, the Contractor shall at its sole cost and expense remove such product or material in accordance with any laws, rules, procedures and regulations applicable to the handling, removal and disposal of ACBMs and to replace such product or material with non-ACBM products or materials and to return the affected portion(s) of the Work to the finish condition depicted in the Drawings and Specifications relating to such portion(s) of the Work. Contractor's obligations under the preceding sentence shall survive the termination of the Contract, the warranty period provided under the Contract Documents, the Contractor's completion of the Work or the District's acceptance of the Work. If the Contractor fails or refuses, for any reason, to commence the removal and replacement of any material or product containing ACBMs forming a part of, or incorporated into the Work, within ten (10) days of the date of the District's written notice to the Contractor of the existence of ACBM materials or products in the Work, the District may thereafter proceed to cause the removal and replacement of such materials or products in any manner which the District determines to be reasonably necessary and appropriate; all costs, expenses and fees, including without limitation fees and costs of consultants and attorneys, incurred by the District in connection with such removal and replacement shall be the responsibility of the Contractor and the Surety.

4.9.8.3 Disposal of Hazardous Materials. Contractor shall be solely and exclusively responsible for the disposal of any Hazardous Materials on or about the Site. The Contractor's obligations hereunder shall include without limitation, the transportation and disposal of any Hazardous Materials in strict conformity with the Laws.

4.10 Maintenance of Documents.

4.10.1.1 Documents at Site. The Contractor shall maintain at the Site: (i) one record copy of the Drawings, Specifications and all addenda thereto; (ii) Change Orders approved by the District and all other modifications to the Contract Documents; (iii) Submittals reviewed by the Architect; (iv) Record Drawings; (v) Material Safety Data Sheets ("MSDS") accompanying any materials, equipment or products delivered or stored at the Site or incorporated into the Work; and (vi) all building and other codes or regulations applicable to the Work, including without limitation, Title 24, Part 2 of the California Code of Regulations. During performance of the Work, all documents maintained by Contractor at the Site shall be available to the District, the Project

Manager, the Architect, the District's Inspector and DSA for review, inspection or reproduction. Upon completion of the Work, all documents maintained at the Site by the Contractor pursuant to the foregoing shall be assembled and transmitted to the Architect for delivery to the District.

4.10.1.2 Maintenance of Record Drawings. During its performance of the Work, the Contractor shall maintain Record Drawings consisting of a set of the Drawings which are marked to indicate all field changes made to adapt the Work depicted in the Drawings to field conditions, changes resulting from Change Orders and all concealed or buried installations, including without limitation, piping, conduit and utility services. All buried or concealed items of Work shall be completely and accurately marked and located on the Record Drawings. The Record Drawings shall be clean and all changes, corrections and dimensions shall be marked in a neat and legible manner in a contrasting color. Record Drawings relating to the Structural, Mechanical, Electrical and Plumbing portions of the Work shall indicate without limitation, circuiting, wiring sizes, equipment/member sizing and shall depict the entirety of the as built conditions of such portions of the Work. The Record Drawings shall be continuously maintained by the Contractor during the performance of the Work. At any time during the Contractor's performance of the Work, upon the request of the District, the District's Inspector or the Architect, the Contractor shall make the Record Drawings maintained here under available for the District's review and inspection. The District's review and inspection of the Record Drawings during the Contractor's performance of the Work shall be only for the purpose of generally verifying that Contractor is continuously maintaining the Record Drawings in a complete and accurate manner; any such inspection or review shall not be deemed to be the District's approval or verification of the completeness or accuracy thereof. The failure or refusal of the Contractor to continuously maintain complete and accurate Record Drawings or to make available the Record Drawings for inspection and review by the District may be deemed by the District to be Contractor's default of a material obligation hereunder. Without waiving, restricting or limiting any other right or remedy of the District for the Contractor's failure or refusal to continuously maintain the Record Drawings, the District may, upon reasonably determining that the Contractor has not, or is not, continuously maintaining the Record Drawings in a complete and accurate manner, take appropriate action to cause the continuous maintenance of complete and accurate Record Drawings, in which event all fees and costs incurred or associated with such action shall be charged to the Contractor and the District may deduct the amount of such fees and costs from any portion of the Contract Price then or thereafter due the Contractor. In accordance with Article 8.4.2 of these General Conditions, prior to receipt of the Final Payment, Contractor shall deliver the Record Drawings to the Architect.

4.11 Use of Site. The Contractor shall confine operations at the Site to areas permitted by the Laws, subject to any restrictions or limitations set forth in the Contract Documents. The Contractor shall not unreasonably encumber the Site or adjoining areas with materials or equipment. The Contractor shall be solely responsible for providing security at the Site with all such costs included in the Contract Price. The District shall at all times have access to the Site.

4.12 Clean-Up. The Contractor shall at all times keep the Site and all adjoining areas free from the accumulation of any waste material or rubbish caused or generated by performance of the Work. Without limiting the generality of the foregoing, Contractor shall maintain the Site in a "rake-clean" standard on a daily basis. If the Work includes painting and/or the installation of floor covering, before any painting operations or the installation of any flooring covering, the area and adjoining areas of the Site where paint is to be applied or floor covering is to be installed shall be in a "broom-clean" condition. Prior to completion of the Work, Contractor shall remove from the Site all rubbish, waste materials, excess excavated materials, tools, Construction Equipment, machinery, surplus materials and any other items which are not the property of the District under the Contract

Documents. Upon completion of the Work, the Site and all adjoining areas shall be left by the Contractor in a neat and broom clean condition satisfactory to District. The District's Inspector or Project Manager shall be authorized to direct the Contractor's clean-up obligations hereunder. If the Contractor fails to clean up as provided for in the Contract Documents, the District may do so, and all costs incurred in connection therewith shall be charged to the Contractor; the District may deduct such costs from any portion of the Contract Price then or thereafter due the Contractor.

4.13 Access to the Work. The Contractor shall provide DSA, the District, the Project Manager, the District's Inspector and the Architect access to the Work, whether in place, preparation and progress and wherever located.

4.14 Facilities and Information for the District's Inspector.

4.14.1 Information to District's Inspector. The Contractor shall furnish the District's Inspector access to the Work for obtaining such information as may be necessary to keep the District's Inspector fully informed respecting the progress, quality and character of the Work and materials, equipment or other items incorporated therein.

4.14.2 Facilities for District's Inspector. Facilities, services or other items to be provided by the Contractor for use by the District's Inspector, if any, shall be as set forth in the Temporary Facilities and Controls Specification Section. If the Contractor fails or refuses to provide and such facilities, services or other items designated the District may furnish such facilities, services or other item, with the costs, fees or expenses incurred to furnish the same being deducted from the Contract Price.

4.15 Patents and Royalties. The Contractor and the Surety shall defend, indemnify and hold harmless the District and its agents, employees and officers from any claim, demand or legal proceeding arising out of or pertaining, in any manner, to any actual or claimed infringement of patent rights in connection with performance of the Work.

4.16 Cutting and Patching. The Contractor is responsible for cutting, fitting or patching required to complete the Work or to make the component parts thereof fit together properly. The Contractor shall not damage or endanger any portion of the Work, or the fully or partially completed construction of the District or separate contractors by cutting, patching, excavation or other alteration. The Contractor shall not cut, patch or otherwise alter the construction by the District or separate contractor without the prior written consent of the District or separate contractor thereto, which consent shall not be unreasonably withheld. The Contractor shall not unreasonably withhold consent to the request of the District or separate contractor to cut, patch or otherwise alter the Work.

4.17 Encountering of Hazardous Materials. If the Contractor encounters Hazardous Materials at the Site which have not been rendered harmless or for which there is no provision in the Contract Documents for containment, removal, abatement or handling of such Hazardous Materials, the Contractor shall immediately stop the Work in the affected area, but shall diligently proceed with the Work in all other unaffected areas. Upon encountering such Hazardous Materials, the Contractor shall immediately notify the District's Inspector and the Architect, in writing, of such condition. The Contractor shall proceed with the Work in such affected area only after such Hazardous Materials have been rendered harmless, contained, removed or abated. If such Hazardous Materials are encountered, the Contractor shall be entitled to an adjustment of the Contract Time to the extent that the Work is stopped and Completion of the Work is affected thereby. In no event shall there be an adjustment to the Contract Price solely on account of the Contractor encountering such Hazardous Materials.

4.18 Wage Rates; Employment of Labor.

4.18.1 Determination of Prevailing Rates. Pursuant to the provisions of Division 2, Part 7, Chapter 1, Article 2 of the California Labor Code at §§1770 et seq., the District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the prevailing rate for holiday and overtime work in the locality in which the Work is to be performed. Holidays shall be as defined in the collective bargaining agreement applicable

to each particular craft, classification or type of worker employed under the Contract. Per diem wages include employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided in California Labor Code §1773.8, apprenticeship or other training programs authorized by California Labor Code §3093, and similar purposes when the term "per diem wages" is used herein. Holiday and overtime work, when permitted by law, shall be paid for at the rate of at least one and one-half (1½) times the above specified rate of per diem wages, unless otherwise specified. The Contractor shall post, at appropriate and conspicuous locations on the Site, a schedule showing all determined general prevailing wage rates.

4.18.2 Payment of Prevailing Rates. There shall be paid each worker of the engaged in the Work, not less than the general prevailing wage rate for the classification of Work performed, regardless of any contractual relationship which may be alleged to exist between the Contractor or any Subcontractor and such worker.

4.18.3 Prevailing Rate Penalty. The Contractor shall, as a penalty, forfeit not more than Two Hundred Dollars ($200.00) to the District for each calendar day or portion thereof, for each worker paid less than the prevailing rates for such work or craft in which such worker is employed for the Work by the Contractor or by any Subcontractor, of any tier, in connection with the Work. The amount of the penalty for failure to pay applicable prevailing wage rates shall be determined and assessed in accordance with the standards established pursuant to Labor Code §1775(a)(2). The amount of the penalty shall be determined based on consideration of both of the following: (i) whether the failure of the Contractor or Subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the Contractor or Subcontractor; and (ii) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations. The penalty may not be less than forty dollars ($40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the Contractor or Subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor. The penalty may not be less than eighty dollars ($80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Contractor or Subcontractor has been assessed penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned. The penalty may not be less than one hundred twenty dollars ($120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1. When the penalty amount due hereunder is collected from the Contractor or Subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that Contractor or Subcontractor shall be satisfied before applying that amount to the penalty imposed on that Contractor or Subcontractor hereunder. The difference between prevailing wage rates and the amount paid to each worker each calendar day, or portion thereof, for which each worker paid less than the prevailing wage rate, shall be paid to each worker by the Contractor.

4.18.4 Certified Payroll Records.

4.18.4.1 Maintenance of Certified Payroll Records. Pursuant to California Labor Code §1776, the Contractor and each Subcontractor, of any tier, shall keep an accurate payroll record, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each person employed for the Work.

4.18.4.2 Submittal of Certified Payroll Records to Labor Commissioner. The Contractor and each Subcontractor shall submit their respective Certified Payroll Records to the Labor Commissioner on forms, in the manner and within the times prescribed by the Labor Commissioner.

4.18.4.3 Inspection of Certified Payroll Records. The Certified Payroll Records of

the Contractor and Subcontractors shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis: (i) a certified copy of an employee's payroll record shall be made available for inspection or furnished to such employee or his/her authorized representative on request; (ii) a certified copy of all payroll records shall be made available for inspection or furnished upon request to the District, the Division of Labor Standards Enforcement and the Division of Apprenticeship Standards of the Department of Industrial Relations; (iii) a certified copy of payroll records shall be made available upon request to the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either the District, the Division of Apprenticeship Standards, or the Division of Labor Standards Enforcement. If the requested Certified Payroll Records have not been provided, the requesting party shall, prior to being provided the records, reimburse the cost of preparation by the Contractor, Subcontractors and the entity through which the request was made; the public shall not be given access to such records at the principal office of the Contractor; (iv) the Contractor shall file a certified copy of the Certified Payroll Records with the entity that requested such records within ten (10) days after receipt of a written request; (v) any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor or any Subcontractor, of any tier, performing a part of the Work shall not be marked or obliterated. The Contractor shall inform the District of the location of Certified Payroll Records, including the street address, city and county and shall, within five (5) working days, provide a notice of a change or location and address. In the event of noncompliance with the requirements of this Article 4.18.4, the Contractor shall have ten (10) days in which to comply, subsequent to receipt of written notice specifying in what respects the Contractor must comply herewith. Should noncompliance still be evident after such 10-day period, the Contractor shall, as a penalty to the District, forfeit One Hundred Dollars ($100.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, such penalties shall be withheld from any portion of the Contract Price then or thereafter due the Contractor. The Contractor is solely responsible for compliance with the foregoing provisions.

4.18.5 Hours of Work.

4.18.5.1 Limits on Hours of Work. Pursuant to California Labor Code §1810, eight (8) hours of labor shall constitute a legal day's work. Pursuant to California Labor Code §1811, the time of service of any worker employed at any time by the Contractor or by a Subcontractor, of any tier, upon the Work or upon any part of the Work, is limited and restricted to eight (8) hours during any one calendar day and forty (40) hours during any one calendar week, except as hereafter provided. Notwithstanding the foregoing provisions, Work performed by employees of Contractor or any Subcontractor, of any tier, in excess of eight (8) hours per day and forty (40) hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight (8) hours per day at not less than one and one-half (12) times the basic rate of pay.

4.18.5.2 Penalty for Excess Hours. The Contractor shall pay to the District a penalty of Twenty-five Dollars ($25.00) for each worker employed on the Work by the Contractor or any Subcontractor, of any tier, for each calendar day during which such worker is required or permitted to work more than eight (8) hours in any calendar day and forty (40) hours in any one calendar week, in violation of the provisions of the California Labor Code, unless compensation to the worker so employed by the Contractor is not less than one and one-half (12) times the basic rate of pay for all hours

worked in excess of eight (8) hours per day.

4.18.5.3 Contractor Responsibility. Any Work performed by workers necessary to be performed after regular working hours or on Sundays or other holidays shall be performed without adjustment to the Contract Price or any other additional expense to the District.

4.18.6 Apprentices.

4.18.6.1 Employment of Apprentices. Any apprentices employed to perform any of the Work shall be paid the standard wage paid to apprentices under the regulations of the craft or trade for which such apprentice is employed, and such individual shall be employed only for the work of the craft or trade to which such individual is registered. Only apprentices, as defined in California Labor Code §3077 who are in training under apprenticeship standards and written apprenticeship agreements under California Labor Code §§3070 et seq. are eligible to be employed for the Work. The employment and training of each apprentice shall be in accordance with the provisions of the apprenticeship standards and apprentice agreements under which such apprentice is training.

4.18.6.2 Apprenticeship Certificate. When the Contractor or any Subcontractor, of any tier, in performing any of the Work employs workers in any Apprenticeable Craft or Trade, the Contractor and such Subcontractor shall apply to the Joint Apprenticeship Committee administering the apprenticeship standards of the craft or trade in the area of the site of the Work for a certificate approving the Contractor or such Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected, provided, however, that the approval as established by the Joint Apprenticeship Committee or Committees shall be subject to the approval of the Administrator of Apprenticeship. The Joint Apprenticeship Committee or Committees, subsequent to approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or such Subcontractor in order to comply with California Labor Code §1777.5. The Contractor and Subcontractors shall submit contract award information to the applicable Joint Apprenticeship Committee which shall include an estimate of journeyman hours to be performed under the Contract, the number of apprentices to be employed, and the approximate dates the apprentices will be employed. There shall be an affirmative duty upon the Joint Apprenticeship Committee or Committees, administering the apprenticeship standards of the crafts or trades in the area of the site of the Work, to ensure equal employment and affirmative action and apprenticeship for women and minorities. Contractors or Subcontractors shall not be required to submit individual applications for approval to local Joint Apprenticeship Committees provided they are already covered by the local apprenticeship standards.

4.18.6.3 Ratio of Apprentices to Journeymen. The ratio of Work performed by apprentices to journeymen, who shall be employed in the Work, may be the ratio stipulated in the apprenticeship standards under which the Joint Apprenticeship Committee operates, but in no case shall the ratio be less than one hour of apprentice work for each five hours of labor performed by a journeyman, except as otherwise provided in California Labor Code §1777.5. The minimum ratio for the land surveyor classification shall not be less than one apprentice for each five journeymen. Any ratio shall apply during any day or portion of a day when any journeyman, or the higher standard stipulated by the Joint Apprenticeship Committee, is employed at the site of the Work and shall be computed on the basis of the hours worked during the day by journeymen so employed, except for the land surveyor classification. The Contractor shall employ apprentices for the number of hours computed as above before the completion of the Work. The Contractor shall, however, endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the site of the Work. Where an hourly apprenticeship

ratio is not feasible for a particular craft or trade, the Division of Apprenticeship Standards, upon application of a Joint Apprenticeship Committee, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification. The Contractor or any Subcontractor covered by this Article and California Labor Code §1777.5, upon the issuance of the approval certificate, or if it has been previously approved in such craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the apprenticeship standards. Upon proper showing by the Contractor that it employs apprentices in such craft or trade in the State of California on all of its contracts on an annual average of not less than one apprentice to each five journeymen, the Division of Apprenticeship Standards may grant a certificate exempting the Contractor from the 1-to-5 ratio as set forth in this Article and California Labor Code §1777.5. This Article shall not apply to contracts of general contractors, or to contracts of specialty contractors not bidding for work through a general or prime contractor, involving less than Thirty Thousand Dollars ($30,000.00) or twenty (20) working days. The term "Apprenticeable Craft or Trade," as used herein shall mean a craft or trade determined as an Apprenticeable occupation in accordance with rules and regulations prescribed by the Apprenticeship Council.

4.18.6.4 Exemption From Ratios. The Joint Apprenticeship Committee shall have the discretion to grant a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the Contractor from the 1-to-5 ratio set forth in this Article when it finds that any one of the following conditions are met: (i) unemployment for the previous three-month period in such area exceeds an average of fifteen percent (15%) or; (ii) the number of apprentices in training in such area exceeds a ratio of 1-to-5 in relation to journeymen, or; (iii) the Apprenticeable Craft or Trade is replacing at least one-thirtieth (1/30) of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis, or; (iv) if assignment of an apprentice to any Work performed under the Contract Documents would create a condition which would jeopardize such apprentice's life or the life, safety or property of fellow employees or the public at large, or if the specific task to which the apprentice is to be assigned is of such a nature that training cannot be provided by a journeyman. When such exemptions from the 1-to-5 ratio between apprentices and journeymen are granted to an organization which represents contractors in a specific trade on a local or statewide basis, the member contractors will not be required to submit individual applications for approval to local Joint Apprenticeship Committees, provided they are already covered by the local apprenticeship standards.

4.18.6.5 Contributions to Trust Funds. The Contractor or any Subcontractor, of any tier, who, performs any of the Work by employment of journeymen or apprentices in any Apprenticeable Craft or Trade and who is not contributing to a fund or funds to administer and conduct the apprenticeship program in any such craft or trade in the area of the site of the Work, to which fund or funds other contractors in the area of the site of the Work are contributing, shall contribute to the fund or funds in each craft or trade in which it employs journeymen or apprentices in the same amount or upon the same basis and in the same manner as the other contractors do, but where the trust fund administrators are unable to accept such funds, contractors not signatory to the trust agreement shall pay a like amount to the California Apprenticeship Council. The Division of Labor Standards Enforcement is authorized to enforce the payment of such contributions to such fund(s) as set forth in California Labor Code §227. Such contributions shall not result in an increase in the Contract Price.

4.18.6.6 Contractor's Compliance. The responsibility of compliance with this Article for all Apprenticeable Trades or Crafts is solely and exclusively that of the Contractor. All decisions of the Joint Apprenticeship Committee(s) under this Article are subject to the provisions of California Labor Code §3081. In the event the Contractor

willfully fails to comply with the provisions of this Article and California Labor Code §1777.5, pursuant to California Labor Code §1777.7, the Contractor shall: (i) be denied the right to bid on any public works contract for a period of one (1) year from the date the determination of non-compliance is made by the Administrator of Apprenticeship; and (ii) forfeit, as a civil penalty, Fifty Dollars ($50.00) for each calendar day of noncompliance. Notwithstanding the provisions of California Labor Code §1727, upon receipt of such determination, the District shall withhold such amount from the Contract Price then due or to become due. Any such determination shall be issued after a full investigation, a fair and impartial hearing, and reasonable notice thereof in accordance with reasonable rules and procedures prescribed by the California Apprenticeship Council. Any funds withheld by the District pursuant to this Article shall be deposited in the General Fund or other similar fund of the District. The interpretation and enforcement of California Labor Code §§1777.5 and 1777.7 shall be in accordance with the rules and procedures of the California Apprenticeship Council.

4.18.7 Employment of Independent Contractors. Pursuant to California Labor Code §1021.5, Contractor shall not willingly and knowingly enter into any agreement with any person, as an independent contractor, to provide any services in connection with the Work where the services provided or to be provided requires that such person hold a valid contractors' license issued pursuant to California Business and Professions Code §§7000 et seq. and such person does not meet the burden of proof of his/her independent contractor status pursuant to California Labor Code §2750.5. In the event that Contractor shall employ any person in violation of the foregoing, Contractor shall be subject to the civil penalties under California Labor Code §1021.5 and any other penalty provided by law. In addition to the penalties provided under California Labor Code §1021.5, Contractor's violation of this Article 4.18.7 or the provisions of California Labor Code §1021.5 shall be deemed an event of Contractor's default under Article 15.1 of these General Conditions. The Contractor shall require Subcontractors performing or providing any portion of the Work to adhere to and comply with the foregoing provisions.

4.19 Assignment of Antitrust Claims. Pursuant to California Government Code §4551, the Contractor and its Subcontractor(s), of any tier, hereby offers and agrees to assign to the District all rights, title and interest in and to all causes of action they may have under Section 4 of the Clayton Act, (15 U.S.C. §15) or under the Cartwright Act (California Business and Professions Code §§16700 et seq.), arising from purchases of goods, services or materials hereunder or any Subcontract. This assignment shall be made and become effective at the time the District tenders Final Payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery in connection with a cause of action assigned under California Government Code §§4550 et seq., the assignor thereof shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the Contract Price, less the expenses incurred by the District in obtaining that portion of the recovery. Upon demand in writing by the assignor, the District shall, within one 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 (i) the District has not been injured thereby; or (ii) the District declines to file a court action for the cause of action.

4.20 Limitations Upon Site Activities. Except in the circumstances of an emergency, no construction activities shall be permitted at or about the Site except during the District's hours and days set forth in the Special Conditions. Work performed outside of the hours and days noted in the Special Conditions will not result in adjustment of the Contract Time or the Contract Price; unless

Work outside of the hours and days noted in the Special Conditions is expressly authorized by the District.

4.21 Progress Reports; DSA Verified Reports.

4.21.1 DSA Verified Reports: Contractor Actions. A material obligation of the Contractor is the completion by the Contractor of all actions and activities which by the Contract Documents or by the Laws are the responsibility of the Contractor relating to DSA reporting requirements pursuant to Education Code §81141 (including amendments thereto) and issuance of DSA's Certificate of Compliance for the Project pursuant to Education Code §81147 (including amendments thereto) upon completion of the Work. The foregoing shall include without limitation, the timely preparation, completion and filing of Verified Reports during Project construction and the filing of the Final Verified Report with DSA within ten (10) days of the determination of Final Completion. Concurrently with submittal to DSA, the Contractor shall provide the District, District's Inspector, Architect and Construction Manager with copies of all Verified Reports completed by the Contractor and submitted to DSA.

4.21.2 District Withholdings From Final Payment. The completion and filing of the Final Verified Report with DSA by the Contractor is an express condition precedent to the District's disbursement of the Final Payment. If the Contractor fails to prepare and file the Final Verified Report with DSA within ten (10) days of the determination of Final Completion, the District may in the sole and exclusive discretion of the District retain and withhold an amount not to exceed ten percent (10%) of the Final Payment from disbursement to the Contractor as damages for the failure of the Contractor to have timely and completely discharged its obligations hereunder. The Contractor acknowledges and agrees that the foregoing withholdings by the District is a reasonable estimate of the damages and other losses the District will sustain due to the failure of the Contractor to have timely and fully discharged its obligations hereunder.

4.21.3 Progress Reports. Progress Reports shall be completed by the Contractor for each day of construction activities at the Site and submitted to the District or Project Manager not later than 9:00 A.M. of the ensuing business day.

ARTICLE 5: SUBCONTRACTORS

5.1 Subcontracts. Any Work performed for the Contractor by a Subcontractor shall be pursuant to a written agreement between the Contractor and such Subcontractor which specifically incorporates by reference the Contract Documents and which specifically binds the Subcontractor to the applicable terms and conditions of the Contract Documents, including without limitation, the policies of insurance required under Article 6 of these General Conditions and obligates the Subcontractor to assume toward the Contractor all the obligations and responsibilities of the Contractor which by the Contract Documents the Contractor assumes toward the District and the Architect. The foregoing notwithstanding, no contractual relationship shall exist, or be deemed to exist, between any Subcontractor and the District, unless the Contract is terminated and District, in writing, elects to assume the Subcontract. Each Subcontract for a portion of the Work shall provide that such Subcontract may be assigned to the District if the Contract is terminated by the District pursuant to Article 15 hereof, subject to the prior rights of the Surety if the District terminates the Contract for the Contractor's default. The Contractor shall provide to the District copies of all executed Subcontracts and Purchase Orders to which Contractor is a party within thirty (30) days after Contractor's execution of the Agreement. During performance of the Work, the Contractor shall, from time to time, as and when requested by the District, the Architect or the Project Manager provide the District with copies of any and all Subcontracts or Purchase Orders relating to the Work and all modifications thereto. The Contractor's failure or refusal, for any reason, to provide copies of such Subcontracts or Purchase Orders in accordance with the two preceding sentences is Contractor's default of a material term of the Contract Documents.

5.2 Subcontractor DIR Contractor Registration.

5.2.1 No Subcontractor Performance of Work Without DIR Registration. No portion of the Work is permitted to be performed by a Subcontractor unless the Subcontractor is a DIR Registered contractor. The foregoing DIR contractor registration requirement is applicable for all Subcontractors, including without limitation, lower tier Subcontractors and Subcontractors who are not identified in the Contractor's Subcontractors List.

5.2.2 Contractor Obligation to Verify Subcontractor DIR Registration Status. An affirmative and on-going obligation of the Contractor under the Contract Documents is the Contractor's verification that all Subcontractors are at all times during performance of the Work in full and strict compliance with DIR contractor registration requirements. The Contractor shall not permit or allow any Subcontractor to perform any Work without the Contractor's verification that the Subcontractor is in full and strict compliance with DIR contractor registration requirements.

5.2.3 Contractor Obligation to Request Substitution of Listed Subcontractor Who Is Not DIR Registered Contractor. If any Subcontractor identified in the Contractor's Subcontractors List submitted with the Contractor's proposal for the Work is not a DIR registered contractor at the time of opening of proposals for the Work or if a Subcontractor's DIR contractor registration lapses prior to or during a Subcontractor's performance of Work, the Contractor shall request the District's consent to substitute the Subcontractor who is not a DIR registered contractor pursuant to Labor Code §1771.1(c)(3) and/or Labor Code §1771.1(d).

5.3 Substitution of Listed Subcontractor.

5.3.1 Substitution Process. Request of the Contractor to substitute a listed Subcontractor will be considered only if in strict conformity with this Article 5.2 and California Public Contract Code §4107. All costs incurred by the District, including without limitation, costs of the District's Inspector, the Architect, the Project Manager or attorneys' fees in the review and evaluation of a request to substitute a listed Subcontractor shall be borne by the Contractor; such costs may be deducted by the District from the Contract Price then or thereafter due the Contractor.

5.3.2 Responsibilities of Contractor Upon Substitution of Subcontractor. The District's consent to Contractor's substitution of a listed Subcontractor shall not relieve Contractor from its obligation to complete the Work within the Contract Time and for the Contract Price. The substitution of a listed Subcontractor shall not, under any circumstance, result in, or give rise to any to any increase of the Contract Price or the Contract Time on account of such substitution. If the District consents to substitution of a listed Subcontractor, the Architect shall determine the extent to which, if any, revised or additional Submittals will be required of the newly substituted Subcontractor ("Substituted Subcontractor"). If the Architect determines that revised or additional Submittals are required of a Substituted Subcontractor, the Architect shall promptly notify the Contractor, in writing, of such requirement. In such event, revised or additional Submittals shall be submitted to Architect not later than thirty (30) days following the date of the Architect's written notice to the Contractor pursuant to the foregoing sentence; provided that if in the reasonable and good faith judgment of the Architect, the progress of the Work or completion of the Work requires submission of additional or revised Submittals by a Substituted Subcontractor in less than thirty (30) days, the Architect shall so state in its written notice to the Contractor. If the revised or additional Submittals are not submitted by Contractor within thirty (30) days, or such earlier time as determined by the Architect pursuant to the preceding sentence, following the Architect's written notice of the requirement for revised or additional Submittals, Contractor shall be subject to the per diem assessments for late Submittals as set forth in Article 4.7.2.1 of these General Conditions. Any revised or additional Submittals required pursuant to this Article 5.3.2 shall conform to the requirements of Article 4.7 of these General Conditions. Contractor shall reimburse the District for all fees and costs, including without limitation fees of the Architect, the District's administrative costs and DSA fees, incurred or associated with the processing, review and evaluation of any revised or additional Submittals required pursuant to this Article 5.3.2; the District may deduct such fees and costs from any portion of the Contract Price then or thereafter due the Contractor. In the event that additional

or revised Submittals are required pursuant to this Article 5.3.2, such requirement shall not result in an increase to the Contract Time or the Contract Price.

5.4 Subcontractors' Work. Whenever the Work of a Subcontractor is dependent upon the Work of the Contractor or another Subcontractor, the Contractor shall require the Subcontractor to: (i) coordinate its Work with the dependent Work; (ii) provide necessary dependent data and requirements; (iii) supply and/or install items to build into the dependent Work of others; (iv) make appropriate provisions for dependent Work of others; (v) carefully examine and understand the portions of the Contract Documents (including Drawings, Specifications and Field Clarifications) and Submittals relating to the dependent Work; and (vi) examine the existing dependent Work and verify that the dependent Work is in proper condition for the Subcontractor's Work. If the dependent Work is not in a proper condition, the Subcontractor shall notify the Contractor in writing and not proceed with the Subcontractor's Work until the dependent Work has been corrected or replaced and is in a proper condition for the Subcontractor's Work.

ARTICLE 6: INSURANCE; INDEMNITY; BONDS

6.1 Workers' Compensation Insurance; Employer's Liability Insurance. The Contractor shall purchase and maintain Workers' Compensation Insurance as will protect the Contractor from claims under workers' or workmen's compensation, disability benefit and other similar employee benefit acts which are applicable to the Work to be performed, whether such operations be by the Contractor or by a Subcontractor or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable. Contractor shall purchase and maintain Employer's Liability Insurance covering bodily injury (including death) by accident or disease to any employee which arises out of the employee's employment by Contractor. The Employer's Liability Insurance required of Contractor hereunder may be obtained by Contractor as a separate policy of insurance or as an additional coverage under the Workers' Compensation Insurance required to be obtained and maintained by Contractor hereunder. The limits of liability for the Employer's Liability Insurance required hereunder shall be as set forth in the Special Conditions.

6.2 Commercial General Liability. The Contractor shall purchase and maintain Commercial General Liability, including coverage for the types of claims set forth below which may arise out of or result from Contractor's performance of the Work: (i) claims for damages because of bodily injury, sickness or disease or death of any person other than the Contractor's employees; (ii) claims for damages insured by usual personal injury liability coverage; (iii) claims for damages, other than to the Work itself, because of injury to or destruction of tangible property, including loss of use resulting therefrom; (iv) claims for damages because of bodily injury, death of a person or property damages arising out of ownership, maintenance or use of a motor vehicle; (v) contractual liability insurance applicable to the Contractor's obligations under the Contract Documents; (vi) Completed Operations; and (vii) Contractor's Pollution Liability.

6.3 Builder's Risk "All-Risk" Insurance. The Contractor, during the progress of the Work and until Final Acceptance of all Work by the District, shall maintain Builder's Risk "All-Risk" Completed Value Insurance Coverage on all insurable Work included under the Contract Documents which coverage is to provide extended coverage and insurance against vandalism and malicious mischief, perils of fire, sprinkler leakage, civil authority, sonic boom, collapse and flood upon the entire Work which is the subject of the Contract Documents, and including completed Work and Work in progress to the full insurable value thereof. Contractor's Builders Risk Insurance shall include coverage and insurance against the perils of earthquake if so indicated in the Special Conditions. Such insurance shall include the District as an additional named insured, and any other person with an insurable interest designated by the District as an additional named insured. The risk of 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 District, nor will such loss or damage excuse the complete and satisfactory performance of the Contract by the Contractor.

6.4 Insurance Requirements.

6.4.1 Coverage Limits. Minimum coverage limits for each policy of insurance required of the Contractor hereunder are set forth in the Special Conditions.

6.4.2 Deductibles. The Contractor is solely and exclusively responsible for the payment of deductibles, if any, under any policy of insurance required of the Contractor hereunder, without adjustment to the Contract Price on account thereof.

6.4.3 No Modification or Cancellation Without Prior Notice to District. Coverages afforded under policies of insurance required of the Contractor shall include provisions to the effect that coverage thereunder will not be canceled or allowed to expire until at least thirty (30) days prior written notice has been given to the District. Should any policy of insurance be canceled before Final Acceptance of the Work by the District and the Contractor fails to immediately procure replacement insurance as required, the District reserves the right to procure such insurance and to deduct the premium cost thereof and other costs incurred by the District in connection therewith from any sum then or thereafter due the Contractor under the Contract Documents.

6.4.4 District Additional Insured. The District shall be an additional insured under the Contractor's Commercial Liability and Builders Risk policies of insurance. The additional Insured acknowledgement shall be submitted as a separate declaration from the Contractor's insurance provider (ACCORD form modifications are not acceptable).

6.4.5 Certificates of Insurance. Prior to commencing the Work, Contractor shall deliver to the District Certificates of Insurance evidencing the insurance coverages required by the Contract Documents. Failure or refusal of the Contractor to so deliver Certificates of Insurance may be deemed by the District to be a default of a material obligation of the Contractor under the Contract Documents, and thereupon the District may proceed to exercise any right or remedy provided for under the Contract Documents or at law. The Contractor shall, from time to time, furnish the District, when requested, with satisfactory proof of coverage of each type of insurance required by the Contract Documents; failure of the Contractor to comply with the District's request may be deemed by the District to be a default of a material obligation of the Contractor under the Contract Documents.

6.5 Subcontractors' Insurance. Contractor shall require that every Subcontractor, to obtain and maintain the policies of insurance set forth in Articles 6.1, 6.2 and 6.4 of these General Conditions; the coverages and limits of liability of such policies of insurance to be obtained and maintained by Subcontractors shall be as set forth in the Special Conditions. The policies of insurance to be obtained and maintained by Subcontractors hereunder are in addition to, and not in lieu of, Contractor obtaining and maintaining such policies of insurance. Each of the policies of insurance obtained and maintained by a Subcontractor hereunder shall conform with the requirements of this Article 6. Upon request of the District, Contractor shall promptly deliver to the District Certificates of Insurance evidencing that the Subcontractors have obtained and maintained policies of insurance in conformity with the requirements of this Article 6. Failure or refusal of the Contractor to provide the District with Subcontractors' Certificates of Insurance evidencing the insurance coverages required hereunder is a material default of Contractor hereunder.

6.6 Maintenance of Insurance. Any insurance bearing on the adequacy of performance of Work shall be maintained after the District's Final Acceptance of all of the Work for the full one year correction of Work period and any longer specific guarantee or warranty periods set forth in the Contract Documents. Should such insurance be canceled before the end of any such periods and the Contractor fails to immediately procure replacement insurance as specified, the District reserves the right to procure such insurance and to charge the cost thereof to the Contractor. Nothing contained

in these insurance requirements is to be construed as limiting the extent of the Contractor's responsibility for payment of damages resulting from its operations or performance of the Work under the Contract Documents, including without limitation the Contractor's obligation to pay Liquidated Damages. In no instance will the District's exercise of its option to occupy and use completed portions of the Work relieve the Contractor of its obligation to maintain insurance required under this Article until the date of Final Acceptance of the Work by the District, or such time thereafter as required by the Contract Documents. The insurer providing any insurance coverage required hereunder shall be to the reasonable satisfaction of the District.

6.7 Contractor's Insurance Primary. All insurance and the coverages thereunder required to be obtainedand maintained by Contractor hereunder, if overlapping with any policy of insurance maintained by the District, shall be deemed to be primary and non-contributing with any policy maintained by the District and any policy or coverage thereunder maintained by District shall be deemed excess insurance. To the extent that the District maintains a policy of insurance covering property damage arising out of the perils of fire or other casualty covered by the Contractor's Builder's Risk Insurance or the Comprehensive General Liability Insurance of the Contractor or any Subcontractor, the District, Contractor and all Subcontractors waive rights of subrogation against the others. The costs for obtaining and maintaining the insurance coverages required herein shall be included in the Contract Price.

6.8 Indemnity. Unless arising solely out of the active negligence, gross negligence or willful misconduct the District or the Architect, the Contractor shall indemnify, defend and hold harmless the Indemnified Parties who are: (i) the District and its Board of Trustees, officers, employees, agents and representatives (including the District's Inspector); (ii) the Architect its respective agents and employees; and (iii) if one is designated by the District for the Work, the Project Manager and its agents and employees. The Contractor's obligations hereunder includes indemnity, defense and hold harmless of the Indemnified Parties from and against any and all damages, losses, claims, demands or liabilities whether for damages, losses or other relief, including, without limitation attorneys' fees and costs which arise, in whole or in part, from the Work, the Contract Documents or the negligent, grossly negligent or willful acts, omissions or other conduct of the Contractor, any Subcontractor or any person or entity engaged by them for the Work. The Contractor's obligations under the foregoing include without limitation: (i) injuries to or death of persons; (ii) damage to property; or (iii) theft or loss of property; (iv) Stop Payment Notice claims asserted by any person or entity in connection with the Work; and (v) other losses, liabilities, damages or costs resulting from, in whole or part, any acts, omissions or other conduct of Contractor, any of Contractor's Subcontractors, of any tier, or any other person or entity employed directly or indirectly by Contractor in connection with the Work and their respective agents, officers or employees. If any action or proceeding, whether judicial, administrative, arbitration or otherwise, shall be commenced on account of any claim, demand or liability subject to Contractor's obligations hereunder, and such action or proceeding names any of the Indemnified Parties as a party thereto, the Contractor shall, at its sole cost and expense, defend the named Indemnified Parties in such action or proceeding with counsel reasonably satisfactory to the named Indemnified Parties. In the event that there shall be any judgment, award, ruling, settlement, or other relief arising out of any such action or proceeding to which any of the Indemnified Parties are bound by, Contractor shall pay, satisfy or otherwise discharge any such judgment, award, ruling, settlement or relief; Contractor shall indemnify and hold harmless the Indemnified Parties from any and all liability or responsibility arising out of any such judgment, award, ruling, settlement or relief. The Contractor's obligations hereunder are binding upon Contractor's Performance Bond Surety and these obligations shall survive notwithstanding Contractor's completion of the Work or the termination of the Contract.

6.9 Payment Bond; Performance Bond. Prior to commencement of the Work, the Contractor shall furnish a Performance Bond as security for Contractor's faithful performance of the Contract and a Labor and Material Payment Bond as security for payment of persons or entities performing work, labor or

furnishing materials in connection with Contractor's performance of the Work under the Contract Documents. Unless otherwise stated in the Special Conditions, the amounts of the Performance Bond and the Payment Bond required hereunder shall be one hundred percent (100%) of the Contract Price. Said Labor and Material Payment Bond and Performance Bond shall be in the form and content set forth in the Contract Documents. The failure or refusal of the Contractor to furnish either the Performance Bond or the Labor and Material Payment Bond in strict conformity with this Article 6.9 may be deemed by the District as a default by the Contractor of a material obligation hereunder. The Surety on any bond required under the Contract Documents shall be an Admitted Surety Insurer as that term is defined in California Code of Civil Procedure §995.120.

ARTICLE 7: CONTRACT TIME

7.1 Completion of the Work Within Contract Time. Unless otherwise expressly provided in the Contract Documents, the Contract Time is the period of time, including authorized adjustments thereto, allotted in the Contract Documents for achieving Completion of the Work. The date for commencement of the Work is the date established by the Notice to Proceed issued by the District pursuant to the Agreement, which shall not be postponed by the failure to act of the Contractor or of persons or entities for whom the Contractor is responsible. The date of Completion is the date certified by the Architect and the District's Inspector as such in accordance with the Contract Documents.

7.2 Progress and Completion of the Work.

7.2.1 Time of Essence. Time limits stated in the Contract Documents are of the essence. By executing the Agreement, the Contractor confirms that the Contract Time is a reasonable period for performing and achieving Completion of the Work. The Contractor shall employ and supply a sufficient force of workers, material and equipment, and prosecute the Work with diligence so as to maintain progress, to prevent Work stoppage and to achieve Completion of the Work within the Contract Time.

7.2.2 Correction and Completion of Project Work per bid documents, plans and specifications Prior to One Hundred Percent Completion.

7.2.2.1 Punchlist. Upon achieving Completion of the Work, the District, the District's Inspector, the Project Manager, if any, the Architect and the Contractor shall jointly inspect the Work and prepare a comprehensive list of items of the Work to be corrected or completed by the Contractor ("the Punchlist"). The exclusion of, or failure to include, any item on the Punchlist shall not alter or limit the obligation of the Contractor to complete or correct any portion of the Work in accordance with the Contract Documents.

7.2.2.2 Time for Completing Punchlist Items. In addition to establishing the Punchlist items pursuant to Article 7.2.3.1, the Project Manager, if any, Contractor and Architect shall, after the joint inspection, establish a reasonable time for Contractor's completion of all Punchlist items. If mutual agreement is not reached to establish the time for the Contractor's completion of Punchlist items, the Architect shall determine such time, and in such event, the time determined by the Architect shall be final and binding upon the District and Contractor so long as the Architect's determination is made in good faith. The Contractor shall promptly and diligently proceed to complete all Punchlist items within the time established. If the Contractor fails or refuses, for any reason, to complete all Punchlist items within the time established, Contractor shall be subject to assessment of Liquidated Damages in accordance with Article 7.4 hereof. The foregoing notwithstanding, if the Contractor fails or refuses to complete all Punchlist items, the District may in its sole and exclusive discretion and without further notice to Contractor, elect to cause the completion of all remaining Punchlist items provided, however that such election by the District is in addition to and not in lieu of any other right or remedy of the District under the Contract Documents or at law. If the District elects to complete Punchlist items of the Work, pursuant to the foregoing, Contractor shall be responsible

for all costs incurred by the District in connection herewith and the District may deduct such costs from the Contract Price then or thereafter due the Contractor, if these costs exceed the remaining Contract Price due to the Contractor, the Contractor and the Performance Bond Surety are jointly and severally liable to District for any such excess costs.

7.2.3 One Hundred Percent Completion. Completion is that stage in the progress of the Work when the Work or any designated portion thereof (whether described as milestones, phases, segments or other similar terms) is complete in accordance with the Contract Documents so the District can occupy or use the Work for its intended purpose. Completion shall be determined by the Architect, Project Manager, if any, and the District's Inspector upon request by the Contractor in accordance with the Contract Documents. The good faith and reasonable determination of Completion by the District's Inspector, Project Manager, if any and the Architect shall be controlling and final.

7.2.4 Contractor Responsibility for Multiple Inspections. If the Contractor requests determination of Completion or Final Completion by the District's Inspector, Project Manager, if any, and the Architect and it is determined by the District's Inspector, Project Manager, if any, or the Architect that the Work does not then justify certification of Completion or Final Completion and re-inspection is required at a subsequent time to make such determination, the Contractor shall be responsible for all costs of such re-inspection, including without limitation, the fees of the Architect, Project Manager, if any, and the District's Inspector. The District may deduct such costs from the Contract Price then due or thereafter due to the Contractor.

7.2.5 Final Acceptance. Final Acceptance of the Work shall occur upon approval of the Work by the District's Board of Trustees; such approval shall be submitted for adoption at the next regularly scheduled meeting of the District's Board of Trustees after the determination of Final Completion. The commencement of any warranty or guarantee period under the Contract Documents is the date upon which the District's Board of Trustees approves of the Final Acceptance of the Work.

7.3 Construction Schedule.

7.3.1 Submittal of Preliminary Construction Schedule. Within five (14) days following execution of the Agreement, the Contractor shall prepare and submit to the District, the Project Manager, if any, and the Architect a Preliminary Construction Schedule indicating, in graphic form, the estimated rate of progress and sequence of all Work required under the Contract Documents. The purpose of the Preliminary Construction Schedule is to assure adequate planning and execution of the Work so that it is completed within the Contract Time and to permit evaluation of the progress of the Work. Unless otherwise provided in the Special Conditions, the Construction Schedules required under this Article 7 shall; (i) be prepared with a commercially available computer software program in a critical path format; (ii) indicate the date(s) for commencement and completion of various portions of the Work including without limitation, procurement, fabrication and delivery of major items, materials or equipment; (iii) indicate manpower and other resources required for completion of each Construction Schedule activity; (iv) indicate costs for completion of each Construction Schedule activity; (v) identify each Submittal required by the Contract Documents, the date for the Contractor's submission of each Submittal and the date for the return of the reviewed Submittal to the Contractor. The Contractor may submit a Preliminary Construction Schedule depicting completion of the Work in a duration shorter than the Contract Time; provided that such Preliminary Construction Schedule shall not be a basis for adjustment to the Contract Price in the event that completion of the Work shall occur after the time depicted therein, nor shall such Preliminary Construction Schedule be the basis for any extension of the Contract Time, the Contractor's entitlement to any extension of the Contract Time shall be based upon the Contract Time and not on any shorter duration which may be depicted in the Contractor's Preliminary Construction Schedule. If the Construction

Schedules required under this Article 7.3 incorporate therein any "float" time, such float shall be deemed to jointly belong to and owned by the District and the Contractor. As used herein, "float time" shall be deemed to refer to the time between earliest finish date and the latest finish date of each activity shown on the Construction Schedule.

7.3.2 Review of Preliminary Construction Schedule. The District, the Project Manager, if any, and the Architect shall review the Preliminary Construction Schedule submitted by the Contractor pursuant to Article 7.3.1 above for conformity with the requirements of the Contract Documents. Within fifteen (15) days of the date of receipt of the Preliminary Construction Schedule, the Preliminary Construction Schedule will be returned to the Contractor with comments to the form or content thereof. Review of the Preliminary Construction Schedule and any comments thereto by the District, the Project Manager and/or the Architect shall not be deemed to be the assumption of construction means, methods or sequences by the District, the Project Manager or the Architect, all of which remain the Contractor's obligations under the Contract Documents.

7.3.3 Preparation and Submittal of Contract Construction Schedule. Within ten (21) days of the District's return of the Preliminary Construction Schedule to the Contractor pursuant to Article 7.3.2 above, the Contractor shall prepare and submit to the Architect and the Project Manager, if any, the Construction Schedule which incorporates therein the comments to the Preliminary Construction Schedule. Upon the Contractor's submittal of such Construction Schedule, the District, the Project Manager and the Architect shall review the same for purposes of determining conformity with the requirements of the Contract Documents. Within fifteen (15) days of the receipt of the Construction Schedule, the District will approve such Construction Schedule or will return the same to the Contractor with comments to the form or content. In the event there are comments to the form or content thereof, the Contractor, shall within seven (7) days of receipt of such comments, revise and resubmit the Construction Schedule incorporating therein such comments. Upon the District's approval of the form and content of a Construction Schedule, the same shall be deemed the "Approved Construction Schedule." The District's approval of a Construction Schedule shall be for the sole and limited purpose of determining conformity with the requirements of the Contract Documents. By the Approved Construction Schedule, the District shall not be deemed to have exercised control over, or approval of, construction means, methods or sequences, all of which remain the responsibility and obligation of the Contractor in accordance with the terms of the Contract Documents. Further, the Approved Construction Schedule shall not operate to limit or restrict any of Contractor's obligations under the Contract Documents nor relieve the Contractor from the full, faithful and timely performance of such obligations in accordance with the terms of the Contract Documents. The activities, commencement and completion dates of activities, and the sequencing of activities depicted on the Approved Construction Schedule shall not be modified or revised by the Contractor without the prior consent, or direction, of the District and the Architect. Updates to the Approved Construction Schedule pursuant to Article 7.3.5 below shall not be deemed revisions to the Approved Construction Schedule. If the Approved Construction Schedule depicts completion of the Work in a duration shorter than the Contract Time, the same shall not be a basis for an adjustment of the Contract Time or the Contract Price in the event that actual completion of the Work shall occur after such the time depicted in such Approved Construction Schedule. In such event, the Contract Price shall not be subject to adjustment on account of any additional costs incurred by the Contractor to complete the Work prior to the Contract Time, as adjusted in accordance with the terms of the Contract Documents. Any adjustment of the Contract Time or the Contract Price shall be based upon the Contract Time set forth in the Contract Documents and not any shorter duration which may depicted in the Approved Construction Schedule.

7.3.4 Revisions to Approved Construction Schedule. In the event that the progress of the Work or the sequencing of the activities of the Work shall materially differ from that indicated in the Approved Construction Schedule, as determined by the District in its reasonable discretion

and judgment, the District may direct the Contractor to revise the Approved Construction Schedule; within fifteen (15) days of the District's direction, the Contractor shall prepare and submit to the Architect and the Project Manager a revised Approved Construction Schedule, for review and approval by the District. The Contractor may request consent of the District to revise the Approved Construction Schedule. Any such request shall be considered by the District only if in writing setting forth the Contractor's proposed revision(s) to the Approved Construction Schedule and the reason(s) therefor. The District may consent to, or deny, any such request of the Contractor to revise the Approved Construction Schedule in its reasonable discretion.

7.3.5 Updates to Approved Construction Schedule. The Contractor shall monitor and update the Approved Construction Schedule on a monthly basis, or more frequently as required by the conditions or progress of the Work, or as may be requested by the District. The Contractor shall provide the District, the Project Manager and the Architect with updated Approved Construction Schedules indicating progress achieved and activities commenced or completed within the prior updated Approved Construction Schedule. Updates to the Approved Construction Schedule shall not include any revisions to the activities, commencement and completion dates of activities or the sequencing of activities depicted on the Approved Construction Schedule. Any such revisions to the Approved Construction Schedule shall result in the District's rejection of such update and Contractor shall, within seven (7) days of the District's rejection of such update, submit to the Architect and the Project Manager an Updated Approved Construction Schedule which does not incorporate any such revisions. If requested by the District, the Contractor shall also submit, with its updates to the Approved Construction Schedule a narrative statement including a description of current and anticipated problem areas of the Work, delaying factors and their impact, and an explanation of corrective action taken or proposed by the Contractor. If the progress of the Work is behind the Approved Construction Schedule, the Contractor shall indicate what measures will be taken to place the Work back on schedule. The District may, from time to time, and in the District's sole and exclusive discretion, transmit to the Contractor's Performance Bond Surety the Approved Construction Schedule, any updates thereof and the narrative statement described hereinabove. The District's election to transmit, or not to transmit such information, to the Contractor's Performance Bond Surety shall not limit the Contractor's obligations under the Contract Documents.

7.3.6 Contractor Responsibility for Construction Schedule. The Contractor shall be responsible for the preparation, submittal and maintenance of the Construction Schedules required by the Contract Documents, and any failure of the Contractor to do so may be deemed by the District as the Contractor's default in the performance of a material obligation under Contract Documents. Any and all costs or expenses required or incurred to prepare, submit, maintain, and update the Construction Schedules shall be solely that of the Contractor and no such cost or expense shall be charged to the District. The Contract Price shall not be subject to adjustment on account of costs, fees or expenses incurred or associated with the Contractor's preparation, submittal, and maintenance or updating of the Construction Schedules.

7.4 Adjustment of Contract Time. If Completion is delayed, adjustment, if any, to the Contract Time on account of such delay shall be in accordance with this Article 7.4.

7.4.1 Excusable Delays. If Completion of the Work is delayed by Excusable Delays, the Contract Time shall be subject to adjustment for such reasonable period of time as determined by the Architect; Excusable Delays shall not result in any increase in the Contract Price. Excusable Delays refer to unforeseeable and unavoidable casualties or other unforeseen causes beyond the control, and without fault or neglect, of the Contractor, any Subcontractor, Material Supplier or other person directly or indirectly engaged by the Contractor in performance of any portion of the Work. Excusable Delays include unanticipated and unavoidable labor disputes, unusual and unanticipated delays in transportation of equipment, materials or Construction Equipment reasonably necessary for completion and proper execution of the Work, unanticipated unusually severe weather conditions or DSA directive to stop the Work. Neither

the financial resources of the Contractor or any person or entity directly or indirectly engaged by the Contractor in performance of any portion of the Work shall be deemed conditions beyond the control of the Contractor. If an event of Excusable Delay occurs, the Contract Time shall be subject to adjustment hereunder only if the Contractor establishes: (i) full compliance with all applicable provisions of the Contract Documents relative to the method, manner and time for Contractor's notice and request for adjustment of the Contract Time; (ii) that the event(s) forming the basis for Contractor's request to adjust the Contract Time are outside the reasonable control and without any fault or neglect of the Contractor or any person or entity directly or indirectly engaged by Contractor in performance of any portion of the Work; and (iii) that the event(s) forming the basis for Contractor's request to adjust the Contract Time directly and adversely impacted the progress of the Work as indicated in the Approved Construction Schedule or the most recent updated Approved Construction Schedule relative to the date(s) of the claimed event(s) of Excusable Delay. The foregoing provisions notwithstanding, if the Special Conditions set forth a number of "Rain Days" to be anticipated during performance of the Work, the Contract Time shall not be adjusted for rain related unusually severe weather conditions until and unless the actual number of Rain Days during performance of the Work exceeds those noted in the Special Conditions and such additional Rain Days directly and adversely impact the critical path progress of the Work as depicted in the Approved Construction Schedule or the most recent updated Approved Construction Schedule relative to the date(s) of such additional Rain Days.

7.4.2 Compensable Delays. If Completion of the Work is delayed and such delay is caused by the acts or omissions of the District, the Architect, or separate contractor employed by the District (collectively "Compensable Delays"), upon Contractor's request and notice, in strict conformity with Articles 7 and 9 of these General Conditions, the Contract Time will be adjusted by Change Order for such reasonable period of time as determined by the Architect and the District. In accordance with California Public Contract Code §7102, if the Contractor's progress is delayed by any of the events described in the preceding sentence, Contractor shall not be precluded from the recovery of damages directly and proximately resulting therefrom, provided that the District is liable for the delay, the delay is unreasonable under the circumstances involved and the delay was not within the reasonable contemplation of the District and the Contractor at the time of execution of the Agreement. In such event, Contractor's damages, if any, shall be limited to direct, actual and unavoidable additional costs of labor, materials or Construction Equipment directly resulting from such delay, and shall exclude indirect or other consequential damages, including without limitation, home office expenses, bond capacity impairment or loss of prospective economic advantage. Except as expressly provided for herein, Contractor shall not have any other claim, demand or right to adjustment of the Contract Price arising out of delay, interruption, hindrance or disruption to the progress of the Work. Adjustments to the Contract Price and the Contract Time, if any, on account of Changes to the Work or Suspension of the Work shall be governed by the applicable provisions of the Contract Documents, including without limitation, Articles 9 and 14 of these General Conditions.

7.4.3 Unexcusable Delays. Unexcusable Delays refer to any delay to the progress of the Work caused by events or factors other than those specifically identified in Articles 7.4.1 and 7.4.2 above. Neither the Contract Price nor the Contract Time shall be adjusted on account of Unexcusable Delays.

7.4.4 Adjustment of Contract Time.

7.4.4.1 Procedure for Adjustment of Contract Time. The Contract Time shall be subject to adjustment only in strict conformity with applicable provisions of the Contract Documents. Failure of Contractor to request adjustment(s) of the Contract Time in strict conformity with applicable provisions of the Contract Documents shall be deemed Contractor's waiver of the same.

7.4.4.2 Limitations Upon Adjustment of Contract Time on Account of Delays. Any adjustment of the Contract Time on account of an Excusable Delay or a Compensable Delay shall be limited as set forth herein. If an Excusable Delay and a Compensable Delay occur concurrently, the maximum extension of the Contract Time shall be the number of days from the commencement of the first delay to the cessation of the delay which ends last. If an Unexcusable Delay occurs concurrently with either an Excusable Delay or a Compensable Delay, the maximum extension of the Contract Time shall be the number of days, if any, which the Excusable Delay or the Compensable Delay exceeds the period of time of the Unexcusable Delay. In addition to the foregoing limitations upon extension of the Contract Time, no adjustment of the Contract Time shall be made on account of any Excusable Delays or Compensable Delays unless such delay(s) actually and directly impact Work or Work activities on the critical path of the then current and updated Approved Construction Schedule as of the date on which such delay first occurs. The District shall not be deemed in breach of, or otherwise in default of any obligation hereunder, if the District shall deny any request by the Contractor for an adjustment of the Contract Time for any delay which does not actually and directly impact Work or Work activities on the critical path of the then current and updated Approved Construction Schedule.

7.5 Liquidated Damages. Should the Contractor neglect, fail or refuse to: (i) submit Submittals in accordance with the Approved Construction Schedule; (ii) achieve Completion of the Work or designated portions thereof within the Contract Time, (subject to adjustments authorized under the Contract Documents); (iii) or to complete Punchlist items within the time established pursuant to the Contract Documents, the Contractor agrees to pay to the District the amount of per diem Liquidated Damages set forth in the Special Conditions, not as a penalty but as Liquidated Damages, for every day beyond the Contract Time, as adjusted, until Submittals are submitted, Completion or completion of the Punchlist items are achieved. The Liquidated Damages amounts set forth in the Special Conditions are agreed upon by and between the Contractor and the District because of the difficulty of fixing the District's actual damages in the event of delayed submission of Submittals, Completion or completion of Punchlist items. The Contractor and the District specifically agree that said amounts are reasonable estimates of the District's damages in such event, and that such amounts do not constitute a penalty. Liquidated Damages may be deducted from the Contract Price then or thereafter due the Contractor. The Contractor and the Surety shall be liable to the District for any Liquidated Damages exceeding any amount of the Contract Price then held or retained by the District. In the event that the Contractor shall fail or refuse to complete Punchlist items and the District elects to exercise its right to cause completion or correction of such items pursuant to Article 7.2.3.2 hereof, the District's assessment of Liquidated Damages pursuant to the foregoing shall be in addition, and not in lieu of, the District's right to charge Contractor with the cost of completing or correcting such items of the Work, as provided for under Article 7.2.3.2. The Contractor and the District acknowledge and agree that the provisions of this Article 7.5 are reasonable under the circumstances existing at the time of the Contractor's execution of the Agreement.

ARTICLE 8: CONTRACT PRICE

8.1 Contract Price. The Contract Price is the amount stated in the Agreement and subject to adjustments thereto in accordance with the Contract Documents, is the total amount payable by the District to the Contractor for completion of the Work and other obligations of the Contractor under the Contract Documents. The District's payment of the Contract Price to the Contractor shall be in accordance with the Contract Documents.

8.2 Cost Breakdown. Within fifteen (15) days of the execution of the Agreement by Contractor, Contractor shall furnish, in a form acceptable to the District, a detailed estimate and complete Cost Breakdown of the Contract Price. The Cost Breakdown is subject to the District's review

and approval of the form and content thereof. If the District objects to any portion of the Cost Breakdown, within ten (10) days of the District's receipt of the Cost Breakdown, the District shall notify the Contractor, in writing of the District's objection(s) to the Cost Breakdown. Within five (5) days of the date of the District's written objection(s), Contractor shall submit a revised Cost Breakdown to the District for review and approval. The foregoing procedure for the preparation, review and approval of the Cost Breakdown shall continue until the District has approved of the entirety of the Cost Breakdown. Upon the District's approval of the Cost Breakdown, the Cost Breakdown shall not be thereafter modified or amended by the Contractor without the prior consent and approval of the District, which may be granted, conditioned or withheld in the sole discretion of the District. Notwithstanding any provision of the Contract Documents to the contrary, payment of the Contractor's overhead, supervision and general conditions costs and profit, as such items are reflected in the Cost Breakdown, shall be made by the District in equal installments with its disbursements of Progress Payments and the Final Payment with the amount of each such installment equal to the aggregate amount of such items as reflected in the Cost Breakdown divided by the number of months of the Contract Time.

8.3 Progress Payments.

8.3.1 Applications for Progress Payments. During the Contractor's performance of the Work, the Contractor shall submit monthly, on the first working day of each month, to the District, District's Inspector, Project Manager, if any, and the Architect, Applications for Progress Payments ("Payment Applications"), on forms approved by the District, setting forth an itemized estimate of Work completed in the preceding month for the purpose of the District's making of Progress Payments thereon. Values utilized in the Payment Applications shall be based upon the District approved Cost Breakdown pursuant to Article 8.2 above provided that such values are only for determining the basis of Progress Payments to Contractor, and shall not be considered as fixing a basis for adjustments, whether additive or deductive, to the Contract Price, or for determining the extent of Work actually completed.

8.3.2 Payment Application Review for Determination of Proper Payment Application. Pursuant to Public Contract Code §20104.50, upon receipt of a Payment Application, the District's Inspector, the Project Manager, if any, and the Architect will review the Payment Application as soon as practicable for the purpose of determining that the Payment Application is a proper Payment Application. A Payment Application is "proper" only if information required by the form of Payment Application is completely and accurately provided by the Contractor and the Payment Application is accompanied by: (i) a summary listing of the Subcontractors/Material Suppliers entitled to payment of any portion of the requested Progress Payment, along with the amount of payment each Subcontractor/Material Supplier is entitled to receive from the Contractor from the proceeds of the requested Progress Payment; (ii) completed and executed form of Verification of Certified Payroll Records Submittal To Labor Commissioner; (iii) duly completed and executed forms of Conditional Waiver and Release of Rights Upon Progress Payment in accordance with California Civil Code §8132 of the Contractor and Subcontractors/Material Suppliers covering the Progress Payment requested; (iv) duly completed and executed forms of Unconditional Waiver and Release of Rights upon Progress Payment in accordance with California Civil Code §8134 of the Contractor and Subcontractors/Material Suppliers covering the Progress Payment received by the Contractor under the immediately preceding Payment Application; (v) if applicable, a current union statement reflecting that the Contractor and Subcontractors are current in the payment of any supplemental fringe benefits required pursuant to any collective bargaining agreement to which the Contractor or any such Subcontractor is a party to or is otherwise bound by; and (vi) a certification by the Contractor that it has continuously maintained the Record Drawings reflecting the actual as-built conditions of the Work performed be for which the Progress Payment is requested, it being understood that such certification is subject to verification by the District, Architect or the Project Manager prior to disbursement of the Progress Payment. Pursuant to

Public Contract Code §20104.50, if a Payment Application determined by the District not to be a proper Payment Application it shall be returned by the District to the Contractor as soon as is practicable after receipt thereof, but in no event not more than seven (7) days after receipt. The District's return of any Payment Application pursuant to the preceding sentence shall be accompanied by a written document setting forth the reason(s) why the Payment Application is not proper.

8.3.3 Verification of Work Completed. Upon receipt of a Payment Application, the Architect, Project Manager, if any and the District's Inspector shall inspect and verify the Work to determine whether it has been performed in accordance with requirements of the Contract Documents and to determine the portion of the Payment Application which is properly due to the Contractor under the terms of the Contract Documents.

8.3.4 District's Disbursement of Progress Payments.

8.3.4.1 Timely Disbursement of Progress Payments. Pursuant to Public Contract Code §20104.50, within thirty (30) days after the District's receipt of a proper Payment Application, there shall be paid, by District, to Contractor a sum equal to ninety-five percent (95%) of the value of the Work indicated in the Payment Application which is actually in place as of the date of the Payment Application, as verified by the District's Inspector, Project Manager, if any, and the Architect and the pro rata portion of the Contractor's overhead, supervision and general conditions costs and profit for that month; provided, however, that the District's obligation to disburse any Progress Payment shall be subject to the District's receipt of all documents set forth in Article 8.3.2 above, each and all of which are conditions precedent to the District's obligation to disburse Progress Payments. If a Payment Application is determined not to be proper due to the failure or refusal of the Contractor to submit documents with the Payment Application, as required by Article 8.3.2, or incompleteness or inaccuracies in any such documents submitted or if it is reasonably determined that the Record Drawings have not been continuously maintained to reflect the actual as built conditions of the Work completed in the period for which the Progress Payment is requested, the thirty (30) day period hereunder for the District's timely disbursement of a Progress Payment is deemed to commence on the date that the District is actually in receipt of documents not submitted with the Payment Application, or corrections to documents with the Payment Application so as to render them complete and accurate, or the date upon which the Contractor accurately and fully completes preparation of the Record Drawings relating to the Work for which the Progress Payment is requested.

8.3.4.2 Untimely Disbursement of Progress Payments. Pursuant to Public Contract Code §20104.50, if the District fails to make a Progress Payment within thirty (30) days after receipt of an undisputed and proper Payment Application, the District shall pay the Contractor interest on the undisputed amount of such Payment Application at the legal rate of interest set forth in California Code of Civil Procedure §685.010(a). The foregoing notwithstanding, if the District determines that any Payment Application is not proper, pursuant to Article 8.3.2 above, and the District does not return such Payment Application within the seven (7) day period provided for in Article 8.3.2, the period of time for the District's disbursement of the Progress Payment on such Payment Application without incurring interest liability shall be reduced by the number of days exceeding the seven (7) day return period.

8.3.4.3 District's Right to Disburse Payments by Joint Checks. The District, may, in its sole discretion, issue joint checks to the Contractor and Subcontractors/Material Suppliers in satisfaction of its obligation to make Progress Payments or the Final Payment due hereunder.

8.3.4.4 No Waiver of Defective or Non-Conforming Work. The approval of any Payment Application or the disbursement of any Progress Payment to the Contractor shall not be deemed nor constitute acceptance of defective or non-conforming Work.

8.3.5 Progress Payments for Changed Work. The Contractor's Payment Applications may

include requests for payment on account of Changes in the Work which have been properly authorized and approved by the District's Inspector, the Architect and all other governmental agencies with jurisdiction over such Change in accordance with the terms of the Contract Documents and for which a Change Order has been issued. Except as provided for herein, no other payment shall be made by the District for Changes in the Work.

8.3.6 Materials or Equipment Not Incorporated Into the Work.

8.3.6.1 Limitations Upon Payment. Except as expressly provided for herein, no payments shall be made by the District on account of any item of the Work, including without limitation, materials or equipment which, at the time of the Contractor's submittal of a Payment Application, has/have not been incorporated into and made a part of the Work.

8.3.6.2 Materials or Equipment Delivered and Stored at the Site. The District may, in its sole and exclusive discretion, make payment for materials or equipment not yet incorporated into the Work if, at or prior to the time of the Contractor's submittal of a Payment Application requesting payment for such materials or equipment if all of the following are complied with: (i) the materials or equipment have been delivered to the Site; (ii) adequate arrangements, reasonably satisfactory to the District, have been made by the Contractor to store and protect such materials or equipment at the Site including without limitation, insurance reasonably satisfactory to the District, covering and protecting against the risk of loss, destruction, theft or other damage to such materials or equipment while in storage; and (iii) the establishment of procedures reasonably satisfactory to the District by which title to such materials or equipment will be vested in the District upon the District's payment therefor. The Contractor acknowledges that the discretion to make, or not to make, payment for materials or equipment delivered or stored at the Site pursuant to the preceding sentence shall be exercised exclusively by the District; the District's exercise of discretion not to make payment shall not be deemed the District's default hereunder. If the District elects to make payment for materials or equipment delivered and stored at the Site, the costs and expenses incurred to comply with the requirements of (ii) and (iii) of this Article 8.3.6.2 shall be borne solely and exclusively by the Contractor and no payment shall be made by the District on account of such costs and expenses.

8.3.6.3 Materials or Equipment Not Delivered or Stored at the Site. No payments shall be made by the District for materials or equipment to be incorporated into the Work where such materials or equipment have not been delivered or stored at the Site or which are in the process of fabrication or transportation to the Site.

8.3.7 Exclusions From Progress Payments. In addition to the District's right to withhold disbursement of any Progress Payment provided for in the Contract Documents, neither the Contractor's Payment Application shall include, nor shall the District be obligated to disburse any portion of the Contract Price for amounts which the Contractor does not intend to pay any Subcontractor or Material Supplier because of a dispute or any other reason.

8.3.8 Title to Work. The Contractor warrants that title to all Work covered by an Payment Application will pass to the District no later than the time of payment. The Contractor further warrants that upon submittal of a Payment Application, all Work for which a Progress Payment has been previously disbursed and the Contractor has received payment from the District therefor shall, to the best of the Contractor's knowledge, information and belief, be free and clear of liens, claims, security interests or encumbrances in favor of the Contractor, Subcontractors, Material Suppliers or other persons or entities making a claim by reason of having provided labor, materials and equipment relating to the Work.

8.3.9 Substitute Security for Retention. Pursuant to California Public Contract Code §22300, eligible and equivalent securities may be substituted for any monies withheld by the District to ensure the Contractor's performance under the Contract Documents at the request and expense of the Contractor and in conformity with the provisions of California Public Contract Code

§22300. The foregoing and the provisions of California Public Contract Code §22300 notwithstanding, failure of the Contractor to request the substitution of eligible and equivalent securities for monies to be withheld by the District within ten (10) days following the date of award of the Contract to Contractor shall be deemed a waiver of such right.

8.4 Final Payment.

8.4.1 Application for Final Payment. When the Contractor has achieved Final Completion of the Work and has otherwise fully performed its obligations under the Contract Documents, the Contractor shall submit an Application for Final Payment on such form as approved by the District. Thereupon, the Architect, Project Manager, if any, and the District's Inspector will promptly make a final inspection of the Work and when the Architect, Project Manager, if any and the District's Inspector find the Work acceptable under the Contract Documents and that the Contract has been fully performed by the Contractor, the Architect, Project Manager, if any, and the District's Inspector will thereupon promptly approve the Application for Final Payment, stating that to the best their knowledge, information and belief, the Work has been completed in accordance with the terms of the Contract Documents. The Final Payment shall include the remaining balance of the Contract Price and any retention from Progress Payments previously withheld by the District.

8.4.2 Conditions Precedent to Disbursement of Final Payment. Neither Final Payment nor any remaining Contract Price shall become due until the Contractor submits to the District each and all of the following, the submittal of which are conditions precedent to the District's obligation to disburse the Final Payment: (i) an affidavit or certification by the Contractor that payrolls, bills for materials and other indebtedness incurred in connection with the Work for which the District or the District's property may or might be responsible or encumbered have been paid or otherwise satisfied; (ii) a certificate evidencing that insurance required by the Contract Documents to remain in force after the Contractor's receipt of Final Payment is currently in effect; (iii) a written statement that the Contractor knows of no One Hundred Percent reason that the insurance will not be renewable to cover any period following Final Payment as required by the Contract Documents; (iv) consent of the Surety on the Labor and Material Payment Bond and Performance Bond, to Final Payment if required; (v) duly completed and executed forms of Conditional or Unconditional Waivers and Releases of rights upon Final Payment of the Contractor, Subcontractors/Material Suppliers in accordance with California Civil Code §§8136 or 8138, with each of the same stating that there are, or will be, no claims for additional compensation after disbursement of the Final Payment; (vi) Operations and Maintenance manuals and separate warranties provided by any manufacturer or distributor of any materials or equipment incorporated into the Work; (vii) the Record Drawings; (viii) the form of Guarantee included in the Contract Documents duly executed by an authorized representative of the Contractor; (ix) any and all other items or documents required by the Contract Documents to be delivered to the District upon completion of the Work; (x) the completion and submittal of all reports required by the Contract Documents, including without limitation, verified reports required by applicable provisions of the California Code of Regulations; and (xi) if required by the District, such other data establishing payment or satisfaction of obligations such as receipts, releases and waivers of liens, Stop Payment Notices, claims, security interest or encumbrances arising out of the Contract to the extent and in such form as may be required by the District.

8.4.3 Disbursement of Final Payment. Provided that the District is then in receipt of all documents and other items in Article 8.4.2 above as conditions precedent to the District's obligation to disburse Final Payment, not later than sixty (60) days following Final Acceptance the District shall disburse the Final Payment to the Contractor. Pursuant to California Public Contract Code §7107, if there is any dispute between the District and the Contractor at the time that disbursement of the Final Payment is due, the District may withhold from disbursement of the Final Payment an amount not to exceed one hundred fifty percent (150%) of the amount in dispute. If the Contractor fails to timely submit completed DSA Reports in accordance with

Article 4.21.1 above, the Final Payment due the Contractor shall be reduced in accordance with Article 4.21.2 above.

8.4.4 Waiver of Claims. The Contractor's acceptance of the Final Payment is a waiver and release by the Contractor of any and all claims against the District for compensation or otherwise in connection with the Contractor's performance of the Contract.

8.4.5 Claims Asserted After Final Payment. Any lien, Stop Payment Notice or other claim filed or asserted after the Contractor's acceptance of the Final Payment by any Subcontractor, laborer, Material Supplier or others in connection with or for Work performed under the Contract Documents shall be the sole and exclusive responsibility of the Contractor and the Surety. The Contractor and Surety shall indemnify, defend and hold harmless the District and its officers, agents, representatives and employees from and against any claims, demands or judgments arising or associated therewith, including without limitation attorney's fees incurred by the District in connection therewith.

8.5 Withholding of Payments. The District may withhold any Progress Payment or the Final Payment, in whole or in part, or backcharge the Contractor to the extent it may deem advisable to protect the District on account of: (i) defective Work or Work not in conformity with the requirements of the Contract Documents which is not remedied; (ii) failure of the Contractor to make payments when due Subcontractors/Material Suppliers; (iii) claims filed or reasonable evidence of the probable filing of claims by Subcontractors, laborers, Material Suppliers, or others performing any portion of the Work under the Contract Documents for which the District may be liable or responsible including, without limitation, Stop Payment Notice Claims filed with the District pursuant to California Civil Code §9350 et seq.; (iv) a reasonable doubt that the Contract can be completed for the then unpaid balance of the Contract Price; (v) tax demands filed in accordance with California Government Code §12419.4; (vi) other claims, penalties and/or forfeitures for which the District is required or authorized to retain funds otherwise due the Contractor; (vii) any amounts due from the Contractor to the District under the terms of the Contract Documents; or (viii) the Contractor's failure to perform any of its obligations under the Contract Documents, its default under the Contract Documents or its failure to maintain adequate progress of the Work. In addition to the foregoing, the District shall not be obligated to process any Payment Application or Application for Final Payment, nor shall Contractor be entitled to any Progress Payment or Final Payment so long as any lawful or proper direction concerning the Work or the performance thereof or any portion thereof, given by the District, the District's Inspector, the Architect or any public authority having jurisdiction over the Work, or any portion thereof, shall not be fully and completely complied with by the Contractor. When the District is reasonably satisfied that the Contractor has remedied any such deficiency, payment shall be made of the amount withheld.

8.6 Payments to Subcontractors. The Contractor shall pay all Subcontractors for and on account of Work of the Contract performed by such Subcontractors in accordance with the terms of their respective subcontracts and as provided for pursuant to California Public Contract Code §10262, the provisions of which are deemed incorporated herein by this reference. If the Contractor fails to make payment to Subcontractors in conformity with California Public Contract Code §10262, the provisions of California Public Contract Code §10253 shall apply; by this reference, the provisions of California Public Contract Code §10253 are incorporated herein in its entirety, except that the references in said Section 10253 to "the director" shall be deemed to refer to the District. The Contractor shall timely make payment of retention due Subcontractors in accordance with Public Contract Code §7107.

8.7 Computerized Job Cost Reporting System.

8.7.1 Job Cost Reporting. The Contractor and each Subcontractor with a Subcontract valued at One Million Five Hundred Thousand Dollars ($1.5M) or greater shall maintain a computerized job cost reporting system conforming to the requirements set forth herein. The computer program(s) utilized by the Contractor and applicable Subcontractors shall be subject to the review and acceptance by the District. The job cost reporting systems for the Work shall be updated in regular intervals of not more than one (1) calendar month.

8.7.2 Job Cost Reporting System Requirements. The computerized job cost programs utilized by the Contractor and applicable Subcontractors shall conform and comply with generally accepted accounting principles applied in a consistent manner and with recognized and generally accepted construction industry accounting standards, guidelines and procedures. The job cost reporting system format and configuration shall follow the general format of the District approved Cost Breakdown and budgets established for each line item shall be traceable to a bid estimate of costs. The job cost reporting systems utilized by the Contractor and applicable Subcontractors shall be capable of: (i) providing overall cost status on a monthly and cumulative basis; (ii) providing comparative analysis of the original budgeted costs, actual costs, remaining budget, and projected cost of completion; the job cost reporting system shall be capable of providing comparative analysis for individual line items and the totality of the Work reflected in the job cost report and; (ii) tracking adjustments to original budget amounts for Changes to the Work (including, without limitation, issued, pending and potential Change Orders).

8.7.3 Job Cost System Information. Upon request of the District, the Contractor and applicable Subcontractors shall make available written job cost reports and/or provide the District with the electronic files of the then current or requested job cost report. The Contractor's obligations hereunder are material.

ARTICLE 9: CHANGES

9.1 Changes in the Work. The District, at any time, by written order, may make Changes within the general scope of the Work under the Contract Documents or issue additional instructions, require additional Work or direct deletion of Work. The Contractor shall not proceed with any Change involving an increase or decrease in the Contract Price or the Contract Time without prior written authorization from the District. The foregoing notwithstanding, the Contractor shall promptly commence and diligently complete any Change to the Work subject to the District's written authorization issued pursuant to the preceding sentence; the Contractor is not relieved or excused from its obligation to promptly commence and diligently complete any Change subject to the District's written authorization by virtue of the absence or inability of the Contractor and the District to agree upon the extent of any adjustment to the Contract Time or the Contract Price on account of such Change. The issuance of a Change Order pursuant to this Article 9 in connection with any Change authorized by the District under this Article 9.1 is not a condition precedent to Contractor's obligation to promptly commence and diligently complete any such Change authorized by the District hereunder. The District's right to make Changes shall not invalidate the Contract nor relieve the Contractor of any liability or other obligations under the Contract Documents. Any requirement of notice of Changes in the scope of Work to the Surety shall be the responsibility of the Contractor. Changes to the Work depicted or described in the Drawings or the Specifications shall be subject to approval by the DSA. The District may make Changes to bring the Work or the Project into compliance with environmental requirements or standards established by state or federal statutes and regulations enacted after award of the Contract.

9.2 Construction Change Directive. A Construction Change Directive is a written instrument issued by or on behalf of the District directing a Change to the Work prior to the Contractor and District reaching full agreement on an adjustment of the Contract Time and/or Contract Price on account of such Change. The Contractor shall promptly commence and diligently complete any Change to the Work subject to a Construction Change Directive issued hereunder. The issuance of a Change Order pursuant to this Article 9 in connection with any Construction Change Directive authorized by the District is not a condition precedent to Contractor's obligation to promptly commence and diligently complete any such Construction Change Directive. Upon completion of the Work subject to a Construction Change Directive, if the Contractor and District have not agreed on the

adjustment of Contract Time and/or Contract Price for such Change, District shall issue a Unilateral Change Order pursuant to this Article 9.

9.3 Oral Order of Change in the Work. Any oral order, direction, instruction, interpretation, or determination from the District or the Architect which in the opinion of the Contractor constitutes a Change to the Work, or otherwise requires an adjustment to the Contract Price or the Contract Time, shall be treated as a Change only if the Contractor gives the Architect, Project Manager, if any and the District's Inspector written notice within ten (10) days of the order, directions, instructions, interpretation or determination and prior to acting in accordance therewith. Time is of the essence in Contractor's written notice pursuant to the preceding sentence. Accordingly, Contractor acknowledges that its failure, for any reason, to give written notice within ten (10) days of such order, direction, instruction, interpretation or determination is the Contractor's waiver of any right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of such order, direction, instruction, interpretation or determination. The written notice shall state the date, circumstances, extent of adjustment to the Contract Price or the Contract Time, if any, requested, and the source of the order, directions, instructions, interpretation or determination that the Contractor regards as a Change. Unless the Contractor acts in strict accordance with this procedure, any such order, direction, instruction, interpretation or determination shall not be treated as a Change and the Contractor waives any claim for any adjustment to the Contract Price or the Contract Time on account thereof.

9.4 Contractor Submittal of Data. Within thirty (30) days after receipt of a written order directing a Change in the Work or furnishing the written notice regarding any oral order directing a Change in the Work, the Contractor shall submit to the Architect, Project Manager, if any, the District's Inspector and the District a detailed written statement setting forth the general nature of the Change, the adjustment to the Contract Price on account thereof, properly itemized and supported by sufficient substantiating data to permit evaluation of the same, and the extent of adjustment of the Contract Time, if any, required by such Change. No claim or adjustment to the Contract Price or the Contract Time shall be allowed if not asserted by the Contractor in strict conformity herewith or if asserted after Final Payment is made under the Contract Documents.

9.5 Adjustment to Contract Price and Contract Time on Account of Changes to the Work.

9.5.1 Adjustment to Contract Price. Adjustments to the Contract Price due to Changes in the Work shall be determined by application of one of the following methods, in the following order of priority:

9.5.1.1 Mutual Agreement. By negotiation and mutual agreement, on a lump sum basis, between the District and the Contractor on the basis of the estimate of the actual and direct increase or decrease in costs on account of the Change. Upon request of the District, Project Manager, if any, or the Architect, the Contractor shall provide a detailed estimate of increase or decrease in costs directly associated with performance of the Change along with cost breakdowns of the components of the Change and supporting data and documentation. The Contractor's estimate of increase or decrease in costs pursuant to the foregoing, if requested, shall be in sufficient detail and in such form as to allow the District, the District's Inspector and the Architect to review and assess the completeness and accuracy thereof. The Contractor shall be solely responsible for any additional costs or additional time arising out of, or related in any manner to, its failure to provide the estimate of costs within the time specified in the request of the District or the Architect for such estimate.

9.5.1.2 Determination by the District. By the District, whether or not negotiations are initiated pursuant to Article 9.5.1.1 above, based upon actual and necessary costs incurred by the Contractor as determined by the District on the basis of the Contractor's records. In the event that the procedure set forth in this Article 9.5.1.2 is utilized to determine the extent of adjustment to the Contract Price on account of Changes to the

Work, promptly upon determining the extent of adjustment to the Contract Price, the District shall notify the Contractor in writing of the same; the Contractor is deemed to have accepted the District's determination of the amount of adjustment to the Contract Price on account of a Change to the Work unless Contractor notifies the District, the Architect, Project Manager, if any and the District's Inspector, in writing, not more than fifteen (15) days from the date of the District's written notice, of any objection to the District's determination. Failure of the Contractor to timely notify the District, the Architect and the District's Inspector of Contractor's objections to the District's determination of the extent of adjustment to the Contract Price shall be deemed Contractor's acceptance of the District's determination and a waiver of any right or basis of the Contractor to thereafter protest or otherwise object to the District's determination. Notwithstanding any objection of the Contractor to the District's determination of the extent of any adjustment to the Contract Price pursuant to this Article 9.5.1.2, Contractor shall, pursuant to Article 9.8 below, diligently proceed to perform and complete any such Change.

9.5.1.3 Basis for Adjustment of Contract Price. If Changes in the Work require an adjustment of the Contract Price pursuant to Articles 9.5.1.1 or 9.5.1.2 above, the basis for adjustment of the Contract Price shall be as follows:

9.5.1.3.1 Labor. Contractor shall be compensated for the costs of labor actually and directly utilized in the performance of the Change. Such labor costs shall be limited to field labor for which there is a prevailing wage rate classification. Wage rates for labor shall not exceed the prevailing wage rates in the locality of the Site and shall be in the labor classification(s) necessary for the performance of the Change. Use of a labor classification which would increase labor costs associated with any Change shall not be permitted. Labor costs shall exclude costs incurred by the Contractor in preparing estimate(s) of the costs of the Change, in the maintenance of records relating to the costs of the Change, coordination and assembly of materials and information relating to the Change or performance thereof, or the supervision and other overhead and general conditions costs associated with the Change or performance thereof.

9.5.1.3.2 Materials and Equipment. Contractor shall be compensated for the costs of materials and equipment necessarily and actually used or consumed in connection with the performance of Changes. Costs of materials and equipment may include reasonable costs of transportation from a source closest to the site of the Work and delivery to the Site. If discounts by Material Suppliers are available for materials necessarily used in the performance of Changes, they shall be credited to the District. If materials and/or equipment necessarily used in the performance of Changes are obtained from a supplier or source owned in whole or in part by the Contractor, compensation therefor shall not exceed the current wholesale price for such materials or equipment. If, in the reasonable opinion of the District, the costs asserted by the Contractor for materials and/or equipment in connection with any Change is excessive, or if the Contractor fails to provide satisfactory evidence of the actual costs of such materials and/or equipment from its supplier or vendor of the same, the costs of such materials and/or equipment and the District's obligation for payment of the same shall be limited to the then lowest wholesale price at which similar materials and/or equipment are available in the quantities required to perform the Change. The District may elect to furnish materials and/or equipment for Changes to the Work, in which

event the Contractor shall not be compensated for the costs of furnishing such materials and/or equipment or any mark-up thereon.

9.5.1.3.3 Construction Equipment. Contractor shall be compensated for the actual cost of the necessary and direct use of Construction Equipment in the performance of Changes to the Work. Use of such Construction Equipment in the performance of Changes to the Work shall be compensated in increments of fifteen (15) minutes. Rental time for Construction Equipment moved by its own power shall include time required to move such Construction Equipment to the site of the Work from the nearest available rental source of the same. If Construction Equipment is not moved to the Site by its own power, Contractor will be compensated for the loading and transportation costs in lieu of rental time. The foregoing notwithstanding, neither moving time or loading and transportation time shall be allowed if the Construction Equipment is used for performance of any portion of the Work other than Changes to the Work. Unless prior approval in writing is obtained by the Contractor from the Architect, Project Manager, if any, the District's Inspector and the District, no costs or compensation shall be allowed for time while Construction Equipment is inoperative, idle or on standby, for any reason. The Contractor shall not be entitled to an allowance or any other compensation for Construction Equipment or tools used in the performance of Changes to the Work where such Construction Equipment or tools have a replacement value of $500.00 or less. Construction Equipment costs claimed by the Contractor in connection with the performance of any Change to the Work shall not exceed rental rates established by distributors or construction equipment rental agencies in the locality of the Site; any costs asserted which exceed such rental rates shall not be allowed or paid. Unless otherwise specifically approved in writing by the Architect, Project Manager, if any, the District's Inspector and the District, the allowable rate for the use of Construction Equipment in connection with Changes to the Work shall constitute full compensation to the Contractor for the cost of rental, fuel, power, oil, lubrication, supplies, necessary attachments, repairs or maintenance of any kind, depreciation, storage, insurance, labor (exclusive of labor costs of the Construction Equipment operator), and any all other costs incurred by the Contractor incidental to the use of such Construction Equipment.

9.5.1.3.4 Mark-up on Costs of Changes to the Work. In determining the cost to the District and the extent of increase to the Contract Price resulting from a Change adding to the Work, the allowance for mark-ups on the costs of the Change for all overhead (including home office and field overhead), general conditions costs and profit associated with the Change shall not exceed the percentage set forth in the Special Conditions, regardless of the number of Subcontractors, of any tier, performing any portion of any Change to the Work. If a Change to the Work reduces the Contract Price, no profit, general conditions or overhead costs shall be paid by the District to the Contractor for the reduced or deleted Work. In such event, the adjustment to the Contract Price shall be the actual cost reduction realized by the reduced or deleted Work multiplied by the percentage set forth in the Special Conditions for mark-ups on the cost of a Change adding to the scope of the Work.

9.5.1.4 Contractor Maintenance of Records. If the Contractor is directed to perform any Changes to the Work pursuant to Article 9.1, 9.2 or 9.3, or should the Contractor

encounter conditions which the Contractor believes to obligate the District to adjust the Contract Price and/or the Contract Time, Contractor shall maintain detailed records on a daily basis. Such records shall include without limitation hourly records for labor and Construction Equipment and itemized records of materials and equipment used that day in connection with the performance of any Change to the Work. If more than one Change to the Work is performed by the Contractor in a calendar day, Contractor shall maintain separate records of labor, Construction Equipment, materials and equipment for each such Change. If any Subcontractor provides or performs any portion of a Change to the Work, Contractor shall require that each such Subcontractor maintain records in accordance with this Article. Each daily record maintained hereunder shall be signed by Contractor's Superintendent or Contractor's authorized representative which shall constitute the Contractor's representation and warranty to the District that all information contained therein is true, accurate, complete and relate only to the Change referenced therein. All records maintained by a Subcontractor relating to the costs of a Change to the Work shall be signed by such Subcontractor's authorized representative or Superintendent. All records maintained hereunder shall be subject to inspection, review and/or reproduction by the District, the Architect, Project Manager, if any or the District's Inspector upon request. If the Contractor fails or refuses, for any reason, to maintain or make available for inspection, review and/or reproduction such records and the adjustment to the Contract Price on account of any Change to the Work, the District's reasonable good faith determination of the extent of adjustment to the Contract Price on account of such Change shall be final, conclusive, dispositive and binding upon Contractor. Contractor's obligation to maintain records hereunder is in addition to, and not in lieu of, any other Contractor obligation under the Contract Documents with respect to Changes to the Work.

9.5.2 Adjustment to Contract Time. If any Change to the Work authorized pursuant to this Article 9, the Contract Time affects the critical path of the Work, the Contract Time shall be extended or reduced by Change Order for a period of time commensurate with the time reasonably necessary to perform such Change. The Contractor is solely responsible for submitting scheduling data, analysis and other materials necessary or required by the District to substantiate the Contract Time adjustment requested by the Contractor for a Change. The District is not obligated to consider any adjustment to the Contract Time on account of a Change until the Contractor has submitted such scheduling data, analysis and other materials.

9.5.3 Addition or Deletion of Alternate Bid Item(s). If the Bid Proposal for the Work includes proposal(s) for Alternate Bid Item(s), during Contractor's performance of the Work, the District may elect, pursuant to this Article to add any such Alternate Bid Item(s) if the same did not form a basis for award of the Contract or delete any such Alternate Bid Item(s) if the same formed a basis for award of the Contract. If the District elects to add or delete any such Alternate Bid Item(s) pursuant to the foregoing, the cost or credit for such Alternate Bid Item(s) shall be as set forth in the Contractor's Bid. If any Alternate Bid Item is added or deleted from the Work pursuant to the foregoing, the Contract Time shall be adjusted by the number of days allocated for the added or deleted Alternate Bid Item in the Contract Documents; if days are not allocated for any Alternate Bid Item added or deleted pursuant to the foregoing, the Contract Time shall be equitably adjusted.

9.6 Change Orders. If the District approves of a Change, a written Change Order prepared by the Architect on behalf of the District shall be forwarded to the Contractor describing the Change and setting forth the adjustment to the Contract Time and the Contract Price, if any, on account of such Change. All Change Orders shall be in full payment and final settlement of all claims for direct, indirect and consequential costs, including without limitation, costs of delays or impacts related to, or arising out of, items covered and affected by the Change Order, as well as any adjustments to the Contract Time. Any claim or item relating to any Change incorporated into a Change Order not

presented by the Contractor for inclusion in the Change Order shall be deemed waived. The Contractor shall execute the Change Order prepared pursuant to the foregoing; once the Change Order has been prepared and forwarded to the Contractor for execution, without the prior approval of the District which may be granted or withheld in the sole and exclusive discretion of the District, the Contractor shall not modify or amend the form or content of such Change Order, or any portion thereof. The Contractor's attempted or purported modification or amendment of any such Change Order, without the prior approval of the District, shall not be binding upon the District; any such unapproved modification or amendment to such Change Order shall be null, void and unenforceable. Unless otherwise expressly provided for in the Contract Documents or in the Change Order, any Change Order issued hereunder shall be binding upon the District only upon action of the District's Board of Trustees approving and ratifying such Change Order. In the event of any amendment or modification made by the Contractor to a Change Order for which there is no prior approval by the District, in accordance with the provisions of this Article 9.6, unless otherwise expressly stated in its approval and ratification of such Change Order, any action of the Board of Trustees to approve and ratify such Change Order shall be deemed to be limited to the Change Order as prepared by the Architect; such approval and ratification of such Change Order shall not be deemed the District's approval and ratification of any unapproved amendment or modification by the Contractor to such Change Order.

9.7 Contractor Notice of Changes. If the Contractor claims that any instruction, request, the Drawings, the Specifications, action, condition, omission, default, or other situation obligates the District to increase the Contract Price or to extend the Contract Time, the Contractor shall notify the Project Manager, if any, the District's Inspector and the Architect, in writing, of such claim within ten (10) days from the date of its actual or constructive notice of the factual basis supporting the same. The District shall consider any such claim of the Contractor only if sufficient supporting documentation is submitted with the Contractor's notice to the District's Inspector and the Architect. Time is of the essence in Contractor's written notice pursuant to the preceding sentence so that the District can promptly investigate and consider alternative measures to the address such instruction, request, Drawings, Specifications, action, condition, omission, default or other situation. Accordingly, Contractor acknowledges that its failure, for any reason, to give written notice (with sufficient supporting documentation to permit the District's review and evaluation) within ten (10) days of its actual or constructive knowledge of any instruction, request, Drawings, Specifications, action, condition, omission, default or other situation for which the Contractor believes there should an adjustment of the Contract Time or the Contract Price shall be deemed Contractor's waiver, release, discharge and relinquishment of any right to assert or claim any entitlement to an adjustment of the Contract Time or the Contract Price on account of any such instruction, request, Drawings, Specifications, action, condition, omission, default or other situation. In the event that the District determines that the Contract Price or the Contract Time are subject to adjustment based upon the events, circumstances and supporting documentation submitted with the Contractor's written notice under this Article 9.7, any such adjustment shall be determined in accordance with the provisions of Articles 9.5.1 and 9.5.2.

9.8 Disputed Changes. If there is any dispute or disagreement between the Contractor and the District or the Architect regarding the characterization of any item as a Change to the Work or as to the appropriate adjustment of the Contract Price or the Contract Time on account thereof, the Contractor shall promptly proceed with the performance of such item of the Work, subject to a subsequent resolution of such dispute or disagreement in accordance with the terms of the Contract Documents. The Contractor's failure or refusal to so proceed with such Work may be deemed to be Contractor's default of a material obligation of the Contractor under the Contract Documents.

9.9 Emergencies. In an emergency affecting or threatening the safety of persons, or which affects or threatens the Work, or property, the Contractor, without special instruction or prior authorization from the District, Project Manager or the Architect, is permitted to act at its discretion to prevent

such threatened loss or injury. Any compensation claimed by the Contractor on account of such emergency work shall be submitted and determined in accordance with this Article 9.

9.10 Minor Changes in the Work. The Architect may order minor Changes in the Work not involving an adjustment in the Contract Price or the Contract Time and not inconsistent with the intent of the Contract Documents. Such Changes shall be effected by written order and shall be binding on the District and the Contractor. The Contractor shall carry out such orders promptly.

9.11 Unauthorized Changes. Any Work beyond the lines and grades shown on the Contract Documents, or any extra Work performed or provided by the Contractor without notice to the Architect and the District's Inspector in the manner and within the time set forth in Articles 9.2 or 9.7 shall be considered unauthorized and at the sole expense of the Contractor. Work so done will not be measured or paid for, no extension to the Contract Time will be granted on account thereof and any such Work may be ordered removed at the Contractor's sole cost and expense. The failure of the District to direct or order removal of such Work shall not constitute acceptance or approval of such Work nor relieve the Contractor from any liability on account thereof.

ARTICLE 10: SEPARATE CONTRACTORS

10.1 District's Right to Award Separate Contracts. The District reserves the right to perform construction or operations related to the Project with the District's own forces or to award separate contracts in connection with other portions of the Project or other construction or operations at or about the Site. If the Contractor claims that delay or additional cost is involved because of such action by the District, the Contractor shall seek an adjustment to the Contract Price or the Contract Time as provided for in the Contract Documents. Failure of the Contractor to request such an adjustment of the Contract Time or the Contract Price in strict conformity with the provisions of the Contract Documents applicable thereto shall be deemed a waiver of the same.

10.2 District's Coordination of Separate Contractors. The District shall provide for coordination of the activities of the District's own forces and of each separate contractor with the Work of the Contractor, who shall cooperate with them. The Contractor shall participate with other separate contractors and the District in reviewing their respective Construction Schedules when directed to do so. The Contractor shall make any revisions to the Approved Construction Schedule for the Work hereunder deemed necessary after a joint review and mutual agreement. The Construction Schedules shall then constitute the Construction Schedules to be used by the Contractor, separate contractors and the District until subsequently revised.

10.3 Mutual Responsibility. The Contractor shall afford the District and separate contractors of the District reasonable opportunity for storage of their materials and equipment and performance of their activities at the Site and shall connect and coordinate the Contractor's Work, construction and operations with theirs as required by the Contract Documents.

10.4 Discrepancies or Defects. If part of the Contractor's Work depends for proper execution or results upon construction or operations by the District or a separate contractor, the Contractor shall, prior to proceeding with that portion of the Work, promptly report to the Architect, Project Manager, if any and the District's Inspector any apparent discrepancies or defects in such other construction that would render it unsuitable for such proper execution and results. Failure of the Contractor to so report shall constitute an acknowledgment that the District's or separate contractors' completed or partially completed construction is fit and proper to receive the Contractor's Work, except as to defects not then discoverable by the Contractor's reasonable diligence.

ARTICLE 11: TESTS AND INSPECTIONS

11.1 Tests; Inspections; Observations.

11.1.1 Contractor's Notice. If the Contract Documents, the Laws or any public authority with jurisdiction over the Work requires the Work, or any portion thereof, to be specially tested, inspected or approved, the Contractor shall give the Architect, the Project Manager and the

District's Inspector written notice of the readiness of such Work for observation, testing or inspection at least two (2) working days prior to the time for the conducting of such test, inspection or observation. The Contractor shall not cover up any portion of the Work subject to tests, inspections or observations prior to the completion and satisfaction of the requirements of such test, inspection or observation. If any portion of the Work subject to tests, inspection or approval is covered up by Contractor prior to completion and satisfaction of the requirements of such tests, inspection or approval, Contractor shall be responsible for the uncovering of such portion of the Work as is necessary for performing such tests, inspection or approval without adjustment of the Contract Price or the Contract Time on account thereof.

11.1.2 Cost of Tests and Inspections. The District will pay for fees, costs and expenses for the initial tests/inspections of materials/equipment which are conducted at the Site or locations within a one hundred (100) mile radius of the Site. All fees, costs or expenses for subsequent tests/inspections or for tests/inspections conducted at a location more than a one hundred (100) mile radius from the Site (including without limitation, travel and travel-related expenses) shall be borne solely and exclusively by the Contractor.

11.1.3 Testing/Inspection Laboratory. The District shall select duly qualified person(s) or testing laboratory(ies) to conduct the tests and inspections to be paid for by the District and required by the Contract Documents. All such tests and inspections shall be in conformity with the Laws, including without limitation, Title 24 of the California Code of Regulations. Where inspection or testing is to be conducted by an independent laboratory or testing agency, materials or samples thereof shall be selected by the laboratory, testing agency, the District's Inspector, the Project Manager or the Architect and not by the Contractor.

11.1.4 Additional Tests, Inspections and Approvals. If the Architect, the Project Manager, the District's Inspector or public authorities having jurisdiction over the Work determine that portions of the Work require additional testing, inspection or approval, the Architect or Project Manager, if any will, upon written authorization from the District, instruct the Contractor to make arrangements for such additional testing, inspection or approval by an entity acceptable to the District, and the Contractor shall give timely notice to the Architect, the Project Manager and the District's Inspector of when and where tests and inspections are to be made so the District's Inspector and the Architect may observe such procedures. The District shall bear the costs of such additional tests, inspections or approvals, except to the extent that such additional tests, inspections or approvals reveal any failure of the Work to comply with the requirements of the Contract Documents, in which case the Contractor shall bear all costs made necessary by such failures, including without limitation, the costs of corrections, repeat tests, inspections or approvals and the fees of the Architect, Project Manager, if any, and the District's Inspector in connection therewith.

11.2 Delivery of Certificates. Required certificates of testing, inspection or approval shall, unless otherwise required by the Contract Documents, be secured by the Contractor and promptly delivered to the Architect.

11.3 Timeliness of Tests, Inspections and Approvals. Tests or inspections required and conducted pursuant to the Contract Documents shall be made or arranged by Contractor to avoid delay in the progress of the Work.

ARTICLE 12: UNCOVERING AND CORRECTION OF WORK

12.1 Inspection of the Work.

12.1.1 Access to the Work. All Work and all materials and equipment forming a part of the Work or incorporated into the Work are subject to inspection by the District, the Project Manager, the Architect and the District's Inspector for conformity with the Contract Documents. The Contractor shall, at its cost and without adjustment to the Contract Price or the Contract Time, furnish any facilities necessary for sufficient and safe access to the Work for purposes of inspection by the District, the Project Manager, the Architect, the District's Inspector, DSA or

any other public or quasi-public authority with jurisdiction over the Work or any portion thereof.

12.1.2 Limitations Upon Inspections. Inspections, tests, measurements, or other acts of the Architect and the District's Inspector hereunder are for the sole purpose of assisting them in determining that the Work, materials, equipment, progress of the Work, and quantities generally comply and conform with the requirements of the Contract Documents. These acts or functions shall not relieve the Contractor from performing the Work in full compliance with the Contract Documents. No inspection by the Architect or the District's Inspector shall constitute or imply acceptance of Work inspected. Inspection of the Work hereunder is in addition to, and not in lieu of, any other testing, inspections or approvals of the Work required under the Contract Documents.

12.2 Uncovering of Work. If any portion of the Work is covered contrary to the request of the Architect, the District's Inspector or the requirements of the Contract Documents, it must, if required by the Architect or the District's Inspector, be uncovered for observation by the Architect and the District's Inspector and be replaced at the Contractor's expense without adjustment of the Contract Time or the Contract Price.

12.3 Rejection of Work. Prior to the District's Final Acceptance of the Work, any Work or materials or equipment forming a part of the Work or incorporated into the Work which is defective or not in conformity with the Contract Documents may be rejected by the District, the Project Manager the Architect or the District's Inspector and the Contractor shall correct such rejected Work without any adjustment to the Contract Price or the Contract Time, even if the Work, materials or equipment have been previously inspected by the Architect or the District's Inspector or even if they failed to observe the defective or non-conforming Work, materials or equipment.

12.4 Correction of Work. The Contractor shall promptly correct any portion of the Work rejected by the District, the Project Manager, the Architect or the District's Inspector for failing to conform to the requirements of the Contract Documents, or which is determined by them to be defective, whether observed before or after Completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected Work, including additional testing and inspections and compensation for the Architect's services and expenses made necessary thereby. The Contractor shall bear all costs of correcting destroyed or damaged construction, whether completed or partially completed, of the District or separate contractors, caused by the Contractor's correction or removal of Work which is not in accordance with the requirements of the Contract Documents, or which is defective.

12.5 Removal of Non-Conforming or Defective Work. The Contractor shall, at its sole cost and expense, remove from the Site all portions of the Work which are defective or are not in accordance with the requirements of the Contract Documents which are neither corrected by the Contractor nor accepted by the District.

12.6 Failure of Contractor to Correct Work. If the Contractor fails to commence to correct defective or non-conforming Work within three (3) days of notice of such condition and promptly thereafter complete the same within a reasonable time, the District may correct it in accordance with the Contract Documents. If the Contractor does not proceed with correction of such defective or non-conforming Work within the time fixed herein, the District may remove it and store the salvable materials or equipment at the Contractor's expense. If the Contractor does not pay costs of such removal and storage after written notice, the District may sell such materials or equipment at auction or at private sale and shall account for the proceeds thereof, after deducting costs and damages that should have been borne by the Contractor, including without limitation compensation for the Architect's services, attorneys fees and other expenses made necessary thereby. If such proceeds of sale do not cover costs which the Contractor should have borne, the Contract Price shall be reduced by the deficiency. If payments of the Contract Price then or thereafter due the Contractor

are not sufficient to cover such amount, the Contractor and the Surety shall be jointly and severally liable to the District for any such excess amount.

12.7 Acceptance of Defective or Non-Conforming Work. The District may, in its sole and exclusive discretion, elect to accept Work which is defective or which is not in accordance with the requirements of the Contract Documents, instead of requiring its removal and correction, in which case the Contract Price shall be reduced as appropriate and equitable. The District's determination of the extent of reduction of the Contract Price on account of defective or non-conforming Work accepted by the District shall be binding, conclusive, dispositive and not subject to appeal or other dispute resolution procedures, unless such determination is manifestly unreasonable.

ARTICLE 13: WARRANTIES

13.1 Workmanship and Materials. The Contractor warrants to the District that: (i) all materials and equipment furnished under the Contract Documents conform to requirements of the Contract Documents and are new, of good quality and of the most suitable grade and quality for the purpose intended, unless otherwise specified in the Contract Documents; and (ii) all Work and workmanship is of good quality, free from faults and defects and in conformity with the requirements of the Contract Documents. If required by the Architect or the District, the Contractor shall furnish satisfactory evidence as to the kind and quality of materials and equipment incorporated into the Work. Any Work or portion thereof not conforming to these requirements, including substitutions or alternatives not properly approved in accordance with the Contract Documents may be deemed defective. Where there is an approved substitution of, or alternative to, material or equipment specified in the Contract Documents, the Contractor warrants to the District that such installation, construction, material, or equipment will equally perform the function and have the quality of the originally specified material or equipment. The Contractor expressly warrants the merchantability, the fitness for use, and quality of all substitute or alternative items in addition to any warranty given by the manufacturer or supplier of such item.

13.2 Warranty Work. If, within one (1) year after the date of Final Acceptance, or such other time frame set forth elsewhere in the Contract Documents, any of the Work is found to be defective or not in accordance with the requirements of the Contract Documents, or otherwise contrary to the warranties contained in the Contract Documents, the Contractor shall commence all necessary corrective action not more than seven (7) days after receipt of a written notice from the District to do so, and to thereafter diligently complete the same. In the event that Contractor shall fail or refuse to commence correction of any such item within said seven (7) day period or to diligently prosecute such corrective actions to completion, the District may, without further notice to Contractor, cause such corrective Work to be performed and completed. In such event, Contractor and Contractor's Performance Bond Surety shall be responsible for all costs in connection with such corrective Work, including without limitation, general administrative overhead costs of the District in securing and overseeing such corrective Work. Nothing contained herein shall be construed to establish a period of limitation with respect to any obligation of the Contractor under the Contract Documents. The obligations of the Contractor hereunder shall be in addition to, and not in lieu of, any other obligations imposed by any special guarantee or warranty required by the Contract Documents, guarantees or warranties provided by any manufacturer of any item or equipment forming a part of, or incorporated into the Work, or otherwise recognized, prescribed or imposed by law. Neither the District's Final Acceptance, the making of Final Payment, any provision in Contract Documents, nor the use or occupancy of the Work, in whole or in part, by District shall constitute acceptance of Work not in accordance with the Contract Documents nor relieve the Contractor or the Contractor's Performance Bond Surety from liability with respect to any warranties or responsibility for faulty or defective Work or materials, equipment and workmanship incorporated therein.

13.3 Guarantee. Upon completion of the Work, Contractor shall execute and deliver to the District the form of Guarantee included with the Contract Documents. The Contractor's execution and delivery

of the form of Guarantee is an express condition precedent to any obligation of the District to disburse the Final Payment to the Contractor.

13.4 Survival of Warranties; Surety Obligations. The Contractor's warranty obligations hereunder shall survive the Contractor's completion of Work under the Contract Documents, the District's Final Acceptance or the termination of the Contract. The obligations of the Surety issuing the Performance Bond shall include assumption and discharge of the Contractor's warranty obligations if the Contractor fails or refuses to perform its warranty obligations hereunder in strict conformity herewith.

ARTICLE 14: SUSPENSION OF WORK

14.1 District's Right to Suspend Work. The District may, without cause, and without invalidating or terminating the Contract, order the Contractor, in writing, to suspend, delay or interrupt the Work in whole or in part for such period of time as the District may determine. The Contractor shall resume and complete the Work suspended by the District in accordance with the District's directive, whether issued at the time of the directive suspending the Work or subsequent thereto.

14.2 Adjustments to Contract Price and Contract Time. If the District directs suspension of the Work, an adjustment shall be made to the Contract Price for increases in the direct cost of performance of the Work of the Contract Documents, actually caused by suspension, delay or interruption ordered by the District; provided however that no adjustment of the Contract Price shall be made to the extent: (i) that performance is, was or would have been so suspended, delayed or interrupted by another cause for which the Contractor is responsible under the Contract Documents; or (ii) that an equitable adjustment is made or denied under another provision of the Contract Documents. The foregoing notwithstanding, any such adjustment of the Contract Price shall not include any adjustment to increase the Contractor's overhead, general administrative costs or profit, all of which will remain as reflected in the Cost Breakdown submitted by the Contractor pursuant to the Contract Documents. In the event of the District's suspension of the Work, the Contract Time shall be equitably adjusted.

ARTICLE 15: TERMINATION

15.1 Termination for Cause.

15.1.1 District's Right to Terminate. The District may terminate the Contract upon the occurrence of any one or more of the following events of the Contractor's default: (i) if the Contractor refuses or fails to prosecute the Work with diligence as will insure Completion of the Work within the Contract Time, or if the Contractor fails to One Hundred Percent Complete the Work within the Contract Time; (ii) if the Contractor becomes bankrupt or insolvent, or makes a general assignment for the benefit of creditors, or if the Contractor or a third party files a petition to reorganize or for protection under any bankruptcy or similar laws, or if a trustee or receiver is appointed for the Contractor or for any of the Contractor's property on account of the Contractor's insolvency, and the Contractor or its successor in interest does not provide adequate assurance of future performance in accordance with the Contract Documents within ten (10) days of receipt of a request for such assurance from the District; (iii) if the Contractor repeatedly fails to supply sufficient skilled workmen or suitable materials or equipment; (iv) if the Contractor repeatedly fails to make prompt payments to any Subcontractor, of any tier, or Material Suppliers or others for labor, materials or equipment; (v) if the Contractor disregards laws, ordinances, rules, codes, regulations, orders applicable to the Work or similar requirements of any public entity having jurisdiction over the Work; (iv) if the Contractor disregards proper directives of the Architect, the District's Inspector or District under the Contract Documents; (vii) if the Contractor performs Work which deviates from the Contract Documents and neglects or refuses to correct such Work; or (viii) if the Contractor otherwise violates in any material way any provisions or requirements of the

Contract Documents. Once the District determines that sufficient cause exists to justify the action, the District may terminate the Contract without prejudice to any other right or remedy the District may have, after giving the Contractor and the Surety at least seven (7) days advance written notice of the effective date of termination. The District shall have the sole discretion to permit the Contractor to remedy the cause for the termination without waiving the District's right to terminate the Contract, or otherwise waiving, restricting or limiting any other right or remedy of the District under the Contract Documents or at law.

15.1.2 District's Rights Upon Termination. If the Contract is terminated pursuant to this Article 15.1, the District may take over the Work and prosecute it to completion, by contract or otherwise, and may exclude the Contractor from the site. The District may take possession of the Work and of all of the Contractor's tools, appliances, construction equipment, machinery, materials, and plant which may be on or about the Site, and use the same to the full extent they could be used by the Contractor without liability to the Contractor. In exercising the District's right to prosecute the completion of the Work, the District may also take possession of all materials and equipment at or about the Site or for which the District has paid the Contractor but which are stored elsewhere, and finish the Work as the District deems expedient. In exercising the District's right to prosecute the completion of the Work, the District shall have the right to exercise its sole discretion as to the manner, methods, and reasonableness of the costs of completing the Work and the District shall not be required to obtain the lowest price for completion of the Work. If the District takes bids for remedial Work or completion of the Work, the Contractor shall not be eligible for the award of such contract(s).

15.1.3 Completion by the Surety. If the Contract is terminated pursuant to this Article 15.1, the District may demand that the Surety take over and complete the Work. The District may require that in so doing, the Surety not utilize the Contractor in performing and completing the Work. Upon the failure or refusal of the Surety to take over and begin completion of the Work within twenty (20) days after demand therefor, the District may take over the Work and prosecute it to completion as provided for above.

15.1.4 Assignment and Assumption of Subcontracts. The District shall, in its sole and exclusive discretion, have the option of requiring any Subcontractor or Material Supplier to perform in accordance with its Subcontract or Purchase Order with the Contractor and assign the Subcontract or Purchase Order to the District or such other person or entity selected by the District to complete the Work.

15.1.5 Costs of Completion. In the event of termination under this Article 15.1, the Contractor shall not be entitled to receive any further payment of the Contract Price until the Work is completed. If the unpaid balance of the Contract Price as of the date of termination exceeds the District's direct and indirect costs and expenses for completing the Work, including without limitation, attorneys' fees, fees for additional professional and consultant services, and the District's administrative costs, such excess shall be used to pay the Contractor for the cost of the Work performed prior to the effective date of termination with a reasonable allowance for overhead and profit. If the District's costs and expenses to complete the Work exceed the unpaid Contract Price, the Contractor and Surety are jointly and severally liable for payment of such difference to the District.

15.1.6 Contractor Responsibility for Damages. The Contractor and the Surety shall be jointly and severally liable for all damage sustained by the District resulting from, in any manner, the termination of Contract under this Article 15.1, including without limitation, attorneys' fees, and for all costs necessary for repair and completion of the Work exceeding the Contract Price.

15.1.7 Conversion to Termination for Convenience. In the event the Contract is terminated under this Article 15.1, and it is determined, for any reason, that the Contractor was not in default under the provisions hereof, the termination shall be deemed a Termination for Convenience of the District and thereupon, the rights and obligations of

the District and the Contractor shall be determined in accordance with Article 15.2 hereof.

15.1.8 District's Rights Cumulative. In the event the Contract is terminated pursuant to this Article 15.1, the termination shall not affect or limit any rights or remedies of the District against the Contractor or the Surety. The rights and remedies of the District under this Article 15.1 are in addition to, and not in lieu of, any other rights and remedies provided by the Laws or under the Contract Documents. Any retention or payment of monies to the Contractor by the District shall not be deemed to release the Contractor or the Surety from any liability hereunder.

15.2 Termination for Convenience of the District. The District may at any time, in its sole and exclusive discretion, by written notice to the Contractor, terminate the Contract in whole or in part when it is in the interest of, or for the convenience of, the District. In such case, the Contractor shall be entitled to payment for: (i) Work actually performed and in place as of the effective date of such termination for convenience of the District, with a reasonable allowance for profit and overhead on such Work, and (ii) reasonable termination expenses for reasonable protection of Work in place and suitable storage and protection of materials and equipment delivered to the site of the Work but not yet incorporated into the Work, provided that such payments exclusive of termination expenses shall not exceed the total Contract Price as reduced by payments previously made to the Contractor and as further reduced by the value of the Work as not yet completed. The Contractor shall not be entitled to profit and overhead on Work which was not performed as of the effective date of the termination for convenience of the District. The District may, in its sole discretion, elect to have Subcontracts assigned pursuant to Article 15.1.4 above after exercising the right hereunder to terminate for the District's convenience.

ARTICLE 16: MISCELLANEOUS

16.1 Governing Law. This Contract shall be governed by and interpreted in accordance with the laws of the State of California.

16.2 Marginal Headings; Interpretation. The titles of the various Articles of these General Conditions and elsewhere in the Contract Documents are used for convenience of reference only and are not intended to, and shall in no way, enlarge or diminish the rights or obligations of the District or the Contractor and shall have no effect upon the construction or interpretation of the Contract Documents. The Contract Documents shall be construed as a whole in accordance with their fair meaning and not strictly for or against the District or the Contractor.

16.3 Successors and Assigns. Except as otherwise expressly provided in the Contract Documents, all terms, conditions and covenants of the Contract Documents shall be binding upon, and shall inure to the benefit of the District and the Contractor and their respective heirs, representatives, successors-in-interest and assigns.

16.4 Cumulative Rights and Remedies; No Waiver. Duties and obligations imposed by the Contract Documents and rights and remedies available thereunder shall be in addition to and not in lieu of or otherwise a limitation or restriction of duties, obligations, rights and remedies otherwise imposed or available by law. No action or failure to act by the District shall constitute a waiver of a right or remedy afforded it under the Contract Documents or at law nor shall such an action or failure to act constitute approval of or acquiescence in a breach hereunder, except as may be specifically agreed in writing.

16.5 Severability. In the event any provision of the Contract Documents shall be deemed illegal, invalid, unenforceable and/or void, by a court or any other governmental agency of competent jurisdiction, such provision shall be deemed to be severed and deleted from the Contract Documents, but all remaining provisions hereof, shall in all other respects, continue in full force and effect.

16.6 No Assignment by Contractor. The Contractor shall not sublet or assign the Contract, or any portion thereof, or any monies due thereunder, without the express prior written consent and approval of the District, which approval may be withheld in the sole and exclusive discretion of the District. The District's approval to such assignment shall be upon such terms and conditions as determined by the District in its sole and exclusive discretion.

16.7 Gender and Number. Whenever the context of the Contract Documents so require, the neuter gender shall include the feminine and masculine, the masculine gender shall include the feminine and neuter, the singular number shall include the plural and the plural number shall include the singular.

16.8 Independent Contractor Status. In performing its obligations under the Contract Documents, the Contractor is an independent contractor to the District and not an agent or employee of the District.

16.9 Notices. Except as otherwise expressly provided for in the Contract Documents, all notices which the District or the Contractor may be required, or may desire, to serve on the other, shall be effective only if delivered by personal delivery or by postage prepaid, First Class Certified Return Receipt Requested United States Mail, addressed to the District or the Contractor at their respective address set forth in the Contract Documents, or such other address(es) as either the District or the Contractor may designate from time to time by written notice to the other in conformity with the provisions hereof. In the event of personal delivery, such notices shall be deemed effective upon delivery, provided that such personal delivery requires a signed receipt by the recipient acknowledging delivery of the same. In the event of mailed notices, such notice shall be deemed effective on the third working day after deposit in the mail.

16.10 Disputes; Continuation of Work. Notwithstanding any claim, dispute or other disagreement between the District and the Contractor regarding performance under the Contract Documents, the scope of Work thereunder, or any other matter arising out of or related to, in any manner, the Contract Documents, the Contractor shall proceed diligently with performance of the Work in accordance with the District's written direction, pending any final determination or decision regarding any such claim, dispute or disagreement.

16.11 Dispute/Claims Resolution.

16.11.1 Public Contract Code §9204 Claims Resolution Procedures. Claims of the Contractor are subject to the non-binding dispute resolution procedures set forth in Public Contract Code §9204 ("Section 9204") provided, however, that the Contractor's initiation of Section 9204 procedures is expressly subject to the Contractor's prior full and timely compliance with requirements and procedures of the Contract Documents relating to procedures for resolution of claims, change orders, disputes and other matters in controversy under the Contract Documents.

16.11.1.1 Claim Defined. The term "Claim" shall be as defined in Section 9204.

16.11.1.2 Claim Documentation. The Contractor shall furnish reasonable documentation to support each Claim. "Reasonable documentation" includes, without limitation: (i) contractual and legal basis establishing Claim entitlement or merit; (ii) factual basis establishing District liability for the Claim; (iii) detailed breakdown of labor, materials, equipment and other costs included in the Claim; and (iv) detailed basis, including Construction Schedule analysis and fragnets supporting any Contract Time adjustment or Liquidated Damages relief included in the scope of a Claim.

16.11.1.3 District Claim Review Statement. Within forty five (45) days (or such other time mutually agreed to by the District and the Contractor) after receipt of a properly submitted and properly documented Claim, the District will conduct a reasonable review

of the Claim and provide the Contractor with a written statement identifying the disputed and undisputed portions of the Claim ("Claim Review Statement"). If the District does not provide the Contractor with the Claim Review Statement for any Claim within forty five (45) days (or other time mutually agreed to by the District and the Contractor) after receipt of a properly submitted and properly documented Claim, the Claim is deemed rejected in its entirety and thereupon, the Contractor may initiate the Meet and Confer process described below. A Claim deemed rejected pursuant to the foregoing does not constitute an adverse finding of Claim merit or the Contractor's responsibility or qualifications. If the Claim Review Statement identifies any undisputed portion of a Claim ("Undisputed Claim") and payment is due from the District on the Undisputed Claim, the District shall process and make payment on the Undisputed Claim within sixty (60) days after the issuance date of the Claim Review Statement.

16.11.1.4 Meet and Confer.

16.11.1.4.1 Meet and Confer Demand. If the Contractor disputes any portion of the Claim Review Statement, or if a Claim is deemed rejected by the District not providing the Contractor with the Claim Review Statement within the time permitted under Section 9204, the Contractor may demand an informal conference to meet and confer with the District for settlement of the issues in dispute ("Meet and Confer"). The Contractor's Meet and Confer request must be submitted to the District: (i) in writing; (ii) by registered mail or certified mail, return receipt requested; and (iii) within ten (10) days after the Claim Review Statement is submitted to the Contractor or within ten (10) days after the date the Claim is deemed rejected, as applicable. Failure of the Contractor to strictly comply with the foregoing is deemed a waiver of the Contractor's right to request the Meet and Confer and the Non-Binding Mediation procedures under Section 9204. If the Contractor strictly complies with the foregoing, the District will schedule the Meet and Confer conference within thirty (30) days of the Contractor's Meet and Confer request for settlement of disputed portions of the Claim Review Statement.

16.11.1.4.2 Meet and Confer Statement. Within ten (10) business days after conclusion of the Meet and Confer conference, if any portion of a Claim remains disputed, the District shall provide the Contractor a written statement identifying the disputed and undisputed portions of the Claim ("Meet and Confer Statement"). If the Meet and Confer Statement identifies any Undisputed Claim and payment is due from the District on the Undisputed Claim, the District shall process and make payment on the Undisputed Claim within sixty (60) days after date the Meet and Confer Statement is issued.

16.11.1.5 Non-Binding Mediation.

16.11.1.5.1 Contractor Initiation. The Contractor may request nonbinding mediation ("Mediation") of disputed portions of a Claim identified in the Meet and Confer Statement. The Contractor's Mediation demand must be submitted to the District: (i) in writing; (ii) by registered mail or certified mail, return receipt requested; (iii) within ten (10) days after the Meet and Confer Statement is submitted to the Contractor; and (iv) with specific identification of the disputed Claims issues subject to Mediation. Failure of the Contractor to strictly comply with the foregoing is deemed a waiver of the Contractor's right to demand Mediation procedures under Section 9204.

16.11.1.5.2 Mediator Selection. The District and Contractor shall mutually agree to a mediator within ten (10) business days after the date of the Contractor's demand for Mediation. If the District and Contractor do not mutually agree to a mediator, the District and Contractor shall each select a mediator and the District/Contractor selected mediators shall select a qualified neutral third party to mediate the disputed portion of the Claim.

16.11.1.5.3 Mediation Procedures. 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 District and Contractor in dispute resolution through negotiation or by issuance of an evaluation.

16.11.1.5.4 Mediation Costs. All costs, fees and expenses of the mediator(s) and mediation administration shall be shared equally by the District and Contractor. The foregoing notwithstanding, the Contractor and District shall each bear the costs, fees and expenses of their own attorneys, experts and consultants.

16.11.1.5.5 Post-Mediation Disputed Claims. Any Claims issues in dispute after Mediation shall be resolved in accordance with the applicable provisions of the Contract Documents.

16.11.1.5.6 Waiver. The District and Contractor may mutually agree to waive, in writing, Mediation under Section 9204 and subject to the Contractor's compliance with Government Code Claim requirements, proceed directly to commencement of a civil action or binding arbitration.

16.11.2 Payments of Undisputed Claims. If a payment due from the District for Undisputed Claims identified in the Claim Review Statement or the Meet and Confer Statement issued for a Claim is not made within the time established under Section 9204 the overdue portion of such payment shall bear interest at the rate of seven percent (7%) per annum from the date due. The District's credit application of any amount due for an Undisputed Claim against amounts due from the Contractor under the Contract Documents shall be deemed payment of the Undisputed Claim.

16.11.3 Subcontractor Claims.

16.11.3.1 Subcontractor Claim Submittal. If a Subcontractor, of any tier (collectively "Subcontractor") lacks legal standing to assert a Claim against the District because privity of contract does not exist, the Contractor may present the District a Claim on behalf of the Subcontractor ("Subcontractor Claim"). Each Subcontractor requesting submittal of a Subcontractor Claim to the District shall furnish reasonable documentation to support the Subcontractor Claim. Within forty-five (45) days of receipt of a Subcontractor's written request to submit a Subcontractor Claim, the Contractor shall notify the Subcontractor in writing as to whether the Contractor presented the Subcontractor Claim to the District. If the Contractor did not present the Subcontractor Claim, the Contractor shall provide the Subcontractor with a statement of the reasons for not having done so.

16.11.3.2 Contractor Certification of Subcontractor Claim. The District's review of Subcontractor Claims is expressly subject to the Contractor's submittal of a duly completed and executed form of Contractor Certification of Subcontractor Claim certifying that the Contractor has thoroughly reviewed the Subcontractor Claim and based on the Contractor's review, certify that: (i) the Subcontractor Claim is made by the Subcontractor in good faith; (ii) the Subcontractor Claim is supported by reasonable

documentation establishing entitlement to the relief requested and District liability therefor; and (iii) the Subcontractor Claim does not incorporate any request constituting a False Claim under applicable law, including the California False Claim Act (Government Code §12650 et seq). The form of Contractor Certification of Subcontractor Claim is included in the Contract Documents.

16.11.3.3 District Review of Subcontractor Claim. Subcontractor Claims presented by the Contractor to the District are subject to the Section 9204 non-binding dispute resolution procedures set forth above, as modified herein. Requests for the District to conduct Meet and Confer and/or non-binding mediation procedures must be submitted jointly by the Contractor and the Subcontractor submitting the Subcontractor Claim. If Mediation proceedings are initiated in connection with a Subcontractor Claim, mediator and mediation administration fees and costs shall be borne equally by the District, Contractor and Subcontractor.

16.11.3.4 Disputed Subcontractor Claims. Subcontractor Claims which are not fully resolved by the Section 9204 non-binding dispute resolution procedures shall be resolved by Section 20104.4 Dispute Resolution Procedures or binding arbitration, as applicable. Commencement of Section 20104.4 Dispute Resolution Procedures or binding arbitration proceedings in connection with any Subcontractor Claim is subject to compliance with Government Code Claims requirements.

16.11.4 Government Code Claim Requirements. Pursuant to Government Code §930.6, any claim, demand, dispute, disagreement or other matter in controversy asserted by the Contractor, whether on behalf of itself or a Subcontractor, against the District for money or damages, including without limitation Claims or portions thereof remaining in dispute after completion of the Section 9204 non-binding dispute resolution procedures described above are deemed a "suit for money or damages" and shall be subject to the provisions of Government Code §§945.4, 945.6 and 946 ("Government Code Claims Process"). An express condition precedent to the Contractor's initiation of Section 20104.4 Dispute Resolution Procedures or binding arbitration proceedings pursuant to the following is the Contractor's compliance with the Government Code Clams Process, including without limitation, presentation of the claim, demand, dispute, disagreement or other matter in controversy between the Contractor and the District seeking money or damages to the District and acted upon or deemed rejected by the District in accordance with Government Code §900, et seq.

16.11.5 Section 20104.4 Dispute Resolution Procedures; Claims Less Than $375,000. Any Claim, or portion thereof, in dispute after completion of the Section 9204 non-binding dispute resolution procedures and the Government Code Claims Process which is equal to or less $375,000 shall be resolved in accordance with the civil action procedures established in Public Contract Code §20104.4. Unless otherwise agreed to by the District and the Contractor in writing, the mediation conducted pursuant to Section 9204 procedures shall excuse any further obligation under Section 20104.4 to mediate after litigation has been commenced.

16.11.5.1 Binding Arbitration of Claims Exceeding $375,000.

16.11.5.1.1 JAMS Arbitration. Any Claim, or portion thereof in dispute after completion of the Section 9204 procedures and the Government Code Claims Process which exceeds $375,000 and any other claims, disputes, disagreements or other matters in controversy between the District and the Contractor arising out of, or related, in any manner, to the Contract Documents, or the interpretation, clarification or enforcement thereof shall be resolved by binding arbitration conducted before one (1) retired judge in accordance with the Construction Arbitration Rules and Procedures of Judicial Arbitration Mediation Services ("JAMS") in effect as of the date that a Demand for Arbitration is filed,

except as expressly modified herein. The locale for any arbitration commenced hereunder shall be the regional office of the JAMS closest to the Site.

16.11.5.2 Demand for Arbitration. A Demand for Arbitration shall be filed and served within a reasonable time after the occurrence of the claim, dispute or other disagreement giving rise to the Demand for Arbitration, but in no event shall a Demand for Arbitration be filed or served after the date when the institution of legal or equitable proceedings based upon such claim, dispute or other disagreement would be barred by the applicable statute of limitations. If more than one Demand for Arbitration is filed by either the District or the Contractor relating to the Work or the Contract Documents, all Demands for Arbitration shall be consolidated into a single arbitration proceeding, unless otherwise agreed to by the District and the Contractor. The Contractor's Surety, a Subcontractor or Material Supplier to the Contractor and other third parties may be permitted to join in and be bound by an arbitration commenced hereunder if required by the terms of their respective agreements with the Contractor, except to the extent that such joinder would unduly delay or complicate the expeditious resolution of the claim, dispute or other disagreement between the District and the Contractor, in which case an appropriate severance order shall be issued by the Arbitrator(s).

16.11.5.3 Discovery. In connection with any arbitration proceeding commenced hereunder, the discovery rights and procedures provided for in California Code of Civil Procedure §1283.05 shall be applicable, and the same shall be deemed incorporated herein by this reference.

16.11.5.4 Arbitration Award. The award rendered by the Arbitrator(s) ("Arbitration Award") shall be final and binding upon the District and the Contractor only if the Arbitration Award is: (i) supported by One Hundred Percent evidence; (ii) based on applicable legal standards in effect that the time the Arbitration Award is issued; and (iii) supported by written findings of fact and conclusions of law in conformity with California Code of Civil Procedure §1296. Any Arbitration Award that does not conform to the foregoing is invalid and unenforceable. The District and Contractor hereby expressly agree that the Court shall, subject to California Code of Civil Procedure §§1286.4 and 1296, vacate the Arbitration Award if, after review, the Court determines either that the Arbitration Award does not fully conform to the foregoing. The confirmation, enforcement, vacation or correction of an arbitration award rendered hereunder shall be made by the Superior Court of the State of California for the county in which the Site is situated. The substantive and procedural rules for such post-award proceedings shall be as set forth in California Code of Civil Procedure §1285 et seq.

16.11.5.5 Arbitration Fees and Expenses. The expenses and fees of the Arbitrator(s) shall be divided equally among all of the parties to the arbitration. Each party to any arbitration commenced hereunder shall be responsible for and shall bear its own attorneys' fees, witness fees and other costs or expenses incurred in connection with such arbitration. The foregoing notwithstanding, the Arbitrator(s) may award arbitration costs, including Arbitrators' fees but excluding attorneys' fees, to the prevailing party. By this arbitration provision, the District and the Contractor acknowledge and agree that neither shall recover from the other any attorney's fees associated with or arising out of any legal, administrative or other proceedings filed or instituted in connection with or arising out of the Contract Documents or the performance of either the District or the Contractor thereunder. The limited exceptions in the Contract Documents that provide attorney's fees for specific issues shall neither be construed as applying to this arbitration provision under California Civil Code §1717(a) nor be deemed to be "authorized by the Laws."

16.11.5.6 Limitation on Arbitrator. The Superior Court for the State of California for

the County in which the Project Site is situated has the sole and exclusive jurisdiction, and an arbitrator has no authority, to hear and/or determine a challenge to the commencement or maintenance of an arbitration proceeding on the grounds that: (i) the subject matter of the arbitration proceeding is barred by the applicable statute of limitations; (ii) the subject matter of the arbitration proceeding is barred by a provision of the California Government Claims Act; (iii) the subject matter of the arbitration proceeding is outside the scope of the arbitration clause; (iv) the Contractor has failed to satisfy all conditions precedent to commencement or maintenance of ab arbitration proceeding; (v) waiver of the right to compel arbitration; (vi) grounds exist for the revocation of the arbitration agreement; and/or, (vii) there is the prospect that a ruling in arbitration would conflict or potentially with a ruling in a pending proceeding regarding the Project on a common issue of law or fact.

16.11.6 Inapplicability to Bid Bond. The arbitration proceedings described above are not applicable to disputes, disagreements or enforcement of rights or obligations under the Bid Bond. All claims, disputes and actions to enforce rights or obligations under the Bid Bond shall be adjudicated only by judicial proceedings commenced in a court of competent jurisdiction.

16.12 Limitation on Special/Consequential Damages. In the event of the District's breach or default of its obligations under the Contract Documents, the damages, if any, recoverable by the Contractor shall be limited to general damages which are directly caused by the breach or default of the District and shall exclude any and all special or consequential damages, if any. The Contractor expressly acknowledges the foregoing limitation to recovery of only general damages from the District if the District is in breach or default of its obligations under the Contract Documents; the Contractor expressly waives and relinquishes any recovery of special or consequential damages from the District.

16.13 Capitalized Terms. Except as otherwise expressly provided, capitalized terms used in the Contract Documents shall have the meaning and definition for such term as set forth in the Contract Documents.

16.14 Attorneys' Fees. Except as expressly provided for in the Contract Documents, or authorized by law, neither the District nor the Contractor shall recover from the other any attorney's fees or other costs associated with or arising out of any legal, administrative or other proceedings filed or instituted in connection with or arising out of the Contract Documents or the performance of either the District or the Contractor thereunder.

16.15 Provisions Required by Law Deemed Inserted. Each and every provision of law and clause required by law to be inserted in the Contract Documents is deemed to be inserted herein and the Contract Documents shall be read and enforced as though such provision or clause are included herein, and if through mistake, or otherwise, any such provision or clause is not inserted or if not correctly inserted, then upon application of either party, the Contract Documents shall forthwith be physically amended to make such insertion or correction.

16.16 Days. Unless otherwise expressly stated, references to "days" in the Contract Documents shall be deemed to be calendar days.

16.17 Entire Agreement. The Contract Documents contain the entire agreement and understanding between the District and the Contractor concerning the subject matter hereof, and supersedes and replaces all prior negotiations, proposed agreements or amendments, whether written or oral. No amendment or modification to any provision of the Contract Documents shall be effective or enforceable except by an agreement in writing executed by the District and the Contractor.

[END OF SECTION]

SPECIAL CONDITIONS

Application of Special Conditions. These Special Conditions for a part of the Contract Documents for the Work described as **BID # 2025-10 MERCED COLLEGE FLATWORK PLANT SCIENCE PROJECT**

1. .

2. Project Manager. The District will manage the project.

3. Drawings and Specifications. **(Available Electronically)**, The number of sets of the Drawings and Specifications which the District will provide to the Contractor, pursuant to Article 2.1.3 of the General Conditions is **Two (2)** Additional sets of the Drawings and Specifications may be obtained by the Contractor from the District at the cost of reproduction.

4. Insurance Coverages.
   4.1. Contractor Insurance. Pursuant to Article 6 of the General Conditions, the Contractor shall obtain and maintain the following insurance coverages with minimum coverage amounts as set forth below:

Policy of Insurance	Minimum Coverage Amount
Commercial General Liability Insurance	Per Occurrence: Two Million Dollars ($2,000,000)
	Aggregate: Four Million Dollars ($4,000,000)
Workers Compensation	In accordance with the Laws
Employers Liability	One Million Dollars ($1,000,000)
Builders Risk	Full insurable value of the Work; Seismic coverage: Required

   4.2. Subcontractor Insurance. Pursuant to Article 6 of the General Conditions, each Subcontractor shall obtain and maintain the following insurance coverages with minimum coverage amounts as set forth below

Policy of Insurance	Minimum Coverage Amount
Commercial General Liability Insurance	Per Occurrence: One Million Dollars ($1,000,000)
	Aggregate: Two Million Dollars ($2,000,000)
Workers Compensation	In accordance with the Laws
Employers Liability	One Million Dollars ($1,000,000)

5. Contract Time. The commencement date of the Contract Time of the Work shall be as set forth in the Notice to Proceed issued by or on behalf of the District. The Contractor shall achieve One Hundred Percent (100%) of the Work by 30 days from Notice to Proceed. The Contract Time shall not be extended if the Contractor commences Work after the date established in the Notice to Proceed for commencement of Work without fault or neglect of the District.

6. Liquidated Damages. The per diem rate of Liquidated Damages for delayed One Hundred Percent Completion, delayed submission of Submittals and delayed completion of Punchlist shall be as set forth herein.
   6.1. Delayed One Hundred Percent Completion. If Completion is not achieved on or before expiration of the Contract Time, the Contractor shall be liable to the District for Liquidated Damages from the date of expiration of the Contract Time to the date that the Contractor achieves Completion of the Work at the per diem rate of Five Hundred Dollars ($500.00).

6.2. Delayed Submission of Submittals. If the Contractor fails to submit a Submittal in accordance with the Submittal Schedule, the Contractor shall be liable to the District for Liquidated Damages for each delayed Submittal at the per diem rate of Five Hundred Dollars ($500.00) from the date that such Submittal was due to be submitted pursuant to the Submittal Schedule and the date that the Contractor actually submits the Submittal to the Architect.

6.3. Delayed Punchlist Completion. If the Contractor fails to complete Punchlist within the time established pursuant to the Contract Documents, the Contractor shall be liable to the District for Liquidated Damages from the date established for completion of Punchlist until the date that all Punchlist is actually completed at the per diem rate of Five Hundred Dollars ($500.00).

6.4. Surety Liability. Subject only to limitations established by the penal sum of the Performance Bond, the Surety issuing the Performance Bond shall be liable to the District for Liquidated Damages due from the Contractor.

7. Mark-Ups on Changes to the Work. In the event of Changes to the Work, pursuant to Article 9 of the General Conditions, the mark-up for all overhead (including home and field office overhead), general conditions costs and profit, shall not exceed the percentage of allowable direct actual costs for performance of the Change as set forth below.

7.1. Subcontractor Performed Changes. For the portion of any Change performed by Subcontractors of any tier, the percentage mark-up on allowable actual direct labor and materials costs incurred by all Subcontractors of any tier shall be **Ten Percent (10%)**. In addition, for the portion of any Change performed by a Subcontractor of any tier, the Contractor may add an amount equal to Four Percent (4%) of the allowable actual direct labor and materials costs of Subcontractors performing the Change; the foregoing mark-up shall not be applied to the Subcontractor mark-up.

7.2. Contractor Performed Changes. For the portion of any Change performed by the Contractor's own forces, the mark-up on the allowable actual direct labor and materials costs of such portion of a Change shall be **Ten Percent (10%)**.

7.3. Bond Premium Costs. In addition to the foregoing mark-ups on the direct costs of labor and materials, a bond premium expense in an amount equal to the lesser of the Contractor's actual bond premium rate of One Percent (1%) of the total actual direct costs of labor and materials (before Subcontractor and Contractor mark-ups) will be allowed.

7.4. Exclusions From Mark-Up of Actual Costs. Mark-ups on the actual cost of materials/equipment incorporated into a Change or for purchase/rental of Construction Equipment shall not be applied to any portion of such costs which are for sales, use or other taxes arising out of the purchase of materials/equipment and/or for purchase/rental of Construction Equipment.

8. Rain Days.

8.1. Rain Days Defined and Limitations on Rain Days. In addition to the requirements and limitations set forth in the Contract Documents, including without limitation Article 7.4.1 of the General Conditions, the Contract Time will be adjusted for unusually severe weather conditions resulting from rainfall only if: (i) the Contractor has taken reasonable measures to proceed with the Work notwithstanding inclement weather conditions;(ii) the Contractor demonstrates (by schedule analysis or other means) to the reasonable satisfaction of the District that the progress of Work on the critical path of the then current Construction Schedule was affected by unusually severe weather conditions resulting from rainfall; and (iii) the Contractor demonstrates to the reasonable satisfaction of the District that the Contractor could not re-sequence Work so that Work activities (whether or not on the critical path of the then current Construction Schedule) not affected by rainfall could have been performed on a Rain Day. The occurrence of precipitation by itself shall not constitute a Rain Day. For purposes of the Contract Documents, a Rain Day occurs when: (ii) there is measurable rainfall occurring on a day when Work is scheduled to be performed at the Site; (ii) there is rainfall sufficiently continuous for at least a three (3) hour period; (iv) the rainfall is sufficiently severe to prevent performance of Work at the Site (rainfall is not deemed sufficiently severe to prevent Work at the Site if there are Work activities which are not materially affected by rainfall and which can be reasonably performed by the Contractor by re-sequencing Work activities); and (iv) after a Rain Day (as defined in (i), (ii) and (iii) above) has occurred, the conditions at the Site are adversely affected by rainfall so that a period of time is necessary to

permit sufficient "drying out" of wet conditions at the Site sufficient to permit the continuation of Work.

8.2. Rain Days Incorporated Into Construction Schedules. Construction Schedules prepared by the Contractor shall incorporate the following Rain Days. The Contract Time shall not be subject to adjustment for unusually severe weather conditions until the number of Rain Days noted below are exceeded.

Month	Rain Days
January	four (4)
February	four (4)
March	three (3)
April	two (2)
May	two (2)
June	none
July	none
August	none
September	none
October	two (2)
November	three (3)
December	four (4)

9. Hours and Days of Work at the Site.

9.1. Work Hours/Days. Subject to limitations set forth elsewhere in the Contract Documents and below, the hours/days of Work at the Site are: 7am – 5pm Mondays through Fridays, except for holiday days.

9.2. Limitations on Work Hours/Days. Work activities at the Site will be limited or prohibited on days: (i) devoted to student testing or when testing of students may be adversely affected by Work activities at the Site; or (ii) when other special events or functions are scheduled. The Contractor shall familiarize itself with District activities at the Site to avoid Work activity interferences or disturbances to such District activities. The Contractor's Construction Schedule shall take into account the District activities which limit or preclude Work activities at the Site.

9.3. Facilities/Services for District Inspector. Unless otherwise expressly provided in the Contract Documents, pursuant to Article 4.14.2 of the General Conditions, the Contractor, without adjustment of the Contract Price, shall provide, or cause to be provided, for use by the District Inspector during prosecution of the Work, the following: (i) lockable temporary office space consisting of sufficient space to accommodate Project Inspectors assigned to the Work; (ii) furniture and furnishings consisting of desks and chairs for use by Project Inspectors assigned to the Work, file storage, one (1) conference table and seating sufficient to accommodate seating for at least four (4) people; (iii) landline phone; (iv) plain paper fax machine; (v) landline telephone and fax service; (vi) internet service; and (vii) plain paper copier with copy speed of no greater than thirty five (35) pages per minute.

10. Permits, Fees and Approvals. In addition to permits or approvals obtained by the District for the Work, the Contractor shall obtain the following permits, approvals and other authorizations from any public agency with jurisdiction over any portion of the Work. The Contractor shall obtain the permits, approvals and/or authorizations set forth below: (i) without adjustment of the Contract Price, unless otherwise indicated below; and (ii) without adjustment of the Contract Time.

Contractor Obtained Permit, Approval or Authorization	Cost Reimbursement
Deferred Approval Items	**No reimbursement to Contractor; cost included in Contract Price.**

For any work requiring City or County review and/or approval including the Merced County Health Department, Contractor shall coordinate and schedule inspections with City or County department

11. Construction Utilities. The Contractor shall obtain and pay for all site utilities required to complete the Work.

12. Use of Site.

12.1. Staging/Storage. Staging/storage areas shall be restricted to areas designated in the Contract Documents for such purposes. The Contractor, without adjustment of the Contract Price or the Contract Time, shall secure and pay for the use of additional storage, staging areas, or work areas needed for operations. The Contractor and Subcontractors are responsible for following the requirements established in the Contract Documents for deliveries, storage trailers, office trailers and temporary utilities. The Contractor and Subcontractors shall coordinate material and equipment deliveries with the District and to ensure that materials can be off-loaded efficiently and that Site use operations are maintained in an orderly fashion. If any materials or equipment stored at the Site obstruct the performance of any portion of the Project or otherwise interfere with District operations or activities, these materials shall be removed and relocated by the Contractor without adjustment of the Contract Price or the Contract Time. If the Contractor fails or refuses to comply with the foregoing staging/storage requirements and limitations within a reasonable time, but not more than twenty four (24) hours after notice, the District reserves the right to take measures to comply with such requirements or limitations, with the costs of such measures being the sole responsibility of the Contractor.

12.2. Site Logistics Plan. Prior to commencement of Work at the Contractor, the Contractor prepare a Site Logistics Plan which include, without limitation: delivery routes, storage/staging areas, jobsite trailer locations, wash out areas, and other similar activities. The Site Logistics Plan shall: (i) take into account emergency vehicle ingress/egress; pedestrian paths of travel and disabled persons paths of travel; (ii) be subject to review and acceptance by the District; and (iii) be subject to modification during performance of the Work.

12.3. Parking. Personnel of the Contractor, Subcontractors and others performing Work at the Site will be allowed to park vehicles in the staging area as designated in the specifications, or areas outside the Site, with a valid District parking permit, in the parking spaces at a location designated by the District. Parking permit charges, if any, shall be borne and paid by the Contractor without adjustment of the Contract Price. The foregoing notwithstanding, the extent or location of parking for such personnel may be limited, restricted, eliminated or modified by the District as reasonably necessary to facilitate and accommodate necessary parking for the District's students, staff and visitors. Neither the Contract Price nor the Contract Time shall be adjusted as a result of any such District modifications to the extent or location of parking.

12.4. Prohibition on Smoking. The District has implemented policies and practices limiting and restricting smoking on District property, including the Site. The Contractor is solely responsible for obtaining the District's current non-smoking policy and: (i) notifying Subcontractors of the District's non-smoking policies; (ii) informing employees of the Contractor and Subcontractors of the District's non-smoking policies; (iii) posting notices at the Site summarizing the District's non-smoking policies; (iv) complying with the Laws relating to smoking limitations and restrictions; and (v) taking appropriate actions if the District's non-smoking policies are violated or limitations/restrictions imposed by the Laws are violated, including without limitation, removal of personnel violating such policies, limitations or restrictions.

[END OF SECTION]

California Community Colleges

MEMORANDUM
April 12, 2022

| Via Email

TO: Chief Business Officers

FROM: Marc A. LeForestier
General Counsel

RE: Contractor and Grantee Compliance with Economic Sanctions Imposed in Response to Russia's Invasion of Ukraine

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On March 4, 2022, Governor Gavin Newsom issued Executive Order N-6-22 (EO) (available here: http://www.gov.ca.gov/wp-content/uploads/2022/03/3.4.22-Russia-Ukraine-Executive-Order.pdf) regarding sanctions in response to the Russian invasion of Ukraine.

The EO directs all agencies and departments that are subject to the Governor's authority to take certain immediate steps, including notifying all contractors and grantees of their obligations to comply with existing economic sanctions imposed by the U.S. government in response to Russia's actions in Ukraine, as well as any sanctions imposed under state law. As you know, many community college districts contract with the California Community Colleges Board of Governors, and this memorandum is shared with the listserv for this purpose.

This correspondence serves as a notice under the EO that as a contractor or grantee, compliance with the economic sanctions imposed in response to Russia's actions in Ukraine is required, including with respect to, but not limited to, the federal executive orders identified in the EO and the sanctions identified on the U.S. Department of the Treasury website (https://home.treasury.gov/policy-issues/financial-sanctions/sanctions-programs-and-country-information/ukraine-russia-related-sanctions). Failure to comply may result in the termination of contracts or grants, as applicable. If you have any questions regarding compliance with these sanctions, they should be addressed to your legal counsel.

Please note that for any agreements or grants valued at $5 million or more, a separate notification will be sent outlining additional requirements specified under the EO.

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Chancellor's Office, Division Name
1102 Q Street, Sacramento, CA 95811 | 916.445.8752 | www.cccco.edu

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

FOR DSA USE ONLY

DSA APP# 02-121754

GENERAL SITE NOTES:

THE REQUIREMENTS AND INFORMATION SET OUT BELOW ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE AND DO NOT ENCOMPASS ALL PROJECT REQUIREMENTS DESCRIBED BY THE PROJECT PLANS AND SPECIFICATIONS AND/OR APPLICABLE LAWS, REGULATIONS AND/OR BUILDING CODES.

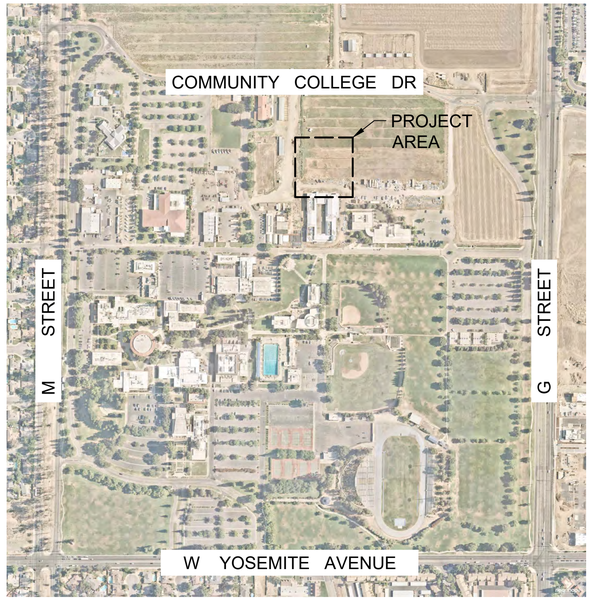
1. *CONSTRUCTION OF ALL PROJECT SITE IMPROVEMENTS SUBJECT TO ADA ACCESS COMPLIANCE, INCLUDING ACCESSIBLE PATH OF TRAVEL, CURB RETURNS, PARKING STALL(S) AND UNLOADING AREAS, BARRIER FREE AMENITIES AND/OR OTHER APPLICABLE SITE IMPROVEMENTS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT, CALIFORNIA TITLE 24, AND THE CALIFORNIA BUILDING CODE, CURRENT EDITION(S).*
2. *CONTRACTOR SHALL FIELD VERIFY ALL GRADES AND SLOPES PRIOR TO THE PLACEMENT OF CONCRETE AND/OR PAVEMENT FOR CONFORMANCE WITH ADA ACCESS COMPLIANCE REQUIREMENTS. EXAMPLES OF MINIMUM AND MAXIMUM LIMITS RELATED TO ADA ACCESS COMPLIANCE INCLUDE, BUT ARE NOT LIMITED TO:*
   - a) *ACCESSIBLE PATH OF TRAVEL CROSS-SLOPE SHALL NOT EXCEED 2%*
   - b) *ACCESSIBLE PATH OF TRAVEL LONGITUDINAL SLOPES SHALL NOT EXCEED 5%*
   - c) *RAMP LONGITUDINAL SLOPES SHALL NOT EXCEED 8.33%*
   - d) *WALKS SHALL NOT HAVE LESS THAN 48 INCHES IN UNOBSTRUCTED WIDTH*
   - e) *ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION*
   - f) *LANDINGS AT THE TOP AND BOTTOM OF ACCESSIBLE RAMPS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION*
   - g) *GUTTERS AND ROAD SURFACES DIRECTLY ADJACENT TO AND WITHIN 2 FEET OF A CURB RAMP SHALL HAVE A COUNTER SLOPE NOT TO EXCEED 5%*
   - h) *OPEN PAVED PLAY AREAS SHALL NOT EXCEED 2% IN ANY DIRECTION*
3. *CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IDENTIFIED BY THE PROFESSIONAL ENGINEERING SEAL AND SIGNATURE ON THESE PLANS, OF ANY SITE CONDITION(S) AND/OR DESIGN INFORMATION THAT PREVENTS THE CONTRACTOR FROM COMPLYING WITH THE LAWS, REGULATIONS AND/OR BUILDING CODES GOVERNING ADA ACCESS COMPLIANCE.*
4. *DRAINAGE SHALL NOT BE ALLOWED ONTO ADJACENT PROPERTY.*
5. *ALL FILL MATERIAL USED SHALL BE PLACED IN COMPLIANCE WITH THE PROJECT SPECIFICATIONS. A SOILS COMPACTION REPORT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AS REQUIRED BY THE PROJECT SPECIFICATIONS.*
6. *THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES AS REQUIRED BY THE PROJECT SPECIFICATIONS, AND BY GOVERNING PUBLIC AGENCIES.*
7. *THE CONTRACTOR SHALL LOCATE ALL EXISTING UTILITIES PRIOR TO START OF ANY WORK.*
8. *CONTRACTOR SHALL NOTIFY THE SCHOOL DISTRICT TO TURN OFF IRRIGATION A MINIMUM OF 2 DAYS PRIOR TO STARTING WORK. CONTRACTOR SHALL COORDINATE WITH THE SCHOOL DISTRICT THROUGHOUT THE COURSE OF THE PROJECT FOR WATERING AND NON-WATERING TIMES. CONTRACTOR SHALL NOTIFY THE DISTRICT AS SOON AS WORK IS COMPLETED TO THE POINT WHERE IRRIGATION SYSTEMS MAY BE TURNED BACK ON.*
9. *ENSURE THAT ALL EXISTING STRIPING IS NOT VISIBLE AFTER APPLYING SEAL COAT AND PRIOR TO RESTRIPING AND REPAINTING. OTHERWISE, ADDITIONAL SEAL COAT APPLICATION MAY BE REQUIRED.*
10. *PRIOR TO ACCEPTANCE OF NEW PAVING AND APPLICATION OF SEAL COAT AND/OR STRIPING, THE CONTRACTOR SHALL COMPLETE A WATER TEST OF THE NEW PAVEMENT WITH THE ENGINEER OR RECORD PRESENT TO VERIFY THAT NO LOW SPOTS OR "BIRD BATHS" ARE PRESENT, PER THE PROJECT SPECIFICATIONS.*
11. *LAYOUT ALL PAVEMENT MARKINGS TO MATCH EXISTING UNLESS NOTED OTHERWISE ON PLANS.*
12. *PAINT ALL CURBS AND WHEELSTOPS TO MATCH EXISTING WITHIN PROJECT LIMITS, UNLESS SHOWN OTHERWISE ON THE PLANS*
13. *ALL CONCRETE SHALL HAVE WEAKENED PLANE JOINTS AT 10 FEET OR LESS ON CENTER AND ONE HALF INCH PREMOLDED EXPANSION JOINTS AT 30 FEET OR LESS MINIMUM. MATCH EXISTING SCORE PATTERN DIMENSIONS ON ALL CONCRETE WALKS AND PAVEMENT.*
14. *NO CONCRETE MAY BE POURED UNTIL ALL FORMS AND REINFORCEMENTS HAVE BEEN REVIEWED AND APPROVED BY THE PROJECT INSPECTOR.*
15. *REPLACE ALL DAMAGED TURF AND IRRIGATION FACILITIES RESULTING FROM THE WORK REQUIRED.*
16. *ADJUST ALL UTILITY LIDS TO FINISHED GRADE WITHIN CONSTRUCTION AREA PER DETAIL [E/X100] UNLESS NOTED OTHERWISE. REMOVE AND REPLACE ALL BROKEN OR DAMAGED LIDS AND BOXES. ALL LIDS WITHIN TRAFFIC AREAS SHALL BE TRAFFIC RATED.*
17. *ANY EXISTING UTILITIES AND/OR IMPROVEMENTS WHICH ARE TO REMAIN, THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER AND AGENCY HAVING AUTHORITY, AT THE CONTRACTOR'S SOLE EXPENSE.*
18. *ANY EXISTING UTILITIES AND/OR IMPROVEMENTS THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER AND AGENCY HAVING AUTHORITY, AT THE CONTRACTOR'S SOLE EXPENSE.*
19. *CONTRACTOR TO MATCH EXISTING PAVEMENT GRADE AT ALL NEW PAVEMENT LOCATIONS UNLESS NOTED OTHERWISE ON THE PLANS.*
20. *ASPHALT CONCRETE REMOVAL AND REPLACEMENT LIMITS SHOWN ARE APPROXIMATE AND ARE BASED ON PAVEMENT CONDITIONS OBSERVED DURING A PRE-DESIGN SITE REVIEW. ADJUST LOCATIONS AND LIMITS AS REQUIRED BY ACTUAL FIELD CONDITIONS OR AS DIRECTED BY THE ENGINEER.*
21. *INSTALL DOWELED CONNECTION AT JOINT OF NEW CONCRETE TO EXISTING CONCRETE PER DETAIL [D/X100]*

GENERAL NOTES:

1. *ALL WORK SHALL BE DONE IN ACCORDANCE WITH THESE CONSTRUCTION DRAWINGS, THE CONTRACT SPECIFICATIONS AND, WHERE APPLICABLE, THE CITY STANDARDS AND THE STATE OF CALIFORNIA STANDARD SPECIFICATIONS.*
2. *THE CONTRACTOR SHALL COORDINATE ALL CONSTRUCTION ACTIVITIES WITH THE SCHOOL DISTRICT'S USE OF THE FACILITIES AND OTHER CONTRACTORS WHO MAY BE DOING CONSTRUCTION WITHIN THE PROJECT SITE.*
3. *THE CONTRACTOR SHALL CONTACT DISTRICT OFFICIALS FOR DETERMINATION OF DEPTH AND LOCATION OF UNDERGROUND UTILITIES PRIOR TO EXCAVATION IN THE PROJECT SITE.*
4. *BEFORE COMMENCING WORK, THE CONTRACTOR SHALL NOTIFY ALL UTILITY AUTHORITIES OR UTILITY COMPANIES HAVING POSSIBLE INTEREST IN THE WORK OF THE CONTRACTOR'S INTENTION TO EXCAVATE PROXIMATE TO EXISTING FACILITIES AND THE CONTRACTOR SHALL VERIFY THE LOCATION OF ANY UTILITIES IN THE WORK AREA, NOTIFY U.S.A. AT 1(800) 642-2444, TWO (2) DAYS PRIOR TO EXCAVATION.*
5. *ALL CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF THE MOST CURRENT CALIFORNIA BUILDING CODE (CBC).*
6. *CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.*
7. *A "DSA CERTIFIED" CLASS 3 PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.*
8. *A DSA- ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.*
9. *THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS IS THAT THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION SHALL BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK (SECTION 4-317(C), PART 1, TITLE 24, CCR).*
10. *GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND EMERGENCY ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.*

GENERAL DEMOLITION NOTES:

1. *THE "LIMIT OF DEMOLITION" SHOWN IS APPROXIMATE AND IS GENERALLY CONSIDERED TO BE THE MINIMUM REMOVAL REQUIREMENTS. CONTRACTOR MUST COORDINATE AS NOTED IN THE LEGEND.*
2. *CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEMOLISHED MATERIALS OFF SITE.*
3. *CONTRACTOR SHALL PROTECT ALL EXISTING UTILITY IMPROVEMENTS NOT SPECIFICALLY DESIGNATED FOR REMOVAL.*
4. *THE ON-SITE UNDERGROUND UTILITIES SHOWN ON THIS SHEET ARE AT APPROXIMATE LOCATIONS. THE EXTENT, LOCATIONS AND SIZES ARE UNKNOWN. THE CONTRACTOR SHALL POTHOLE TO LOCATE AND VERIFY THE UNDERGROUND UTILITY LINES PRIOR TO REMOVAL.*
5. *CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ANY FOUND SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A CALIFORNIA LICENSED SURVEYOR AND THE APPROPRIATE PAPERWORK FILED WITH THE CITY OR COUNTY, AT CONTRACTOR'S EXPENSE.*
6. *ALL HAZARDOUS MATERIALS ENCOUNTERED DURING SITE DEMOLITION SHALL BE REMEDIATED AND DISPOSED OF PER STATE AND EPA REQUIREMENTS.*
7. *REMOVE EXISTING IMPROVEMENTS AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS SHOWN ON THESE PLANS.*
   - a) *FOR CONCRETE REMOVAL, REMOVE TO THE NEXT NEAREST TOOLED JOINT OR EXPANSION JOINT OF IMPROVEMENTS DESIGNATED TO REMAIN.*
   - b) *FOR ASPHALTIC PAVEMENT REMOVAL. SAWCUT TO A STRAIGHT, CLEAN EDGE AT LOCATIONS INDICATED ON THE PLANS.*



SITE MAP

NOT TO SCALE

SITE ADDRESS:

MERCED COLLEGE
3600 M STREET
MERCED, CA. 95348

PROJECT CONTACTS:

OWNER:	*MARCUS METCALF* *SR. DIRECTOR OF CAPITAL PROJECTS AND FACILITIES* *3600 M STREET* *MERCED CA 95348* *PHONE: (209) 384-6000*
CIVIL ENGINEER:	*BLAIR, CHURCH & FLYNN CONSULTING ENGINEERS* *451 CLOVIS AVE., SUITE 200* *CLOVIS, CA 93612* *PHONE: (559) 326-1400*
ELECTRICAL ENGINEER:	*THOMA ELECTRIC, INC.* *3562 EMPLEO ST.* *SAN LUIS OBISPO, CA 93406* *PHONE: (805) 543-3850*

SCOPE OF WORK:

1. *CONSTRUCTION OF NEW GREENHOUSE COMPLEX INCLUDING: THREE GREENHOUES, TWO LOAFING BARNS, ONE STORAGE SHED, AND ONE DSA PRE-CHECKED SHADE CANOPY*

APPLICABLE CODES:

2022 CALIFORNIA ADMIN. CODE, TITLE 24, PART 1, CCR

2022 CALIFORNIA BUILDING CODE, TITLE 24, PART 2, CCR

GREENHOUSE CONTRACTOR SCOPE OF WORK:

1. *INSTALL OWNER PROVIDED GREENHOUSES.*
2. *SITE UTILITIES WILL BE PROVIDED UNDER A SEPARATE CONTRACT UP TO 5 FEET OF THE EXTERIOR OF THE GREENHOUSE BUILDINGS. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING UTILITY CONNECTIONS TO THE BUILDING.*
3. *ALL UTILITIES AND EQUIPMENT WITHIN THE GREENHOUSE BUILDING FOOTPRINTS SHALL BE PROVIDED BY THE GREENHOUSE CONTTACTOR.*

GREENHOUSE BID ALTERNATE SCOPE OF WORK:

1. *INSTALLATION OF "GREENHOUSE 3" AND ALL ASSOCIATED EQUIPMENT AND UTILITIES WITHIN THE FOOTPRINT OF GREENHOUSE 3.*

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SHEET NUMBER	SHEET TITLE
CIVIL	
C000	COVER SHEET
C100	ACCESS COMPLIANCE PLAN
C101	TOPOGRAPHIC SURVEY LEGEND
C102	TOPOGRAPHIC SURVEY
C103	DEMOLITION PLAN
C104	SITE PLAN & HORIZONTAL CONTROL
C105	GRADING AND DRAINAGE PLAN
C106	UTILITY PLAN
X100	SITE DETAILS
X200	UTILITY DETAILS
X201	UTILITY DETAILS
ARCHITECTURAL	
A100	MAIN GREENHOUSE FLOOR & FOUNDATION PLANS
A101	MAIN GREENHOUSE REFLECTED CEILING PLAN
A102	MAIN GREENHOUSE ELEVATIONS & SECTION
A200	SMALL GREENHOUSE FOUNDATION & FLOOR & CEILING PLANS
A201	SMALL GREENHOUSE ELEVATIONS & SECTIONS
A300	AG STORAGE FOUNDATION & FLOOR & CEILING PLANS
A301	AG STORAGE ELEVATIONS & SECTION
A400	POTTING SHADE FLOOR & FOUNDATION PLAN
A401	POTTING SHADE CEILING PLAN
A402	POTTING SHADE ELEVATION & SECTION
A500	LOAFING BARN FOUNDATION & FLOOR & CEILING PLANS
A501	LOAFING BARN ELEVATIONS & SECTION
A600	FOUNDATION DETAILS
ELECTRICAL	
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E-002	ELECTRICAL SINGLE LINE DIAGRAM
E-003	PANEL SCHEDULES
E-004	PANEL SCHEDULES
E-101	ELECTRICAL SITE PLAN
E-201	AG STORAGE LIGHTING PLAN
E-202	GREENHOUSE 1 & 2 LIGHTING PLANS
E-203	MAIN GREENHOUSE LIGHTING PLANS
E-204	LOAFING BARN LIGHTING PLAN
E-205	POTTING SHADE LIGHTING PLAN
E-301	AG STORAGE POWER PLAN
E-302	GREENHOUSE 1 & 2 POWER PLANS
E-303	MAIN GREENHOUSE POWER PLAN
E-304	LOAFING BARNS POWER PLAN
E-305	POTTING SHADE POWER PLAN
E-401	ELECTRICAL DETAILS
DSA PRE-CHECK SHADE STRUCTURE	
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LS1.1	GENERAL INFO
LS1.2	DSA 103
LS1.3	DSA 103
LS4.0	FOUNDATION PLAN
LS4.1	FRAMING AND CONNECTION DETAILS
LS4.2	MULTI RIB ROOFING PLAN
LS4.3	MEGA RIB ROOFING PLAN
LS4.4	STANDING SEAM ROOFING PLAN
LS5.0	OPTIONAL ELECTRICAL ACCESS

TOTAL SHEET COUNT: 50



811 Know what's below. Call before you dig.

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — GARY D. HUSTON — No. 57218 — CIVIL — STATE OF CALIFORNIA

03/01/2024
Date Signed:

CONSULTANT
Blair, Church & Flynn Consulting Engineers
451 Clovis Avenue, Suite 200
Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
COVER SHEET

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

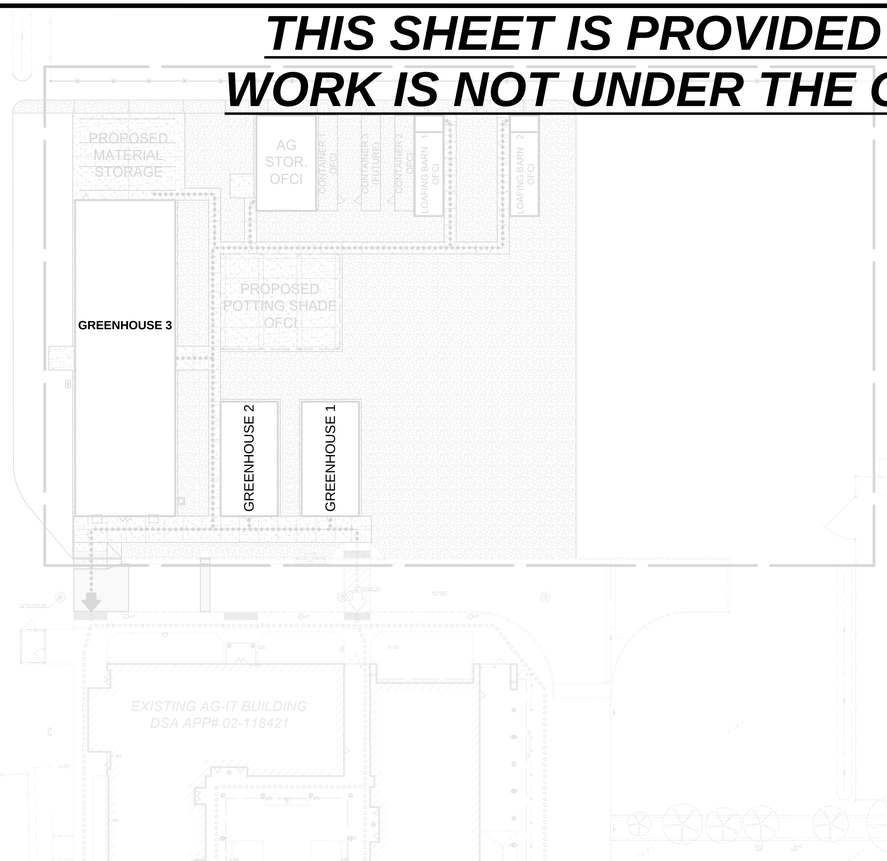
C000

Drawings\2023\02121754-Merced College Greenhouse Complex\Merced College Greenhouse Complex Sheet .dwg 03/01/2024 - 12:51:08
Plot by Ashworth Apr 29, 2024 - 12:51:08

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

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DSA APP# 02-121754



A C100 ACCESSIBLE PARKING STALL SIGN
NOT TO SCALE

B C100 TOW-AWAY SIGN
NOT TO SCALE

NOTES:

1. 17" x 22" x 16 GAUGE METAL. BLACK LETTERING NOT LESS THAN 1" HIGH.
2. BACKING PLATE 17" x 22" x 16 GAUGE METAL PLATE, SANDWICH CHAIN LINK FABRIC BETWEEN SIGN AND BACKING PLATE. FASTEN TOGETHER WITH TAMPER RESISTANT THRU BOLTS SIMILAR TO DETAIL TO THE RIGHT.

PARKING CALCULATIONS

LOT#	DSA APP #	STALLS PROVIDED	ACCESSIBLE STALLS PROVIDED	ACCESSIBLE STALLS REQUIRED PER CBC 11-B208.2
A	02-118421	109	5 TOTAL, 1 VAN	5 TOTAL, 1 VAN

SITE LEGEND:

- LIMITS OF WORK
- EXISTING ACCESSIBLE PATH OF TRAVEL
- ACCESSIBLE PATH OF TRAVEL
- DF — EXISTING ACCESSIBLE DRINKING FOUNTAIN PER DSA APP# 02-118421
- W — EXISTING ACCESSIBLE WOMEN'S RESTROOM PER DSA APP# 02-118421
- M — EXISTING ACCESSIBLE MEN'S RESTROOM PER DSA APP# 02-118421
- U — EXISTING ACCESSIBLE UNISEX RESTROOM PER DSA APP# 02-118421
- 1 — CONTRACTOR TO VERIFY THAT TOW AWAY SIGNAGE MEETS THE MINIMUM REQUIREMENTS OF DETAIL [B/C100]. IF SIGNAGE DOES NOT MEET THE MINIMUM REQUIREMENTS, CONTRACTOR SHALL INSTALL NEW SIGNAGE ON EXISTING POST PER DETAIL [B/C100]
- 2 — EXISTING ACCESSIBLE PARKING STALL PER DSA APP# 02-118421
- 3 — CONTRACTOR TO VERIFY THAT PARKING STALL SIGNAGE MEETS THE MINIMUM REQUIREMENTS OF DETAIL [A/C100]. IF SIGNAGE DOES NOT MEET THE MINIMUM REQUIREMENTS, CONTRACTOR SHALL INSTALL NEW SIGNAGE ON EXISTING POST PER DETAIL [A/C100]

NOTES:

1. DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT: THE PATH-OF-TRAVEL (P.O.T.) IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS IS COMPLIANT WITH THE CURRENT APPLICABLE CALIFORNIA BUILDING CODE ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN OF THIS PROJECT, THE P.O.T. WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WERE DETERMINED TO BE NON-COMPLIANT 1) HAVE BEEN IDENTIFIED AND 2) THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS, AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NON-COMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE P.O.T. THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONABLE HARDSHIP ARE SO INDICATED IN THESE CONSTRUCTION DOCUMENTS.

   DURING CONSTRUCTION, IF P.O.T. ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CODE COMPLIANT ARE FOUND TO BE NON-CONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THEY SHALL BE BROUGHT INTO COMPLIANCE WITH THE CBC AS A PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

2. THE ENGINEER HAS SURVEYED/INSPECTED THE PATH OF TRAVEL (P.O.T.) AS INDICATED ON THE PLANS AND HAS FOUND IT TO BE, OR HAS INDICATED ON THE PLANS REMEDIAL WORK WHICH WOULD CAUSE IT TO BE, A BARRIER FREE ACCESSIBLE ROUTE:
   1. AT LEAST 48" IN WIDTH; OR AS APPROVED BY CODE. WITHOUT ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAXIMUM SLOPE, OR VERTICAL LEVEL CHANGES EXCEEDING 1/4"
   2. WITH A FIRM, STABLE, AND SLIP RESISTANT WALKING SURFACE; WITH A RUNNING SLOPE OF 1:20 OR LESS, UNLESS OTHERWISE INDICATED, AND A CROSS SLOPE OF 1:48 OR LESS;
   3. IS FREE OF OVERHEAD OBSTRUCTIONS WITHIN 80" ABOVE THE WALKING SURFACE
   4. IS FREE OF OBJECTS WHICH PROTRUDE MORE THAN 4" BETWEEN THE HEIGHTS OF 27" AND 80" ABOVE THE WALKING SURFACE.
3. PASSING SPACES (11B-403.5.3) OF 60"x60" MIN. ARE LOCATED NOT MORE THAN 200' APART. WALKS WITH CONTINUOUS GRADIENTS HAVE 60" IN LENGTH OF LEVEL AREAS (11B-403.7) NOT MORE THAN 400' APART. THERE IS NO DROP-OFF OVER 4" AT THE EDGE OF WALK OR LANDING UNLESS IDENTIFIED BY A GUARD, A HANDRAIL, OR WARNING CURB AT LEAST 6" IN HEIGHT ABOVE THE WALK (11B-303.5).

GREENHOUSE BID ALTERNATE NOTES:

1. GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.
3. BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.
4. IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.
5. BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS

SCALE: 1"=30'

0 10 20 30 60
SCALE IN FEET

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811 Know what's below. Call before you dig.

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER GARY D. HOYT No. 61218 CIVIL STATE OF CALIFORNIA
03/01/2024 Date Signed

CONSULTANT
Blair, Church & Flynn Consulting Engineers
451 Clovis Avenue, Suite 200
Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

ACCESS COMPLIANCE PLAN

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

C100

Drawing: P:\2023\23-034\Construction\Arch\23034_ac_Array Access Compliance Plan - ENTP.dwg
Plot by: kylerson Apr 29, 2024 - 12:02pm

GENERAL TOPOGRAPHIC SURVEY LEGEND:

(NOT ALL SYMBOLS SHOWN APPEAR ON THE PLANS)

AB	ABUTMENT
AC	ASPHALTIC CONCRETE
ACE	ASPHALTIC CONCRETE EDGE
AD	ASPHALTIC CONCRETE DIKE
AWT	ALL-WEATHER TRACK
BD	BRIDGE DECK
BFC	BOTTOM FACE OF CURB
BGST	STEPS
BGTR	TOP OF ROOF
BGV	BUILDING VENTS
BOD	BOTTOM OF DITCH
BR	BARRICADE
BRK	BRICK
BW	BARRIER WALL
CB	CATCH BASIN
CDA	CONCRETE DRIVE APPROACH
CE	CONCRETE EDGE
CMP	CORRUGATED METAL PIPE
CON	CONCRETE
COTH	COMMUNICATION TRENCH
CR	CROWN OF ROAD
CRQ	QUARTER CROWN
CS	CONCRETE SLAB
CULV	CULVERT
CW	CONCRETE WALL
DD	DOWN DRAIN
DFL	DITCH FLOWLINE
DWY	DRIVEWAY
ECTH	ELECTRICAL TRENCH
EDR	EDGE OF DIRT ROAD
EGR	EDGE OF GRAVEL ROAD
EOD	EDGE OF OILED DIRT
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
ET	EDGE OF TRAVELED WAY
FF	FINISH FLOOR
FOTH	FIBER OPTIC TRENCH
GB	GRADE BREAK
GFL	GUTTER FLOWLINE
GRA	GRAVEL SPOT SHOT
GRAE	EDGE OF GRAVEL
GSTH	GAS TRENCH
HDR	WOOD HEADER
HW	HEAD WALL
KR	K-RAIL
LIP	LIP OF GUTTER
LSDE	DECOMPOSED GRANITE EDGE
LSDG	DECOMPOSED GRANITE
LSGC	GROUND COVER
LSGF	GOLF COURSE FAIRWAY
LSGG	GOLF COURSE GREEN
LSGT	GOLF COURSE TEE
LSLN	TURF
LSSA	SAND
LSSP	SLOPE PROTECTION
LSST	GOLF COURSE SAND TRAP
LSTF	TURF
NPTH	NON-POTABLE TRENCH
PA	PATIO
PGTH	PROPANE GAS TRENCH
POS	POINT ON SLOPE
RCP	REINFORCED CONCRETE
RIEL	RIPARIAN EDGE OF LAKE
RIEP	RIPARIAN EDGE OF POND
RIES	RIPARIAN EDGE OF STREAM
RIEW	RIPARIAN EDGE OF WETLAND
RIFL	RIPARIAN FLOWLINE
RIMC	RIPARIAN MISC.
RIP	RIP-RAP SLOPE PROTECTION
RK	ROCK
RW	RETAINING WALL
SB	SPEED BUMP
SDCD	STORM DRAIN CROSS DRAIN
SDFL	STORM DRAIN FLOWLINE
SDGR	STORM DRAIN GRATE
SDMG	STORM DRAIN MANHOLE W/ GRATE
SSFL	SEWER FLOWLINE
SDTH	STORM DRAIN TRENCH
SSGT	STORM DRAIN GREASE TRAP
SSST	SEWER TANK (SEPTIC)
SSTH	SEWER TRENCH
SWK	SIDEWALK
SWL	SWALE
TBC	TOP BACK OF CURB
TBW	TOP BACK OF WALK
TF	TOP OF FOOTING
TFC	TOP FACE OF CURB
TFW	TOP FACE OF WALK
TLTH	TELEPHONE TRENCH
TOB	TOP OF BANK
TOE	TOE OF SLOPE
TOP	TOP OF SLOPE
TRDO	TRUNCATED DOMES
TVTH	TV TRENCH
TW	TOP OF WALL
UTH	UNIDENTIFIED TRENCH/SCAR LINE
VGFL	VALLEY GUTTER FLOWLINE
VGR	VALLEY GUTTER
WALBA	BARRIER WALL
WALBW	BLOCK WALL
WALCW	CONCRETE WALL
WALHW	HEAD WALL
WALRW	RETAINING WALL
WALWW	WING WALL
WCR	WHEELCHAIR RAMP
WLPD	WELL PAD
WTTH	WATER TRENCH
WW	WING WALL
(335.21)	EXISTING ELEVATION
AL	ACCENT LIGHT
AV	ALFALFA VALVE
	BACKFLOW ASSEMBLY
	BASKETBALL GOAL
BOV	BLOW-OFF VALVE
	BM=BENCHMARK; OR SBM=SITE BENCHMARK
BO	BOLLARD
CO	CLEANOUT
COPB	COMMUNICATION PULLBOX
CVA	COMMUNICATION VAULT
312.55	SURVEY CONTROL MONUMENT
DF	DRINKING FOUNTAIN
DS	DOORSTOP
DW	DRYWELL
EG	ELECTRICAL GROUND
ELC	ELECTRICAL CONDUIT
	ELECTRICAL METER
EPB	ELECTRICAL PULLBOX
E	ELECTRICAL VAULT LID
ETS	GAS ELECTRONIC TESTING STATION
FDC	FIRE DEPARTMENT CONNECTION
	FIRE HYDRANT
FP	FENCE POST
FPO	FLAG POLE
GAS	GAS LINE; DIAMETER AS SHOWN
G	GAS REGULATOR
GAV	IRRIGATION GATE VALVE
G	GAS METER
GOP	GOAL POST
GP	GUY POLE
4"GR	GRATE; DIAMETER AS SHOWN
GS	GATE STOP
GSR	GAS RISER
GV	GAS VALVE
GRD	GROUNDING ROD
GUY	GUY WIRE
HB	HOSE BIBB
HR	HANDRAIL
ICB	IRRIGATION CONTROLLER
	IRRIGATION DISTRICT MANHOLE
IVA	IRRIGATION REMOTE CONTROL VALVE
INB	IN-GROUND HOSE BIBB
IP	IRON PIPE
JP	JOINT UTILITY POLE
LP	LIGHT POLE
MB	MAIL BOX
MH	MANHOLE
MI	MANUAL IRRIGATION VALVE
MW	MONITORING WELL
PB	PULLBOX
PIV	POST INDICATOR VALVE
	UTILITY STUB
	PARKING METER
4"POST	POST; DIAMETER AS SHOWN
PP	POWER POLE
6"PVC	PVC PIPE; DIAMETER AS SHOWN
QC	QUICK COUPLER VALVE
RD	ROOF DRAIN
RDU	ROOF DRAIN UNDERGROUND
RS	ROOF SUPPORT
	STADIUM LIGHT POLE
D	STORM DRAIN MANHOLE
	SIGN
PPB	SIGNAL LIGHT PUSH BUTTON
	STREET LIGHT
4"SLE	PIPE SLEEVE; DIAMETER AS SHOWN
	SLOPE
SLPB	STREET LIGHT PULLBOX
4"SLV	PIPE SLEEVE; DIAMETER AS SHOWN
S	SEWER MANHOLE
SP	SERVICE POLE
SPB	SIGNAL PULLBOX
	SPRINKLER
4"SPO	STEEL POST; DIAMETER AS SHOWN
12"SS	SAND SEPARATOR; SIZE AS NOTED
24"STP	STAND PIPE; DIAMETER AS NOTED
12"STUMP	TREE STUMP; DIAMETER AS SHOWN
MW	SURVEY MONUMENT WELL
4"TEL	TELEPHONE; DIAMETER AS SHOWN
T	TELEPHONE MANHOLE
TN	TENNIS NET POLE
TP	TELEPHONE POLE
TPB	TELEPHONE PULLBOX
TVPB	TELEVISION PULLBOX
	TREE; SPREAD SHOWN GRAPHICALLY AND TRUNK DIAMETER AS SHOWN
TSB	TELEPHONE SPLICE BOX
	TRAFFIC SIGNAL POLE
TSPB	TRAFFIC SIGNAL PULLBOX
UP	UTILITY POLE
VB	VACUUM BREAKER
VN	VOLLEYBALL NET POST
2"VP	VENT PIPE; DIAMETER AS SHOWN
WELL	WELL
W	WATER METER
WP	WELL PUMP
6"WPO	CIRCULAR WOOD POST; DIAMETER AS SHOWN
4"X4"WPO	SQUARE WOOD POST; SIZE AS SHOWN
4"W	WATER LINE; DIAMETER AS SHOWN
WV	WATER VALVE
	ASPHALT PAVEMENT
	CONCRETE BLOCK WALL
	EXISTING BUILDING
	CONCRETE
	DETECTABLE WARNINGS
	DG OR GRAVEL
	CHAIN LINK FENCE
	EDGE OF ASPHALT PAVEMENT
	WOOD FENCE
	DIRECTION OF FLOW
E	UNDERGROUND ELECTRIC
G 8"	GAS LINE; SIZE AS NOTED
OE	OVERHEAD ELECTRIC
OT	OVERHEAD TELEPHONE
SD 18"	STORM DRAIN LINE; SIZE AS NOTED
S 12"	SEWER LINE; SIZE AS NOTED
T	UNDERGROUND TELEPHONE
W 8"	WATER LINE; SIZE AS NOTED
AG 12"	AGRICULTURAL IRRIGATION LINE; SIZE AS NOTED
A 1"	AIR LINE; SIZE AS NOTED
C	COMMUNICATION LINE
350	MAJOR GRADE CONTOUR LINE
345	MINOR GRADE CONTOUR LINE
CW 2"	CHILLED WATER LINE; SIZE AS NOTED
CWR 2"	CHILLED WATER RETURN LINE; SIZE AS NOTED
CWS 2"	CHILLED WATER SUPPLY LINE; SIZE AS NOTED
	LIMIT OF DIRT
	LIMIT OF TURF
DL 1"	DRAIN LINE; SIZE AS NOTED
EMS	EMERGENCY MANAGEMENT SYSTEM
FA	FIRE ALARM LINE
F 8"	FIRE LINE; SIZE AS NOTED
FO	FIBER OPTIC LINE
	DRAIN TUBE
HW 2"	HOT WATER LINE; SIZE AS NOTED
HWR 2"	HOT WATER RETURN LINE; SIZE AS NOTED
HWS 2"	HOT WATER SUPPLY LINE; SIZE AS NOTED
HYD	HYDRAULIC LINE
ID 18"	IRRIGATION DISTRICT; SIZE AS NOTED
	IRON FENCE
IRR 3"	IRRIGATION MAIN LINE; SIZE AS NOTED
L 1"	IRRIGATION LATERAL LINE; SIZE AS NOTED
ITS	INTELLIGENT TRAFFIC SYSTEM
JT	JOINTLY TRENCHED UTILITIES
OC	OVERHEAD COMMUNICATIONS LINE
OE	OVERHEAD ELECTRIC LINE
OEC	OVERHEAD ELECTRIC AND COMMUNICATION LINE
OET	OVERHEAD ELECTRIC AND TELEPHONE LINE
OETV	OVERHEAD ELECTRIC AND TELEVISION LINE
OETVT	OVERHEAD ELECTRIC, TELEVISION AND TELEPHONE LINE
OTS	OVERHEAD TRAFFIC SIGNAL LINE
OTV	OVERHEAD TELEVISION LINE
OU	OVERHEAD UTILITY LINE
P 6"	PETROLEUM LINE; SIZE AS NOTED
RWI 3"	RECYCLED WATER IRRIGATION LINE; SIZE AS NOTED
S&SD 8"	SEWER AND STORM DRAIN LINE; SIZE AS NOTED
SFM 6"	SEWER FORCE MAIN; SIZE AS NOTED
ST 2"	STEAM LINE; SIZE AS NOTED
TFO	TRAFFIC FIBER OPTIC LINE
TS	TRAFFIC SIGNAL LINE
TV	TELEVISION LINE
UNK	UNKNOWN UTILITY LINE
X X	WIRE FENCE
	PROPERTY LINE
	CITY LIMIT
	EASEMENT 1
	EASEMENT 2
	RIGHT-OF-WAY LINE
	RIGHT-OF-WAY CENTER LINE
	SETBACK LINE

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DSA APP# 02-121754

NOTE:

THIS TOPOGRAPHIC SURVEY LOCATES SPECIFIC PHYSICAL FEATURES OF THE SITE AND THEIR ELEVATION AS DETERMINED NECESSARY BY THE PROJECT ENGINEER. THE INFORMATION SHOWN REFLECTS THE DATA OBTAINED BY FIELD SURVEY CONDUCTED ON JANUARY 23, 2020.

SITE BENCHMARK:

BRASS CAP ON UNIVERSITY DRIVE APPROXIMATELY 148'± SOUTHWEST OF THE ALLIED HEALTH BUILDING WEST

ELEV.= 175.98 NAVD88 DATUM

UTILITY NOTE:

UTILITY INFORMATION SHOWN HEREON IS BASED ON RECORD INFORMATION SUPPLIED TO THE ENGINEER BY UTILITY COMPANIES, PUBLIC AGENCIES AND THE PROPERTY OWNER. TOGETHER WITH OBSERVATION OF VISIBLE EVIDENCE BY A FIELD SURVEY. THE ENGINEER CAN MAKE NO GUARANTEE AS TO THE ACCURACY OR COMPLETENESS OF THE UNDERGROUND UTILITY FACILITIES SHOWN. PRIOR TO ANY SITE EXCAVATIONS, THE CONTRACTOR SHALL CONTACT THE OWNER AND UNDERGROUND SERVICE ALERT (USA) AND REQUEST THAT THEY IDENTIFY THE LOCATION OF ALL UNDERGROUND UTILITIES AT THE SITE.

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — JEFFREY D. HICKS — No. 61218 — CIVIL — STATE OF CALIFORNIA
03/01/2024
Date Signed:

CONSULTANT
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453 Clovis Avenue,
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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

TOPOGRAPHIC SURVEY LEGEND

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

C101

Drawing: P:\2021\21-024\Construction\Drawings\202121-024-dwg-Topographic Survey Legend .dwg
Plot By: hylawson Apr 29, 2024 - 12:02pm

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DSA APP# 02-121754

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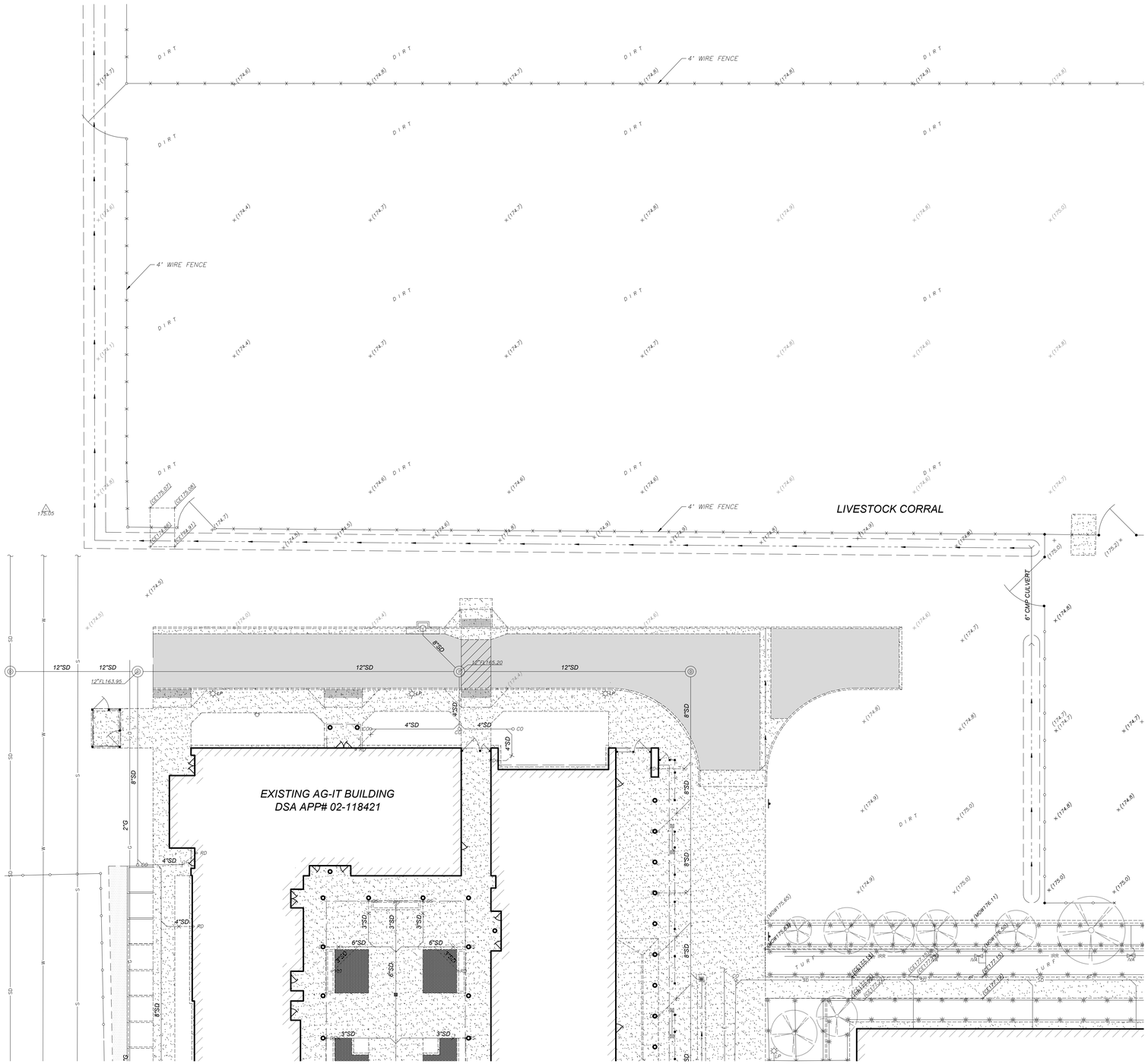
SITE BENCHMARK:

BRASS CAP ON UNIVERSITY DRIVE APPROXIMATELY 148'± SOUTHWEST OF THE ALLIED HEALTH BUILDING WEST

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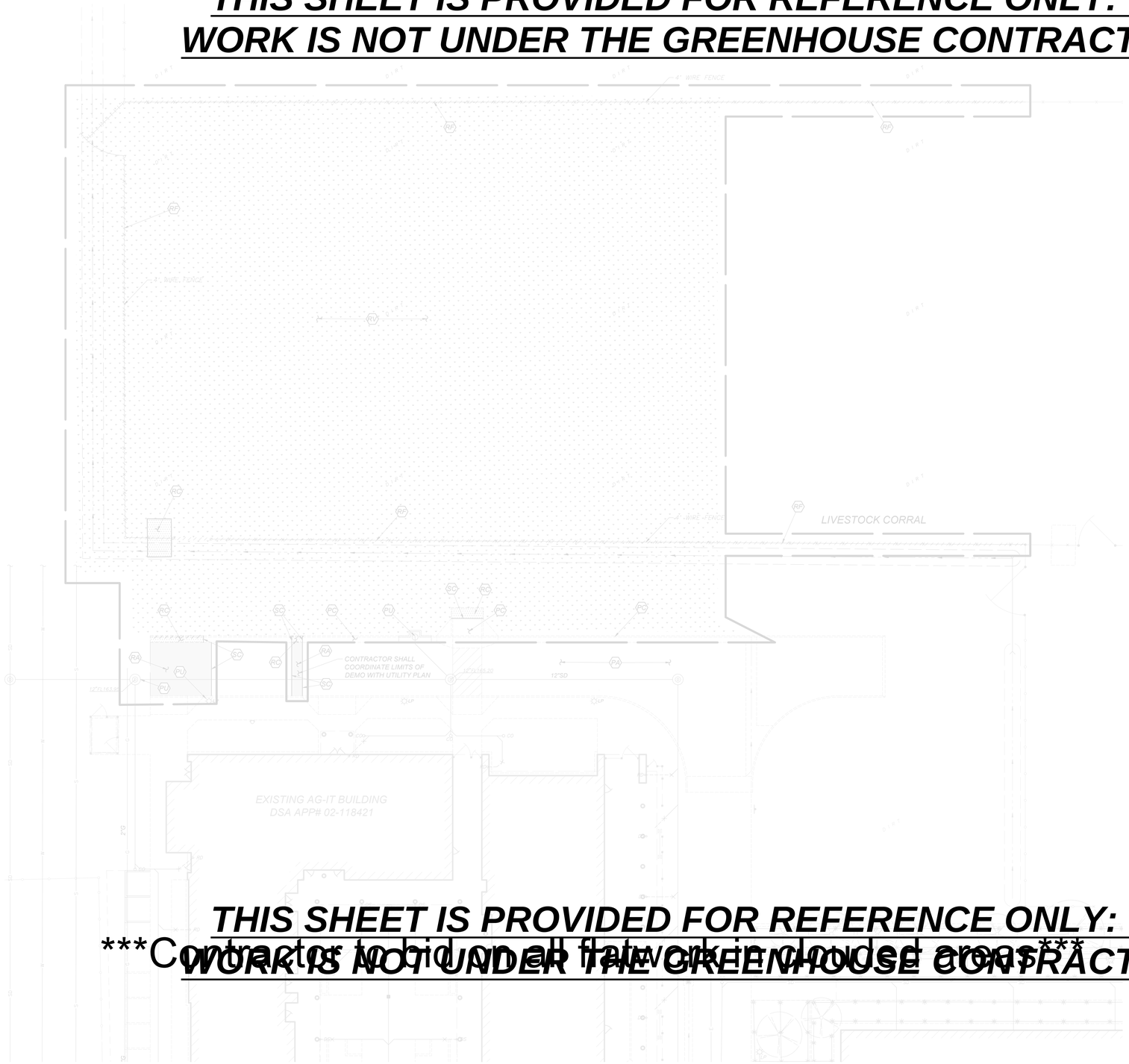
Blair, Church & Flynn CONSULTING ENGINEERS	CONSULTANT: Blair, Church & Flynn Consulting Engineers 452 Clovis Avenue, Suite 200 Clovis, California 93612 Tel (559) 326-1400 Fax (559) 326-1500	REF. & REV.	MERCED COLLEGE GREENHOUSE COMPLEX GREENHOUSE COMPLEX TOPOGRAPHIC SURVEY
REGISTERED PROFESSIONAL ENGINEER GARY D. HOLLAND No. 81218 CIVIL STATE OF CALIFORNIA 03/01/2024 Date Signed			CONST. DOCUMENTS DR. BY: AH CH. BY: ZH DATE: 03/01/2024 SCALE AS NOTED C102

Drawing: P:\2023\2412\Plans\Landscape\2412TS-Sv.dwg, Topographic Survey, 4/29/2024 12:02pm, Plot by: kylerson

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

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DSA APP# 02-121754



GENERAL DEMOLITION NOTES:

1. THE "LIMIT OF DEMOLITION" SHOWN IS APPROXIMATE AND IS GENERALLY CONSIDERED TO BE THE MINIMUM REMOVAL REQUIREMENTS. CONTRACTOR MUST COORDINATE AS NOTED IN THE LEGEND.
2. CONTRACTOR SHALL LEGALLY DISPOSE OF ALL DEMOLISHED MATERIALS OFF SITE.
3. CONTRACTOR SHALL PROTECT ALL EXISTING UTILITY IMPROVEMENTS NOT SPECIFICALLY DESIGNATED FOR REMOVAL.
4. THE ON-SITE UNDERGROUND UTILITIES SHOWN ON THIS SHEET ARE AT APPROXIMATE LOCATIONS. THE EXTENT, LOCATIONS AND SIZES ARE UNKNOWN. THE CONTRACTOR SHALL POTHOLE TO LOCATE AND VERIFY THE UNDERGROUND UTILITY LINES PRIOR TO REMOVAL.
5. CONTRACTOR TO PROTECT AND PRESERVE IN PLACE ANY FOUND SURVEY MONUMENTS. ANY MONUMENTS DISTURBED SHALL BE RESET BY A CALIFORNIA LICENSED SURVEYOR AND THE APPROPRIATE PAPERWORK FILED WITH THE CITY OR COUNTY, AT CONTRACTOR'S EXPENSE.
6. ALL HAZARDOUS MATERIALS ENCOUNTERED DURING SITE DEMOLITION SHALL BE REMEDIATED AND DISPOSED OF PER STATE AND EPA REQUIREMENTS.
7. CONTRACTOR SHALL CONTACT AND COORDINATE WITH ALL UTILITY AGENCIES PRIOR TO THE START OF ANY DEMOLITION OR CONSTRUCTION.
8. ANY EXISTING UTILITIES AND/OR IMPROVEMENTS WHICH ARE TO REMAIN, THAT BECOME DAMAGED DURING CONSTRUCTION SHALL BE COMPLETELY RESTORED TO THE SATISFACTION OF THE OWNER AND AGENCY HAVING AUTHORITY, AT THE CONTRACTOR'S SOLE EXPENSE.
9. REMOVE EXISTING IMPROVEMENTS AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS SHOWN ON THESE PLANS.
   a) FOR CONCRETE REMOVAL, REMOVE TO THE NEXT NEAREST TOOLED JOINT OR EXPANSION JOINT OF IMPROVEMENTS DESIGNATED TO REMAIN.
   b) FOR ASPHALTIC PAVEMENT REMOVAL, SAWCUT TO A STRAIGHT, CLEAN EDGE AT LOCATIONS INDICATED ON THE PLANS.
10. REFER TO ELECTRICAL PLANS FOR ADDITIONAL DEMOLITION REQUIREMENTS.

DEMOLITION LEGEND:

- REMOVE EXISTING IMPROVEMENTS AS NECESSARY TO CONSTRUCT NEW IMPROVEMENTS SHOWN ON THESE PLANS UNLESS OTHERWISE NOTED ON THE PLAN. THE REMOVAL OF IMPROVEMENTS MUST BE COORDINATED WITH ALL PLAN SHEETS. CONTRACTOR MUST ALSO COORDINATE REMOVAL OF IMPROVEMENTS WITH UTILITY AGENCIES. PROTECT ALL IMPROVEMENTS NOT DESIGNATED FOR REMOVAL. SEE NOTE 1
- LIMITS OF VEGETATION REMOVAL. 4" MINIMUM DEPTH
- LIMITS OF ASPHALTIC CONCRETE IMPROVEMENT REMOVAL
- LIMITS OF CONCRETE IMPROVEMENT REMOVAL
- (PA) PROTECT ASPHALT CONCRETE PAVEMENT TO REMAIN
- (PC) PROTECT CONCRETE IMPROVEMENTS TO REMAIN
- (PF) PROTECT FENCE TO REMAIN
- (PU) PROTECT UTILITY TO REMAIN
- (RA) REMOVE ASPHALT CONCRETE PAVEMENT STRUCTURAL SECTION
- (RC) REMOVE CONCRETE IMPROVEMENTS
- (RF) REMOVE WIRE FENCES AND GATE
- (RV) REMOVE VEGETATION
- (SC) SAWCUT
- LIMIT OF WIRE FENCE REMOVAL
- LIMIT OF CONCRETE CURB REMOVAL

Contractor to bid on all flatwork in clouded areas

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

811 Know what's below. Call before you dig.

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — BRENT D. ANDERSON — No. 57218 — CIVIL — STATE OF CALIFORNIA

03/01/2024
Date Signed:

CONSULTANT
Blair, Church & Flynn Consulting Engineers
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Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
DEMOLITION PLAN

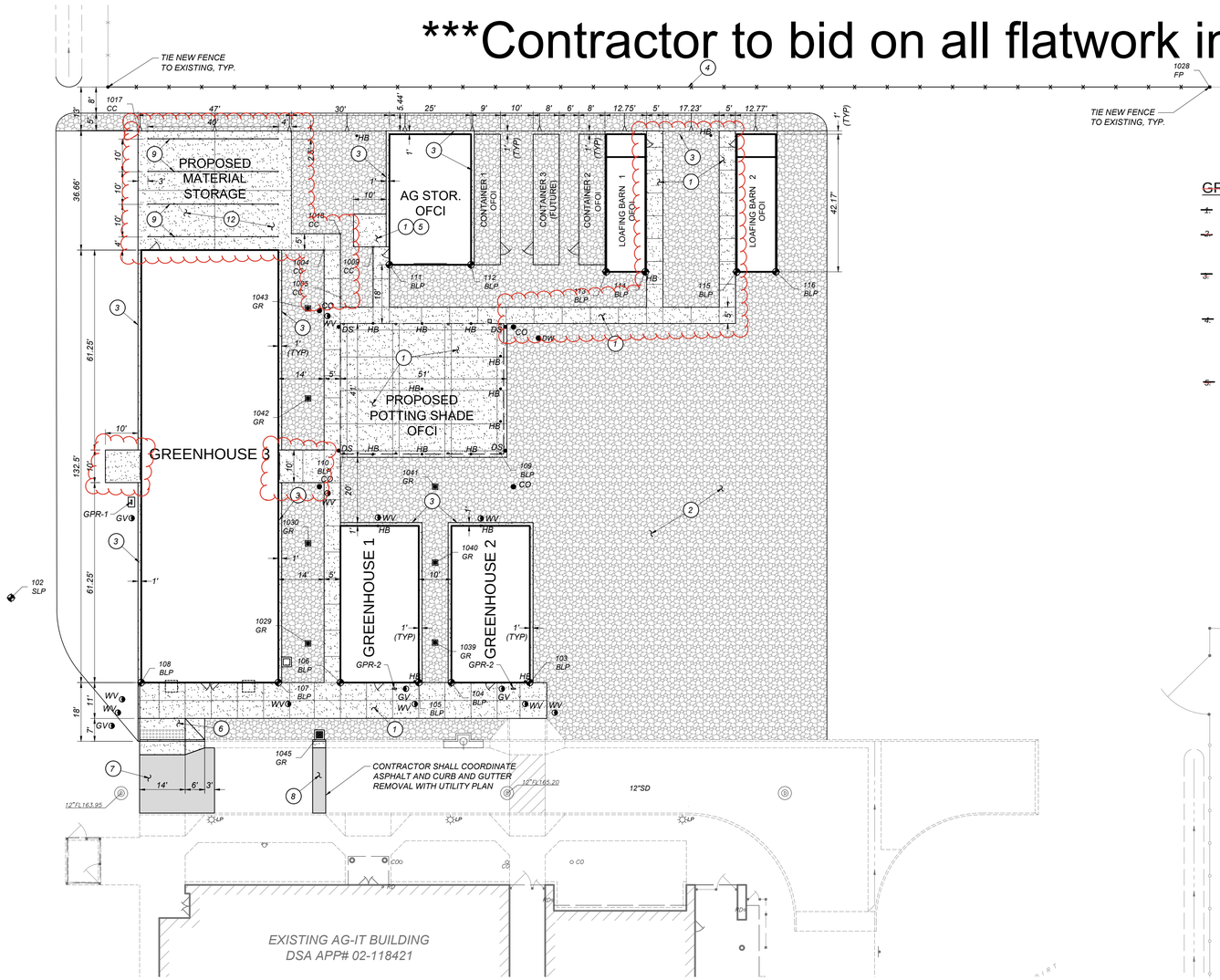
CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

C103

Drawing: P:\2023\23014\Cad\construction\23314_ar-Key Demolition Plan - BCF7.dwg
Plot by: kylarson Apr 29, 2024 - 12:02pm

Contractor to bid on all flatwork in clouded areas



GREENHOUSE BID ALTERNATE NOTES:

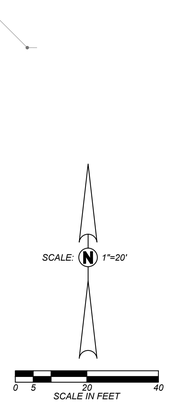
1. ~~GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.~~
2. ~~THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.~~
3. ~~BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.~~
4. ~~IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.~~
5. ~~BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL~~ CONNECTIONS TO THE GREENHOUSE BUILDINGS

GENERAL HORIZONTAL CONTROL NOTES:

1. ALIGNMENT OF THE SITE LAYOUT GRID IS BASED ON AN ASSUMED COORDINATE SYSTEM.
2. SITE LAYOUT POINT 100 IS A BRASS CAP STAMPED "SURVEY MARK" ON TOP OF THE CURB ON THE SOUTH SIDE OF UNIVERSITY DRIVE, SOUTH OF THE SOUTH-EAST CORNER OF THE AGRICULTURE AND IT BUILDING
3. SITE LAYOUT POINT 101 IS A CHISELED 'X' ON TOP OF THE CURB ON THE SOUTH SIDE OF UNIVERSITY DRIVE APPROXIMATELY 57'+/- SOUTH-WEST OF THE ENTRY TO THE AGRICULTURE AND IT BUILDING
4. SITE LAYOUT POINT 102 IS A NAIL AND TIN APPROXIMATELY 102'+/- NORTHWEST OF THE NORTHWEST CORNER OF THE AGRICULTURE AND IT BUILDING
5. DIMENSIONS AND POINTS ARE TO CENTER OF FENCE POSTS, FACE OF BUILDINGS, TOP FACE OF CURB, OR EDGE OF CONCRETE, UNLESS SHOWN OTHERWISE.

SITE NOTES:

1. ALL CONCRETE MOWSTRIPS, RAMP AND SIDEWALKS SHALL HAVE WEAKENED PLANE JOINTS AT 15 FEET MAXIMUM ON CENTER AND ONE HALF INCH EXPANSION JOINTS AT 45 FEET MAXIMUM ON CENTER PER DETAIL [A/X100]
2. INSTALL DOWELED CONNECTION AT JOINT OF NEW CONCRETE TO EXISTING CONCRETE PER DETAIL [D/X100]
3. NO CONCRETE MAY BE POURED UNTIL THE FORMS HAVE BEEN REVIEWED AND APPROVED BY THE PROJECT INSPECTOR.
4. ALL BURIED METALLIC OBJECTS SHALL HAVE A PROTECTIVE COATING OR BE WRAPPED WITH APPROVED PROTECTIVE WRAP.
5. ADJUST EXISTING SPRINKLER HEADS AND LATERAL LINES AS REQUIRED FOR NEW IMPROVEMENTS.
6. DIMENSIONS ARE TO CENTER OF FENCE POSTS, FACE OF BUILDINGS, FACE OF WALLS OR EDGE OF CONCRETE.
7. 2 WORKING DAYS BEFORE COMMENCING EXCAVATION OPERATIONS WITHIN THE STREET RIGHT-OF-WAY AND/OR UTILITY EASEMENTS, ALL EXISTING UNDERGROUND FACILITIES SHALL HAVE BEEN LOCATED BY UNDERGROUND SERVICES ALERT (USA). CALL 1-800-642-2444
8. ANY SURVEY MONUMENTS WITHIN THE AREA OF CONSTRUCTION SHALL BE PRESERVED OR RESET BY A PERSON LICENSED TO PRACTICE LAND SURVEYING IN THE STATE OF CALIFORNIA



HORIZONTAL CONTROL LEGEND:

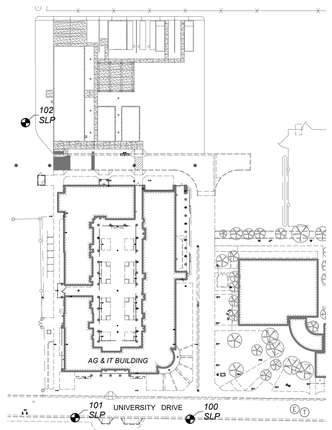
100 LCP	LAYOUT COORDINATE POINT
100 SLP	SITE LAYOUT POINT
100 BLP	BUILDING LAYOUT POINT
CC	CORNER CONCRETE
FP	FENCE POST
GR	DRAIN INLET GRATE
■	STORM DRAIN INLET, SEE GRADING AND DRAINAGE PLAN
□	BOTTLE FILLING STATION, SEE UTILITY PLAN

SITE LEGEND:

A / X101	DETAIL DESIGNATION DETAIL REFERENCE SHEET LOCATION
[A/X101]	[DETAIL DESIGNATION / SHEET LOCATION]
	LIMITS OF STANDARD DUTY CONCRETE IMPROVEMENTS
	LIMITS OF ASPHALTIC CONCRETE PAVEMENT STRUCTURAL SECTION
	LIMITS OF DECOMPOSED GRANITE
	LIMITS OF DETECTABLE WARNINGS PER DETAIL [G/X100]
1	CONCRETE SIDEWALK PER DETAIL [A/X100]
2	4" STABILIZED DECOMPOSED GRANITE PER [B/X100]
3	CONCRETE MOWSTRIP PER DETAIL [C/X100]
4	BARBED WIRE WITH ELECTRIC DETERRENT WIRE FENCE TO MATCH EXISTING FENCE
5	ELECTRICAL EQUIPMENT PAD, SEE ELECTRICAL PLANS FOR FURTHER INFORMATION
6	ACCESSIBLE CURB RAMP PER DETAIL [F/X100]
7	HEAVY DUTY ASPHALT CONCRETE PAVEMENT PER DETAIL [I/X100]
8	ASPHALT CONCRETE PLUG PER DETAIL [J/X100]
9	MATERIAL STORAGE BAY WOOD WALLS PER DETAIL [K/X100]
10	CONTRACTOR TO VERIFY THAT PARKING STALL SIGNAGE MEETS THE MINIMUM REQUIREMENTS OF DETAIL [A/C100]. IF SIGNAGE DOES NOT MEET THE MINIMUM REQUIREMENTS, CONTRACTOR SHALL INSTALL NEW SIGNAGE ON EXISTING POST PER DETAIL [A/C100]
11	CONTRACTOR TO VERIFY THAT TOW AWAY SIGNAGE MEETS THE MINIMUM REQUIREMENTS OF DETAIL [B/C100]. IF SIGNAGE DOES NOT MEET THE MINIMUM REQUIREMENTS, CONTRACTOR SHALL INSTALL NEW SIGNAGE ON EXISTING POST PER DETAIL [B/C100]
12	HEAVY DUTY CONCRETE PER DETAIL [J/A600]

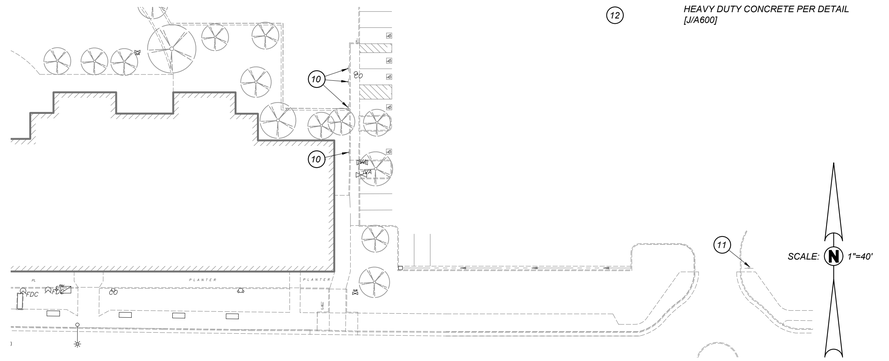
NORTHING EASTING TABLE				
POINT	NORTHING	EASTING	ABV	DESCRIPTION
100	1945050.08	6569563.59	SLP	SITE LAYOUT POINT
101	1945052.16	6569403.02	SLP	SITE LAYOUT POINT
102	1945464.64	6569333.71	SLP	SITE LAYOUT POINT
103	1945438.69	6569492.58	BLP	BUILDING LAYOUT POINT
104	1945438.69	6569468.58	BLP	BUILDING LAYOUT POINT
105	1945438.69	6569458.57	BLP	BUILDING LAYOUT POINT
106	1945438.69	6569434.58	BLP	BUILDING LAYOUT POINT
107	1945438.69	6569415.59	BLP	BUILDING LAYOUT POINT
108	1945438.69	6569373.58	BLP	BUILDING LAYOUT POINT
109	1945508.90	6569483.58	BLP	BUILDING LAYOUT POINT
110	1945508.90	6569435.58	BLP	BUILDING LAYOUT POINT
111	1945566.69	6569449.60	BLP	BUILDING LAYOUT POINT
112	1945566.69	6569474.60	BLP	BUILDING LAYOUT POINT
113	1945564.52	6569516.00	BLP	BUILDING LAYOUT POINT
114	1945564.52	6569528.00	BLP	BUILDING LAYOUT POINT
115	1945564.52	6569555.97	BLP	BUILDING LAYOUT POINT
116	1945564.52	6569567.97	BLP	BUILDING LAYOUT POINT
1004	1945571.19	6569429.58	CC	CORNER CONCRETE
1005	1945556.69	6569434.58	CC	CORNER CONCRETE
1009	1945572.19	6569444.60	CC	CORNER CONCRETE

POINT	NORTHING	EASTING	ABV	DESCRIPTION
1017	1945607.85	6569372.58	CC	CORNER CONCRETE
1018	1945576.19	6569434.58	CC	CORNER CONCRETE
1028	1945621.13	6569700.85	FP	FENCE POST
1029	1945450.69	6569424.65	GR	DRAIN INLET GRATE
1030	1945481.32	6569424.65	GR	DRAIN INLET GRATE
1039	1945450.94	6569463.58	GR	DRAIN INLET GRATE
1040	1945475.44	6569463.58	GR	DRAIN INLET GRATE
1041	1945498.69	6569463.59	GR	DRAIN INLET GRATE
1042	1945525.73	6569424.65	GR	DRAIN INLET GRATE
1043	1945553.31	6569424.65	GR	DRAIN INLET GRATE
1045	1945422.69	6569428.14	GR	DRAIN INLET GRATE



SITE LAYOUT POINTS

811 Know what's below. Call before you dig.



PARKING LOT A

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DSA APP# 02-121754

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER TROY D. HOLLAND No. 81218 CIVIL STATE OF CALIFORNIA 03/01/2024 Date Signed

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Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

SITE PLAN & HORIZONTAL CONTROL

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

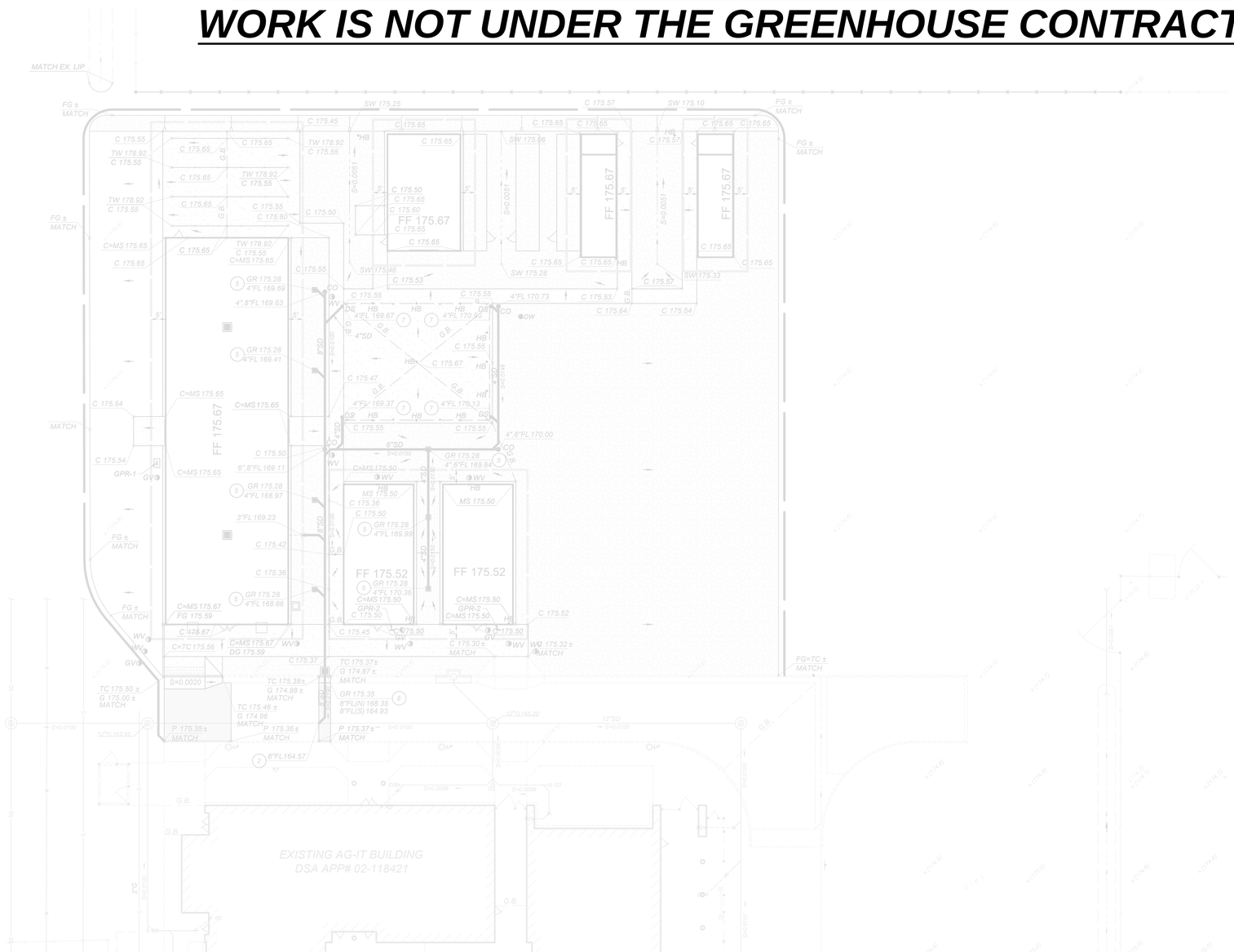
C104

Drawing: P:\2022\2412\Drawings\Arch\2412A_ARTWorkingDrawings.dwg Plotted by: kylerson Apr 29, 2024 - 12:02pm

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GENERAL GRADING AND DRAINAGE NOTES:

THE REQUIREMENTS AND INFORMATION SET OUT BELOW ARE PROVIDED FOR THE CONTRACTOR'S CONVENIENCE AND DO NOT ENCOMPASS ALL PROJECT REQUIREMENTS DESCRIBED BY THE PROJECT PLANS AND SPECIFICATIONS AND/OR APPLICABLE LAWS, REGULATIONS AND/OR BUILDING CODES.

1. CONSTRUCTION OF ALL PROJECT SITE IMPROVEMENTS SUBJECT TO ADA ACCESS COMPLIANCE, INCLUDING ACCESSIBLE PATH OF TRAVEL, CURB RETURNS, PARKING STALL(S) AND UNLOADING AREAS, BARRIER FREE AMENITIES AND/OR OTHER APPLICABLE SITE IMPROVEMENTS SHALL CONFORM TO THE AMERICANS WITH DISABILITIES ACT, CALIFORNIA TITLE 24, AND THE CALIFORNIA BUILDING CODE, CURRENT EDITION(S).
2. CONTRACTOR SHALL FIELD VERIFY ALL GRADES AND SLOPES PRIOR TO THE PLACEMENT OF CONCRETE AND/OR PAVEMENT FOR CONFORMANCE WITH ADA ACCESS COMPLIANCE REQUIREMENTS. EXAMPLES OF MINIMUM AND MAXIMUM LIMITS RELATED TO ADA ACCESS COMPLIANCE INCLUDE, BUT ARE NOT LIMITED TO:
   a) ACCESSIBLE PATH OF TRAVEL CROSS-SLOPE SHALL NOT EXCEED 2%
   b) ACCESSIBLE PATH OF TRAVEL LONGITUDINAL SLOPES SHALL NOT EXCEED 5%
   c) RAMP LONGITUDINAL SLOPES SHALL NOT EXCEED 8.33%
   d) WALKS SHALL NOT HAVE LESS THAN 48 INCHES IN UNOBSTRUCTED WIDTH
   e) ACCESSIBLE PARKING SPACES AND ACCESS AISLES SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION
   f) LANDINGS AT THE TOP AND BOTTOM OF ACCESSIBLE RAMPS SHALL NOT EXCEED 2% SLOPE IN ANY DIRECTION
   g) GUTTERS AND ROAD SURFACES DIRECTLY ADJACENT TO AND WITHIN 2 FEET OF A CURB RAMP SHALL HAVE A COUNTER SLOPE NOT TO EXCEED 5%
3. CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IDENTIFIED BY THE PROFESSIONAL ENGINEERING SEAL AND SIGNATURE ON THESE PLANS, OF ANY SITE CONDITION(S) AND/OR DESIGN INFORMATION THAT PREVENTS THE CONTRACTOR FROM COMPLYING WITH THE LAWS, REGULATIONS AND/OR BUILDING CODES GOVERNING ADA ACCESS COMPLIANCE.
4. GROUND SLOPES AWAY FROM BUILDING PADS IN LANDSCAPED OR DIRT AREAS SHALL BE NO LESS THAN 5% FOR AT LEAST TEN (10) FEET, OR AS OTHERWISE NOTED ON THE PLANS.
5. DRAINAGE SHALL NOT BE ALLOWED ONTO ADJACENT PROPERTY.
6. ALL FILL MATERIAL USED TO SUPPORT THE FOUNDATIONS OF ANY BUILDING OR STRUCTURE SHALL BE PLACED UNDER THE DIRECTION OF A LICENSED GEOTECHNICAL ENGINEER, AND IN COMPLIANCE WITH THE PROJECT SPECIFICATIONS. A SOILS COMPACTION REPORT SHALL BE SUBMITTED TO THE ENGINEER OF RECORD AS REQUIRED BY THE PROJECT SPECIFICATIONS.
7. THE CONTRACTOR SHALL IMPLEMENT DUST CONTROL MEASURES AS REQUIRED BY THE PROJECT SPECIFICATIONS, AND BY GOVERNING PUBLIC AGENCIES.
8. THIS PROJECT IS SUBJECT TO AN EROSIVITY WAIVER GRANTED BY THE STATE WATER RESOURCES CONTROL BOARD; HOWEVER, THE EROSIVITY WAIVER IS BASED ON CONSTRUCTION BEING COMPLETED BEFORE THE BEGINNING OF NOVEMBER. IF THE PROJECT EXTENDS INTO NOVEMBER, A SWPPP MAY BE REQUIRED. CONTRACTOR SHALL NOTIFY THE OWNER AND THE ENGINEER OF RECORD IMMEDIATELY IF THE PROJECT IS PROJECTED TO EXTEND INTO NOVEMBER FOR ANY REASON. SEE THE PROJECT SPECIFICATIONS.
9. AS A FIRST ORDER OF WORK, THE CONTRACTOR SHALL POT HOLE THE EXISTING UTILITY LINES AT THE POINT OF CONNECTION TO VERIFY THE LOCATION, SIZE, PIPE MATERIAL AND ELEVATION SO THAT THE ENGINEER CAN MAKE ELEVATION AND/OR ALIGNMENT ADJUSTMENTS IF NECESSARY. THE CONTRACTOR SHALL ALSO POT HOLE WHERE PROPOSED UTILITIES ARE SHOWN TO CROSS OR BE PROXIMATE TO EXISTING UTILITIES. NOTIFY THE ENGINEER OF ANY CONFLICTS AND OBTAIN DIRECTION BEFORE PROCEEDING.
10. ADJUST UTILITY LIDS WITHIN NEW CONSTRUCTION AREA TO FINISHED GRADE PER DETAIL [E/X100]. REPLACE ALL BROKEN LIDS WITH NEW. PROVIDE TRAFFIC RATED LIDS WITHIN VEHICLE LOADING AREAS.
11. CONTRACTOR TO WATER TEST PAVEMENT WITHIN NEW IMPROVEMENT AREA. CONTRACTOR TO REPLACE PAVEMENT WHERE BIRD BATHS OCCUR AFTER TEST AS DIRECTED BY THE INSPECTOR OR ENGINEER.

GRADING LEGEND:

C	CONCRETE
FF	FINISHED FLOOR
G	GUTTER
MS	MOWSTRIP
P	PAVEMENT
SW	SWALE
TC	TOP OF CURB
TW	TOP OF WALL
(344.9)	EXISTING ELEVATION
C328.78	NEW FINISHED GRADE
	DIRECTION OF DRAINAGE
	BUILDING OVER-EXCAVATION LIMITS; SEE DETAIL [H/X100]
G.B.	GRADE BREAK
	LIMITS OF GRADING
S=0.0050	PIPE SLOPE AND DIRECTION OF FLOW
	SWALE
6"SD	PVC STORM DRAIN PIPELINE; SIZE AS NOTED. TRENCH AND BACKFILL PER [G/X200]
S=0.0020	FLOWLINE SLOPE AND DIRECTION OF FLOW
	U23 STORM DRAIN INLET
	V12 STORM DRAIN INLET
1	NOT USED
2	CONNECT TO EXISTING STORM DRAIN WITH WATER-TIGHT CONNECTION
3	NOT USED
4	NOT USED
5	V12 STORM DRAIN INLET PER DETAIL [F/X200]
6	U23 STORM DRAIN INLET PER DETAIL [H/X200]
7	HARD-PIPED CONNECTION TO SHADE CANOPY DOWNSPOUT PER DETAIL [E/X200]
CO	SURFACE CLEANOUT PER DETAIL [C/X200]
DS	DOWNSPOUT

STABILIZATION NOTES:

1. CONTRACTOR SHALL BE RESONSBILE FOR STABLIZING ALL EARTH AND SURFACES DISTURBED AS PART OF THIS PROJECT, INCLUDING LAY DOWN AREAS AND AREAS OUTSIDE THE LIMITS OF THE PROJECT WHICH ARE DISTURBED BY THE PROJECT
2. STABILIZATION SHALL BE HYDRO-SEEDING, OR SIMILAR PER THE CONSTRUCTION GENERAL PERMIT ORDER SECTION III.H

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Contractor to bid on all flatwork in clouded areas

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Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — ROBERT D. ANDERSON — No. 57218 — CIVIL — STATE OF CALIFORNIA

03/01/2024
Date Signed:

CONSULTANT
Blair, Church & Flynn Consulting Engineers
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Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

GRADING AND DRAINAGE PLAN

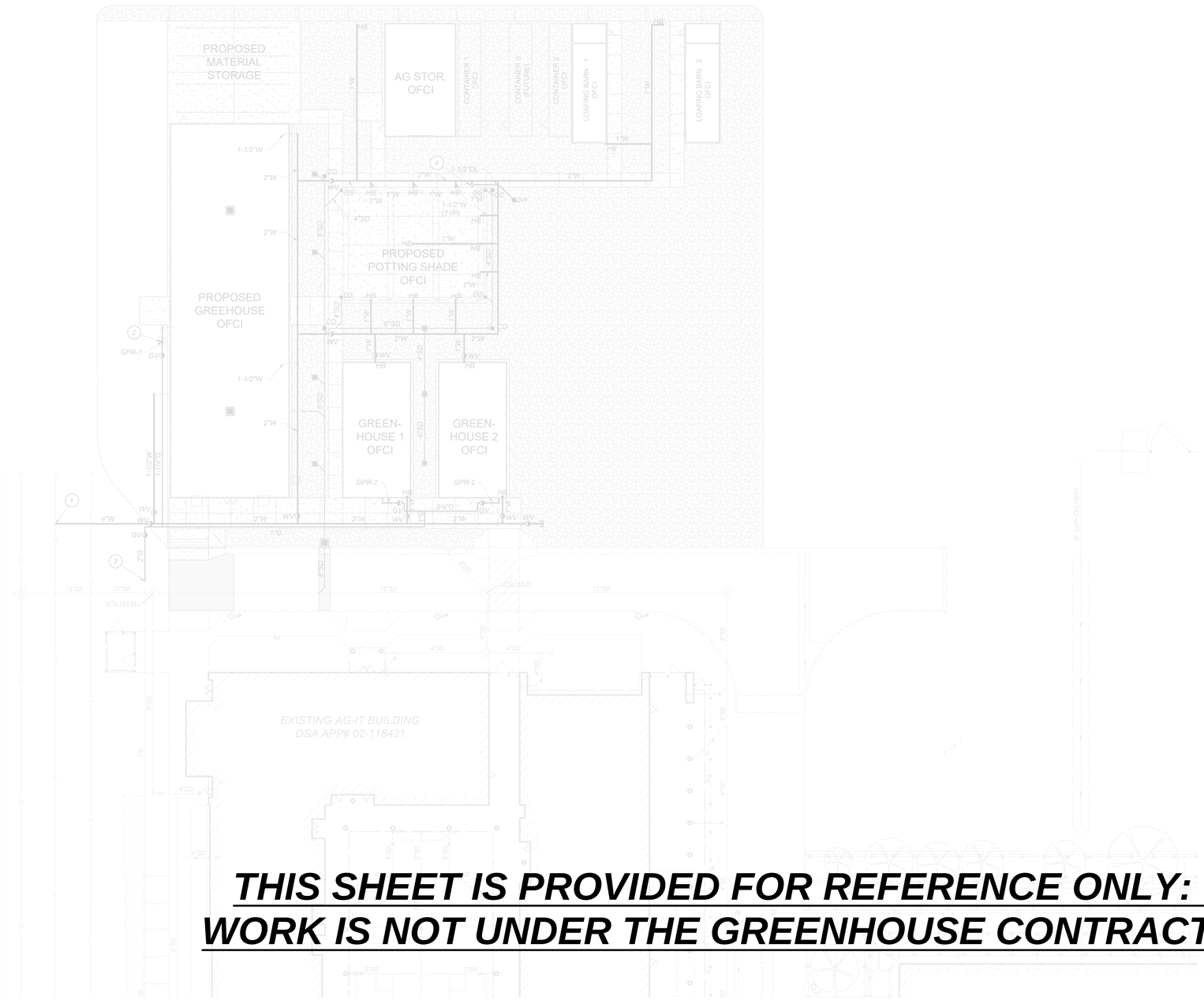
CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

C105

Drawing: P:\2022\04\Cad\Construction\C105 Fin Floor Grading Plan .dwg
Plot by: kylarsson Apr 29, 2024 - 12:03pm

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DSA APP# 02-121754

GENERAL SITE UTILITY NOTES:

1. AS FIRST ORDER OF WORK, CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AND NOTIFY ENGINEER IMMEDIATELY OF LOCATIONS, SIZE AND DEPTH.
2. THE CONTRACTOR SHALL FIELD VERIFY THE EXACT LOCATION, SIZE, DEPTH, AND TYPE OF ALL EXISTING UTILITIES AND INTERFERENCES SITUATED ALONG THE ROUTE OF THE PROPOSED CONSTRUCTION PRIOR TO COMMENCEMENT OF EXCAVATION, FABRICATION, AND INSTALLATION. THE CONTRACTOR SHALL CONSTRUCT ALL IMPROVEMENTS IN SUCH A MANNER AS WILL PROTECT ALL EXISTING UNDERGROUND UTILITIES AND. IN THE EVENT OF ANY CONFLICTS, SHALL NOTIFY THE ENGINEER BEFORE PROCEEDING.
3. SEE IRRIGATION PLANS FOR PROPOSED IRRIGATION PIPE ALIGNMENT.
4. COORDINATE EXACT POINTS OF CONNECTION TO PLUMBING BY OTHERS AND NOTIFY THE ENGINEER OF ANY CONFLICT SO THAT ADJUSTMENTS CAN BE MADE IF NEEDED.
5. SAWCUT EXISTING CONCRETE IMPROVEMENTS AS NECESSARY TO INSTALL NEW WATER OR SEWER IMPROVEMENTS. CONSTRUCT NEW CONCRETE IMPROVEMENTS TO MATCH ADJACENT CONCRETE IMPROVEMENTS AND JOIN TOGETHER WITH DOWEL BARS PER DETAIL [D/X100].
6. INSTALLATION, TYPE, AND MANUFACTURER'S MODELS OF DOMESTIC WATER METERS, DRAIN INLETS/OUTLETS AND OTHER APPURTENANCES OF SITE UTILITY SYSTEMS SHALL BE DONE IN STRICT ACCORDANCE WITH GOVERNING AUTHORITY REQUIREMENTS.
7. LAYOUT OF MATERIALS, EQUIPMENT AND SYSTEMS IS GENERALLY DIAGRAMMATIC UNLESS SPECIFICALLY DIMENSIONED. SOME WORK MAY BE SHOWN OFFSET FOR CLARITY. THE ACTUAL LOCATIONS OF ALL MATERIALS, PIPING, FIXTURES, EQUIPMENT, SUPPORTS, ETC., SHALL BE CAREFULLY PLANNED PRIOR TO INSTALLATION OF ANY WORK TO AVOID ALL INTERFERENCES WITH EACH OTHER OR WITH STRUCTURAL, ELECTRICAL, PLUMBING AND MECHANICAL, ARCHITECTURAL OR ANY OTHER ELEMENTS. ALL CONFLICTS SHALL BE CALLED TO THE ATTENTION OF THE ARCHITECT AND THE ENGINEER PRIOR TO THE INSTALLATION OF ANY WORK OR THE ORDERING OF ANY EQUIPMENT.
8. ANY INSPECTION TO BE MADE BY THE PROJECT INSPECTOR SHALL REQUIRE A MINIMUM OF 24 HOUR NOTICE.
9. PRESSURE TESTS AND PURITY TESTS ARE REQUIRED ON ALL WATER SYSTEM INSTALLATIONS. CONTRACTOR TO COORDINATE WITH THE AUTHORITY HAVING JURISDICTION.
10. IF THE TOP OF THE STEM OF ANY WATER GATE VALVE IS DEEPER THAN 4' BELOW FINISHED PAVEMENT GRADE, THE CONTRACTOR SHALL INSTALL A STEM EXTENSION SO THAT THE TOP OF THE STEM, WITH EXTENSION, SHALL BE NO DEEPER THAN 4' NOR SHALLOWER THAN 2' FROM FINISHED GRADE.
11. BACKFILL UTILITY TRENCHES PER DETAIL [G/X200]
12. ADJUST EXISTING UTILITY LIDS TO FINISHED GRADE PER UTILITY COMPANY STANDARDS AND DETAIL [E/X100] AND INSTALL TRAFFIC RATED LIDS WHERE LOCATED IN A TRAFFIC AREA.

UTILITY LEGEND:

6"W	PVC WATER LINE, SIZE AS NOTED ON PLAN. THRUST BLOCKS PER DETAIL [A/X200]. PIPE BEDDING AND BACKFILL PER DETAIL [G/X200]
6"SD	STORM DRAIN PIPE. SEE GRADING PLAN
G	GAS LINE, 5LB
•HB	HOSE BIBB PER DETAIL [D/X200]
WV	WATER VALVE PER [B/X200]
GV	GAS SHUT-OFF VALVE PER [A/X201]
DW	DRY WELL PER [E/X201]
E	CAP END OF UTILITY LINE.
1	CONNECT TO EXISTING WATER LINE WITH WATER- TIGHT CONNECTION.
2	GAS PRESSURE REGULATOR VALVE PER [B/X201] ; PROVIDE HOUSEKEEPING PAD
3	CONNECT TO EXISTING GAS LINE
4	BOTTLE FILLING STATION PER DETAIL [D/X201]

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REGISTERED PROFESSIONAL ENGINEER — ROBERT D. ARMSTRONG — No. 87218 — CIVIL — STATE OF CALIFORNIA

Date Signed: 03/01/2024

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

UTILITY PLAN

CONST. DOCUMENTS

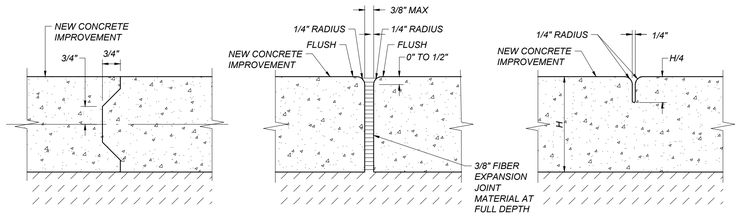
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CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

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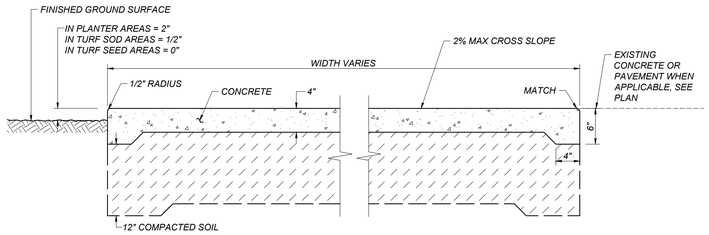
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Plot by: kylarsson Apr 29, 2024 - 12:03pm

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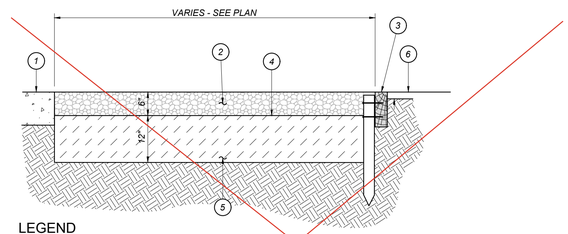
DSA APP# 02-121754



CONSTRUCTION JOINT | EXPANSION JOINT | WEAKENED PLANE JOINT



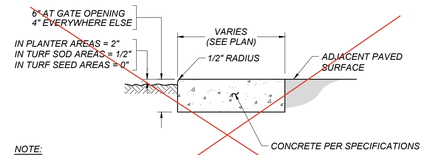
A X100 REGULAR-DUTY CONCRETE
NOT TO SCALE



LEGEND

1. ADJACENT PAVED SURFACE OR CURB. WHERE DG IS ADJACENT TO WALKABLE SURFACE, TOP OF DG IS TO BE LEVEL WITH PAVEMENT'S FINISH SURFACE.
2. 3/4" MAX TYPE 2 AGGREGATE BASE, COMPACTED TO 95%.
3. COMPOSITE WOOD 2x4 HEADER WITH BEVELED JOINTS. SECURE WITH METAL STAKES AT 6' O.C. AND AT EACH SIDE OF JOINT OR CORNER.
4. NON-WOVEN GEOTEXTILE FABRIC, MINIMUM 4.0 OZ/SY. WRAP UP 1.5" HIGH ON ALL SIDES OF HEADER.
5. SUBGRADE. SCARIFY TO A DEPTH OF 12" MOISTURE CONDITION AND RECOMPACT TO 95% RELATIVE DENSITY.
6. FINISH GRADE IN PLANTING AREA SHALL BE 2" BELOW TOP OF HEADER FOR MULCH, 0.5" BELOW FOR TURF SOD, FLUSH FOR TURF SEED OR STOLONS.

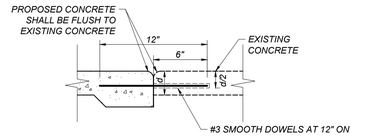
B X100 ~~STABILIZED DECOMPOSED GRANITE SURFACE~~
NOT TO SCALE



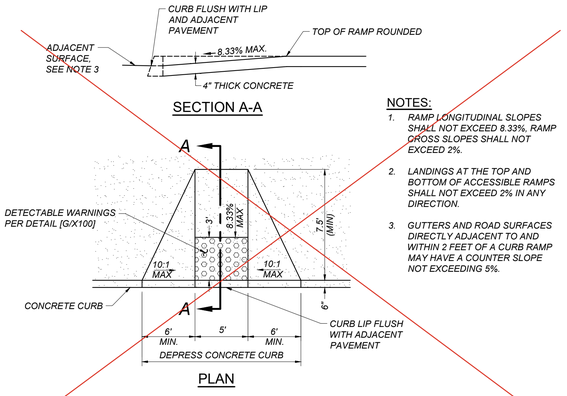
NOTE:

WHERE MOWSTRIP IS ADJACENT TO OR IN A VEHICULAR PATH, PROVIDE 2 EVENLY SPACED, CONTINUOUS #4 REBAR WITH #4 REBAR AT 36" O.C. PERPENDICULAR TO THE LONGITUDINAL AXIS OF THE MOWSTRIP

C X100 ~~CONCRETE MOWSTRIP~~
NOT TO SCALE



D X100 DOWEL BAR DETAIL
NOT TO SCALE



PLAN

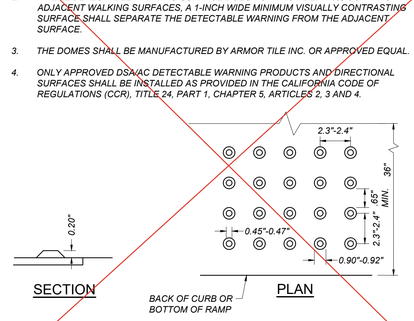
NOTES:

1. RAMP LONGITUDINAL SLOPES SHALL NOT EXCEED 8.33%, RAMP CROSS SLOPES SHALL NOT EXCEED 2%.
2. LANDINGS AT THE TOP AND BOTTOM OF ACCESSIBLE RAMPS SHALL NOT EXCEED 2% IN ANY DIRECTION.
3. GUTTERS AND ROAD SURFACES DIRECTLY ADJACENT TO AND WITHIN 2 FEET OF A CURB RAMP MAY HAVE A COUNTER SLOPE NOT EXCEEDING 5%.

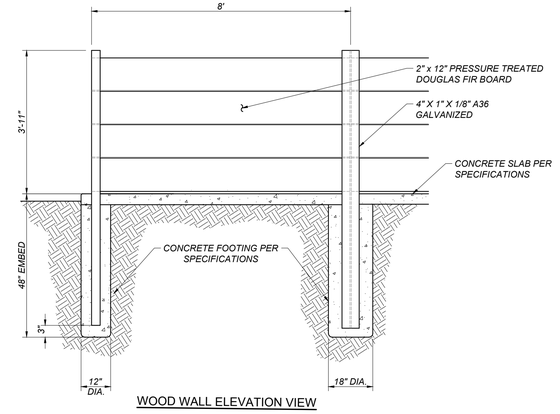
F X100 ~~CONCRETE CURB RAMP~~
NOT TO SCALE

NOTES:

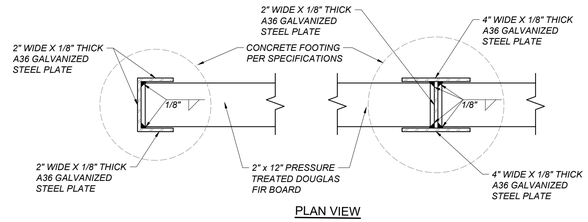
1. THE DETECTABLE WARNING SURFACE SHALL BE YELLOW AND APPROXIMATE FS 33538 OF SAE AMSSTD-595A.
2. WHERE DETECTABLE WARNING SURFACE DOES NOT PROVIDE A 70% CONTRAST WITH ADJACENT WALKING SURFACES, A 1-INCH WIDE MINIMUM VISUALLY CONTRASTING SURFACE SHALL SEPARATE THE DETECTABLE WARNING FROM THE ADJACENT SURFACE.
3. THE DOMES SHALL BE MANUFACTURED BY ARMOR TILE INC. OR APPROVED EQUAL.
4. ONLY APPROVED DSA/AC DETECTABLE WARNING PRODUCTS AND DIRECTIONAL SURFACES SHALL BE INSTALLED AS PROVIDED IN THE CALIFORNIA CODE OF REGULATIONS (CCR), TITLE 24, PART 1, CHAPTER 5, ARTICLES 2, 3 AND 4.



G X100 ~~DETECTABLE WARNINGS~~
NOT TO SCALE

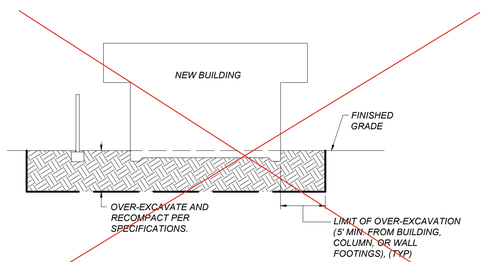


WOOD WALL ELEVATION VIEW



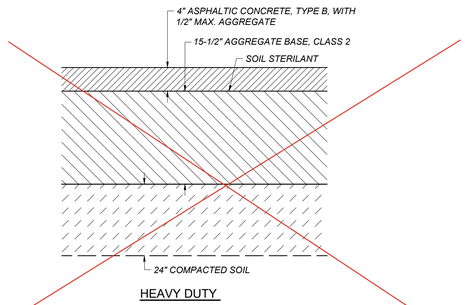
PLAN VIEW

K X100 MATERIAL STORAGE BAY WOOD WALL
NOT TO SCALE
NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1



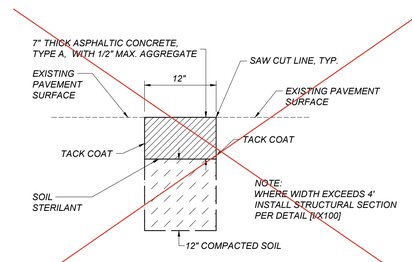
E X100 ADJUST UTILITY LID
NOT TO SCALE

H X100 ~~OVER EXCAVATION DETAIL~~
NOT TO SCALE



HEAVY DUTY

I X100 ~~HEAVY DUTY ASPHALT CONCRETE PAVEMENT~~
NOT TO SCALE



J X100 ~~ASPHALT CONCRETE PLUG~~
NOT TO SCALE

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — GARY D. HUNT — No. 57218 — CIVIL — STATE OF CALIFORNIA

03/01/2024
Date Signed:

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
SITE DETAILS

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

X100

Drawing: P:\2022\22-029\Construction\Drawings\22029-C_ARCH.dwg, Site Details, ARCH.ctb
Plot by: kvierson, Apr 29, 2024 - 12:52pm

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DSA APP# 02-121754

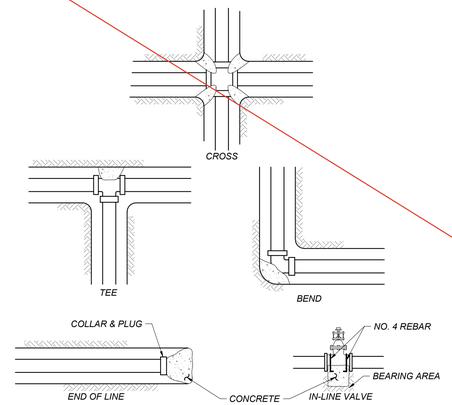
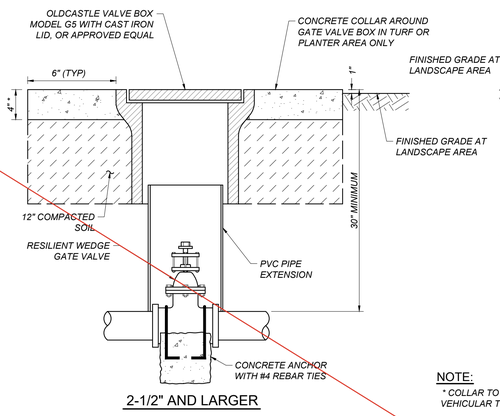


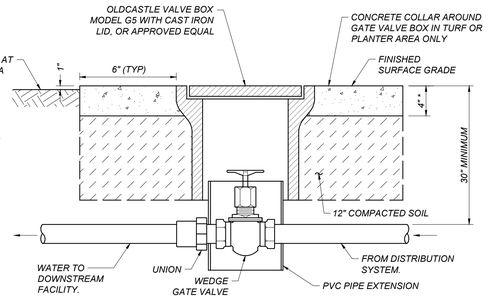
Table Of Bearing Areas Required (In Square Feet)*					
Pipe Diameter	4" Or Smaller	6"	8"	10"	12"
Cross, Tee, 90° Bend, Plug, Hydrant, Valve	6.3	13.2	22.7	34.2	48.3
45° Bend	3.4	7.1	12.3	18.5	26.1
22 1/2° Bend	1.7	3.6	9.4	9.4	13.3
11 1/4° Bend	0.9	1.8	4.7	4.7	6.7

* TABLE CALCULATED BASED ON NFPA 24, CURRENT EDITION TABLE A.10.8.2(b), WITH 250 PSI WATER PRESSURE AND 1500 PSF SOIL BEARING PRESSURE.

A X200 CONCRETE THRUST BLOCKS
NOT TO SCALE



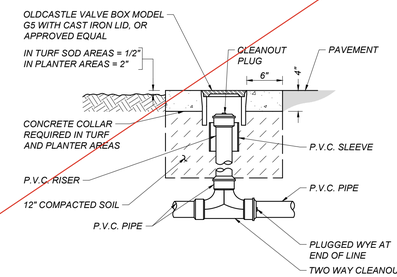
2-1/2" AND LARGER



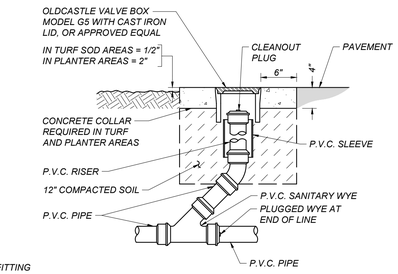
2" AND SMALLER

NOTE:
* COLLAR TO BE 6" THICK IN VEHICULAR TRAFFIC AREAS

B X200 GATE VALVE AND LID
NOT TO SCALE



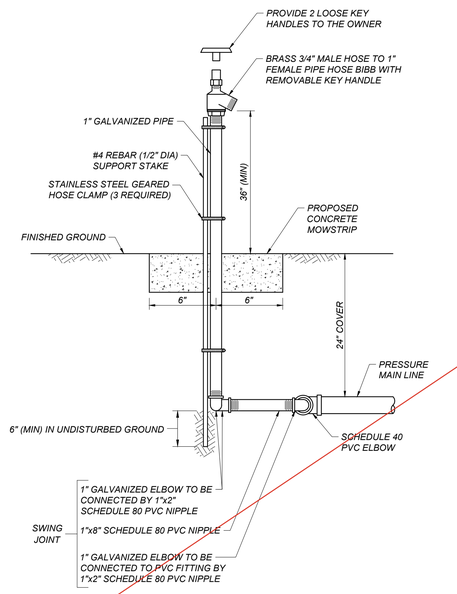
TWO-WAY



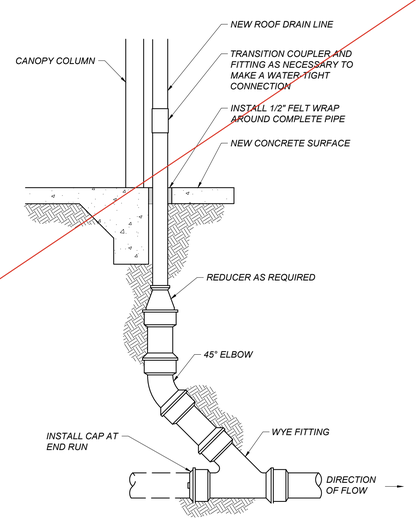
ONE-WAY

NOTES:
1. USE ONE-WAY CLEANOUTS AT ALL ANGLE POINTS
2. TWO-WAY CLEANOUTS AT ALL OTHER LOCATIONS
3. 6" THICK CONCRETE COLLAR IN VEHICULAR TRAFFIC AREAS

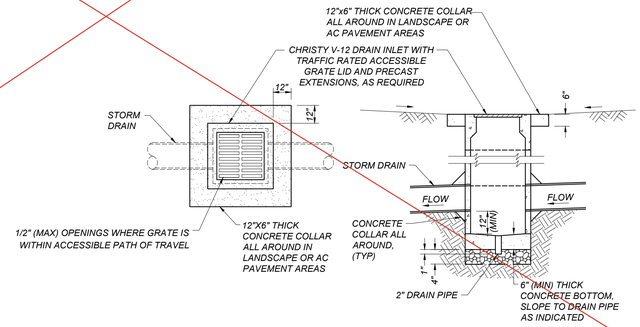
C X200 SURFACE CLEANOUT
NOT TO SCALE



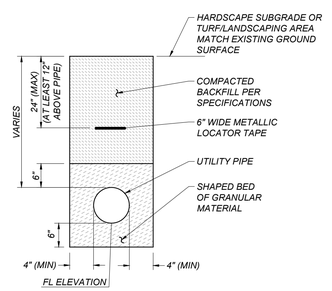
D X200 HOSE BIBB INSTALLATION
NOT TO SCALE



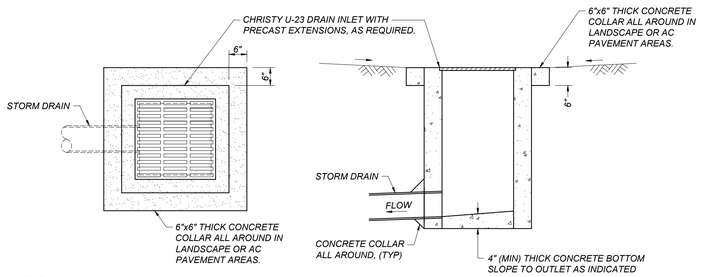
E X200 SHADE CANOPY DOWN-SPOUT CONNECTION
NOT TO SCALE



F X200 V-12 DRAIN INLET WITH CONCRETE COLLAR
NOT TO SCALE



G X200 TRENCH DETAIL FOR UTILITY LINES
NOT TO SCALE



H X200 U-23 DRAIN INLET WITH CONCRETE COLLAR
NOT TO SCALE

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — ROBERT D. ANDERSON — No. 87218 — CIVIL — STATE OF CALIFORNIA
03/01/2024
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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

UTILITY DETAILS

CONST. DOCUMENTS

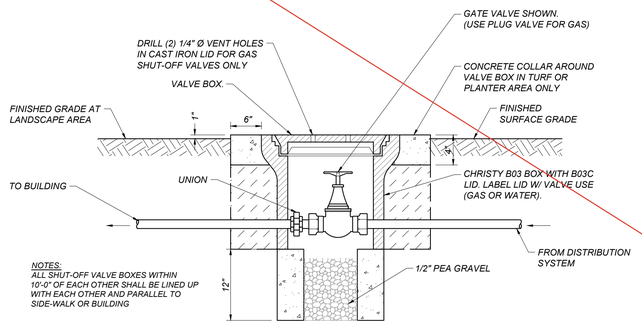
DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

X200

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Plot by: kvansoest Apr 29, 2024 - 12:03pm

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DSA APP# 02-121754

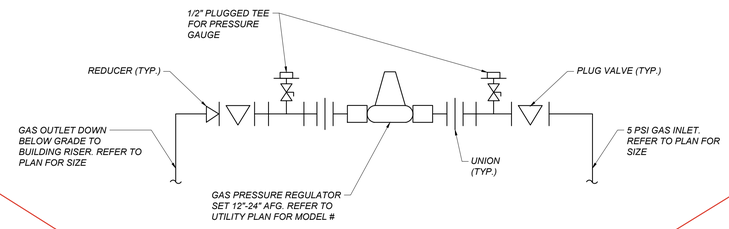


A X201 SHUT-OFF VALVE IN BOX DETAIL

NOT TO SCALE

MODEL IDENTIFIERS:

LARGE GREENHOUSE	GPR-1	MAXITROL #325-7AL210D-B (OR EQUAL) CSA 6.22/ANSI Z21.80 LISTED GAS PRESSURE REGULATOR WITH OVER-PRESSURE DEVICE 210D AND IMBLUE TECHNOLOGY, 1-1/4" INLET AND OUTLET SIZE, 1,250 CFH CAPACITY AT 5 PSI INLET PRESSURE AND SET AT 11"W.C. OUTLET PRESSURE
LARGE GREENHOUSE(S)	GPR-2	MAXITROL #325-5L48 (OR EQUAL) CSA 6.22/ANSI Z21.80 LISTED GAS PRESSURE REGULATOR WITH OVER-PRESSURE DEVICE AND IMBLUE TECHNOLOGY, 3/4" INLET AND OUTLET SIZE, 320 CFH CAPACITY AT 5 PSI INLET PRESSURE AND SET AT 11"W.C. OUTLET PRESSURE



B X201 GAS PRESSURE REGULATOR VALVE DETAIL

NOT TO SCALE

GAS NOTES:

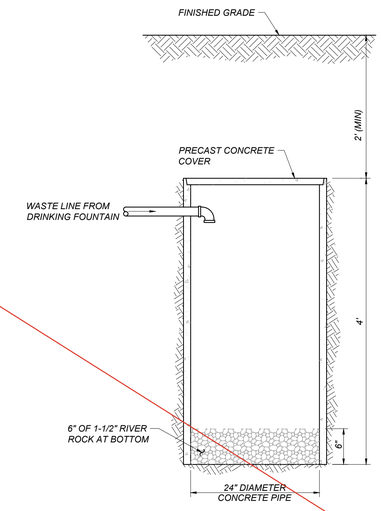
1. GAS PIPING, INSIDE BUILDING AND ABOVE GRADE, 2" AND SMALLER: SCHEDULE 40 GALVANIZED STEEL PIPE, ASTM A53. 150 PSI GALVANIZED MALLEABLE IRON SCREWED FITTINGS, ANSI B16.3, ANSI B31.8. FLEXIBLE CONNECTIONS SHALL BE CORRUGATED STAINLESS STEEL, CSA (US) APPROVED.
2. GAS PIPING, OUTSIDE OF BUILDING, BELOW GRADE: POLYETHYLENE PIPE AND FITTINGS, ANSI B31.8, ASTM D2513, WHERE ALLOWED BY ADMINISTRATIVE AUTHORITY, DRISCOPING 6500, DUPONT ALDYL "A", PLEXCO. OTHERWISE, PIPING SHALL BE COATED SCHEDULE 40 STEEL, ASTM A53.
3. BALL VALVE, SHUT-OFF VALVE: FULL PORT, LEAD-FREE BRASS BODY, CAP, STEM, DISK, AND BALL. SCREWED CONNECTION, LEVER HANDLE. PTFE SEAT AND STEM PACKING. MIN. 400 PSI CWP. CSA-US AND UL LISTED. NIBCO T-FP-600A-LF OR APPROVED EQUAL.
4. GAS PRESSURE REDUCING VALVE: CAPACITY AND PRESSURE RATINGS AS INDICATED ON DRAWINGS, AMERICAN METER.
5. GAS PIPING INSTALLATION SHALL COMPLY WITH CPC AND NFPA 54 (NATIONAL FUEL GAS CODE). SHALL BE PITCHED TO DRAIN TO DRIP LEGS AT LOW POINTS WHERE OTHER THAN DRY GAS CONDITIONS EXIST. NO UNIONS SHALL BE INSTALLED EXCEPT AT CONNECTIONS TO EQUIPMENT. PROVIDE SHUTOFF AND DIRT LET (SEDIMENT TRAP) AT EACH EQUIPMENT CONNECTION. ONLY EQUIPMENT MOUNTED ON VIBRATION ISOLATORS SHALL BE CONNECTED WITH FLEXIBLE CONNECTORS. UNDER-FLOOR PIPING SHALL BE SLEEVED AND VENTED. PLASTIC PIPE AND FITTINGS SHALL BE JOINED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS. METAL TO PLASTIC TRANSITION FITTINGS SHALL BE INSTALLED AT ALL TRANSITIONS. PROVIDE 14-GAGE INSULATED TRACER WIRE SECURED TO PIPE AT 10' INTERVALS WITH NYLON TIES. TERMINATE TRACER 6" ABOVE GRADE AT BOTH ENDS.
6. ODOR FADE WARNING: THE ODORANT IN PROPANE (LP) AND NATURAL GAS IS COLORLESS AND THE INTENSITY OF ITS ODOR CAN FADE UNDER SOME CIRCUMSTANCES. CONTACT THE UTILITY COMPANY FOR MORE INFORMATION.
7. SUBMIT INSTALLER TRAINING CERTIFICATIONS FROM POLYETHYLENE PIPING MANUFACTURER CERTIFIED TRAINER, INCLUDING COPY OF TRAINERS CERTIFICATION. TRAINING SHALL HAVE BEEN COMPLETED NO MORE THAN 6 MONTHS PRIOR TO STARTING WORK.
8. TESTING: THERE SHALL BE NO DROP IN PRESSURE DURING TEST EXCEPT THAT DUE TO AMBIENT TEMPERATURE CHANGES. ALL COMPONENTS OF SYSTEM NOT RATED FOR TEST PRESSURE SHALL BE ISOLATED FROM THE SYSTEM BEFORE TEST IS MADE. MAINTAIN 100 PSI AIR PRESSURE FOR 4 HOURS.

C X201 INTERIOR HOSE BIB DETAIL

NOT TO SCALE

D X201 BOTTLE FILLING STATION

NOT TO SCALE



E X201 DRY WELL

NOT TO SCALE

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — ZACHARY D. HOLLAND — No. 87218 — CIVIL — STATE OF CALIFORNIA

03/01/2024 Date Signed

CONSULTANT

Blair, Church & Flynn Consulting Engineers 451 Clovis Avenue, Suite 200 Clovis, California 93612 Tel (559) 326-1400 Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

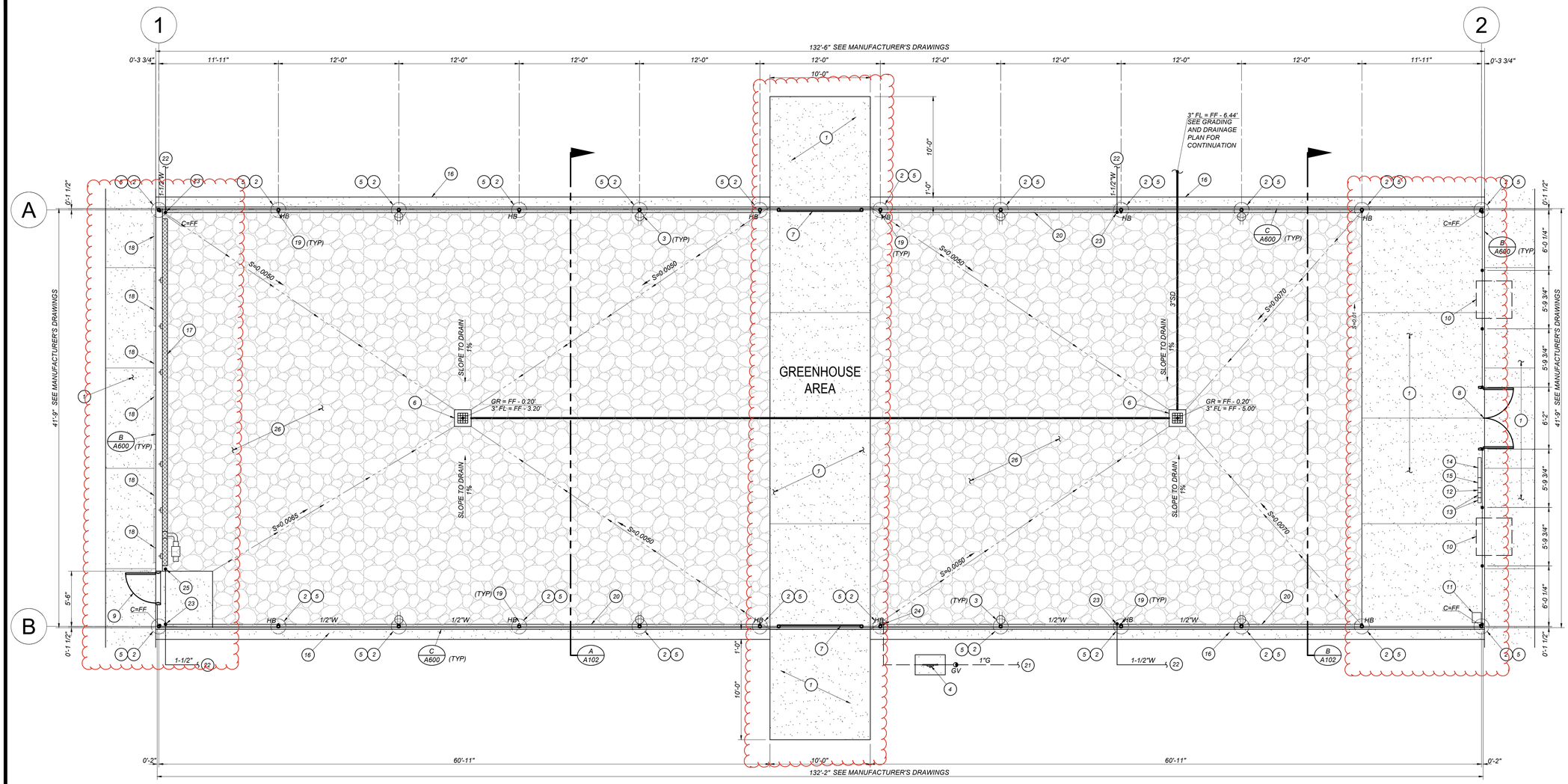
UTILITY DETAILS

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

X201

Drawing: P:\2021\21412\Drawings\Arch\21412_ARCH.dwg Plot Date/Time: Apr 29, 2024 - 12:03pm Plot by: kylerson



A
A100

PROPOSED MAIN GREENHOUSE FLOOR AND FOUNDATION PLAN

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

Contractor to bid on all flatwork in clouded areas

811 Know what's below. Call before you dig.

GREENHOUSE NOTES:

1. *GREENHOUSE STRUCTURE AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND GUIDELINES. IF THERE IS A DISCREPANCY BETWEEN THESE PLANS AND THE MANUFACTURER'S INSTRUCTIONS, THE MANUFACTURER'S INSTRUCTIONS SHALL GOVERN. CONTRACTOR SHALL BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO STARTING CONSTRUCTION.*

GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

FOR DSA USE ONLY

DSA APP# 02-121754

GRADING AND DRAINAGE LEGEND:

C	CONCRETE
FF	FINISHED FLOOR
FL	FLOWLINE
GR	STORM DRAIN GRATE
328.78	NEW FINISHED GRADE
	DIRECTION OF SURFACE DRAINAGE
S=0.0050	PIPE SLOPE AND DIRECTION OF FLOW
	SWALE AND DIRECTION OF FLOW
6"SD	STORM DRAIN PIPELINE; SIZE AS NOTED. TRENCH AND BACKFILL PER DETAIL [G/X200]
S=0.0020	FLOWLINE SLOPE AND DIRECTION OF FLOW
■	V12 STORM DRAIN INLET PER DETAIL [F/X200]

KEYNOTES

1. *GREENHOUSE INTERIOR CONCRETE SLAB PER DETAIL [I/A600], HEAVY BROOM FINISH.*
2. *CONCRETE FOOTING PER DETAIL [A/A600]*
3. *ELECTRICAL EQUIPMENT, SEE ELECTRICAL PLANS*
4. *GAS REGULATOR IN CAGE, SEE DETAIL [A/X100] FOR 2'x3' HOUSEKEEPING PAD*
5. *STRUCTURAL STEEL COLUMN. SEE MANUFACTURER'S PLANS FOR ADDITIONAL INFORMATION.*
6. *V12 STORM DRAIN INLET PER DETAIL [F/X200]*
7. *8'-X 8'-STANDARD WINANDY SHEET STEEL ROLL UP DOOR, (TYP.2)*
8. *6'-X 7'-X 1-3/4"-THICK STANDARD WINANDY HALF GLASS DOUBLE DOOR (WITH STANDARD DOUBLE LEVER "BEST"- STYLE CORE LOCK SET)*
9. *3'-X 7'-X 1-3/4"-THICK STANDARD WINANDY HALF GLASS SINGLE DOOR (WITH STANDARD DOUBLE LEVER "BEST"- STYLE CORE LOCK SET)*
10. *ACME EXHAUST FAN, (2) DCA42J, 1 HP , W/WS, W/GS, W/SLANT WALL HOUSING, W/INLET & OUTLET GUARD, WITH SHUTTER, 115 V*
11. *TGU ROOF SHADE SYSTEM DRIVE MOTOR, ½ HP, 2.5 AMPS, W/ 50% FLAME RETARDANT SHADE CLOTH (TYP. 1)*
12. *MOTORIZED SHADE SYSTEM CONTROL PANEL, (TYP.1)*
13. *"LOCK" VENT MACHINE CONTROL PANEL, (TYP.2)*
14. *WADSWORTH ENVIROSTEP GREENHOUSE CONTROLLER W/ STEP SAVER SOFTWARE, WIRED ALARM MANAGER, 115V, 2 AMPS (TYP.1)*
15. *WADSWORTH ENVIROSTEP CONTACTOR PANEL, 115V, 2 AMPS (TYP.1)*
16. *MOWSTRIP AT BUILDING PERIMETER, SEE SIDE PLAN*
17. *ACME CAEG KOOL-CEL PAD SYSTEM (1) 35"-LG x 4" THICK PADS X60" TALL, SUBMERSIBLE PUMP MODEL #20S, 1/3 HP, 115V., 2.9 AMPS*
18. *ACME WAAC6363MT MOTORIZED PAD INLET SHUTTER, 115V, 0.1 AMPS, (TYP. 6)*
19. *HOSE BIBB MOUNTED TO STEEL SUPPORT PER DETAIL [C/X201]*
20. *INTERIOR WATER PIPE MOUNTED TO STEEL SUPPORT WITH DOUBLE SIDED SADDLE STRAP*
21. *SEE UTILITY PLAN FOR CONTINUATION OF 1" SR G LINE*
22. *SEE UTILITY PLAN FOR CONTINUATION OF 1-1/2" WATER LINE*
23. *1-1/2" SCH40 PVC WATER RISER ATTACHED TO STEEL COLUMN WITH DOUBLE SIDED SADDLE STRAPS AT 2' SPACING ANCHORED TO COLUMN. RUN 1" WATER LATERALS IN BOTH DIRECTIONS TO SERVE THE HOSE BIBBS SHOWN ON THIS FLOOR PLAN. SET LATERALS AT 42" AFF TO CLEAR PLANTING TABLE TOPS*
24. *1" GAS RISER ATTACHED TO STEEL COLUMN WITH UNISTRUT SUPPORTS ANCHORED TO COLUMN AT 3' SPACING. SEE REFLECTED CEILING PLAN FOR CONTINUATION*
25. *1-1/2" SCH40 PVC WATER RISER ATTACHED TO STEEL COLUMN WITH DOUBLE SIDED SADDLE STRAPS AT 2' SPACING ANCHORED TO COLUMN. RUN RISER UP TO SERVE THE KOOL-CELL EVAPORATIVE COOLING SYSTEM AND THEN UP INTO ROOF FRAMING AND LATERALLY TO SERVE THE SPRAY BOOM HOSE CONNECTION ON THE NORTH END WALL. COORDINATE WITH SPRAY BOOM INSTALLATION*
26. *3/4" PEA GRAVEL, 3" THICK OVER, 12" OF COMPACTED SUBGRADE*

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Robert D. Ayers No. 87218 Civil State of California Registered Professional Engineer

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
MAIN GREENHOUSE
FLOOR & FOUNDATION PLANS

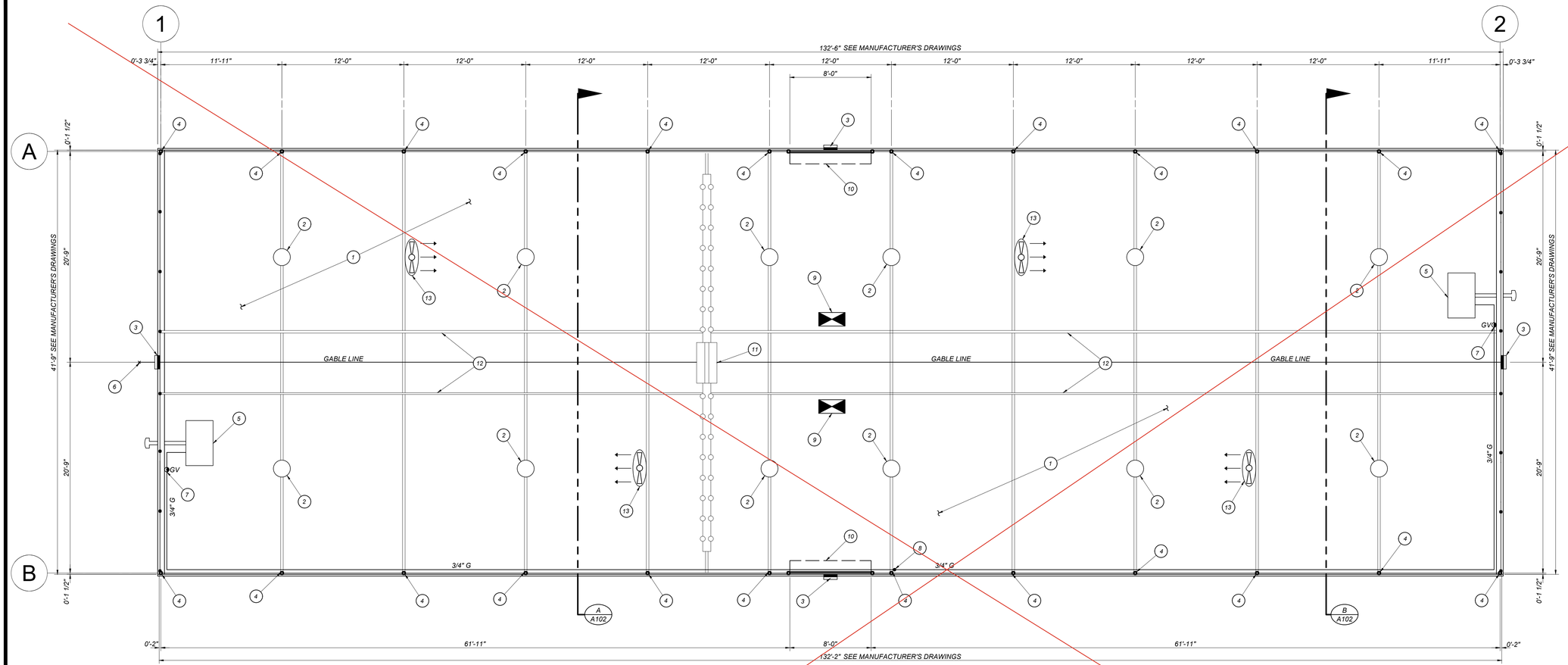
CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A100

Drawings © 2023/2024 Blair,Church&Flynn Consulting Engineers

Plot by: kylawson Apr 29, 2024 - 12:03pm



A A101 PROPOSED MAIN GREENHOUSE REFLECTED CEILING PLAN

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. ROOF PURLIN WITH #12 FASTENERS
2. HIGH-BAY LIGHT FIXTURE, SEE ELECTRICAL PLANS
3. WALLPACK LIGHT FIXTURE, SEE ELECTRICAL PLANS
4. STRUCTURAL STEEL COLUMN. SEE MANUFACTURER'S PLANS FOR ADDITIONAL INFORMATION.
5. MODINE PTP300S GAS FIRED HEATER
6. WADSWORTH ENVIROSTEP WEATHER STATION WITH MAST, MOUNTED TO EXTERIOR GABLE PEAK
7. GAS SHUT-OFF BALL VALVE
8. 1" GAS RISER ATTACHED TO STEEL COLUMN WITH UNISTRUT SUPPORTS ANCHORED TO COLUMN AT 3' SPACING. RUN 3/4" GAS LATERALS AT 9'-6" AFF IN BOTH DIRECTIONS TO THE GAS-FIRED HEATERS AT BOTH ENDS OF THE BUILDING, UNISTRUT SUPPORTS AT MINIMUM 3' SPACING ANCHORED TO GREENHOUSE FRAMING
9. EWA10 90NM LOCK DRIVE ELECTRIC MOTORIZED ROOF VENT MACH. FOR RACK & PINION OPERATION.
10. 8' X 8' STANDARD WINANDY STEEL ROLL -UP DOOR
11. CHERRY CREEK WATERING BOOM WITH BALDOR DC AND CHAIN DRIVE-1/4 HP, 2.5 AMPS (2 ROWS) SINGLE WATER BAR SETUP WITH TEEJET SPRAYS (0.6GPM) EVERY 18", WHIP HOSE WATERING ASSEMBLY COMPASS CAPTURE CONTROLLER W/ AREA CAPTURE PROGRAM.
12. 2" X 2" SQ. STEEL WATERING BOOM TRACK
13. SCHAEFER VK12, 12" DIA. HAF FAN, 115V, 1/10HP, 1.3A (TYP. 4)

GREENHOUSE NOTES:

1. GREENHOUSE STRUCTURE AND EQUIPMENT SHALL BE INSTALLED PER THE MANUFACTURER'S INSTALLATION INSTRUCTIONS AND GUIDELINES. IF THERE IS A DISCREPANCY BETWEEN THESE PLANS AND THE MANUFACTURER'S INSTRUCTIONS, THE MANUFACTURER'S INSTRUCTIONS SHALL GOVERN. CONTRACTOR SHALL BRING ALL DISCREPANCIES TO THE ATTENTION OF THE ENGINEER OF RECORD PRIOR TO STARTING CONSTRUCTION.

GREEHNOUSE BID ALTERNATE NOTES:

1. GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.
3. BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.
4. IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.
5. BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — GARY D. HUNT — No. 57218 — CIVIL — STATE OF CALIFORNIA

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

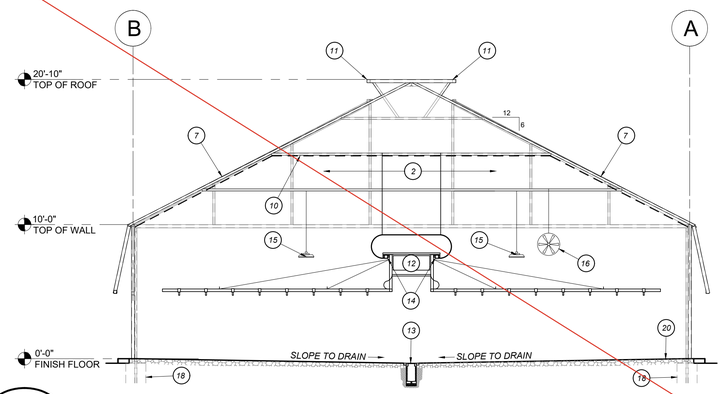
GREENHOUSE COMPLEX
MAIN GREENHOUSE
REFLECTED CEILING PLAN

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

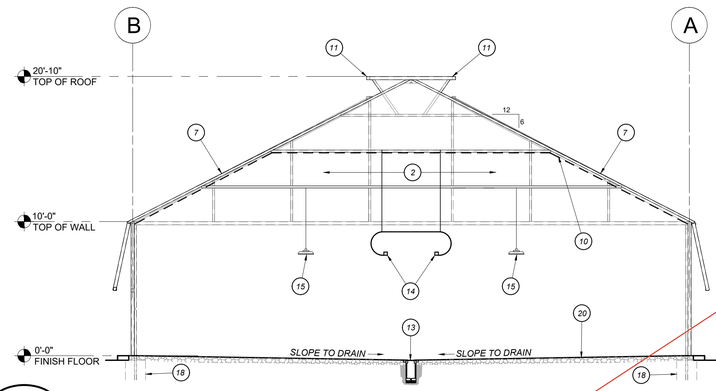
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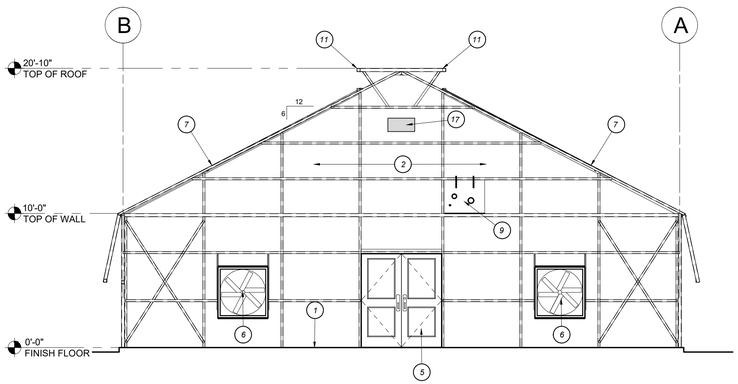
A A102 **BUILDING SECTION**

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



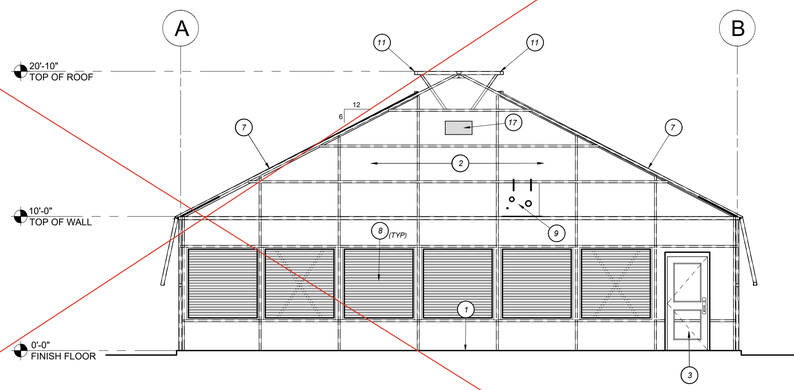
B A102 **BUILDING SECTION**

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



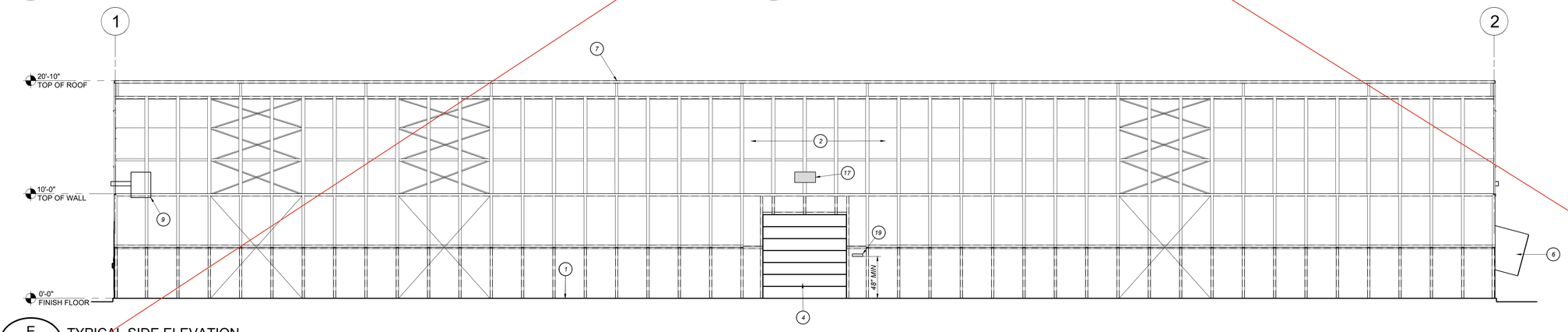
C A102 **SOUTH EXTERIOR ELEVATION**

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



D A102 **NORTH EXTERIOR ELEVATION**

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



E A102 **TYPICAL SIDE ELEVATION**

3/16" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. *GREENHOUSE INTERIOR CONCRETE SLAB PER DETAIL [I/A600], HEAVY BROOM FINISH.*
2. *STRUCTURAL STEEL FRAMING. SEE MANUFACTURER'S PLANS FOR ADDITIONAL INFORMATION.*
3. *3' X 7' X 1-3/4" THICK STANDARD WINANDY HALF GLASS SINGLE DOOR (WITH STANDARD DOUBLE LEVER "BEST" STYLE CORE LOCK SET)*
4. *8' X 8' STANDARD WINANDY SHEET STEEL ROLL UP DOOR, (TYP.2)*
5. *6' X 7' X 1-3/4" THICK STANDARD WINANDY HALF GLASS DOUBLE DOOR (WITH STANDARD DOUBLE LEVER "BEST" STYLE CORE LOCK SET)*
6. *ACME EXHAUST FAN, (2) DCA44J, 1 HP , W/WS, W/GS, W/SLANT WALL HOUSING, W/INLET & OUTLET GUARD, WITH SHUTTER, 115 V*
7. *ROOF PURLIN WITH #12 FASTENERS*
8. *ACME WAAC6363MT MOTORIZED PAD INLET SHUTTER, 115V, 0.1 AMPS, (TYP. 6)*
9. *MODINE PTP300S GAS FIRED HEATER*
10. *TGU MOTORIZED SHADE SYSTEM WITH ALUMINET 50% ICFR SHADE CLOTH SHOWN DASHED*
11. *36" ELECTRIC MOTORIZED RACK & PINION RIDGE VENTS, SEE MANUFACTURER'S PLANS*
12. *CHERRY CREEK WATERING BOOM WITH BALDOR DC AND CHAIN DRIVE-1/4 HP, 2.5 AMPS (2 ROWS) SINGLE WATER BAR SETUP WITH TEEJET SPRAYS (0.8GPM) EVERY 18", WHIP HOSE WATERING ASSEMBLY COMPASS CAPTURE CONTROLLER W/ AREA CAPTURE PROGRAM.*
13. *V12 STORM DRAIN INLET PER DETAIL [F/X200]*
14. *2" X 2" SQ. STEEL WATERING BOOM TRACK*
15. *HIGH-BAY LIGHT FIXTURE, SEE ELECTRICAL PLANS*
16. *SCHAEFER VK12, 12" DIA. HAF FAN, 115V, 1/10HP, 1.3A (TYP. 4)*
17. *WALLPACK LIGHT FIXTURE, SEE ELECTRICAL PLANS*
18. *COLUMN FOOTINGS WHERE THEY OCCUR*
19. *MOUNT SIGN TO WALL ADJACENT TO ROLL UP DOOR THAT READS "MAINTENANCE ACCESS ONLY" SIGN SHALL BE WHITE BACKGROUND WITH 1" HIGH LETTERING THAT COMPLIES WITH SECTION 11B-703 OF THE CBC*
20. *3/4" PEA GRAVEL, 3" THICK OVER, 12" OF COMPACTED SUBGRADE*

GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — GARY D. HOYT — No. 61218 — CIVIL — STATE OF CALIFORNIA

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Date Signed

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MERCED COLLEGE GREENHOUSE COMPLEX

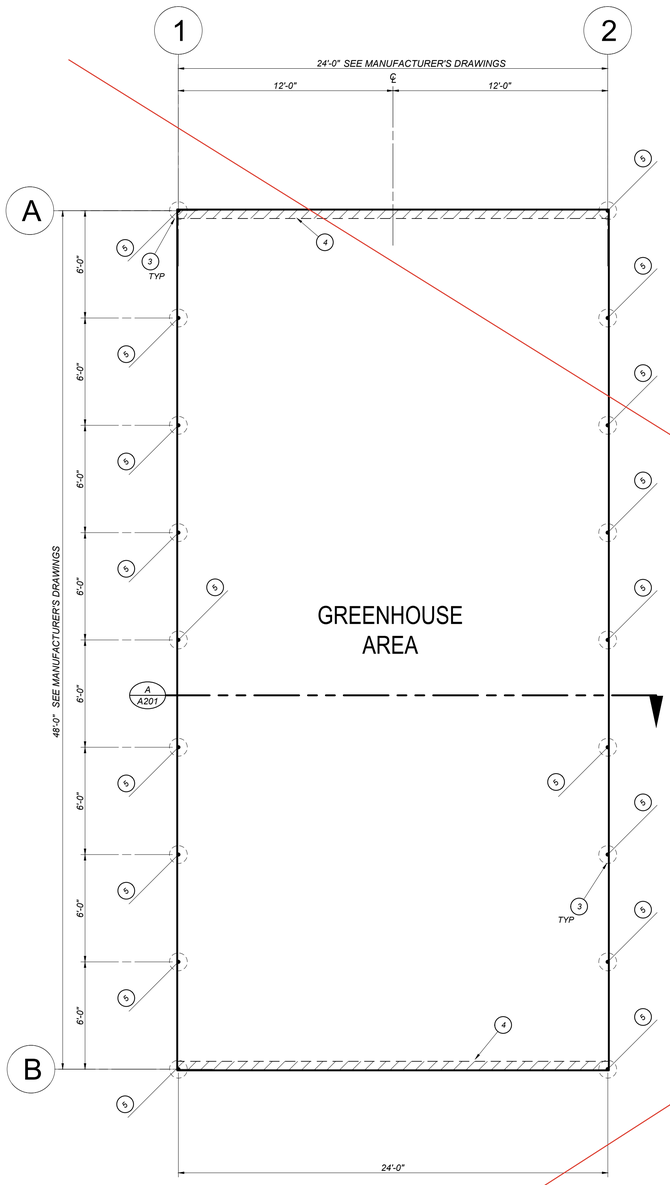
GREENHOUSE COMPLEX
MAIN GREENHOUSE
ELEVATIONS & SECTION

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

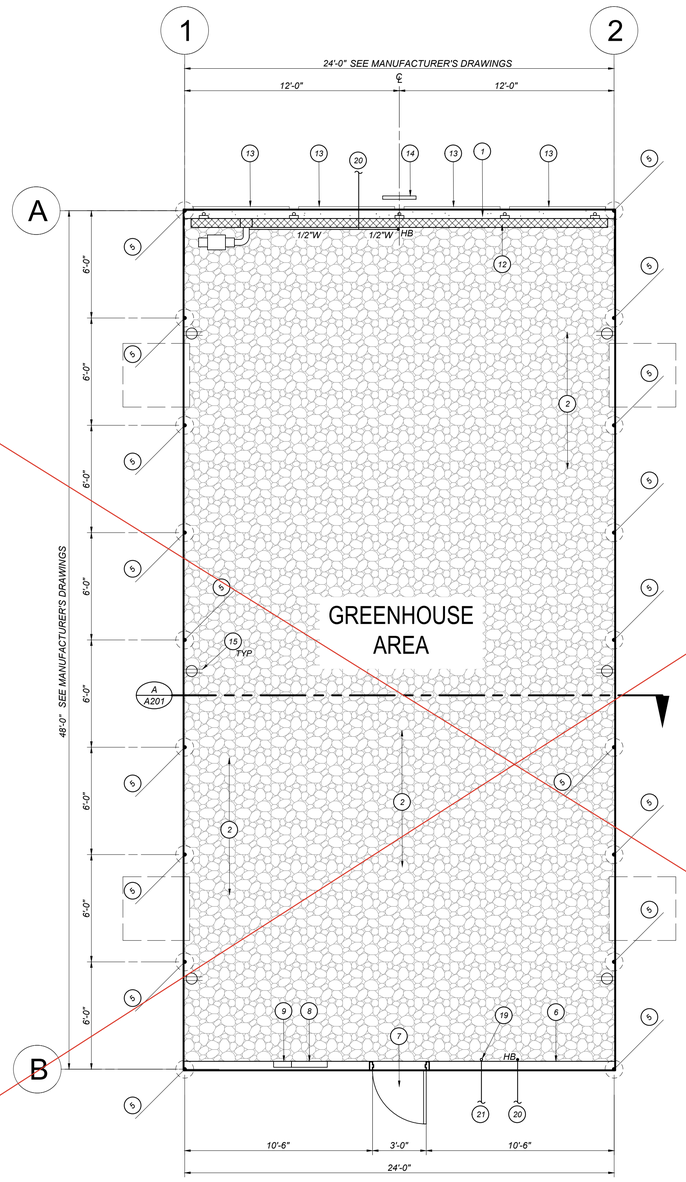
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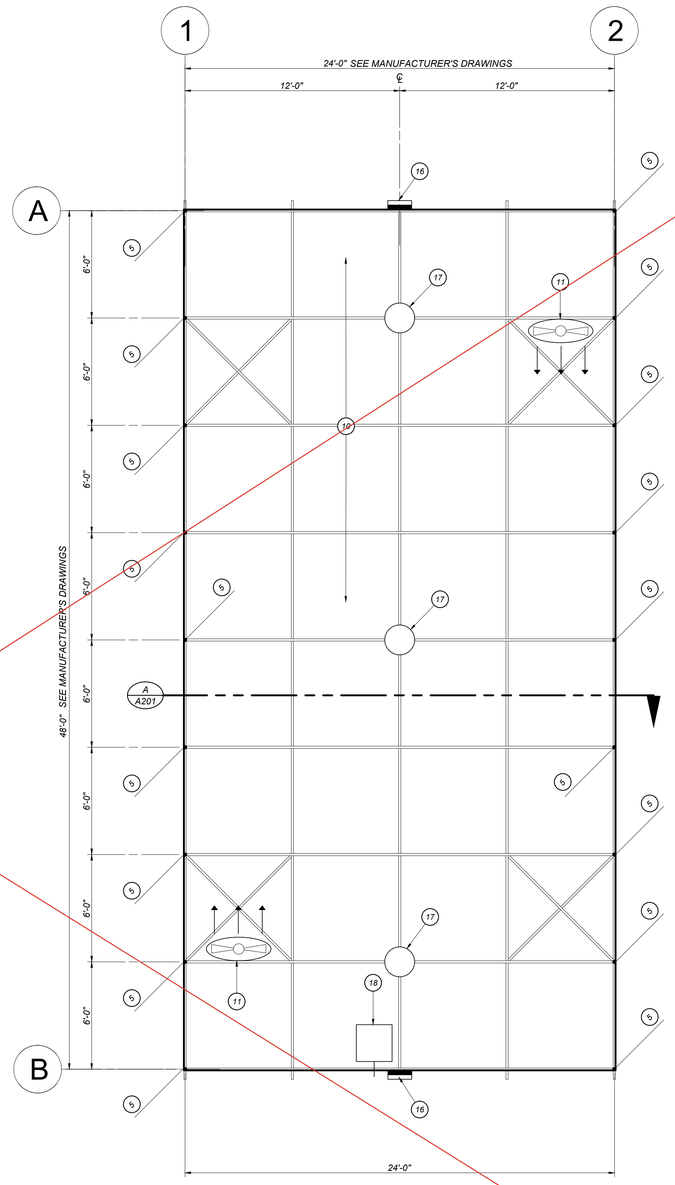
A A200 PROPOSED SMALL GREENHOUSE 1 & 2 FOUNDATION PLAN

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



B A200 PROPOSED SMALL GREENHOUSE 1 & 2 FLOOR PLAN

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



C A200 PROPOSED SMALL GREENHOUSE 1 & 2 REFLECTED CEILING PLAN

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. GREENHOUSE INTERIOR CONCRETE SLAB PER DETAIL (I/A600); HEAVY BROOM FINISH.
2. 3" THICK, 3/4" GRAVEL OVER 12" COMPACTED SUBGRADE
3. 12 INCH DIAMETER X 30 INCH DEEP CONCRETE FOOTING
4. 6 INCH WIDE CONCRETE FOOTING X 8 INCH DEEP WITH REBAR #4 HORIZONTAL
5. STRUCTURAL STEEL COLUMN. SEE MANUFACTURER'S PLANS FOR ADDITIONAL INFORMATION.
6. EXTERIOR WALL
7. 3' X 6'-8" PLYCO SERIES 20 INSULATED DOOR (WITH FALCON LEVER/ LOCKSET INCLUDES ADA THRESHOLDS AND COMMANDER PACK RHOS
8. ELECTRICAL PANEL
9. WADSWORTH ENVIROSTEP CONTACTOR PANEL, 115V, 2 AMPS (TYP.1)
10. ROOF PURLIN WITH #12 FASTENERS
11. SCHAEFER VK12, 12" DIA. HAF FAN, 115V, 1/10HP, 1.3A (TYP. 4)
12. QUIETAIRE EVAPORATIVE COOLING SYSTEM (1) 15' LONG x 4" THICK PADS x 36" TALL, SUBMERSIBLE PUMP
13. ACME WAAC6363MT MOTORIZED PAD INLET SHUTTER, 115V, 0.1 AMPS, (TYP. 4)
14. WADSWORTH ENVIROSTEP WEATHER STATION WITH MAST
15. ELECTRICAL EQUIPMENT, SEE ELECTRICAL PLANS
16. WALLPACK LIGHT FIXTURE, SEE ELECTRICAL PLANS
17. HIGH-BAY LIGHT FIXTURE, SEE ELECTRICAL PLANS
18. MODINE 'HOT DAWG' GAS-FIRED HEATER
19. 1" GAS RISER ATTACHED TO WALL STRUTS/PURLINS. RUN UP WALL AND CONNECT TO GAS-FIRED HEATER WITH A GAS SHUT-OFF BALL VALVE ADJACENT TO THE HEATER ASSEMBLY
20. SEE UTILITY PLAN FOR WATER LINE CONNECTION FOR HOSE BIBBS AND EVAPORATION COOLER
21. SEE UTILITY PLAN FOR GAS LINE CONNECTION FOR GAS-FIRED HEATER

GREEHNOUSE BID ALTERNATE NOTES:

1. GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.
2. THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.
3. BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.
4. IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.
5. BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS

N

Blair, Church & Flynn CONSULTING ENGINEERS

JEREMY D. HOLLAND No. 87218 REGISTERED PROFESSIONAL ENGINEER CIVIL STATE OF CALIFORNIA

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
SMALL GREENHOUSE
FOUNDATION & FLOOR & CEILING PLANS

CONST. DOCUMENTS

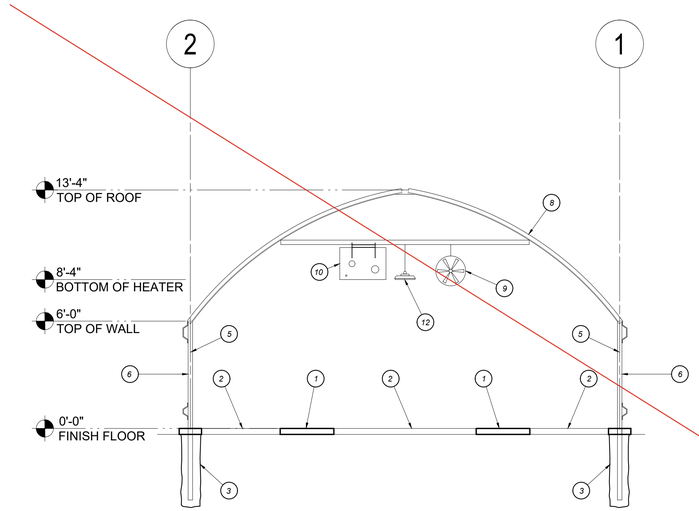
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CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A200

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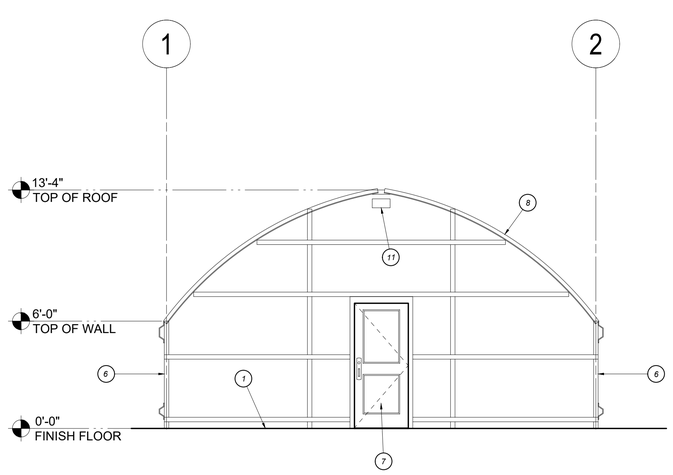
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DSA APP# 02-121754



A A201 BUILDING SECTION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



B A201 SOUTH EXTERIOR ELEVATION

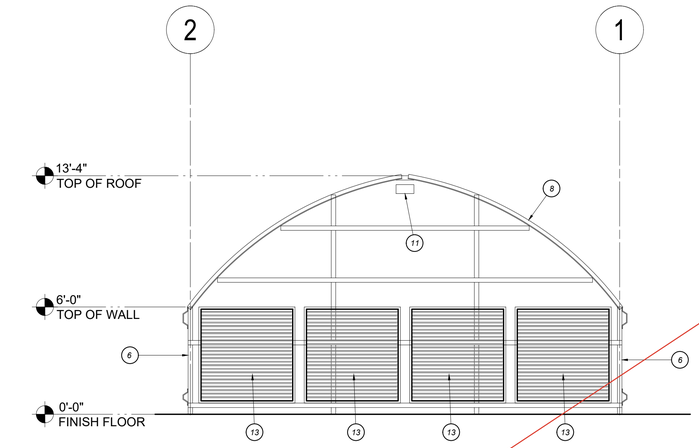
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

KEYNOTES

1. *GREENHOUSE INTERIOR CONCRETE SLAB PER DETAIL [I/A600]. HEAVY BROOM FINISH.*
2. *6" THICK, 3/4" GRAVEL OVER COMPACTED SUBGRADE*
3. *12 INCH DIAMETER X 30 INCH DEEP CONCRETE FOOTING*
4. *6 INCH WIDE CONCRETE FOOTING X 8 INCH DEEP WITH REBAR #4 HORIZONTAL*
5. *STRUCTURAL STEEL COLUMN. SEE MANUFACTURER'S PLANS FOR ADDITIONAL INFORMATION.*
6. *EXTERIOR WALL*
7. *3' X 6'-8" PLYCO SERIES 20 INSULATED DOOR (WITH FALCON LEVER/ LOCKSET INCLUDES ADA THRESHOLDS AND COMMANDER PACK RHOS*
8. *ROOF PURLIN WITH #12 FASTENERS*
9. *SCHAEFER VK12, 12" DIA. HAF FAN, 115V, 1/10HP, 1.3A (TYP. 4)*
10. *MODINE 'HOT DAWG' GAS-FIRED HEATER*
11. *100 W LED WALLPACK*
12. *150 W HIGH-BAY LED*
13. *ACME WAAC6363MT MOTORIZED PAD INLET SHUTTER, 115V, 0.1 AMPS, (TYP. 4)*

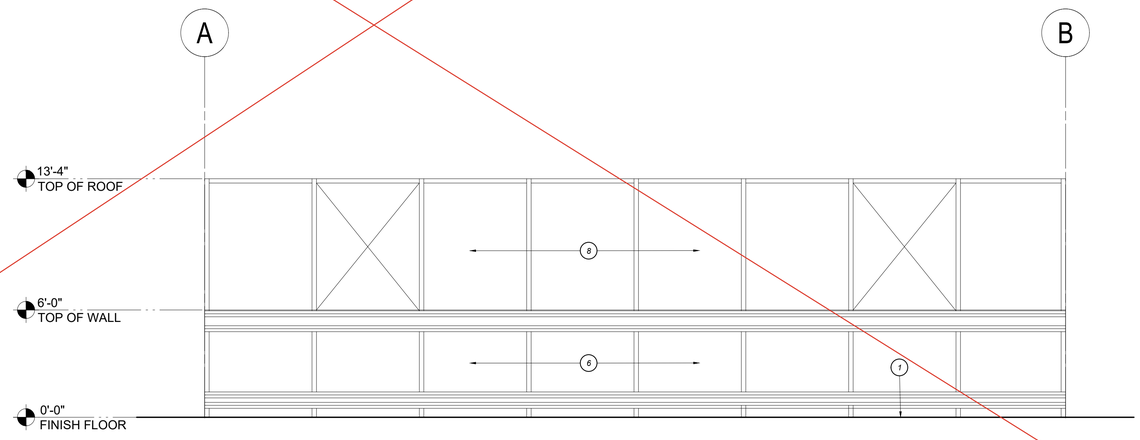
GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*



C A201 NORTH EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



D A201 EAST/ WEST EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER GARY D. HUNT No. 57218 CIVIL STATE OF CALIFORNIA

03/01/2024 Date Signed:

CONSULTANT

Blair, Church & Flynn Consulting Engineers
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Clovis, California 93612
Tel (559) 326-1400
Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
SMALL GREENHOUSE
ELEVATIONS & SECTIONS

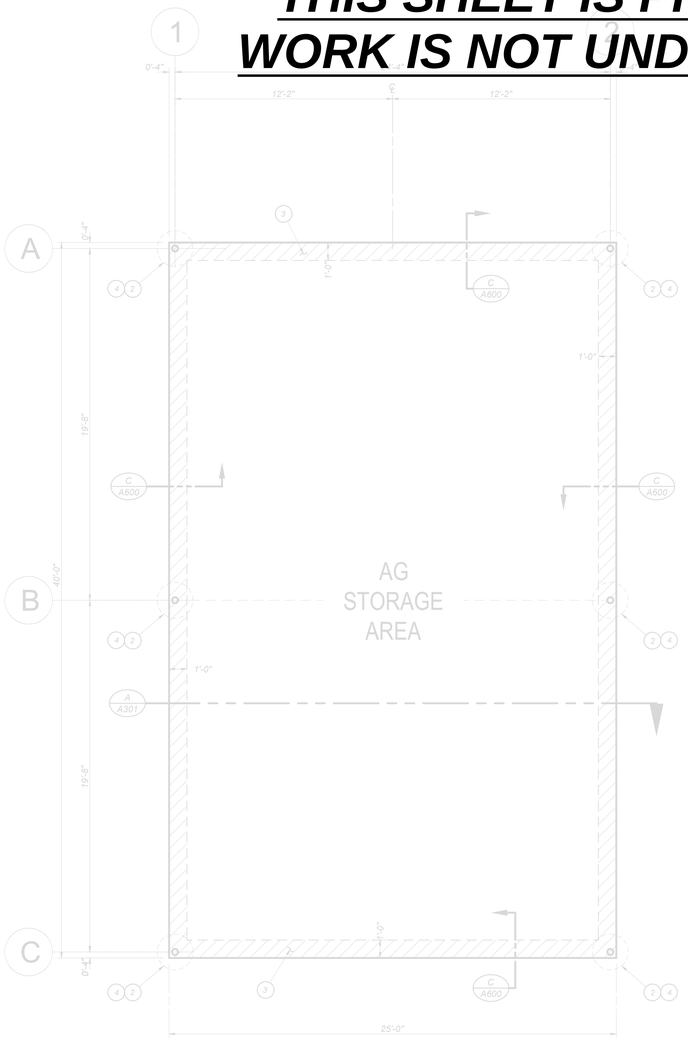
CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

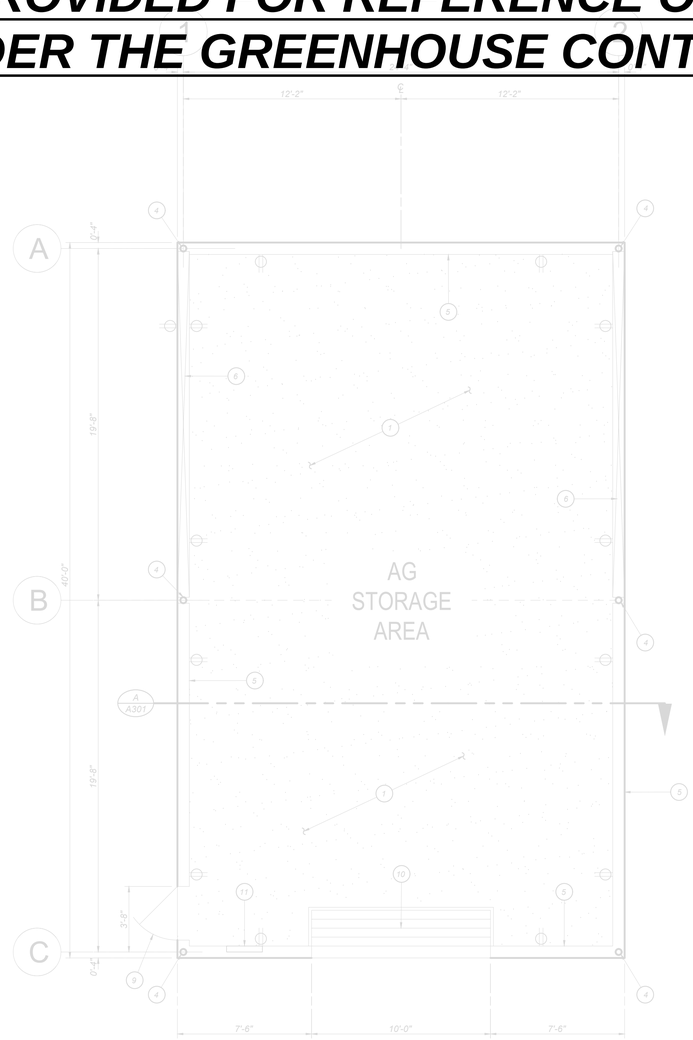
A201

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Plot by: tylarsson Apr 29, 2024 - 12:04pm

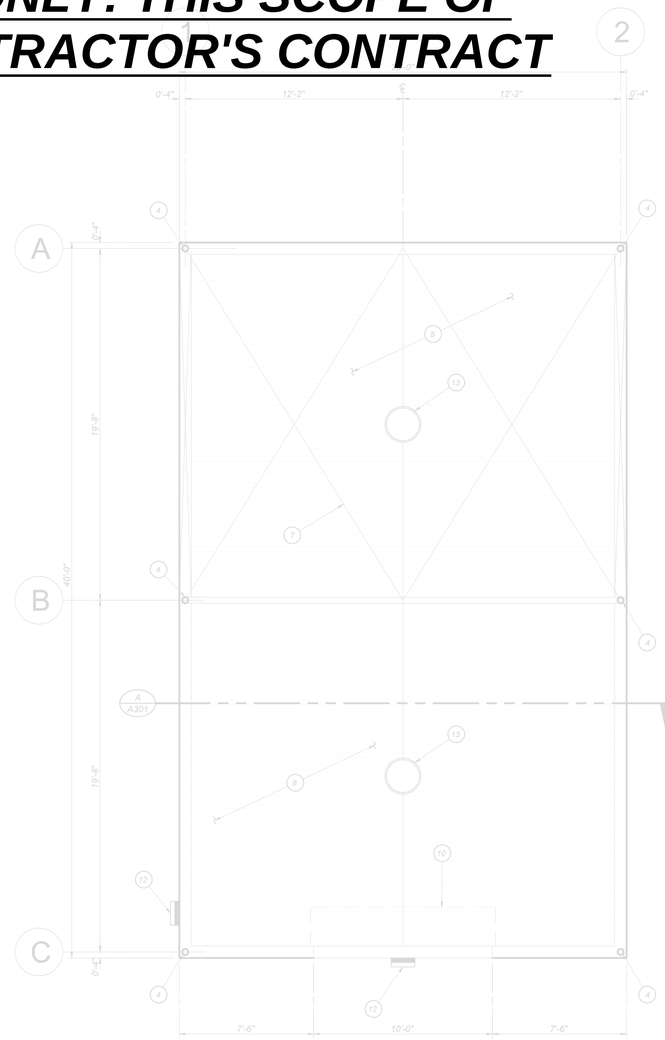
THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT



A A300 PROPOSED AG STORAGE FOUNDATION PLAN
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



B A300 PROPOSED AG STORAGE FLOOR PLAN
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



C A300 PROPOSED AG STORAGE REFLECTED CEILING PLAN
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

FOR DSA USE ONLY
DSA APP# 02-121754

KEYNOTES

1. INTERIOR CONCRETE SLAB PER DETAIL [I/A600], HEAVY BROOM FINISH.
2. 24 INCH DIAMETER X 48 INCH DEEP CONCRETE COLUMN FOOTING
3. 12 INCH WIDE CONCRETE FOOTING X 12 INCH DEEP WITH REBAR #4 HORIZONTAL
4. STRUCTURAL STEEL COLUMN. SEE MANUFACTURER'S PLANS FOR ADDITIONAL INFORMATION.
5. EXTERIOR WALL
6. 5/8 INCH DIAMETER TENSION CABLE CROSS-BRACING AT SIDEWALL, SEE MANUFACTURER'S PLANS.
7. 5/8 INCH DIAMETER TENSION CABLE CROSS-BRACING AT ROOF, SEE MANUFACTURER'S PLANS.
8. METAL ROOF, BORGA SUPER PANEL, 26 GAUGE, COLOR ZINCALUME AZ55 PLUS.
9. 3' X 7' METAL DOOR
10. 10' X 10' METAL DOOR ROLL-UP DOOR.
11. ELECTRICAL PANEL, SEE ELECTRICAL PLANS
12. WALLPACK LIGHT FIXTURE, SEE ELECTRICAL PLANS
13. HIGH-BAY LIGHT FIXTURE, SEE ELECTRICAL PLANS

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Blair, Church & Flynn
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Date Signed:

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
AG STORAGE
FOUNDATION & FLOOR & CEILING PLANS

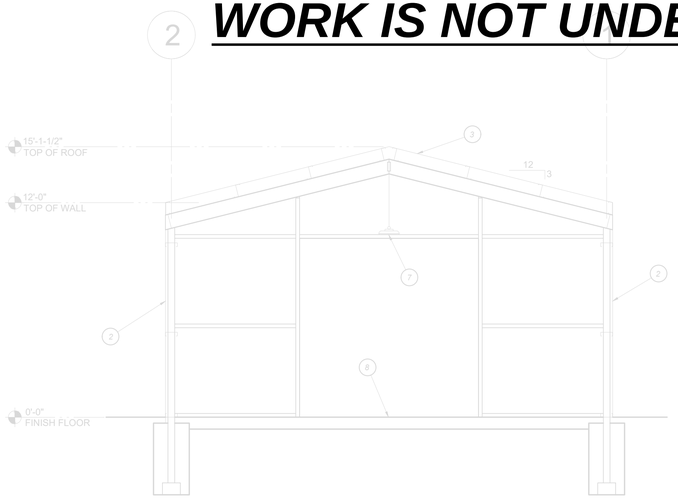
CONST. DOCUMENTS

DR. BY: AH
CH. BY: EA
DATE: 03/01/2024
SCALE AS NOTED

A300

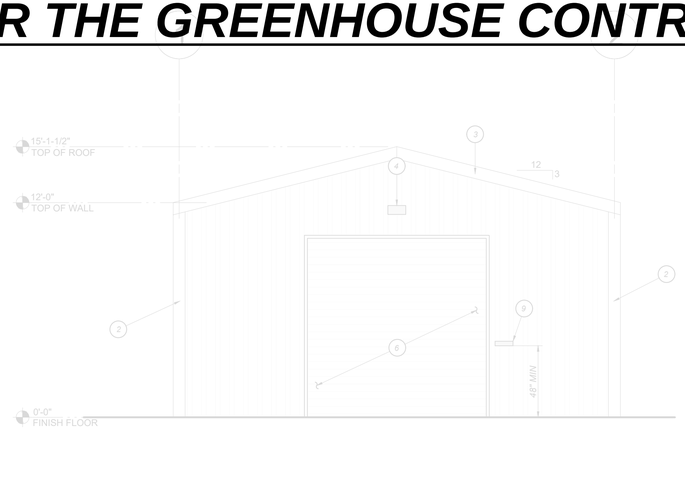
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Plot by: kylarson Apr 29, 2024 - 12:04pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT



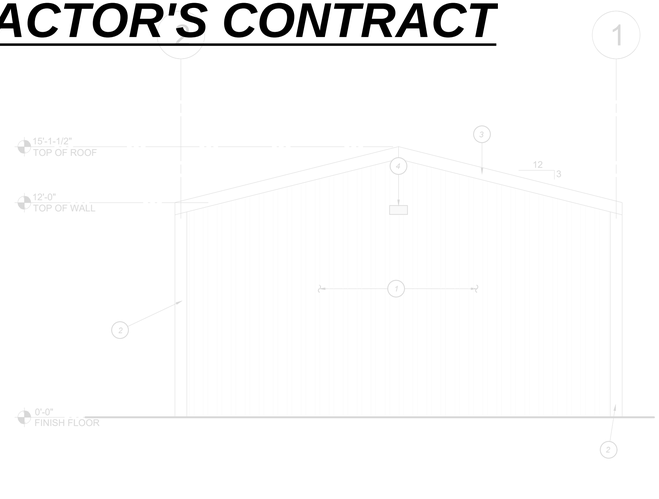
A301 — BUILDING SECTION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



A301 — SOUTH EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



A301 — NORTH EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. METAL PANEL, TYPE 1: BORGA HR345 PANEL. COLOR: TO BE SELECTED BY OWNER.
2. METAL TRIM. SEE DETAILS FOR ADDITIONAL INFORMATION.
3. METAL ROOF: BORGA SUPER PANEL, 26 GAUGE, COLOR ZINCALUME AZ55 PLUS.
4. WALLPACK LIGHT FIXTURE, SEE ELECTRICAL PLANS
5. 3' X 7' METAL DOOR
6. 10' X 10' METAL ROLL-UP DOOR
7. HIGH-BAY LIGHT FIXTURE, SEE ELECTRICAL PLANS
8. INTERIOR CONCRETE SLAB PER DETAIL [I/X600], HEAVY BROOM FINISH.
9. MOUNT SIGN TO WALL ADJACENT TO ROLL UP DOOR THAT READS "MAINTENANCE ACCESS ONLY" SIGN SHALL BE WHITE BACKGROUND WITH 1" HIGH LETTERING THAT COMPLIES WITH SECTION 11B-703 OF THE CBC



A301 — WEST EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



A301 — EAST EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

Blair, Church & Flynn CONSULTING ENGINEERS

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
AG STORAGE
ELEVATIONS & SECTION

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A301

Drawing: P:\2023\2314\Digital\Arch\Merged\Architecture\2314_A300.dwg Layout: A301 Plot by: kylarsson Apr 29, 2024 - 12:04pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

A PROPOSED POTTING SHADE FOUNDATION AND FLOOR PLAN
SCALE: 1/4" = 1'-0"

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. CONCRETE SIDEWALK PER DETAIL [A/X100]
2. 24 INCH DIAMETER X 48 INCH DEEP CONCRETE COLUMN FOOTING
3. 8 INCH WIDE CONCRETE FOOTING X 8 INCH DEEP WITH REBAR #4 HORIZONTAL
4. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
5. EXTERIOR WALL
6. 5/8 INCH DIAMETER HIGH STRENGTH CABLE AT SIDEWALL
7. 5/8 INCH DIAMETER HIGH STRENGTH CABLE AT ROOF
8. ROOF PURLIN WITH #12 FASTENERS
9. 3' X 7' METAL DOOR
10. 10' X 10' METAL DOOR
11. ELECTRICAL PANEL

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

Blair, Church & Flynn
CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER
ROBERT D. ANDERSON
No. 57218
CIVIL
STATE OF CALIFORNIA
03/01/2024
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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
POTTING SHADE
FLOOR & FOUNDATION PLAN

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A400

Drawing: P:\2023\23414\Drawings\Greenhouse\23414_GH300 Reg Layout - ADP.dwg
Plot by: kylarsson Apr 29, 2024 - 12:04pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. CONCRETE SIDEWALK PER DETAIL [A/X100]
2. 36 INCH DIAMETER X 54 INCH DEEP CONCRETE COLUMN FOOTING
3. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
4. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
5. W14 X 22 STEEL BEAM
6. 8"X 3-1/2" 14 GA Z ROOF PURLIN - TYP.
7. 26 GA RIBBED METAL SHEETING
8. 7" WIDE ROOF GUTTER WITH 10 WIDE GRATE
9. LED HIGH BAY FIXTURE
10. 100 W LED WALLPACK LIGHT

A PROPOSED POTTING SHADE REFLECTED CEILING PLAN
1/4" = 1'-0"

N

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

Blair, Church & Flynn
CONSULTING ENGINEERS

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MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
POTTING SHADE
CEILING PLAN

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A401

Drawing: P:\2022\2214\Drawings\Greenhouse\2022214_GH2021.dwg Layout:A1 - ARCH.dwg
Plot by: kylarsson Apr 29, 2024 - 12:04pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

A / A402 POTTION SHADE SECTION

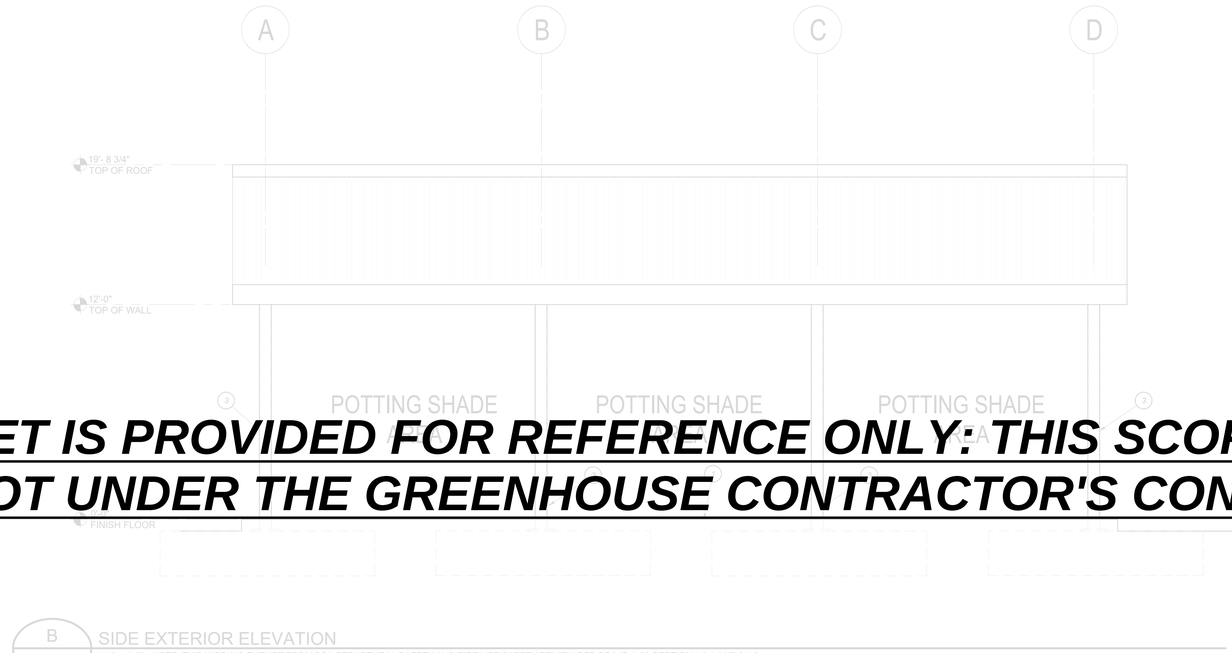
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

FOR DSA USE ONLY

DSA APP# 02-121754

KEYNOTES

1. CONCRETE SIDEWALK PER DETAIL [A/X100]
2. 36 INCH DIAMETER X 54 INCH DEEP CONCRETE COLUMN FOOTING
3. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
4. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
5. W14 X 22 STEEL BEAM
6. 8"X 2-1/2" 14 GA Z ROOF PURLIN - TYP.
7. 26 GA RIBBED METAL SHEETING
8. 7" WIDE ROOF GUTTER WITH 10 WIDE GRATE
9. LED HIGH BAY FIXTURE



B / A402 SIDE EXTERIOR ELEVATION

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

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Blair, Church & Flynn CONSULTING ENGINEERS

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MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
POTTING SHADE
ELEVATION & SECTION

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

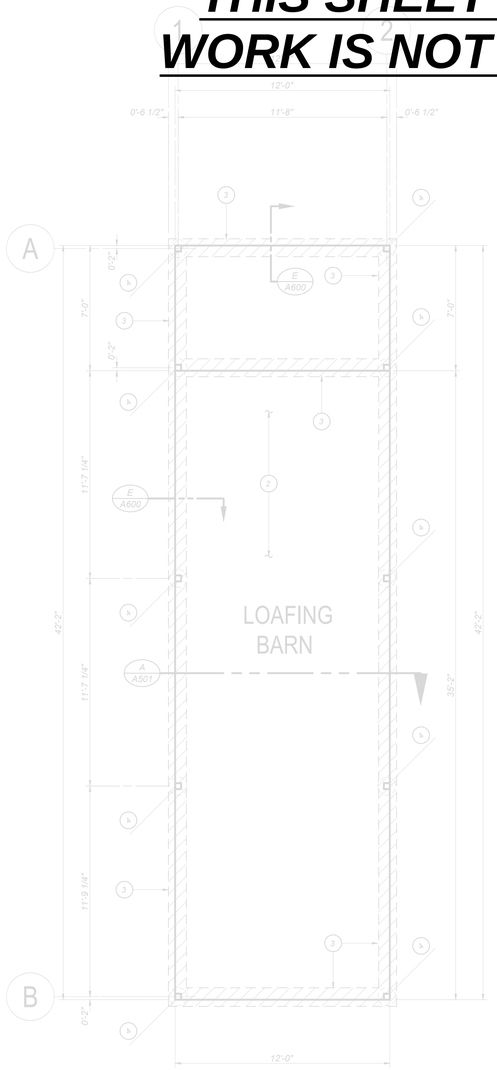
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THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

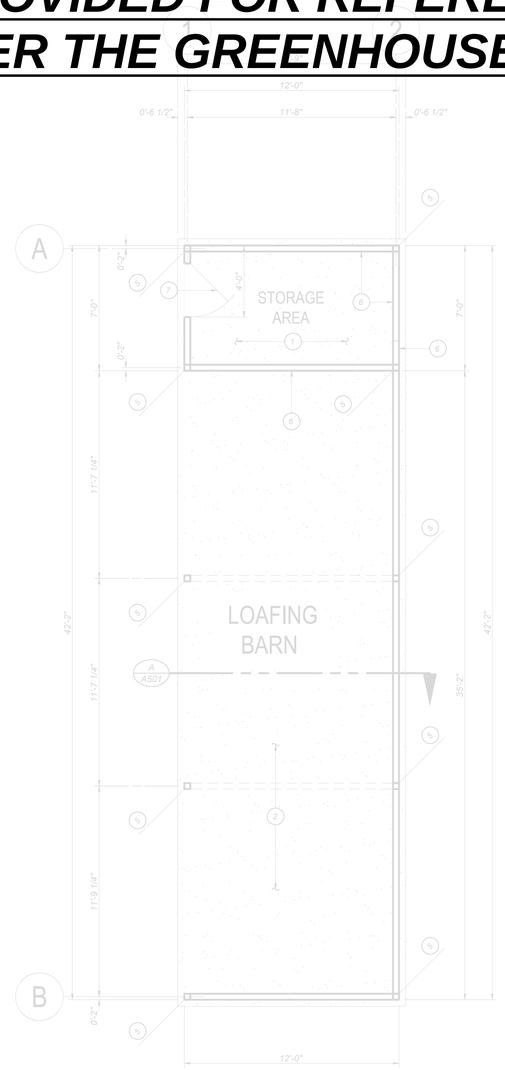
FOR DSA USE ONLY

DSA APP# 02-121754



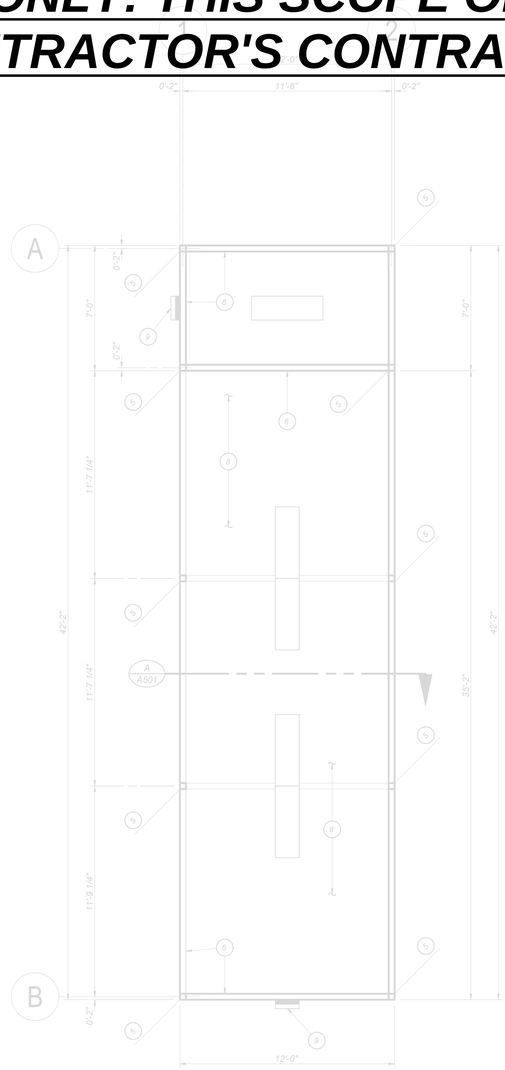
A A500 PROPOSED LOAFING BARN FOUNDATION PLAN

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



B A500 PROPOSED LOAFING BARN FLOOR PLAN

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



C A500 PROPOSED LOAFING BARN REFLECTED CEILING PLAN

1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

KEYNOTES

1. INTERIOR CONCRETE SLAB PER DETAIL [I/A600], HEAVY BROOM FINISH.
2. HEAVY DUTY CONCRETE SLAB PER DETAIL [J/A600]
3. 12 INCH WIDE CONCRETE FOOTING X 12 INCH DEEP WITH REBAR #4 TOP AND BOTTOM
4. 12 INCH DIAMETER X 24 INCH DEEP CONCRETE COLUMN FOOTING
5. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
6. EXTERIOR WALL
7. 36" WIDE 80" HEIGHT DOOR
8. 29 GAUGE SHEET METAL PANELS
9. 100 W LED WALLPACK LIGHT

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — ROBERT D. ANDERSON — No. 57218 — CIVIL — STATE OF CALIFORNIA

03/01/2024
Date Signed:

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Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
LOAFING BARN
FOUNDATION & FLOOR & CEILING PLANS

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A500

Drawing: P:\2020\14\08\preliminary\working\drawings\A500A1.dgn Plot by: kylarsson Apr 29, 2024 - 12:04pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

A A501 SECTION
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

B A501 NORTH EXTERIOR ELEVATION
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

C A501 SOUTH EXTERIOR ELEVATION
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

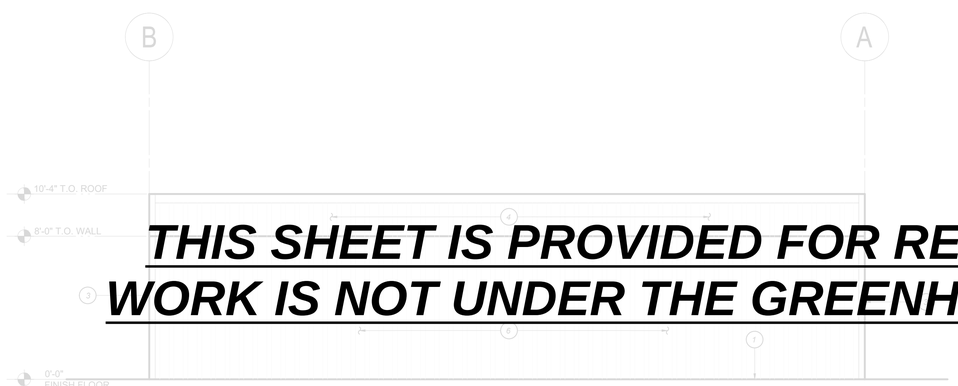
KEYNOTES

1. 6" THICK CONCRETE SLAB PER DETAIL (I/X600). BROOM FINISH.
2. 12 INCH SQUARE X 24 INCH DEEP CONCRETE COLUMN FOOTING
3. 2" X 3" 14 & 15 GAUGE TUBING GALVANIZED STEEL
4. 29 GAUGE ROOF SHEET METAL
5. STRUCTURAL STEEL COLUMN. SEE STRUCTURAL PLANS FOR ADDITIONAL INFORMATION.
6. 29 GAUGE WALL SHEET METAL
7. 36" WIDE 80" HEIGHT DOOR

FOR DSA USE ONLY

DSA APP# 02-121754

D A501 WEST EXTERIOR ELEVATION
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



E A501 WEST EXTERIOR ELEVATION
1/4" = 1'-0" NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

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Blair, Church & Flynn
CONSULTING ENGINEERS

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
LOAFING BARN
ELEVATIONS & SECTION

CONST. DOCUMENTS

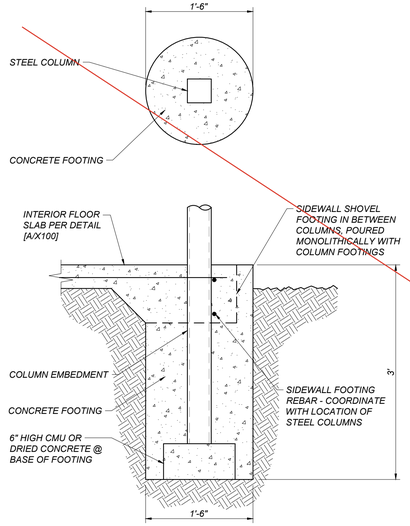
DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A501

Drawing: P:\2022\2214.00\preconstruction\working\drawings\2022214_LBRY.dwg, 4.ARCH Plot by: kylarsson Apr 29, 2024 - 12:04pm

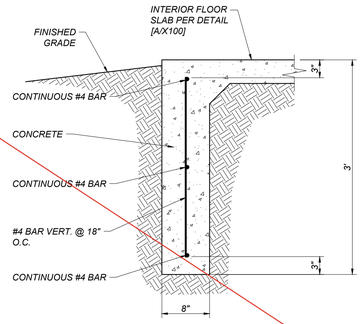
FOR DSA USE ONLY

DSA APP# 02-121754



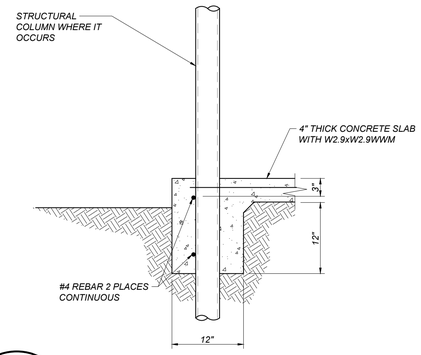
A / A600 LARGE GREENHOUSE COLUMN FOOTING

NOT TO SCALE
NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



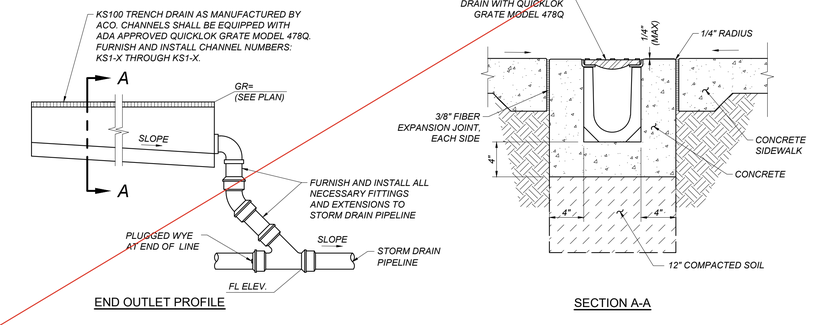
B / A600 ENDWALL FOOTING

NOT TO SCALE
NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



C / A600 PERIMETER FOOTING

NOT TO SCALE
NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

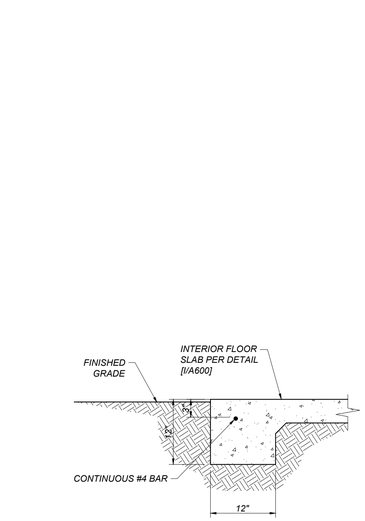


END OUTLET PROFILE

SECTION A-A

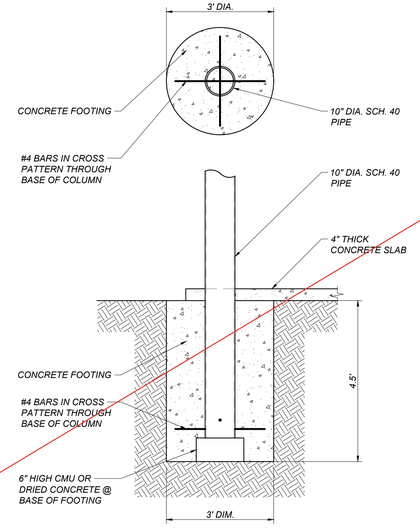
D / A600 TRENCH DRAIN

NOT TO SCALE *NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2*



E / A600 SIDEWALL FOOTING

NOT TO SCALE
NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2



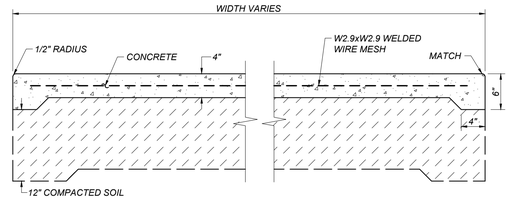
F / A600 COLUMN FOOTING

NOT TO SCALE
NOTE: THIS WORK IS EXEMPT FROM DSA STRUCTURAL SAFETY AND FIRE LIFE SAFETY REVIEW PER DSA IR A-22 SECTION 1.2.1 AND 2.1.2

DETAIL NOT USED

G / A600 END WALL SECTION

NOT TO SCALE



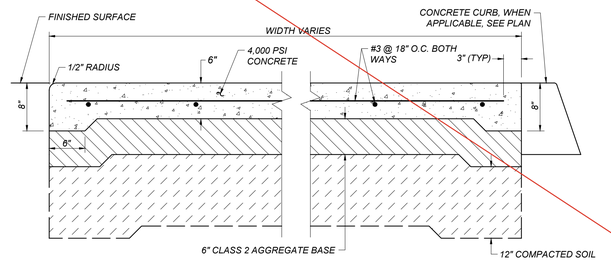
I / A600 INTERIOR FLOOR SLAB

NOT TO SCALE

DETAIL NOT USED

H / A600 MIDDLE WALL SECTION

NOT TO SCALE



J / A600 HEAVY DUTY CONCRETE PAVEMENT STRUCTURAL SECTION

NOT TO SCALE

Blair, Church & Flynn CONSULTING ENGINEERS

REGISTERED PROFESSIONAL ENGINEER — GARY D. HOFFMAN — No. 87218 — CIVIL — STATE OF CALIFORNIA

03/01/2024
Date Signed

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

FOUNDATION DETAILS

CONST. DOCUMENTS

DR. BY: AH
CH. BY: ZH
DATE: 03/01/2024
SCALE AS NOTED

A600

Drawing: P:\2023\2114\Construction\Drawings\2023\1-CAD\Arch_Dtls\Details - A600.dwg
Plot by Kylieson Apr 29, 2024 - 12:54pm

GENERAL NOTES

1. CODE COMPLIANCE: ALL WORK SHALL CONFORM TO AND BE PERFORMED IN ACCORDANCE WITH CODES, STANDARDS, AND ORDINANCES AS SET FORTH BY THE AUTHORITIES HAVING JURISDICTION AND THEIR LATEST ADOPTED EDITIONS (IN EFFECT AT TIME OF BUILDING PERMIT APPLICATION) OF THE FOLLOWING PUBLICATIONS:

   A. CALIFORNIA CODE OF REGULATIONS TITLE 24; INCLUDES 2022 CALIFORNIA ELECTRICAL CODE, 2022 CALIFORNIA FIRE CODE, 2022 CALIFORNIA BUILDING CODE, ETC. WITH LOCAL AMENDMENTS AS APPLICABLE.

   B. AMERICANS WITH DISABILITIES ACT (ADA).

2. SAFETY: THE ELECTRICAL CONTRACTOR IS RESPONSIBLE TO MAINTAIN ALL EQUIPMENT IN A SAFE AND RESPONSIBLE MANNER. KEEP DEAD FRONT EQUIPMENT IN PLACE WHILE EQUIPMENT IS ENERGIZED. CONDUCT ALL CONSTRUCTION OPERATIONS IN A SAFE MANNER FOR EMPLOYEES AS WELL AS OTHER WORKPERSONS OR ANYONE VISITING THE JOB SITE. PROVIDE BARRIERS, FLAGS, TAPE, ETC. AS REQUIRED FOR SAFETY. THE CONTRACTOR SHALL HOLD ALL PARTIES HARMLESS OF NEGLIGENT SAFETY PRACTICES, WHICH MAY CAUSE INJURY TO OTHERS ON OR NEAR THE JOB SITE.

3. FIRE RATED ASSEMBLIES SHALL MAINTAIN RATINGS AS SPECIFIED IN THE CALIFORNIA BUILDING CODE CHAPTER 7. CONTRACTOR SHALL PROVIDE AND INSTALL PHYSICAL ENCLOSURE AROUND FIXTURES, PANELS, ETC. AS REQUIRED. ALL ASSEMBLIES TO BE PENETRATED SHALL BE INSTALLED WITH APPLICABLE THROUGH-PENETRATION FIRESTOP SYSTEM AS DETERMINED BY UL CLASSIFICATION. BEFORE CONSTRUCTION, VERIFY AND COMPLY WITH REQUIREMENTS OF LOCAL AUTHORITY HAVING JURISDICTION.

4. MOUNTING HEIGHTS SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

   +15" AFF: RECEPTACLES, TELEPHONE, TV & DATA OUTLETS. (MEASURED BOTTOM OF OUTLET BOX)
   +46" AFF: OUTLET ABOVE COUNTER (MEAUSRED TOP OF OUTLET BOX)
   +48" AFF: LIGHT SWITCHES. (MEASURED TOP OF OUTLET BOX)
   +48" AFF: FIRE ALARM MANUAL PULL STATIONS, T-STATS. (MEASURED TOP OF OUTLET BOX)
   THE LOWER OF +80" AFF TO BOTTOM OF LENS, OR 6" BELOW CEILING: FIRE ALARM VISUALS.

   ELECTRICAL SWITCHES: CONTROLS AND SWITCHES INTENDED TO BE USED BY THE OCCUPANT OF THE ROOM OR AREA TO CONTROL LIGHT AND RECEPTACLE OUTLETS, APPLIANCES OR COOLING, HEATING AND VENTILATING EQUIPMENT, SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE OUTLET BOX NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE OUTLET BOX TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM. [CBC 11B-308.1.1]

   ELECTRICAL RECEPTACLE OUTLETS: ELECTRICAL RECEPTACLE OUTLETS ON BRANCH CIRCUITS OF 30 AMPERES OR LESS AND COMMUNICATION SYSTEM RECEPTACLES SHALL BE LOCATED NO MORE THAN 48 INCHES MEASURED FROM THE TOP OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING NOR LESS THAN 15 INCHES MEASURED FROM THE BOTTOM OF THE RECEPTACLE OUTLET BOX OR RECEPTACLE HOUSING TO THE LEVEL OF THE FINISH FLOOR OR WORKING PLATFORM [CBC 11B-308.1.2]

   BEFORE ROUGH-IN, VERIFY ALL MOUNTING HEIGHTS AND EXACT LOCATIONS FOR ALL EQUIPMENT ELECTRICAL CONNECTIONS, STUB-UPS, RECEPTACLES, OUTLETS, ETC. WITH ARCHITECT OR OWNER. PLACE DEVICES LOCATED ABOVE COUNTERS, SHELVING, ETC. AND IN BATHROOMS SO AS NOT TO CONFLICT WITH EDGES OF WAINSCOTING, COUNTER SPLASH, SHELVING, ETC. ARCHITECTURAL SHEETS SHALL GOVERN.

4. LABEL PANELS, CABINETS, BACKBOARDS, MAIN DEVICES, SAFETY SWITCHES, CONTACTORS AND OTHER SPECIFICALLY DESIGNATED EQUIPMENT SHOWN ON PLANS. USE ENGRAVED LAMINATED PLASTIC NAMEPLATES ATTACHED BY SCREWS OR RIVETS. FOR FEEDERS, NEATLY AND INDELIBLY LABEL CONDUIT DESTINATIONS ON BOTH VISIBLE ENDS OF CONDUIT RUNS WHERE CONDUITS TERMINATE AT DESIGNATED ENCLOSURES, STRUCTURES OR EQUIPMENT (INCLUDING PULL AND SPLICE BOXES).

5. EQUIPMENT ANCHORAGE NOTE
   ALL MECHANICAL AND ELECTRICAL EQUIPMENT SHALL BE ANCHORED OR BRACED TO MEET THE HORIZONTAL AND VERTICAL FORCES PRESCRIBED IN THE 2022 CBC, SECTIONS 1613A AND 1616A AND ASCE 7-10 SECTIONS 13.3, 13.4 & 13.6.

   THE ATTACHMENT OF THE FOLLOWING ITEMS SHALL BE DESIGNED TO RESIST THE FORCES PRESCRIBED ABOVE, BUT NEED NOT BE DETAILED ON THE PLANS PER 202 CBC SECTION 1616A.1.18:

   A. FURNITURE(EXCEPT STORAGE CABINETS AS NOTED IN 2022 CBC TABLE 13.5-1)
   B. TEMPORARY OR MOVABLE EQUIPMENT WITH EXCEPTIONS NOTED IN 2022 CBC SECTION 1616A.1.18 ITEM 2.
   C. ARCHITECTURAL, MECHANICAL, AND ELECTRICAL COMPONENTS IN SEISMIC DESIGN CATEGORIES D, E, OR F
      THAT MEET ALL OF THE CRITERIA LISTED IN 2022 SECTION 1616A.1.18 ITEM 3.
   D. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUPPORTED BY VIBRATION ISOLATORS.
   E. EQUIPMENT WEIGHING LESS THAN 20 POUNDS SUSPENDED FROM A ROOF OR FLOOR OR HUNG FROM A
      WALL

   FOR THOSE ELEMENTS THAT DO NOT REQUIRE DETAILS ON THE APPROVED DRAWINGS, THE INSTALLATION SHALL BE SUBJECT TO THE APPROVAL OF THE MECHANICAL/ELECTRICAL ENGINEER.

6. ELECTRICAL DISTRIBUTION SYSTEM BRACING NOTE.

   PIPING, DUCTWORK AND ELECTRICAL DISTRIBUTION SYSTEMS SHALL BE BRACED TO COMPLY WITH THE FORCES AND DISPLACEMENTS PRESCRIBED IN ASCE 7-10 SECTION 13.3 AS DEFINED IN ASCE 7-16 SECTION 13.6.8, 13.6.7, 13.6.5.6 AND 2022 CBC, SECTIONS 1617A. 1.1 THROUGH 1617A.1.24.

   THE BRACING AND ATTACHMENTS TO THE STRUCTURE SHALL BE DETAILED ON THE APPROVED DRAWINGS OR THEY SHALL COMPLY WITH ONE OF THE HCAI PRE-APPROVALS (OPM#). I.E. OPM-0043-1 MASON-WEST.

   COPIES OF THE BRACING SYSTEM INSTALLATION GUIDE OR MANUAL SHALL BE AVAILABLE ON THE JOBSITE PRIOR TO THE START OF HANGING AND BRACING OF THE PIPE, DUCTWORK, AND ELECTRICAL DISTRIBUTION SYSTEMS.

   THE STRUCTURAL ENGINEER OF RECORD (SEOR) SHALL VERIFY THE ADEQUACY OF THE STRUCTURE TO SUPPORT THE HANGER AND BRACE LOADS.

7. CONDUIT SHALL NOT BE INSTALLED WITHIN CONCRETE SLABS UNLESS SPECIFICALLY NOTED.

MECHANICAL SYSTEMS

1. MECHANICAL UNIT CONDUITS: TO PREVENT DAMAGE DUE TO VIBRATION, BOTH POWER AND CONTROL WIRING CONDUITS FEEDING EXTERIOR MECHANICAL UNITS SHALL BE PROVIDED AND INSTALLED BY ELECTRICAL CONTRACTOR WITH LIQUID TIGHT FLEXIBLE TYPE AT FINAL CONNECTION TO UNIT AND BETWEEN ROOF JACK AND DISCONNECT SWITCH WHERE DISCONNECT IS MOUNTED ON UNIT.

2. MECHANICAL CONTROLS ROUGH-IN: PROVIDE AND INSTALL J-BOX, RING AND CONDUIT (SIZE ALL AS REQUIRED) FROM EACH MECHANICAL CONTROLS LOCATION TO CONTROLLED MECHANICAL UNITS.

3. MECHANICAL EQUIPMENT CONTROLS: MECHANICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL LOW VOLTAGE WIRE AND CONNECTIONS (BELOW 120 VOLT) TO AND FROM ALL MECHANICAL CONTROL DEVICES. ALL LOW VOLTAGE CONTROL WIRE SHALL BE IN CONDUIT, UNLESS OTHERWISE NOTED.

GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

LEGEND

NOTE: INTERPRET IN CONTEXT

LIGHT FIXTURES

- CEILING SURFACEMOUNT
- WALL SURFACEMOUNT
- PENDANT MOUNT
- RECESSED DOWNLIGHT
- RECESSED WALLWASH
- RECESSED FIXTURE
- SURFACE FIXTURE
- STRIP FIXTURE
- TRACK LIGHT
- DIRECTIONAL FLOOD
- EMERGENCY FIXTURE
- POLE LIGHT
- POLE LIGHT- DECORATIVE
- UPLIGHT- FLUSH IN GRADE
- BOLLARD
- TANDEM-WIRED LAMPS
- UNDERCABINET LIGHT
- WALL SURFACEMOUNT LINEAR TYPE
- PENDANT LINEAR FIXTURE
- RECESSED WALLMOUNT
- WALLPACK
- EXIT LIGHT- WALL
- EXIT LIGHT- CEILING (ARROW INDICATES DIRECTION)
- A LETTER ADJACENT INDICATES FIXTURE TYPE

SWITCHES

- $ SPST
- $2 DPST
- $3 3-WAY
- $4 4-WAY
- $D DIMMER
- $T TIMER SWITCH
- $T W/THERMAL OVERLOAD
- $P W/PILOT LIGHT
- $K KEY OPERATED
- $$ DUAL LEVEL SWITCHING
- .a SWITCHLEG DESIGNATION
- OS OCCUPANCY SENSOR

POWER/COMM.

- SINGLE RECEPT.
- DUPLEX RECEPT.
- DUPLEX- HALF O.S. CNTRLD.
- DOUBLE DUPLEX, HALF O.S. CNTRLD.
- DOUBLE DUPLEX
- SPECIAL CONFIGURATION
- FLOORMOUNT 208V, 1Ø RECEPT
- DUPLEX- FLOOR OUTLET
- GFCI GROUND FAULT CIRCUIT INTERRUPT
- MOUNTED ABOVE COUNTER
- JUNCTION BOX
- TELEPHONE OUTLET
- DATA OUTLET
- PHONE/DATA COMBO OUTLET
- MOUNTED ABOVE COUNTER
- TV TELEVISION OUTLET
- SAFETY DISCONNECT
- DROP CORD RECEPT
- JBC ABOVE-CLGMOUNT J-BOX
- TV TV OUTLET-FLOORMOUNT
- TELEPHONE FLOOR OUTLET
- DATA FLOOR OUTLET
- PHONE/DATA COMBO FLOOR OUTLET
- IDF INTERMEDIATE DISTRIBUTION FRAME
- MDF MAIN DISTRIBUTION FRAME
- AP ACCESS POINT

MISCELLANEOUS

- MOTOR
- T THERMOSTAT
- CIRCUIT BREAKER
- FUSIBLE SWITCH
- GROUND
- Ø PHASE
- CLOCK
- CLOCK/SPEAKER COMBINATION
- WALL MOUNTED CLOCK
- PUSHBUTTON
- FLUSHMOUNT PANEL
- SURFACEMOUNT PANEL
- FLUSHMOUNT CABINET
- SURFACEMOUNT CABINET
- DAMPER MOTOR
- H HUMIDISTAT
- M MAGNETIC CONTACTOR
- COMBINATION STARTER

CONDUIT/WIRE

- NEW
- UNDERGROUND
- NEW POWER HOMERUN (3 HOTS & NEUT SHOWN)
- ISOLATED GROUND
- EXISTING TO REMAIN
- (E) POWER HOMERUN
- WIRE LINE- CONTINUES
- CONDUIT STUB (W/MARKER)
- VERTICAL CONDUIT RUN
- CONDUIT SEAL
- FLEXIBLE CONNECTION
- LOW VOLTAGE
- SURFACEMOUNT RACEWAY
- INDICATES LINE CONTINUES
- CORD W/PLUG

FIRE ALARM

- FIRE ALARM CONTROL PANEL
- RPS REMOTE POWER SUPPLY
- H HORN- AUDIBLE DEVICE
- V VISUAL- VISUAL DEVICE
- AV AUDIBLE/VISUAL
- SV SPEAKER/VISUAL
- F FLOW SWITCH
- T TAMPER SWITCH
- P MANUAL PULL STATION
- SD SMOKE DETECTOR
- SD$_D$ DUCT SMOKE DETECTOR
- SD$_{CO}$ SMOKE/CO DETECTOR
- H HEAT DETECTOR
- B BELL
- END OF LINE RESISTOR
- C CHIME

CONVENTIONS

- X NUMBERED SHEET NOTES: REFERS TO NOTES ON SAME SHEET AS REFERENCED
- 1 / A DETAIL REFERENCE: -DETAIL DESIGNATION -SHEET NUMBER REFERENCE
- 3103 FEEDER SCHEDULE DESIGNATION (EXAMPLE: 3103 = 310 AMPERE, 600V, 3 CURRENT CARRYING CONDUCTORS)

ABBREVIATIONS

A	AMPERE
AF	AMP FUSE RATING
AFF	ABOVE FINISH FLOOR
AFG	ABOVE FINISH GRADE
AIC	AMPERES INTERRUPT CAPACITY
AS	AMP SWITCH RATING
BFG	BELOW FINISH GRADE
CB	CIRCUIT BREAKER
CEC	CA. ELECTRICAL CODE
CKT	CIRCUIT
C	CONDUIT
C.O.	CONDUIT ONLY
(E)	EXISTING
EC	ELECTRICAL CONTRACTOR
EF-#	EXHAUST FAN
(EXN)	(E) IN (N) LOCATION
(EXR)	(E) TO BE (R)
(F)	FUTURE
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
G	GROUNDING CONDUCTOR
GC	GENERAL CONTRACTOR
GFI	GROUND FAULT CKT INTERRUPTER
GND	GROUND
GRS	GALVANIZED RIGID STEEL
GWS	GANGED WITH SWITCH
IG	ISOLATED GROUND
LTG	LIGHTING
MC	MECHANICAL CONTRACTOR
MCB	MAIN CIRCUIT BREAKER
MLO	MAIN LUGS ONLY
MSB	MAIN SWITCHBOARD
MTTB	MAIN TELEPHONE TERMINAL BOARD
(N)	NEW
NIC	NOT IN CONTRACT
NL	NIGHT LIGHT
P	POLE
PV	PHOTOVOLTAIC
(R)	RELOCATE(D)
(TBR)	TO BE REMOVED
TYP	TYPICAL
UC	UNDERCABINET
UG	UNDERGROUND
UON	UNLESS OTHERWISE NOTED
V	VOLT
VA	VOLT AMPERES
W	WATT, WIRE
WP	WEATHERPROOF (NEMA 3R)

DSA APP# 02-121754

LUMINAIRE SCHEDULE

for MERCED COLLEGE GREEN HOUSE

TE# 23-8061

Δ	TYPE	ILLUSTRATION	MANUFACTURER	CATALOG NUMBER	VOLTAGE	TOTAL INPUT WATTS (W)	LAMP TYPE	NOMINAL LUMEN OUTPUT (L)	LAMP COLOR TEMP (K)	MOUNTING TYPE	DESCRIPTION	REMARKS
	A1		LITHONIA	JEBL 18000LM FRGL MVOLT 40K 80CRI WBF CS6G16 STOW5D SBOR10	120-277V	135	LED	18000	4000	PENDANT	13" DIA, LED ROUND HIGH BAY, FROSTED GLASS LENS, WET LISTED, IP65, NSF RATED. 0-10V DIMMING, INTEGRAL OCC SNSOR	
	C1		BEGHELLI	BS100LED-X 4FT HT HO WT40 120V-277V CH w/ EOSL2 LOG ESRPL	120-277V	100	LED	12196	4000	SUSPENDED, CHAIN HUNG	VAPOR-TIGHT LED LIGHT WITH FIXTURE MOUNTED MOTION WIRELESS CONTROL NODE, OCC. SENSOR WITH DAYLIGHT HARVESTING.	PROVIDE QTY. OF COMPATABLE WIRELESS DIMMING CONTROL SWITCHES PER PLANS.
	C2		BEGHELLI	BS100LED-X 4FT HT LO WT40 120V-277V CH w/ EOSL2 LOG ESRPL	120-277V	80	LED	10560	4000	SUSPENDED, CHAIN HUNG	VAPOR-TIGHT LED LIGHT WITH FIXTURE MOUNTED MOTION WIRELESS CONTROL NODE, OCC. SENSOR WITH DAYLIGHT HARVESTING.	PROVIDE QTY. OF COMPATABLE WIRELESS DIMMING CONTROL SWITCHES PER PLANS.
	EM 1		BEGHELLI	TA PLUS LED SE UNV AT SL, WALL	120-277V	10	LED	1444	4000	SURFACE, WALL	WALL MOUNTED EM UNIT W/ 90-MINUTE BACKUP BATTERY. WET LISTED, NSF RATED.	
	EM 2		BEGHELLI	TA PLUS LED SE UNV AT SL, CEILING	120-277V	10	LED	1491	4000	SURFACE, CEILING	CEILING MOUNTED EM UNIT W/ 90-MINUTE BACKUP BATTERY. WET LISTED, NSF RATED.	
	S1		LITHONIA	WDGE2 LED P2SW 40K 80CRI VW MVOLT SRM_PIRIFC3V DDBXD	120-277V	15	LED	2023	4000	SURFACE, WALL	LED WALL PACK WITH CUT-OFF DISTRIBUTION, INTEGRAL PHOTOCONTROL & BI-LEVEL MOTION SENSOR.	
	S1E		LITHONIA	WDGE2 LED P2SW 40K 80CRI VW MVOLT SRM_PIRIFC3V DDBXD E10WH	120-277V	15	LED	2023	4000	SURFACE, WALL	TYPE S1E IS THE SAME AS S1 EXCEPT WITH INTERGRAL EMERGENCY BATTERY	
	S2		LITHONIA	DSXF3 LED 6 P2 40K 70CRI WFL MVOLT YKC62 PE DDBXD	120-277V	138	LED	21005	4000	SURFACE, WALL	LED FLOOD LIGHT WITH WIDE FLOOD DISTRIBUTION & INTEGRAL PHOTOCONTROL	

ISSUE DATE: 8/10/2023
REV. DATE: .....

NOTES
- LUMINAIRE SUPPLIED VOLTAGE TO BE VERIFIED BY ELECTRICAL CONTRACTOR.
- WHERE NOT SPECIFIED; FINISHES TO BE VERIFIED WITH DISTRICT.

THOMA ENGINEERING
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THOMA #23-8061

REGISTERED PROFESSIONAL ENGINEER — STEVEN M. THOMA — NO. 20823 — ELECTRICAL — STATE OF CALIFORNIA
EXPIRES: 09/30/24

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

ELECTRICAL SYMBOLS LEGEND AND GENERAL NOTES

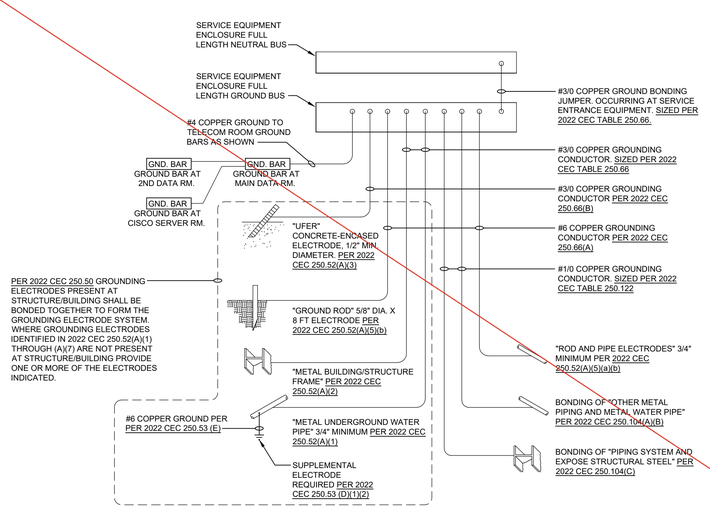
CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-001

Mar 01, 2024 - 12:05pm - aaackett - K:\ENG\2023\23-8061\23-8061_E001_GN NTS AND SYMBL LGND.dwg

Drawing: K:\ENG\2023\23-8061\23-8061_E001_GN NTS AND SYMBL LGND.dwg E-001 - 8x2".ctb
Plot by: aaackett Mar 01, 2024 - 12:05pm



1 GROUND/BOND DETAIL

SCALE: NTS

WARNING

ARC FLASH HAZARD

LINE SIDE of MAIN	FLASH PROTECTION BOUNDARY:	40 inches
	HAZARD RISK CATEGORY:	CLASS 2
	INCIDENT ENERGY RANGE:	4 - 8 cal/cm²
LINE SIDE of MAIN	FLASH PROTECTION BOUNDARY:	20 inches
	HAZARD RISK CATEGORY:	CLASS 0
	INCIDENT ENERGY RANGE:	0 - 2 cal/cm²

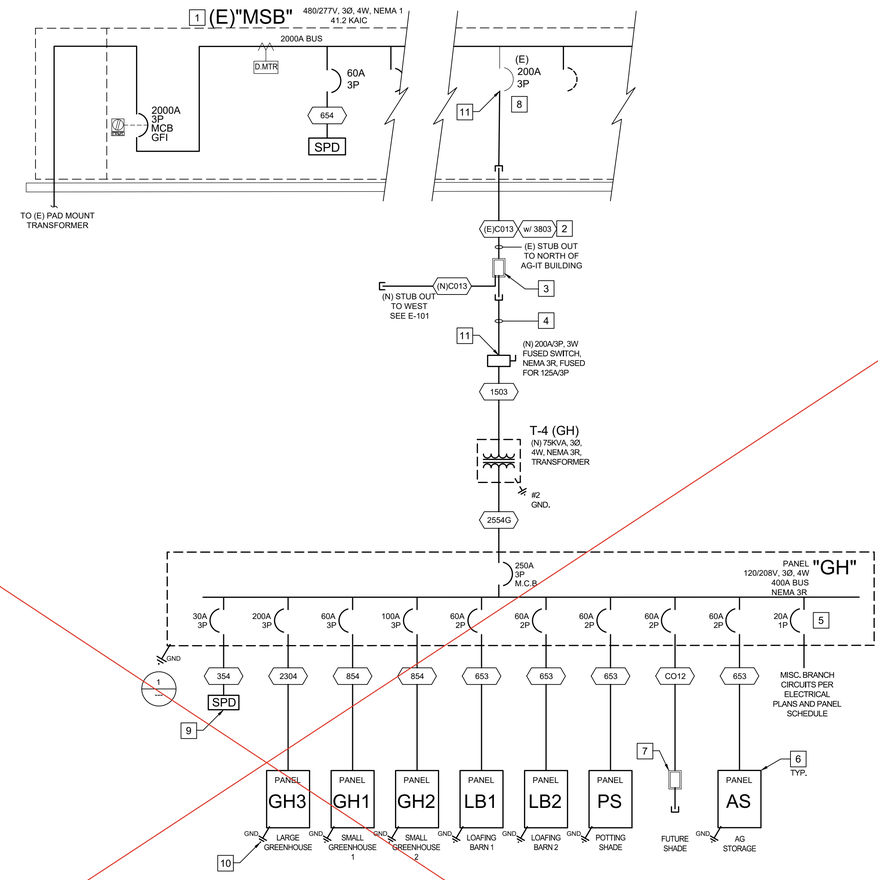
PSE TQS#: #####.# Date Issued: April 2004 Study Rev. :0

LOCATION: BUS NAME PROTECTIVE DEVICE: UPSTREAM DEVICE

NOTE:
IN ACCORDANCE WITH CEC 110.16, PROVIDE ARC FLASH PROTECTION WARNING LABELS ON EACH SWITCHBOARD, PANELBOARD, AND TRANSFORMER. LABELS SHALL BE PER ANSI Z535.4 GUIDELINES PER THE ABOVE EXAMPLE.

2 TYPICAL ARC FLASH SIGNAGE DETAIL

NO SCALE



ELECTRICAL SINGLE LINE DIAGRAM

DSA APP# 02-121754

REFERENCE NOTES

1. (E) MAIN SWITCHBOARD IN AG-IT BLDG. MAIN ELECTRICAL ROOM.
2. LOCATE THE (E) U/G CONDUIT AND PULL BOX INSTALLED IN AREA OF GREENHOUSE PROJECT, SEE SHEET E-101. UTILIZE THE (E) CONDUIT TO INSTALL THE SPECIFIED FEEDER CONDUCTORS BETWEEN (E) "MSB" AND "GH" DISCONNECT SWITCH.
3. (E) U/G PULL BOX WITH CONDUIT FROM 480-VOLT "MSB".
4. EXTEND NEW CONDUIT PER ELECTRICAL PLANS TO NEW DISTRIBUTION EQUIPMENT. SEE SHEET E-101.
5. REFER TO THE PANEL SCHEDULE FOR FURTHER INFORMATION.
6. PROVIDE POWER PANEL IN PROJECT BUILDINGS PER ELECTRICAL PLANS AND PANEL SCHEDULES.
7. PROVIDE PULL BOX WITH CONDUIT ONLY FOR FUTURE USE. SEE SHEET E-101.
8. UTILIZE (E) 200A SPARE CIRCUIT BREAKER IN AG-IT "MSB".
9. PROVIDE A TRANSIENT VOLTAGE SURGE PROTECTION DEVICE (SPD) WITH A MINIMUM 80KA RATING. INCORPORATE INTO PANEL "GH" OR MOUNT ADJACENT TO PANEL "GH" IN A NEMA 3R ENCLOSURE.
10. PROVIDE BUILDING SUB PANELS WITH GROUNDING ELECTRODE SYSTEM AND GROUNDING CONDUCTORS PER CEC 250 (TYP.)
11. PROVIDE OFFSET COMPRESSION LUGS TO ACCOMMODATE OVERSIZED FEEDER TO FIT THE (N) OR (E) OCPD FACTORY LUG SIZE.

COPPER FEEDER SCHEDULE

FEEDER NO.	RACEWAY QUANTITY/SIZE	CONDUCTORS
CO12	(1) 2"C	CONDUIT ONLY WITH PULL ROPE.
CO13	(1) 3"C	CONDUIT ONLY WITH PULL ROPE.
353	(1) 3/4"C	(3) #10 THWN & (1) #10 GND.
653	(1) 1"C	(3) #6 THWN & (1) #10 GND.
854	(1) 1-1/4"C	(4) #4 THWN & (1) #8 GND.
1503	(1) 3"C	(3) #1/0 THWN & (1) #6 GND.
2304	(1) 2-1/2"C	(4) #4/0 THWN & (1) #4 GND.
2554G	(1) 3"C	(4) #250 KCMIL THWN & (1) #2 GND.
3803	(1) 3"C	(3) #500 KCMIL THWN & (1) #3 GND.
4204	(1) 4"C	(4) #600 KCMIL THWN & (1) #2 GND.

EQUIPMENT ELECTRICAL B.O.D. LIST

for MERCED COLLEGE GREEN HOUSE

TE# 23-8061

TAG	DESCRIPTION	QTY	VOLTAGE	PHASE	WATTS	AMPS	HP	FLA
EF-X.X	ACME EXHAUST FAN	2	230 (208)	1			1	
IS-X.X	ACME INLET SHUTTER	14	120	1	17			
HT-X.X	MODINE GAS FIRED HEATER	4	120	1			1/4	
ECS-X.X	EVAPORATIVE COOLING SYSTEM (PUMP)	3	120	1		2.9	1/3	
F-X.X	SCHAEFNER INTERNAL FAN	8	120	1			1/10	
RV-X.X	ROOF VENT (LOCK DRIVE MOTOR)	2	120	1		2.6		
RS-X.X	ROOF SHADE SYSTEM (DRIVE MOTOR)	1	120	1		2.5	1/5	
WB-X.X	DOUBLE RAIL WATERING BOOM (CHAIN DRIVE MOTOR)	1	120	1		2.5	1/4	

(ITEMS RCVD 1-31-24)

NOTES:

- "X.X" DESIGNATION IN EQUIPMENT TAG INDICATES PANEL AND EQUIPMENT NUMBER AS REFLECTED ON ELECTRICAL FLOOR PLANS.
- ROUTE ALL GREENHOUSE EQUIPMENT BRANCH CIRCUITS THROUGH CONTACTOR PANELS AND COORINATE WITH DISTRICTS CONTROLS CONTRACTOR

GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

SINGLE LINE DIAGRAM GENERAL NOTES

A. SERVICE ENTRANCE EQUIPMENT SHALL BE IN ACCORDANCE WITH CEC REQUIREMENTS.

B. ALL CONDUCTORS SHALL BE COPPER WITH TYPE [THHN/THWN] INSULATION UNLESS OTHERWISE NOTED.

C. ALL SWITCHES, CIRCUIT BREAKERS AND OTHER EQUIPMENT, AS SPECIFIED, SHALL HAVE TERMINATION PROVISIONS LISTED AND IDENTIFIED FOR USE WITH 75 DEG. CONDUCTORS, AND ALL FEEDER CONDUCTORS, AND CONDUITS, ARE SIZE BASED ON USE OF 75 DEG. C COPPER WIRES TYPE THWN/THHN.

D. ALL EQUIPMENT SHALL HAVE AN APPROVED TESTING LABORATORY LABEL ATTACHED [UL, CSA, ETC.] (CEC 110-2).

E. SERVICE ENTRANCE AND DOWNSTREAM EQUIPMENT SHALL HAVE A U.L APPROVED SERIES RATING EQUAL TO OR GREATER THAN THE AVAILABLE FAULT CURRENT. LABEL EQUIPMENT ACCORDINGLY WHEN SERIES RATINGS APPLY. IF NO SERIES RATING IS AVAILABLE, EQUIPMENT SHALL BE FULLY-RATED FOR THE AVAILABLE FAULT CURRENT.

F. THE ELECTRICAL CONTRACTOR IS RESPONSIBLE FOR SUPPLYING GEAR SIZED TO FIT IN THE AVAILABLE SPACE IN THE ELECTRIC ROOM/EQUIPMENT PAD. THE DIMENSIONS SHOWN ARE BASED UPON EATON / SQUARE D EQUIPMENT. REFER TO ARCHITECTURAL PLANS FOR DIMENSIONAL INFORMATION NOT SHOWN ON THE ELECTRICAL PLANS. CONTRACTOR SHALL SUBMIT A 1/4" SCALE DRAWING OF ALL SWITCHGEAR, AND TERMINATION CABINETS ON FLOOR PLAN WITH SUBMITTAL.

G. SINGLE LINE DIAGRAM IS A GRAPHIC REPRESENTATION OF THE POWER DISTRIBUTION, REFER TO ELECTRICAL FLOOR PLANS FOR EQUIPMENT ORIENTATION / LAYOUT.

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EXPIRES: 09/30/24

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

ELECTRICAL SINGLE LINE DIAGRAM

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-002

Mar 01, 2024 - 12:06pm - asadcett - K:\ENG\2023\23-8061\23-8061_E002_SLD.dwg

Drawing: K:\ENG\2023\23-8061\23-8061_E002_SLD.dwg E-002 - ARCH.ctb
Plot by asadcett Mar 01, 2024 - 12:06pm

DSA APP# 02-121754

(N) PANEL GH

BUS RATING: 400A 120/208V, 3PH, 4W
MAIN: 250A /3P MAIN CIRCUIT BREAKER
SPACES: 42 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 22 KAIC PANEL

SURFACE MOUNT, NEMA 3R
LOCATION: GREENHOUSE COMPLEX
WITH EQUIPMENT GND BUS
FED FROM A-G-IT BLDG. 'MSB'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
			N	1	SPD	30	3	10	4036			4/0	3	200	PANEL GH3, LRG. GRNHSE.	2	N		190	0.32%
			N	3	"	-	-	10		4417		4/0	-	-	"	4	N		190	0.35%
			N	5	"	-	-	10			4132	4/0	-	-	"	6	N		190	0.33%
0.28%	155		N	7	PANEL GH1, SM. GRNHSE.	60	3	4	856			6	2	60	PANEL PS, POTTING SHADE	8	N		35	0.10%
0.51%	155		N	9	"	-	-	4	758	1533		6	-	-	"	10	N		35	0.14%
0.43%	155		N	11	"	-	-	4		1013	1292	6	2	60	PANEL AS, AG STORAGE	12	N		25	0.23%
0.35%	190		N	13	PANEL GH2, SM. GRNHSE.	60	3	4	856		2386	6	-	-	"	14	N		25	0.38%
0.62%	190		N	15	"	-	-	4	3910	1533		6	2	60	PANEL LB1, LOAFING BARN 1	16	N		115	1.51%
0.52%	190		N	17	"	-	-	4		3340	1292	6	-	-	"	18	N		115	2.17%
				19	SPACE				4838		4800	4	2	60	PANEL LB2, LOAFING BARN 2	20	N		165	1.97%
				21	SPACE					3303		4	-	-	"	22	N		165	1.34%
				23	SPACE						1040	12	2	20	SOIL MIXER RECEPTACLE	24	M		85	1.40%
				25	SPACE				1040			12	-	-	"	26	M		85	1.40%
				27	SPACE								2	60	SPARE C.B. FOR (F) SHADE STRUCTURE	28				
				29	SPACE								-	-	"	30				
				31	SPACE										SPACE	32				
				33	SPACE										SPACE	34				
				35	SPACE										SPACE	36				
				37	SPACE										SPACE	38				
				39	SPACE										SPACE	40				
				41	SPACE										SPACE	42				
					CON:				16292	15138	14942									
					25%:				0	0	0									
					SUB:				0	0	0									
					TOT:				16292	15138	14942									
					AMPS				136	126	125									

PANEL NOTES:
1. ...

LOAD (VA)	LOAD TYPE LEGEND	
0	R	RECEPTACLE
0	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
2080	M	MECHANICAL
0	K	KITCHEN APPLIANCE
44291.75	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(E) Switchboard MSB Panel Schedule

BUS RATING: 2000A, 277/480V, 3PH, 4W
NEMA 1
AIC RATING: 42K

2000A/3P GFCI MCB
ELECTRICAL RM. 127
FED FROM 12KV CIRC.#5 VIA PAD MOUNT

DISTRIBUTION DIST (FT)	PANEL/LOAD	TRIP	POLES	COND SIZE	CONNECTED VA (AMPS) %VD PHASE A	PHASE B	PHASE C	CALC TYPE
	(E) SPD	60	3	6	0	0	0	
40	(E) PANEL "HA1"	225	3	4/0	50600 (182.7A) 0.16%	48335 (174.5A) 0.15%	50725 (183.1A) 0.16%	CON
160	(E) PANEL "HB1"	200	3	3/0	18817.90 (67.9A) 0.30%	14844.65 (53.6A) 0.24%	15974 (57.7A) 0.25%	CON
50	(E) TRANSFORMER "T-1" / PANEL "LDP"	225	3	4/0	43209.60 (156.0A) 0.17%	41004.00 (148.0A) 0.16%	43354.40 (156.5A) 0.17%	CON
275	(E) PANEL "HC1"	800	3	2-500	207170.00 (747.9A) 0.96%	210222 (758.9A) 0.97%	210205 (758.9A) 0.97%	CON
160	(E) PANEL "HC2"	400	3	600	112960 (407.8A) 0.50%	112960 (407.8A) 0.50%	112960 (407.8A) 0.50%	CON
160	(E) PANEL "HD1"	400	3	600	64294 (232.1A) 0.29%	64294 (232.1A) 0.29%	64294 (232.1A) 0.29%	CON
70	(E) BOOSTER PUMP BP-1	30	3	10	3879.87 (14.0A) 0.44%	3879.87 (14.0A) 0.44%	3879.87 (14.0A) 0.44%	CON
445	(N) TRANSFORMER "T-4" / PANEL "GH"	200	3	500	16292 (58.8A) 0.06%	15138 (54.6A) 0.06%	14942 (53.9A) 0.06%	CON
	(E) SPARE	30	3		0.00	0.00	0.00	
	(E) SPARE	100	3		0.00	0.00	0.00	
	SPACE		3		0	0	0	
	SPACE		3		0	0	0	
	SPACE		3		0	0	0	
	SPACE		3		0	0	0	
	SPACE		3		0	0	0	
	SPACE		3		0	0	0	
				KVA (AMPS):	517.22 (1867.2A)	510.68 (1843.6A)	516.33 (1864.0A)	

Total KVA 1544.23
Total Amps 1857

VD CALCULATION TYPE
CON CONNECTED LOAD
CB 80% OF BREAKER RATING

(N) PANEL GH2

BUS RATING: 100A 120/208V, 3PH, 4W
MAIN: 60A /3P MAIN CIRCUIT BREAKER
SPACES: 30 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 3R
LOCATION: SMALL GREEN HOUSE 2
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.12%	25		R	1	WEST RECEPTACLE	20	1	12	180			12	1	20	EXT. LIGHTING	2	L		72	0.06%
0.21%	43		R	3	WEST RECEPTACLE	20	1	12	30	180		12	1	20	INT. LIGHTING	4	L		104	1.89%
0.30%	60		R	5	WEST RECEPTACLE	20	1	12		660	180	12	1	20	EAST RECEPTACLE	6	R		14	0.07%
0.43%	65		M	7	"F-1.1", "F-1.2"	15	1	14	150		180	12	1	20	EAST RECEPTACLE	8	R		32	0.16%
0.38%	25		M	9	"HT-1.1"	15	1	14	180	348		12	1	20	EAST RECEPTACLE	10	R		50	0.25%
0.14%	10		R	11	COMMUNICATION CABINET	20	1	12		180	500	14	1	15	"ECS-2.1"	12	M		70	1.32%
0.07%	10		M	13	GH CONTACTOR PANEL	20	1	12	240		432	14	1	15	"IS-2.1", "IS-2.2", "IS-2.3", "IS-2.4"	14	M		80	0.24%
				15	SPACE				68						SPACE	16				
				17	SPACE										SPACE	18				
				19	SPACE										SPACE	20				
				21	SPACE										SPACE	22				
				23	SPACE										SPACE	24				
				25	SPACE										SPACE	26				
				27	SPACE										SPACE	28				
				29	SPACE										SPACE	30				
					CON:				848	1368	1292									
					25%:				8	165	0									
					SUB:				0	0	0									
					TOT:				856	1533	1292									
					AMPS				7	13	11									

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
1580	R	RECEPTACLE
690	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
1238	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(N) PANEL GH1

BUS RATING: 100A 120/208V, 3PH, 4W
MAIN: 60A /3P MAIN CIRCUIT BREAKER
SPACES: 30 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 3R
LOCATION: SMALL GREEN HOUSE 1
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	PHASE B	PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.12%	25		R	1	WEST RECEPTACLE	20	1	12	180			12	1	20	EXT. LIGHTING	2	L		72	0.06%
0.21%	43		R	3	WEST RECEPTACLE	20	1	12	30	180		12	1	20	INT. LIGHTING	4	L		104	1.89%
0.30%	60		R	5	WEST RECEPTACLE	20	1	12		660	180	12	1	20	EAST RECEPTACLE	6	R		14	0.07%
0.43%	65		M	7	"F-1.1", "F-1.2"	15	1	14	150		180	12	1	20	EAST RECEPTACLE	8	R		32	0.16%
0.38%	25		M	9	"HT-1.1"	15	1	14	180	348		12	1	20	EAST RECEPTACLE	10	R		50	0.25%
0.14%	10		R	11	COMMUNICATION CABINET	20	1	12		180	500	14	1	15	"ECS-1.1"	12	M		70	1.32%
0.07%	10		M	13	GH CONTACTOR PANEL	20	1	12	240		432	14	1	15	"IS-1.1", "IS-1.2", "IS-1.3", "IS-1.4"	14	M		80	0.24%
				15	SPACE				68						SPACE	16				
				17	SPACE										SPACE	18				
				19	SPACE										SPACE	20				
				21	SPACE										SPACE	22				
				23	SPACE										SPACE	24				
				25	SPACE										SPACE	26				
				27	SPACE										SPACE	28				
				29	SPACE										SPACE	30				
					CON:				848	1368	1292									
					25%:				8	165	0									
					SUB:				0	0	0									
					TOT:				856	1533	1292									
					AMPS				7	13	11									

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
1580	R	RECEPTACLE
690	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
1238	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

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REGISTERED PROFESSIONAL ENGINEER — JEFFREY M. [illegible] — NO. 20823 — ELECTRICAL — STATE OF CALIFORNIA
EXPIRES: 09/30/24

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
PANEL SCHEDULES

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-003

Mar 01, 2024 - 12:06pm - asackett - K:\ENG\2023\23-8061\23-8061_E003-E004_PANELS.dwg
Plotted by: asackett Mar 01, 2024 - 12:06pm
Drawing: K:\ENG\2023\23-8061\23-8061_E003-E004_PANELS.dwg, E-003 - SCH.dds

(N) PANEL AS

BUS RATING: 100A 120/208V, 1PH, 3W
MAIN: 60A /2P MAIN CIRCUIT BREAKER
SPACES: 30 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 1
LOCATION: A G STORGAE BLDG.
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	CONNECTED VA PHASE B	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.59%	40		R	1	EAST RECEPTACLES	20	1	12	540		12	1	20	EXT. LIGHTING	2	L		32	0.04%
									45										
0.97%	65		R	3	EAST RECEPTACLES	20	1	12		540	12	1	20	INT. LIGHTING	4	L		58	0.67%
										420									
0.69%	50		L	5	EAST AG CONTAINER LIGHTS	20	1	12	500		12	1	20	WEST RECEPTACLES	6	R		20	0.30%
									540										
0.96%	70		L	7	WEST AG CONTAINER LIGHTS	20	1	12		500	12	1	20	WEST RECEPTACLES	8	R		45	0.89%
										720									
0.83%	60		L	9	(F) AG CONTAINER LIGHTS	20	1	12	500					SPACE	10				
0.41%	10		R	11	REMOTE IDF CABINET RECEPTACLE	20	1	12		1500				SPACE	12				
				13	SPACE									SPACE	14				
				15	SPACE									SPACE	16				
				17	SPACE									SPACE	18				
				19	SPACE									SPACE	20				
				21	SPACE									SPACE	22				
				23	SPACE									SPACE	24				
				25	SPACE									SPACE	26				
				27	SPACE									SPACE	28				
				29	SPACE									SPACE	30				

	PHASE A	PHASE B
CON:	2125	3680
25%:	261	230
SUB:	0	0
TOT:	2386	3910
AMPS	20	33

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
3840	R	RECEPTACLE
1965	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(N) PANEL GH3

BUS RATING: 225A 120/208V, 3PH, 4W
MAIN: 200A /3P MAIN CIRCUIT BREAKER
SPACES: 42 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 3R
LOCATION: LARGE GREEN HOUSE
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	CONNECTED VA PHASE B	CONNECTED VA PHASE C	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.26%	26		R	1	EAST RECEPTACLES	20	1	12	360			12	1	20	EXT. LIGHTING	2	L		72	0.39%
									198											
0.61%	62		R	3	EAST RECEPTACLES	20	1	12		360		10	1	20	NORHT INT. LIGHTING	4	L		170	2.40%
										820										
0.43%	86		R	5	EAST RECEPTACLES	20	1	12			180	12	1	20	SOUTH INT. LIGHTING	6	L		95	2.19%
											840									
1.23%	124		R	7	EAST RECEPTACLES	20	1	12	360			12	1	20	WEST RECEPTACLES	8	R		8	0.08%
									360											
1.58%	160		R	9	EAST RECEPTACLES	20	1	12		360		12	1	20	WEST RECEPTACLES	10	R		52	0.51%
										360										
0.42%	35		M	11	"EF-2"	15	2	14			480	12	1	20	WEST RECEPTACLES	12	R		88	0.44%
											180									
0.42%	35		M	13	"	15	-	14	480			12	1	20	WEST RECEPTACLES	14	R		112	1.11%
									360											
0.68%	45		M	15	"HT-3.1"	15	1	14		348		12	1	20	WEST RECEPTACLES	16	R		154	0.76%
										180										
2.43%	160		M	17	"HT-3.2"	15	1	14			348	14	2	15	"EF-1"	18	M		15	0.18%
											480									
1.96%	150		M	19	"F-3.1", "F-3.2", "F-3.3", "F-3.4"	15	1	14	300			14	-	15	"	20	M		15	0.18%
									480											
1.43%	105		M	21	"RV-3.2"	15	1	14		312		14	1	15	"RS-3.1"	22	M		12	0.16%
										300										
0.41%	30		R	23	COMMUNICATION CABINET	20	1	12			500	14	1	15	"RV-3.1"	24	M		95	1.29%
											312									
0.20%	30		M	25	GH CONTROL PANEL	20	1	12	240			14	1	15	"WB-3.1"	26	M		105	1.59%
									348											
0.20%	30		M	27	GH CONTACTOR PANEL	20	1	12		240		12	1	15	"ECS-3.1"	28	M		155	1.84%
										432										
0.41%	30		M	29	ROOF SHADE CONTROL PANEL	20	1	12			500	14	1	15	"IS-3.1", "IS-3.2", "IS-3.3", "IS-3.4", "IS-3.5", "IS-3.6"	30	M		170	0.76%
											102									
0.41%	30		M	31	ROOF VENT CP 1	20	1	12	500						SPACE	32				
0.41%	30		M	33	ROOF VENT CP 2	20	1	12		500					SPACE	34				
				35	SPACE										SPACE	36				
				37	SPACE										SPACE	38				
				39	SPACE										SPACE	40				
				41	SPACE										SPACE	42				

	PHASE A	PHASE B	PHASE C
CON:	3986	4212	3922
25%:	50	205	210
SUB:	0	0	0
TOT:	4036	4417	4132
AMPS	34	37	34

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
3560	R	RECEPTACLE
1858	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
6702	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(N) PANEL LB2

BUS RATING: 100A 120/208V, 1PH, 3W
MAIN: 60A /2P MAIN CIRCUIT BREAKER
SPACES: 18 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 1
LOCATION: LOAFING BARN 2
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	CONNECTED VA PHASE B	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
				1	SPACE				30		12	1	20	EXT. LIGHTING	2	L		56	0.05%
				3	SPACE					290	12	1	20	INT. LIGHTING	4	L		42	0.33%
				5	SPACE				1920		12	1	20	20A CART CHARGER	6	C		28	1.48%
				7	SPACE					1920	12	1	20	20A CART CHARGER	8	C		40	2.11%
				9	SPACE				1920		12	1	20	20A CART CHARGER	10	C		50	2.64%
				11	SPACE					540	12	1	20	RECEPTACLES	12	R		52	0.77%
				13	SPACE									SPACE	14				
				15	SPACE									SPACE	16				
				17	SPACE									SPACE	18				

	PHASE A	PHASE B
CON:	3870	2750
25%:	968	553
SUB:	0	0
TOT:	4838	3303
AMPS	40	28

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
540	R	RECEPTACLE
320	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
5760	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(N) PANEL LB1

BUS RATING: 100A 120/208V, 1PH, 3W
MAIN: 60A /2P MAIN CIRCUIT BREAKER
SPACES: 18 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 1
LOCATION: LOAFTING BARN 1
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	CONNECTED VA PHASE B	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
0.45%	56		L	1	INT. LIGHTING	20	1	12	290		12	1	20	EXT. LIGHTING	2	L		56	0.05%
									30										
				3	SPACE					1920	12	1	20	20A CART CHARGER	4	C		28	1.48%
				5	SPACE				1920		12	1	20	20A CART CHARGER	6	C		40	2.11%
				7	SPACE					1920	12	1	20	20A CART CHARGER	8	C		50	2.64%
				9	SPACE				540		12	1	20	RECEPTACLES	10	R		52	0.77%
				11	SPACE									SPACE	12				
				13	SPACE									SPACE	14				
				15	SPACE									SPACE	16				
				17	SPACE									SPACE	18				

	PHASE A	PHASE B
CON:	2780	3840
25%:	560	960
SUB:	0	0
TOT:	3340	4800
AMPS	28	40

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
540	R	RECEPTACLE
320	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
5760	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

(N) PANEL PS

BUS RATING: 100A 120/208V, 1PH, 3W
MAIN: 60A /2P MAIN CIRCUIT BREAKER
SPACES: 12 FULL SIZE BOLT-ON CB SPACES
AIC RATING: 10 KAIC PANEL

SURFACE MOUNT, NEMA 3R
LOCATION: POTTING SHADE
WITH EQUIPMENT GND BUS
FED FROM PANEL 'GH'

CKT %VD	DIST (FT)	NOTES	LOAD TYPE	CKT	DESCRIPTION	TRIP	POLES	COND SIZE	CONNECTED VA PHASE A	CONNECTED VA PHASE B	COND SIZE	POLES	TRIP	DESCRIPTION	CKT	LOAD TYPE	NOTES	DIST (FT)	CKT %VD
1.19%	60			1	RECEPTACLES	20	1	12	720		12	1	20	EXT. LIGHTING	2	L		75	0.06%
									30										
				3	SPACE					810	12	1	20	INT. LIGHTING	4	L		80	1.78%
				5	SPACE									SPACE	6				
				7	SPACE									SPACE	8				
				9	SPACE									SPACE	10				
				11	SPACE									SPACE	12				

	PHASE A	PHASE B
CON:	750	810
25%:	8	203
SUB:	0	0
TOT:	758	1013
AMPS	6	8

PANEL NOTES:

LOAD (VA)	LOAD TYPE LEGEND	
0	R	RECEPTACLE
840	L	LIGHTING (125% OF CONNECTED LOAD CEC 215.2)
0	M	MECHANICAL
0	K	KITCHEN APPLIANCE
0	N	NON-CONTINUOUS MISC.
0	C	CONTINUOUS MISC. (125% OF CONNECTED LOAD CEC 215.2)

DSA APP# 02-121754

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
PANEL SCHEDULES

CONST. DOCUMENTS

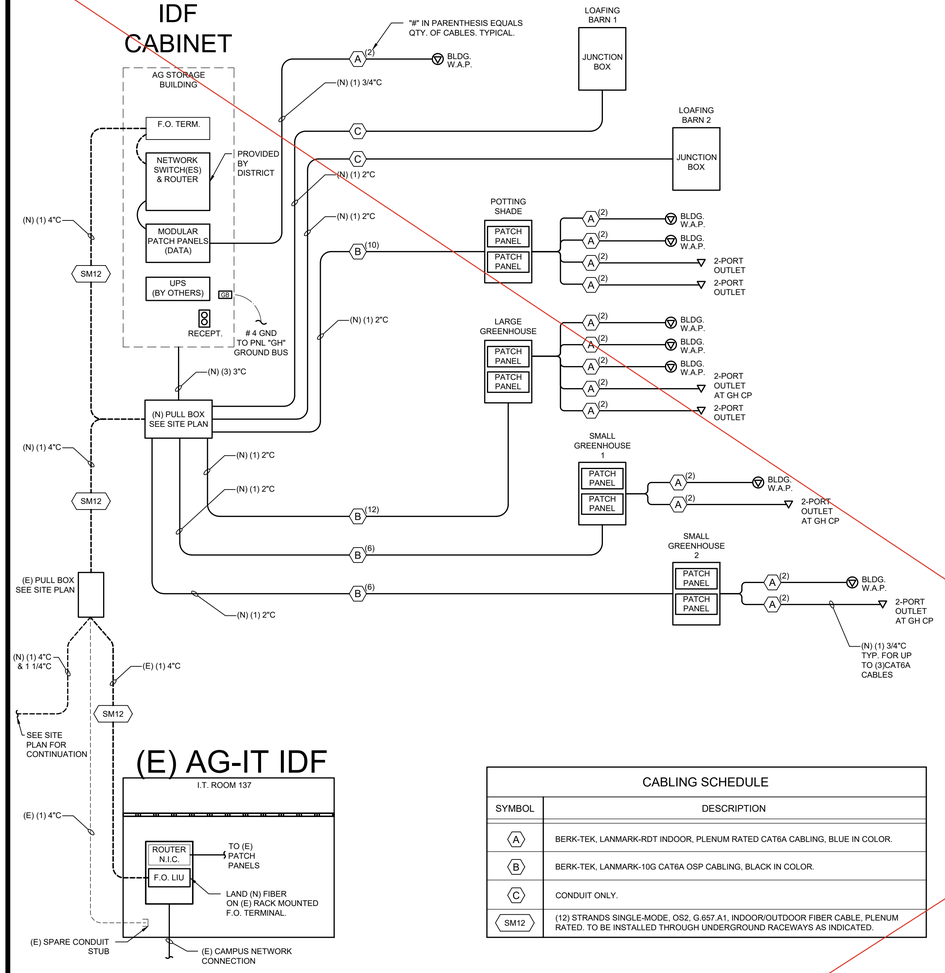
DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-004

Mar 01, 2024 - 12:06pm - asackett - K:\ENG\2023\23-8061\23-8061_E003-E004_PANELS.dwg
Drawing K:\ENG\2023\23-8061\23-8061_E003-E004_PANELS.dwg, E-004 - ROT.ctb
Plotted by: asackett - Mar 01, 2024 - 12:06pm

DSA APP# 02-121754

REMOTE IDF CABINET



(E) AG-IT IDF

CABLING SCHEDULE

SYMBOL	DESCRIPTION
A	BERK-TEK, LANMARK-RDT INDOOR, PLENUM RATED CAT6A CABLING, BLUE IN COLOR.
B	BERK-TEK, LANMARK-10G CAT6A OSP CABLING, BLACK IN COLOR.
C	CONDUIT ONLY.
SM12	(12) STRANDS SINGLE-MODE, OS2, G.657.A1, INDOOR/OUTDOOR FIBER CABLE, PLENUM RATED. TO BE INSTALLED THROUGH UNDERGROUND RACEWAYS AS INDICATED.

BASIS OF DESIGN

CABLING SPEC.

MANUF.	MANUFACTURER'S PART NO. / SERIES NO.	DESCRIPTION
LEVITON	012ZWP-T4101D20	INDOOR/OUTDOOR, PLENUM RATED, LOOSE TUBE 'OS2', G657.A1 COMPLIANT 12-STRAND, SINGLE MODE FIBER OPTIC CABLE
BERK-TEK	LANMARK-RDT	INDOOR, PLENUM RATED, CAT6A CABLE
BERK-TEK	LANMARK-10G CAT6A OSP	OUTDOOR, CAT6A CABLE (PERMITTED IN UNDERSLAB APPLICATIONS ONLY)

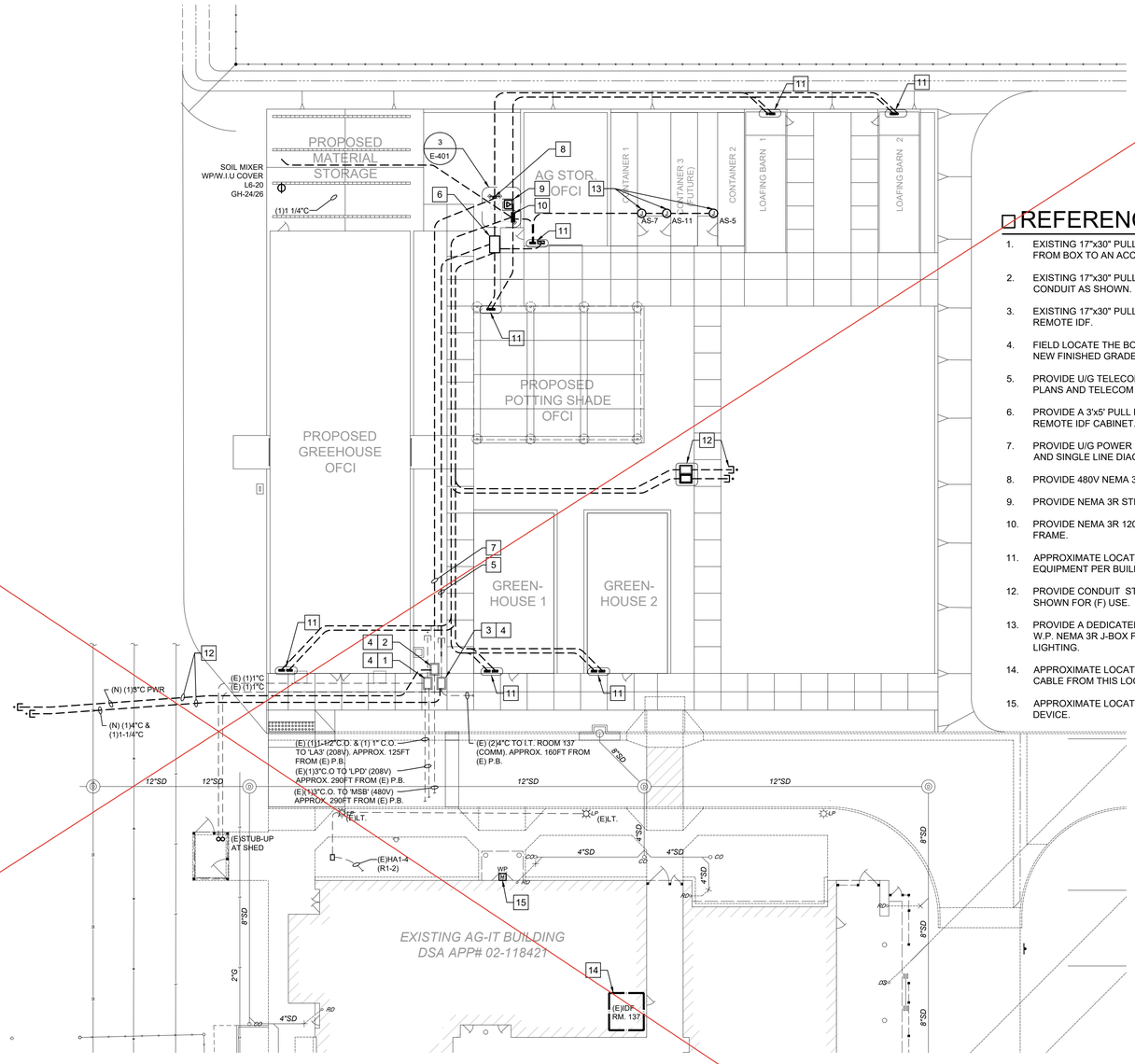
REMOTE INTERMEDIATE DISTRIBUTION FRAME ('IDF') CABINET

MANUF.	MANUFACTURER'S PART NO. / SERIES NO.	DESCRIPTION
HUBBLE	RE4XB	REMOTE EQUIPMENT CABINET, BLACK, 5U, #12-24 THREADED HOLES
LEVITON	OPT-X 2000i (5R1UH-S03)	1RU, RACK-MOUNTED, FIBER OPTIC SPLICE ENCLOSURE
LEVITON	49255-Q48	48 PORT, 1RU MODULAR PATCH PANEL (CAT6A) - COMPATIBLE WITH LEVITON QUICKPORT CONNECTORS

NOTE: FOR PURPOSES OF EQUIPMENT SIZE AND FIT, THIS DESIGN IS BASED UPON THE EQUIPMENT SHOWN IN THIS SCHEDULE. ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR FORM, FIT AND FUNCTION OF EQUIPMENT SUBSTITUTED AT BID TIME. ALL TELECOMMUNICATIONS EQUIPMENT NOT LISTED HERE SHALL BE SUBMITTED FOR APPROVAL PER SPECIFICATIONS.

1 TELECOM RISER DIAGRAM

SCALE: NTS



ELECTRICAL SITE PLAN

SCALE: 1" - 20' 0"

NORTH

REFERENCE NOTES

1. EXISTING 17"x30" PULL BOX LABELED "208V ELECTRICAL". STUB A 2"C FROM BOX TO AN ACCESSIBLE LOCATION TO THE NORTH FOR (F) USE.
2. EXISTING 17"x30" PULL BOX LABELED "480V ELECTRICAL". EXTEND CONDUIT AS SHOWN.
3. EXISTING 17"x30" PULL BOX LABELED "COMM". EXTEND CONDUIT TO (N) REMOTE IDF.
4. FIELD LOCATE THE BOXES AND ADJUST COVERS TO BE FLUSH WITH NEW FINISHED GRADE.
5. PROVIDE U/G TELECOM DISTRIBUTION CONDUIT(S) PER BUILDING PLANS AND TELECOM RISER DIAGRAM (TYP).
6. PROVIDE A 3'x5' PULL BOX FOR TELECOM DISTRIBUTION FROM THE REMOTE IDF CABINET. SEE TELECOM RISER DIAGRAM.
7. PROVIDE U/G POWER DISTRIBUTION CONDUIT(S) PER BUILDING PLANS AND SINGLE LINE DIAGRAM (TYP.).
8. PROVIDE 480V NEMA 3R DISCONNECT SWITCH.
9. PROVIDE NEMA 3R STEP-DOWN TRANSFORMER ON CONCRETE PAD.
10. PROVIDE NEMA 3R 120/208V POWER PANEL "GH" ON STEEL SUPPORT FRAME.
11. APPROXIMATE LOCATION OF BUILDING POWER & LOW VOLTAGE EQUIPMENT PER BUILDING PLANS AND RISER DIAGRAM.
12. PROVIDE CONDUIT STUB-OUTS FROM POWER AND COMM. BOXES AS SHOWN FOR (F) USE.
13. PROVIDE A DEDICATED CIRCUIT, 20A DISCONNECT SWITCH (SPST), AND W.P. NEMA 3R J-BOX FOR EACH AG CONTAINER TO CONNECT INTERIOR LIGHTING.
14. APPROXIMATE LOCATION OF AG-IT IDF ROOM. EXTEND FIBER OPTIC CABLE FROM THIS LOCATION TO (N) REMOTE IDF.
15. APPROXIMATE LOCATION OF NEAREST FIRE ALARM NOTIFICATION DEVICE.

GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

811 Know what's below. Call before you dig.

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

ELECTRICAL SITE PLAN

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-101

Mar 01, 2024 - 12:06pm - astuckett - K:\ENG\2023\23-8061\23-8061_E101_SITE PLAN.dwg

Drawing: K:\ENG\2023\23-8061\23-8061_E101_SITE PLAN.dwg, E-101 - IDCF.ctb
Plot by: astuckett - Mar 01, 2024 - 12:06pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

DSA APP# 02-121754

REFERENCE NOTES

1. PROVIDE CHAIN HUNG LED VAPOR-TIGHT LIGHT WITH DIMMING CONTROL NODE AND MOTION SENSOR.
2. PROVIDE EMERGENCY LIGHTING UNIT EQUIPMENT. COORDINATE LOCATION WITH STRUCTURE ELEMENT FOR MOUNTING. CONNECT WITH A CONSTANT HOT FROM THE INTERIOR LIGHTING CIRCUIT FOR CONTINUOUS CHARGING OF THE BATTERY.
3. PROVIDE LED WALL PACK LIGHT WITH INTEGRAL PHOTOCONTROL AND BI-LEVEL MOTION SENSOR. TYPE 'S1E' LIGHTS HAVE AN INTEGRAL EMERGENCY BATTERY PACK. CONNECT WITH A CONSTANT HOT FOR CONTINUOUS CHARGING OF BATTERY.
4. PROVIDE WIRELESS LIGHTING CONTROL SWITCH(ES) WITH W.P. COVER PLATE COMPATIBLE WITH SUPPLIED 0-10V DIMMING LUMINAIRES.

AG STORAGE LIGHTING PLAN

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

AG STORAGE LIGHTING PLAN

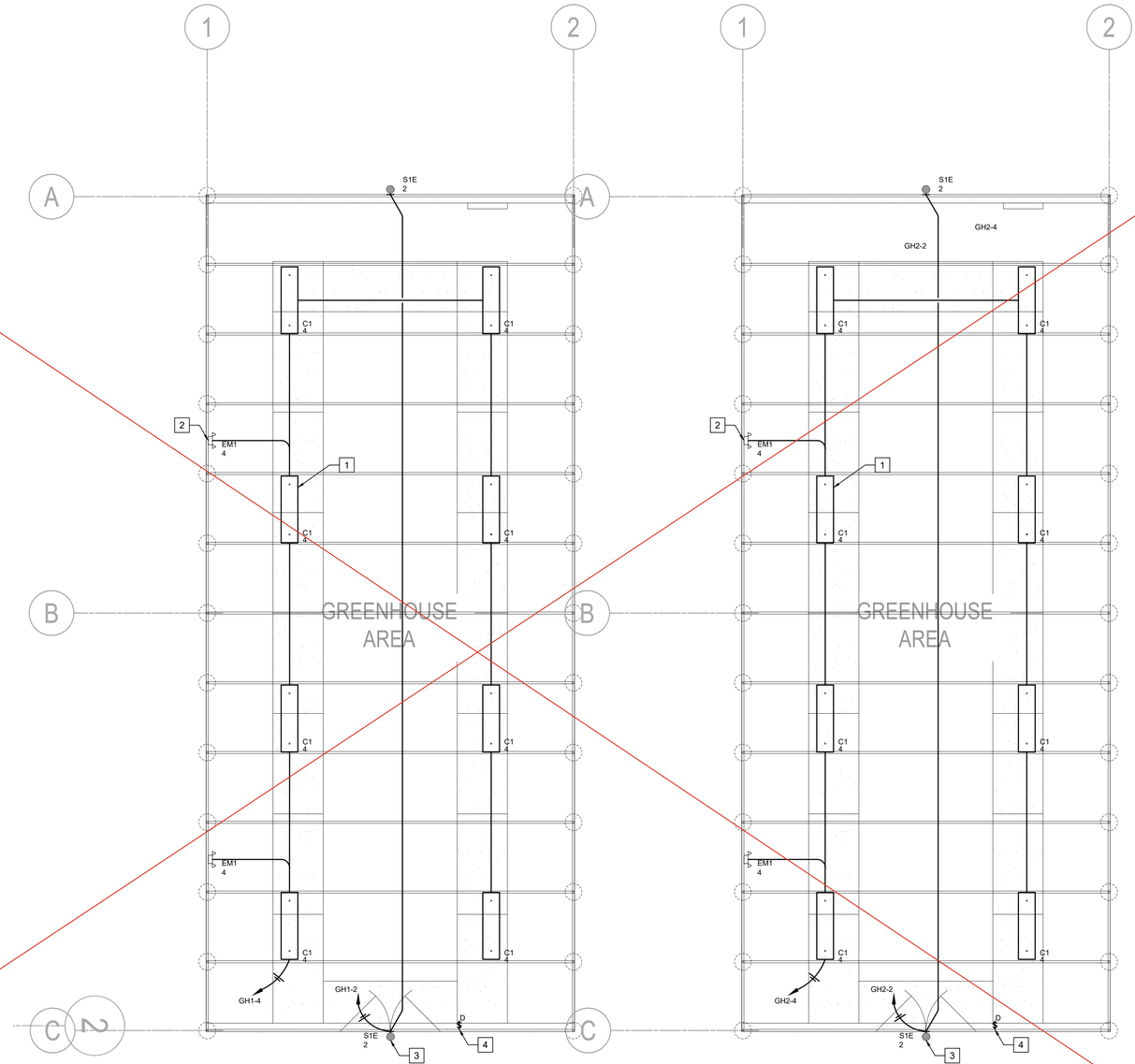
CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-201

Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2023\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg
Drawing: K:\ENG\2023\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg, E-201 - AG STORAGE LIGHTING PLAN.dwg
Plot by: stackett - Mar 01, 2024 - 12:06pm

DSA APP# 02-121754



REFERENCE NOTES

1. PROVIDE CHAIN HUNG LED VAPOR-TIGHT LIGHT WITH DIMMING CONTROL NODE AND MOTION SENSOR.
2. PROVIDE EMERGENCY LIGHTING UNIT EQUIPMENT. COORDINATE LOCATION WITH STRUCTURE ELEMENT FOR MOUNTING. CONNECT WITH A CONSTANT HOT FROM THE INTERIOR LIGHTING CIRCUIT FOR CONTINUOUS CHARGING OF THE BATTERY.
3. PROVIDE LED WALL PACK LIGHT WITH INTEGRAL PHOTOCONTROL AND BI-LEVEL MOTION SENSOR. TYPE 'S1E' LIGHTS HAVE AN INTEGRAL EMERGENCY BATTERY PACK, CONNECT WITH A CONSTANT HOT FOR CONTINUOUS CHARGING OF BATTERY.
4. PROVIDE WIRELESS LIGHTING CONTROL SWITCH(ES) WITH W.P. COVER PLATE COMPATIBLE WITH SUPPLIED 0-10V DIMMING LUMINAIRES.

NORTH

GREENHOUSE 1 & 2 LIGHTING PLANS

SCALE: 1/4" - 1' 0"

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MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

GREENHOUSE 1 & 2
LIGHTING PLANS

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

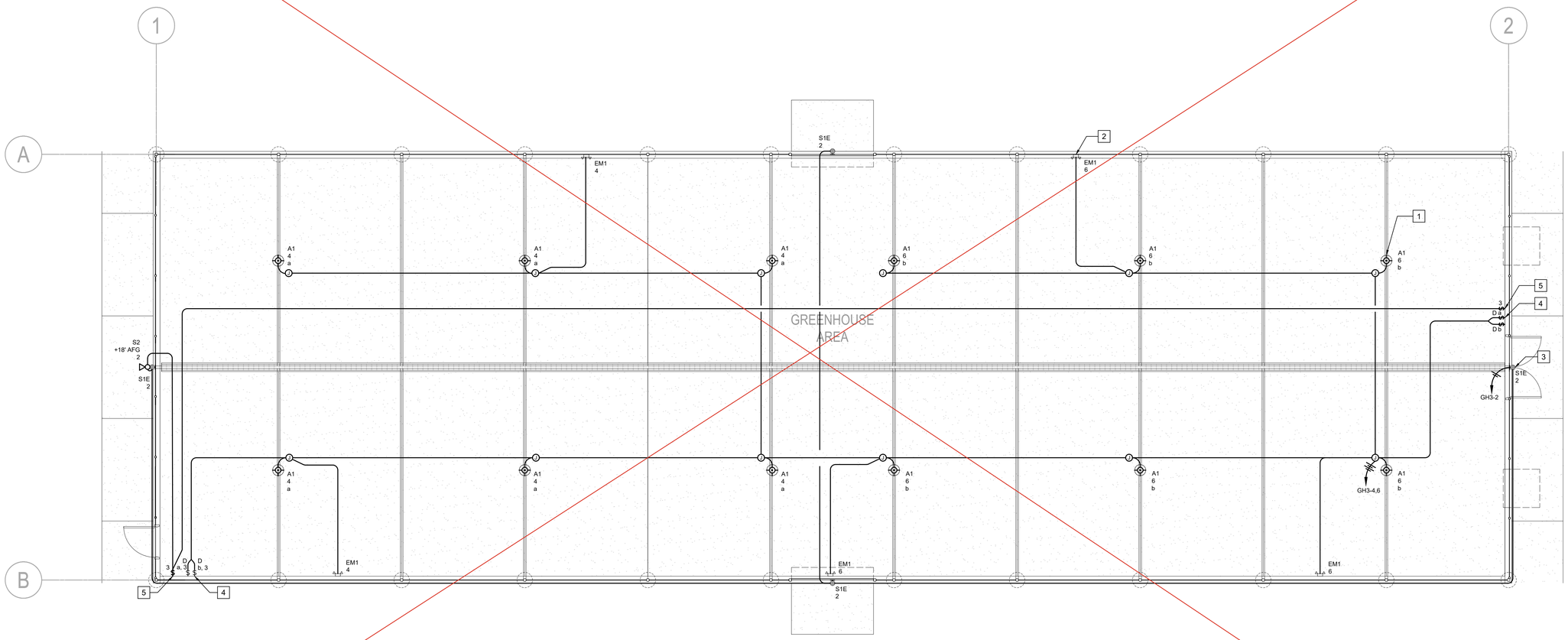
E-202

Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2020\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg
Drawing: K:\ENG\2020\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg, E-202 - REF.rds
Plot by: stackett - Mar 01, 2024 - 12:06pm

REFERENCE NOTES

1. PROVIDE PENDANT MOUNTED LED WITH ON BOARD DIMMING / MOTION SENSOR.
2. PROVIDE EMERGENCY LIGHTING UNIT EQUIPMENT. COORDINATE LOCATION WITH STRUCTURE ELEMENT FOR MOUNTING. CONNECT WITH A CONSTANT HOT FROM THE INTERIOR LIGHTING CIRCUIT FOR CONTINUOUS CHARGING OF THE BATTERY.
3. PROVIDE LED WALL PACK LIGHT WITH INTEGRAL PHOTOCONTROL AND BI-LEVEL MOTION SENSOR. TYPE 'S1E' LIGHTS HAVE AN INTEGRAL EMERGENCY BATTERY PACK, CONNECT WITH A CONSTANT HOT FOR CONTINUOUS CHARGING OF BATTERY.
4. INTERIOR LIGHTING CONTROL SWITCHES WITH W.P. COVER PLATE COMPATIBLE WITH 0-10V DIMMING LUMINARIES.
5. PROVIDE LINE VOLTAGE SWITCH WITH W.P. COVER PLATE FOR MANUAL ON/OFF CONTROL OF EXTERIOR FLOOD LIGHT.

DSA APP# 02-121754



MAIN GREENHOUSE LIGHTING PLANS

SCALE: 3/16" - 1' 0"

NORTH

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MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

MAIN GREENHOUSE LIGHTING PLANS

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-203

Mar 01, 2024 - 12:05pm - asackett - K:\ENG\2023\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg

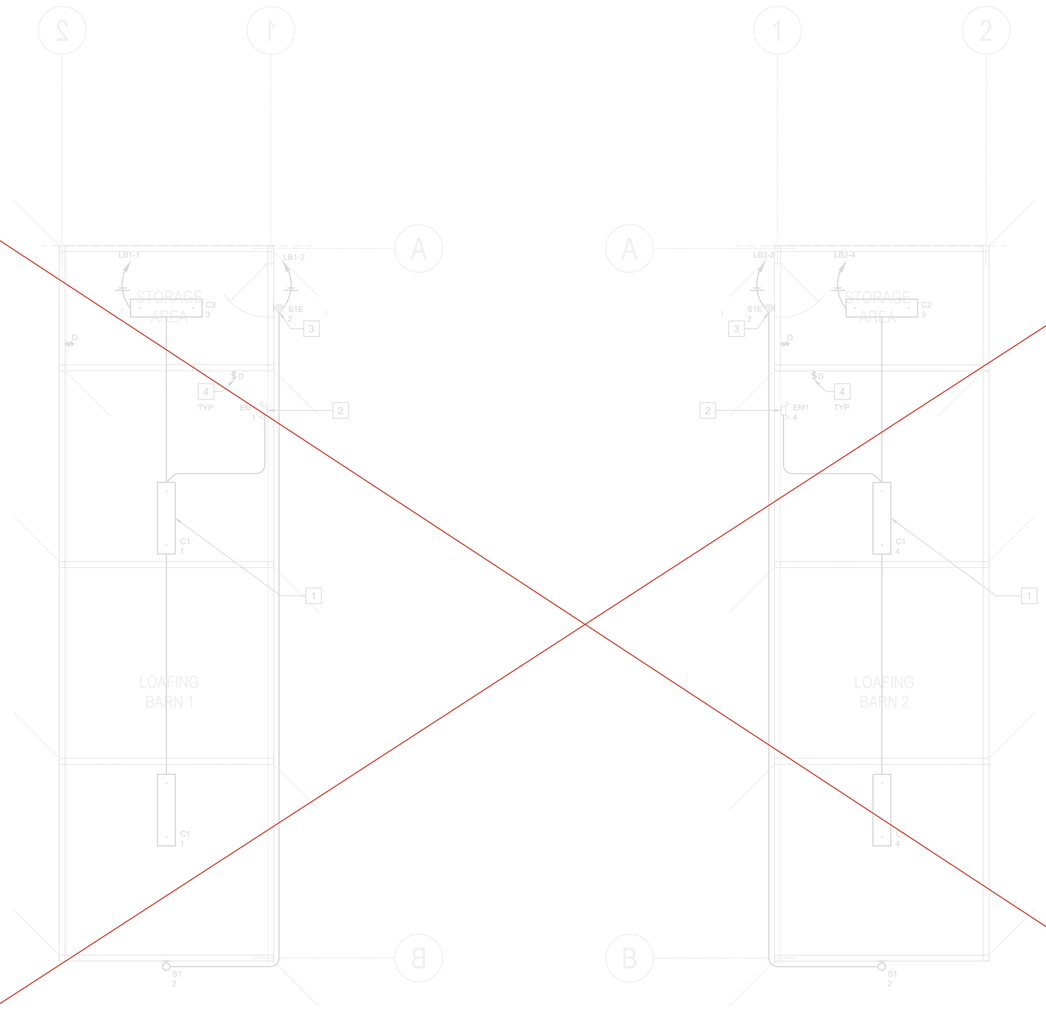
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Plotted by: asackett - Mar 01, 2024 - 12:05pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

DSA APP# 02-121754

REFERENCE NOTES

1. PROVIDE CHAIN HUNG LED VAPOR-TIGHT LIGHT WITH DIMMING CONTROL NODE AND MOTION SENSOR.
2. PROVIDE EMERGENCY LIGHTING UNIT EQUIPMENT. COORDINATE LOCATION WITH STRUCTURE ELEMENT FOR MOUNTING. CONNECT WITH A CONSTANT HOT FROM THE INTERIOR LIGHTING CIRCUIT FOR CONTIOUS CHARGING OF THE BATTERY.
3. PROVIDE LED WALL PACK LIGHT WITH INTEGRAL PHOTOCONTROL AND BI-LEVEL MOTION SENSOR. TYPE 'S1E' LIGHTS HAVE AN INTEGRAL EMERGENCY BATTERY PACK. CONNECT WITH A CONSTANT HOT FOR CONTINUOUS CHARGING OF BATTERY.
4. PROVIDE WIRELESS LIGHTING CONTROL SWITCH(ES) WITH W.P. COVER PLATE COMPATIBLE WITH SUPPLIED 0-10V DIMMING LUMINAIRES.



LOAFING BARN LIGHTING PLAN

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EXPIRES: 09/30/24

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

LOAFING BARN LIGHTING PLAN

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-204

Mar 01, 2024 - 12:06pm - aaackert - K:\ENG\2023\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg
Drawing: K:\ENG\2023\23-8061\23-8061_E201~E-205_BLDG LTG PLANS.dwg E-204 - BCF.ctb
Plot by aaackert Mar 01, 2024 - 12:06pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

DSA APP# 02-121754

REFERENCE NOTES

1. PROVIDE CHAIN HUNG LED VAPOR-TIGHT LIGHT WITH DIMMING CONTROL NODE AND MOTION SENSOR.
2. PROVIDE EMERGENCY LIGHTING UNIT EQUIPMENT. COORDINATE LOCATION WITH STRUCTURE ELEMENT FOR CEILING MOUNTING. CONNECT WITH A CONSTANT HOT FROM THE INTERIOR LIGHTING CIRCUIT FOR CONTIOUS CHARGING OF THE BATTERY.
3. PROVIDE LED WALL PACK LIGHT WITH INTEGRAL PHOTOCONTROL AND BI-LEVEL MOTION SENSOR. TYPE 'S1E' LIGHTS HAVE AN INTEGRAL EMERGENCY BATTERY PACK, CONNECT WITH A CONSTANT HOT FOR CONTINUOUS CHARGING OF BATTERY.
4. PROVIDE WIRELESS LIGHTING CONTROL SWITCH(ES) WITH W.P. COVER PLATE COMPATABLE WITH SUPPLIED 0-10V DIMMING LUMINAIRES.

POTTING SHADE LIGHTING PLAN

SCALE: 1/4" - 1' 0"

NORTH

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thoma ENGINEERING
THOMA ELECTRIC, INC.
P.O. Box 1167 - 3562 Empleo St.
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THOMA #23-8061

LICENSED PROFESSIONAL ENGINEER
JEFFREY M. THOMA
NO. 20823
ELECTRICAL
STATE OF CALIFORNIA
EXPIRES: 09/30/24

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CONSULTING ENGINEERS

CONSULTANT
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Fax (559) 326-1500

REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

POTTING SHADE LIGHTING PLAN

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-205

Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2023\23-006\123-8061_E201~E-205_BLDG LTG PLANS.dwg
Drawing: K:\ENG\2023\23-006\123-8061_E201~E-205_BLDG LTG PLANS.dwg, E-205 - ROT.ctb
Plot by: stackett - Mar 01, 2024 - 12:06pm

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DSA APP# 02-121754

REFERENCE NOTES

1. COORDINATE DEVICE MOUNTING LOCATIONS WITH APPROVED SHOP DRAWINGS. (TYP.)
2. PROVIDE BACKING PLATE OR SUPPORT TO STRUCTURE FOR POWER PANEL AND COMMUNICATIONS CABINET.(TYP.)
3. (F) WIRELESS NETWORK ACCESS POINT AT CEILING. PROVIDE CONDUIT AND J-BOX ONLY. EXTEND CONDUIT TO COMMUNICATIONS CABINET. ACCESS POINT FURNISHED AND INSTALLED BY DISTRICT.
4. SEE DETAIL FOR LAYOUT OF ELECTRICAL EQUIPMENT.

AG STORAGE POWER PLAN

SCALE: 1/4" - 1' 0"

NORTH

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811 Know what's below. Call before you dig.

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MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

AG STORAGE POWER PLAN

CONST. DOCUMENTS

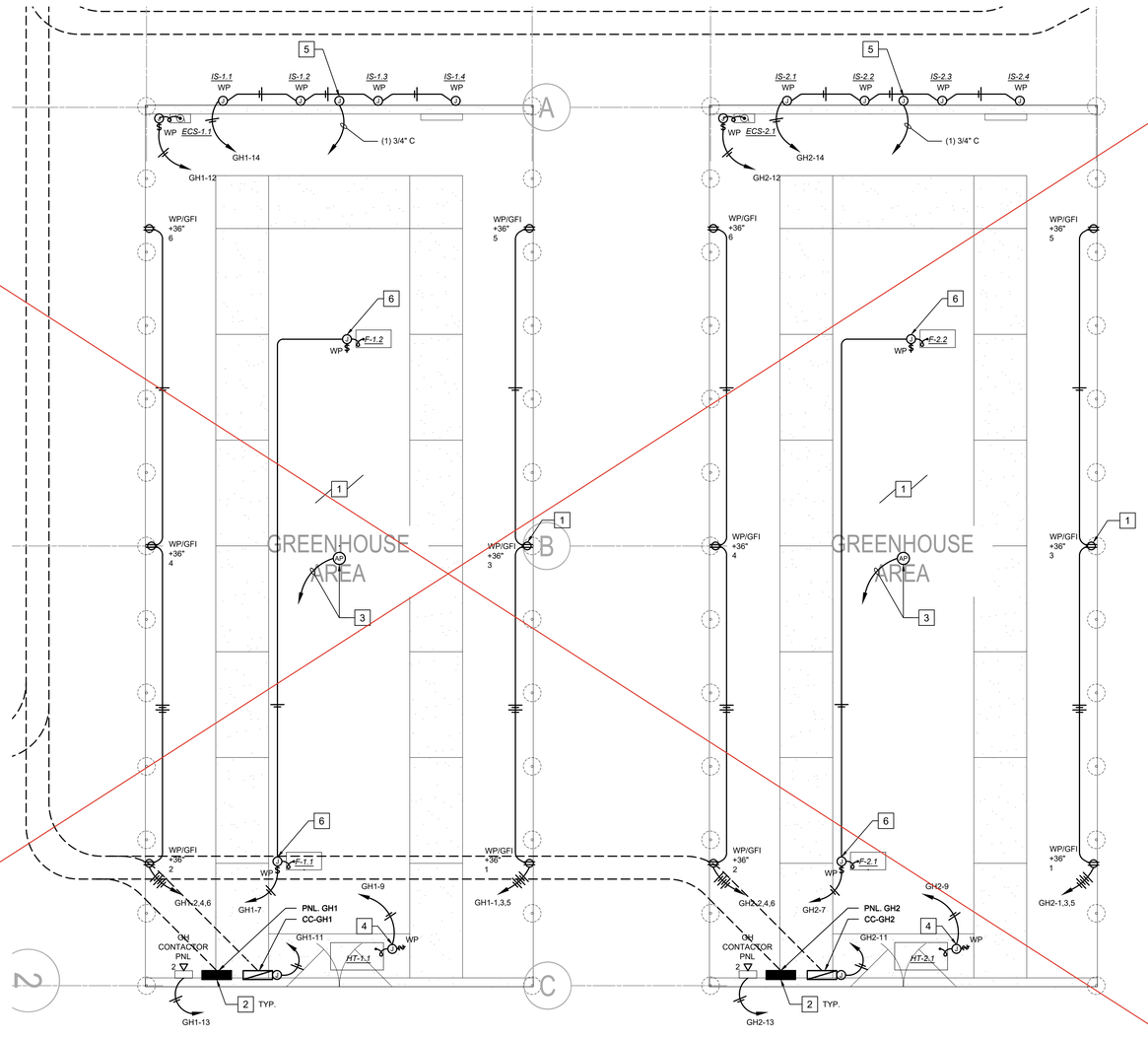
DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-301

Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2023\23-8061\23-8061_E301~E-305_BLDG PWR PLANS.dwg

Drawing: K:\ENG\2023\23-8061\23-8061_E301~E-305_BLDG PWR PLANS.dwg, E-301 - BCP.ctb
Plot by: stackett Mar 01, 2024 - 12:06pm

DSA APP# 02-121754



GREENHOUSE 1 & 2 POWER PLANS

SCALE: 1/4" - 1' 0"

NORTH

☐ REFERENCE NOTES

1. COORDINATE DEVICE MOUNTING LOCATIONS WITH APPROVED SHOP DRAWINGS. (TYP.)
2. PROVIDE BACKING PLATE OR SUPPORT TO STRUCTURE FOR PANELS AND COMMUNICATIONS CABINET.(TYP.)
3. (F) WIRELESS NETWORK ACCESS POINT AT CEILING. PROVIDE CONDUIT AND J-BOX ONLY. EXTEND CONDUIT TO COMMUNICATIONS CABINET. ACCESS POINT FURNISHED AND INSTALLED BY DISTRICT.
4. CONNECT HEATER THROUGH LOCKING W.P. DISCONNECT SWITCH.
5. WEATHER STATION MOUNTED TO EXTERIOR. PROVIDE CONDUIT TO GREENHOUSE CONTROL PANEL AND CONTROL WIRE PER MANUFACTURES REQUIREMENTS. COORDINATE FINAL LOCATION WITH DISTRICT.
6. CONNECT INTERNAL FAN BRANCH CIRCUIT THROUGH GREENHOUSE CONTACTOR PANEL AND COORDINATE WITH DISTRICT CONTROLS CONTRACTOR.

GREENHOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

GREENHOUSE 1 & 2 POWER PLANS

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-302

Mar 01, 2024 - 12:06pm - aaskett - K:\ENG\2023\23-8061\23-8061_E301-E305_BLDG PWR PLANS.dwg
Drawing: K:\ENG\2023\23-8061\23-8061_E301-E305_BLDG PWR PLANS.dwg E-302 - REF.rtf
Plot by: aaskett Mar 01, 2024 - 12:06pm

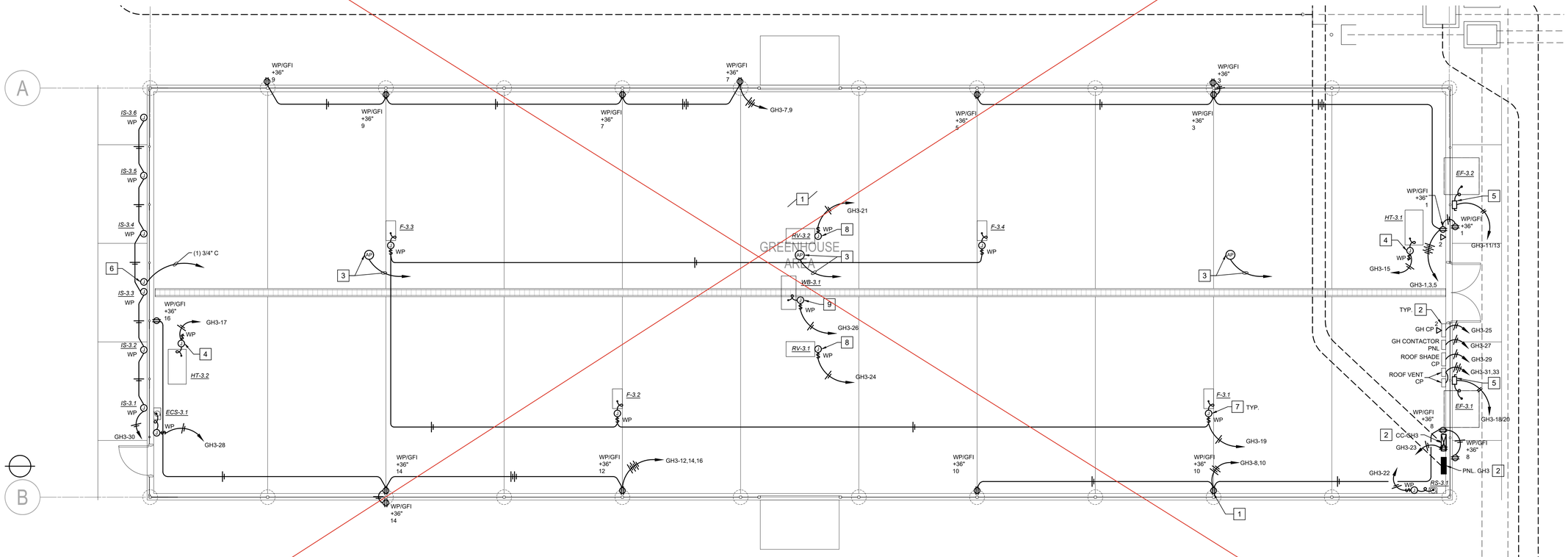
GREEHNOUSE BID ALTERNATE NOTES:

1. *GREENHOUSE 3 IS AN ADDITIVE ALTERNATE UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT.*
2. *THE SITE CONTRACTOR IS RESPONSIBLE FOR PREPARATION OF THE BUILDING SUBGRADE PAD FOR ALL GREENHOUSES INCLUDING OVEREXCAVATION AND COMPACTION PER THE PROJECT SPECIFICATIONS.*
3. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING WOOD MULCH WITHIN THE FOOTPRINT OF GREENHOUSE #3 AND ROUGH GRADING THE AREA TO DRAIN TO THE INLETS AS SHOWN ON SHEET A100.*
4. *IF THE ALTERNATE FOR THE CONSTRUCTION OF THE GREENHOUSE IS ACCEPTED, THE SITE CONTRACTOR SHALL REMOVE MULCHING AND ROUGH GRADING AT GREENHOUSE 3 FROM THEIR SCOPE OF WORK AND THE GREENHOUSE CONTRACTOR SHALL PROVIDE DECOMPOSED GRANITE AND FINE GRADING WITHIN THE FOOTPRINT OF GREENHOUSE 3.*
5. *BASE BID FOR THE SITE CONTRACTOR INCLUDES PROVIDING ALL UTILITIES UP TO 5' OUTSIDE OF THE GREENHOUSE BUILDING FOOTPRINTS AND CAPPING ALL UTILITIES EXCEPT FOR STORM DRAIN 5' FROM THE EXTERIOR OF GREENHOUSE 3. THE GREENHOUSE CONTRACTOR IS RESPONSIBLE FOR MAKING ALL FINAL CONNECTIONS TO THE GREENHOUSE BUILDINGS*

☐ REFERENCE NOTES

1. COORDINATE DEVICE MOUNTING LOCATIONS WITH APPROVED SHOP DRAWINGS. (TYP.)
2. PROVIDE BACKING PLATE OR SUPPORT TO STRUCTURE FOR PANELS AND COMMUNICATIONS CABINET.(TYP.)
3. (F) WIRELESS NETWORK ACCESS POINT AT CEILING. PROVIDE CONDUIT AND J-BOX ONLY. EXTEND CONDUIT TO COMMUNICATIONS CABINET. ACCESS POINT FURNISHED AND INSTALLED BY DISTRICT.
4. CONNECT HEATER THROUGH LOCKING W.P. DISCONNECT SWITCH.
5. CONNECT EXHAUST FANS THROUGH FUSED W.P. NEMA 3R DISCONNECT.
6. WEATHER STATION MOUNTED TO EXTERIOR GABLE PEAK. PROVIDE CONDUIT TO GREENHOUSE CONTROL PANEL AND CONTROL WIRE PER MANUFACTURES REQUIREMENTS. COORDINATE FINAL LOCATION WITH DISTRICT.
7. CONNECT INTERNAL FAN BRANCH CIRCUIT THROUGH GREENHOUSE CONTACTOR PANEL AND COORDINATE WITH DISTRICT CONTROLS CONTRACTOR. TYPICAL.
8. CONNECT ROOF VENT BRANCH CIRCUIT THROUGH ROOF VENT CONTROL PANELS. COORDINATE WITH DISTRICT CONTROLS CONTRACTOR.
9. COORDINATE WATER BOOM POWER AND CONTROLS REQUIREMENTS WITH MANUFACTURES RECOMMENDATIONS AND DISTRICT CONTROLS CONTACTOR.

DSA APP# 02-121754



MAIN GREENHOUSE POWER PLANS

SCALE: 3/16" - 1' 0"

NORTH

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EXPIRES: 09/30/24

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX

MAIN GREENHOUSE POWER PLAN

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-303

Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2023\23-006\123-6061_E301~E-305_BLDG PWR PLANS.dwg

Drawing: K:\ENG\2023\23-006\123-6061_E301~E-305_BLDG PWR PLANS.dwg, E-303 - 8Dº.ctb
Plot by: stackett Mar 01, 2024 - 12:06pm

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DSA APP# 02-121754

REFERENCE NOTES

1. PROVIDE BACKING PLATE OR SUPPORT TO STRUCTURE FOR PANEL AND COMMUNICATIONS CABINET.(TYP.)
2. PROVIDE A 12"x12" BUILDING COMMUNICATION J-BOX ATTACHED TO STRUCTURE.

LOAFING BARN POWER PLAN
1/4" = 1'-0"
NORTH

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REF. & REV.

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GREENHOUSE COMPLEX

LOAFING BARNS POWER PLAN

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-304

Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2023\23-006\123-8061_E301~E-305_BLDG PWR PLANS.dwg
Drawing: K:\ENG\2023\23-006\123-8061_E301~E-305_BLDG PWR PLANS.dwg, E-304 - BCF.ctb
Plot by: stackett Mar 01, 2024 - 12:06pm

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

DSA APP# 02-121754

REFERENCE NOTES

1. COORDINATE DEVICE MOUNTING LOCATIONS WITH APPROVED SHOP DRAWINGS. (TYP.)
2. PROVIDE BUILDING NEMA 3R PANELBOARD MOUNTED TO UNISTRUT SUPPORT FRAME.
3. PROVIDE BUILDING COMMUNICATIONS 12"x12", NEMA 3R J-BOX MOUNTED TO UNISTRUT SUPPORT FRAME WITH W.P. TELECOM OUTLET.
4. (F) WIRELESS NETWORK ACCESS POINT AT CEILING. PROVIDE CONDUIT AND J-BOX ONLY. EXTEND CONDUIT TO COMMUNICATIONS CABINET. ACCESS POINT FURNISHED AND INSTALLED BY DISTRICT.



THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

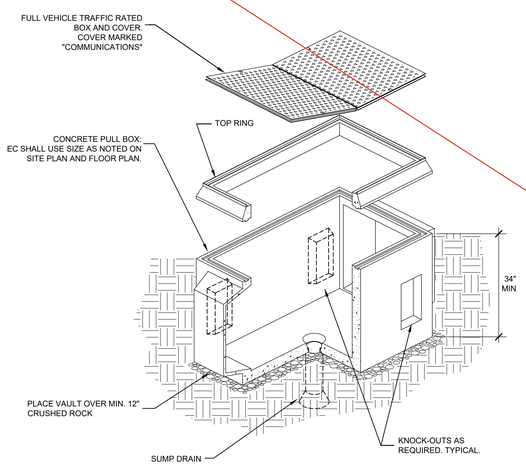
811 Know what's below. Call before you dig.

thoma ENGINEERING THOMA ELECTRIC, INC. P.O. Box 1167 - 3562 Empleo St. San Luis Obispo, CA 93406 Phone: (805) 543-3850 THOMA #23-8061	REGISTERED PROFESSIONAL ENGINEER JEFFREY M. THOMA NO. 20823 ELECTRICAL STATE OF CALIFORNIA EXPIRES: 09/30/24	Blair, Church & Flynn CONSULTING ENGINEERS	CONSULTANT Blair, Church & Flynn Consulting Engineers 451 Clovis Avenue, Suite 200 Clovis, California 93612 Tel (559) 326-1400 Fax (559) 326-1500	REF. & REV.	MERCED COLLEGE GREENHOUSE COMPLEX GREENHOUSE COMPLEX POTTING SHADE POWER PLAN CONST. DOCUMENTS DR. BY: AS/PM CH. BY: JT DATE: 03/01/2024 SCALE AS NOTED E-305

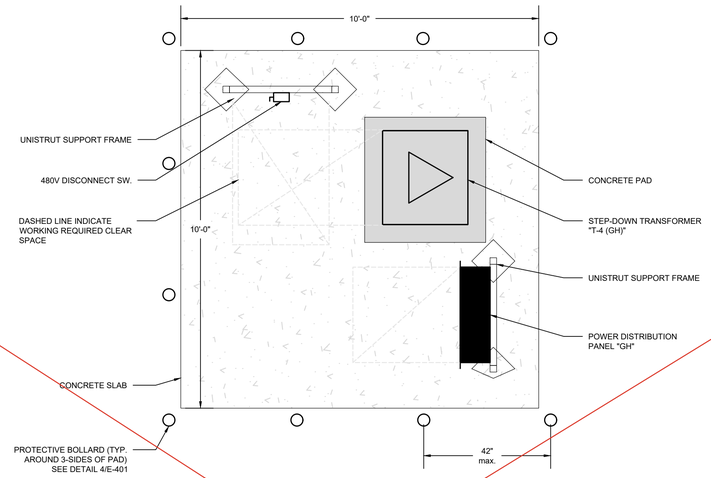
Mar 01, 2024 - 12:06pm - stackett - K:\ENG\2023\23-8061\23-8061_E301~E-305_BLDG PWR PLANS.dwg

Drawing: K:\ENG\2023\23-8061\23-8061_E301~E-305_BLDG PWR PLANS.dwg, E-305 - ROF.ctb
Plot by: stackett - Mar 01, 2024 - 12:06pm

DSA APP# 02-121754

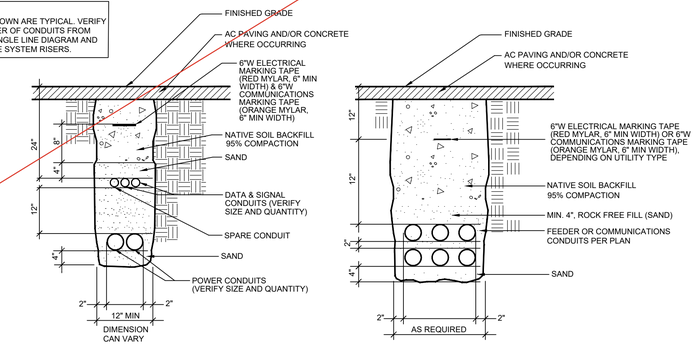


5 COMMUNICATIONS PULL BOX
SCALE:



3 GREENHOUSE COMPLEX ELECT. EQUIP. LAYOUT
SCALE: NTS

NOTE:
CONDUITS SHOWN ARE TYPICAL. VERIFY EXACT NUMBER OF CONDUITS FROM SITE PLAN, SINGLE LINE DIAGRAM AND LOW VOLATGE SYSTEM RISERS.



JOINT TRENCH

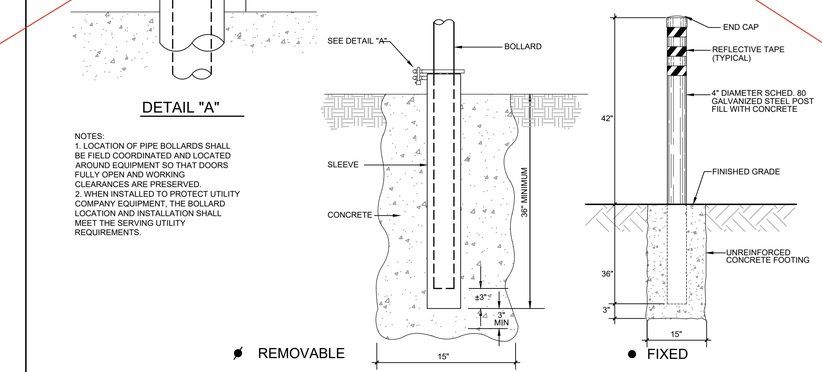
SINGLE TRENCH

1 TYPICAL CONDUIT IN TRENCH
SCALE: NTS



DETAIL "A"

NOTES:
1. LOCATION OF PIPE BOLLARDS SHALL BE FIELD COORDINATED AND LOCATED AROUND EQUIPMENT SO THAT DOORS FULLY OPEN AND WORKING CLEARANCES ARE PRESERVED.
2. WHEN INSTALLED TO PROTECT UTILITY COMPANY EQUIPMENT, THE BOLLARD LOCATION AND INSTALLATION SHALL MEET THE SERVING UTILITY REQUIREMENTS.

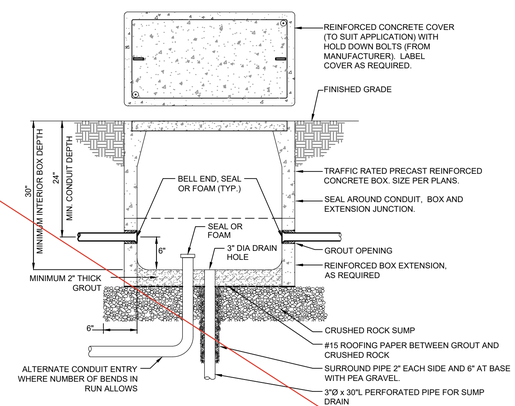


REMOVABLE

FIXED

4 TYP. PROTECTIVE PIPE BOLLARD
SCALE:

NOTES:
1. PULL BOXES SHALL BE INTERMITTENT TRAFFIC RATED.
2. PULLBOXES CONSTRUCTED OF REINFORCED POLYMER WITH TRAFFIC RATING ARE ACCEPTABLE.



2 TYPICAL PULL BOX, 24" X 36" AND SMALLER
SCALE: NTS

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REF. & REV.

MERCED COLLEGE GREENHOUSE COMPLEX

GREENHOUSE COMPLEX
ELECTRICAL DETAILS

CONST. DOCUMENTS

DR. BY: AS/PM
CH. BY: JT
DATE: 03/01/2024
SCALE AS NOTED

E-401

Mar 01, 2024 - 12:07pm - asackett - K:\ENG\22\23\23-806\123-806\1_E401_DETAILS.dwg
Drawing: K:\ENG\22\23\23-806\123-806\1_E401_DETAILS.dwg E-401 - REF-rtb
Plot by: asackett - Mar 01, 2024 - 12:07pm

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DESIGN CRITERIA	
BASE LOCATION LOCATED AT BOTTOM OF BASEPLATE/TOP OF FOOTING	
DESCRIPTION	DESIGN CRITERIA
DEAD AND LIVE LOADS	
ROOF LIVE LOAD	
ROOF DEAD LOAD (SUPERIMPOSED ON FRAME)	
ROOF PANEL DEAD LOAD	M = 1.3 PSF, G = 1.2 PSF, S = 1.3 PSF
COLLATERAL DEAD LOAD	M = 3.9 PSF, G = 3.8 PSF, S = 3.7 PSF
ROOF LIVE LOAD	
ROOF LIVE LOAD, L_r	20 PSF
ROOF SNOW LOAD	
GROUND SNOW LOAD, P_g	20 PSF
RISK CATEGORY	II
ROOF SNOW LOAD: SLOPED, P_f	20 PSF
FOR SNOW LOAD CONDITIONS ONLY - SITE APPLICATION REVIEWER SHALL VERIFY THE STTRUCTURE SHALL BE LOCATED AT LEAST 20 FEET FROM ANY ADJACENT STRUCTURE FOR SNOW DRIFT.	
SNOW LOAD SLOPE FACTOR, C_s	1.0
SNOW LOAD EXPOSURE FACTOR, C_e	1.0
SNOW LOAD IMPORTANCE FACTOR, I_s	1.0
THERMAL FACTOR, C_t	1.2
LOWEST ANTICIPATED SERVICE TEMPERATURE	30
WIND DESIGN	
BASIC WIND SPEED (3 SECOND GUST), V_{ult}, V_{asd}	100 MPH, 78 MPH
RISK CATEGORY	II
EXPOSURE CATEGORY	C
FACTORS: K_D, K_{zt}, K_d	0.85, 1.0, 0.85
$q_h = 0.00256\ K_z\ K_{zt}\ K_d\ V^2$	18.50 PSF
C_{NW} PER ASCE FIGURE 27.3-5 ROOF ANGLE 18.43 - CLEAR / OBSTRUCTED	CASE A (1.1 / -1.2) CASE B (0.01 / -0.69)
C_{NL} PER ASCE FIGURE 27.3-5 ROOF ANGLE 18.43 - CLEAR / OBSTRUCTED	CASE A (-0.17 / -1.09) CASE B (-0.96 / -1.65)
C_N PER ASCE FIGURE 27.3-7 PARALLEL TO RIDGE - CLEAR / OBSTRUCTED (< h)	CASE A (-0.8 / -1.2) CASE B (0.8 / 0.5)
C_N PER ASCE FIGURE 27.3-7 PARALLEL TO RIDGE - CLEAR / OBSTRUCTED (> h, < 2h)	CASE A (-0.6 / -0.9) CASE B (0.5 / 0.5)
C_N PER ASCE FIGURE 27.3-7 PARALLEL TO RIDGE - CLEAR / OBSTRUCTED (>2h)	CASE A (-0.3 / -0.6) CASE B (0.3 / 0.3)
COMPONENTS & CLADDING - C_N (PRESSURE/SUCTION) CLEAR / OBSTRUCTED	ZONE 3 - (2.29 / -2.11) / (1.0 / -3.0)
	ZONE 2 - (1.77 / -1.63) / (0.8 / -2.3)
	ZONE 1 - (1.15 / -1.05) / (0.5 / -1.5)
SEISMIC DESIGN	
LATERAL FORCE RESISTING SYSTEM	STEEL - ORDINARY CANTILEVER COLUMN
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE
SESIMIC IMORTANCE FACTOR, I_e	1.0
SEISMIC SITE CLASS	D
MCE_R SPECTRAL RESPONSE ACCELERATION @ 0.2 s, S_s	2.60
MCE_R SPECTRAL RESPONSE ACCELERATION @ 1.0 s, S_1	0.90
SHORT PERIOD SITE COEFFICIENT, F_a	1.20
LONG PERIOD COEFFICIENT, F_v	1.70
FUNDAMENTAL PERIOD OF THE STRUCTURE, T (WORST CASE FOR ALL STRUCTURES)	0.152 s
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, S_{DS}	2.08 ☐
DESIGN SPECTRAL RESPONSE ACCELERATION AT SHORT PERIOD, S_{DS} - USED TO DETERMINE Cs (WITH CAP PER ASCE 7 12.8.1.3) SOIL PROPERTIES MAY NOT BE CLASSIFIED AS SITE CLASS E.	2.08 * 0.70 = 1.456 ☐
DESIGN SPECTRAL RESPONSE ACCELERATION AT 1-s PERIODS, S_{D1}	1.02
SEISMIC DESIGN CATEGORY	E
SITE SPECFIC RESPONSE ANALYSIS NOT REQUIRED PER ASCE 7 11.4.8 EXCEPTION 2	T_s = 0.49 s ; T< 1.5 * T_s
RESPONSE MODIFICATION FACTOR, R	1.25
OVERSTRENGTH FACTOR, Ω	1.25
REDUNDANCY FACTOR, ρ	1.0
HORIZONTAL OR VERTICAL IRREGULARITIES	NONE
SEISMIC RESPONSE COEFFICIENT, C_s (20' WIDE, 30' WIDE, 40' WIDE)	1.16 ; 1.00 ; 1.00
DESIGN BASE SHEAR, V (20' WIDE, 30' WIDE, 40' WIDE) (WORST CASE)	10.62 PSF ☐ ; 12.70 PSF ☐ ; 12.85 PSF ☐
ALLOWABLE SOIL BEARING FOR FOUNDATIONS	VARIES - SEE FOUNDATION CHARTS
FLOOD DESIGN - DESIGN IS ASSUMED TO NOT BE IN FLOOD HAZARD AREA	
IF PROJECT IS LOCATED IN A FLOOD ZONE OTHERTHAN ZONE X, A LETTER STAMPED & SIGNED FROM A SOILS ENGINEER IS REQUIRED TO VALIDATE THE ALLOWABLE SOIL VALUES SPECIFIED.	

STEP 1: SELECT FRAME DIMENSIONS FOR YOUR PROJECT
- FRAME WIDTH AND LENGTH DIMENSIONS ARE TO OUTSIDE OF FRAME
- 40' WIDTH IS THE MOST ECONOMICAL
- 120' BAYS ARE THE MOST ECONOMICAL
- FRAME LENGTHS ASSUME 2' OVERHANGS (UNO BY ARCHITECT = 2' MAX DIMENSION)

STEP 1	FRAME DIMENSIONS					
		SUGGESTED			OTHER	
	FRAME WIDTH	[ ] 20'	[ ] 30'	[ ] 40'	[ ] (40' MAX)	
	FRAME LENGTH	[ ] 44'	[ ] 64'	[ ] 84'	[ ] 104'	[ ] (NO MAX)

STEP 2: SELECT ROOF DECK FOR YOUR PROJECT
- "M" REPRESENTS McELROY METAL "MULTI-RIB" ROOF PANEL
- "G" REPRESENTS McELROY METAL "MEGA-RIB" ROOF PANEL
- "S" REPRESENTS McELROY METAL "MEDALLION-LOK" 16" STANDING SEAM ROOF PANEL

STEP 2	ROOF PANEL		
	ROOF PANEL TYPE	[ ] M [ ] G [ ] S	

STEP 3: IDENTIFY THE Ss ACCELERATION (g) FOR YOUR PROJECT
- Ss VALUE DETERMINES THE REQUIRED SEISMIC DESIGN FORCES
- Ss VAULE DEPENDS ON THE PROJECTS GEOGRAPHICAL LOCATION (VALUES RANGE FROM 0.00 TO 3.73)
  - FIND Ss VALUES FOR YOUR PROJECT ON THE USGS WEBSITE (SEARCH INTERNET FOR "USGS SEISMIC DESIGN MAPS")

STEP 3	PROJECT SITE – Ss ACCELERATION (g)
	____

STEP 4: IDENTIFY THE Ss REGION FOR YOUR PROJECT
- THE REGIONS ARE DEPENDANT ON THE Ss VALUE DETERMINED IN STEP 3
- THE Ss REGION DICTATES THE MAXIMUM DEAD LOAD PERMITTED ON THE FRAME

STEP 4	Ss REGION			
			Ss REGIONS	MAX DEAD LOAD
	DESCRIPTION		0 < Ss <= 2.14	5 PSF
			2.14 < Ss <= 2.50	5 PSF
			2.50 < Ss <= 2.50	5 PSF

STEP 5: IDENTIFY THE ROOF DEAD LOAD FOR YOUR PROJECT
- THE ROOF DECK DEAD LOAD WILL ALWAYS BE INCLUDED
- THE COLLATERAL LOAD REPRESENTS ADDITIONAL LOAD THAT CAN BE SUPPORTED BY THE FRAME
- BE SURE THE TOTAL ROOF DEAD LOAD FOR YOUR PROJECT IS LESS THAN OR EQUAL TO THE MAX DEAD LOAD SHOWN IN STEP 4 FOR YOUR Ss VALUE
- Sds VALUE USED IN CALCULATION IS THE CAPPED Sds (SEE DESIGN CRITERIA)

STEP 5	TOTAL ROOF DEAD LOAD		
		DEAD LOAD	EXAMPLES
	ROOF DECK	_____ PSF	M=1.1PSF; G=1.2PSF ;S=1.3PSF (SEE STEP 2)
	COLLATERAL	_____ PSF	LIGHTNING,FIRE SUPPRESSION,SOLAR PANELS,ETC
	TOTAL	_____ PSF	ADD ROOF DECK AND COLLATERAL LOADS (MAX S PSF)

STEP 6: IDENTIFY THE FOUNDATION REQUIREMENTS FOR YOUR PROJECT
- IDENTIFY SOIL CLASS FOR PROJECT SITE PER SITE SPECIFIC SOIL CONDITIONS
- USE THIS TO SELECT CORRECT FOUNDATION SIZE ON FOUNDATION SHEET
- AREA OVER 4000 SQFT REQUIRES A GEOHAZARD REPORT

STEP 6	FOUNDATION REQUIREMENTS		
	[ ] GEOTECHNICAL REPORT NOT REQUIRED	[ ] GEOTECHNICAL REPORT REQUIRED	
	SOIL CLASS 5 (BEARING) 1500 PSF [ ]	SOIL CLASS 4 (BEARING) 2000 PSF [ ]	SOIL CLASS 3 (BEARING) 3000 PSF [ ]
	SOIL CLASS 5 (LATERAL BEARING) 200 PSF/FT	SOIL CLASS 5 (LATERAL BEARING) 300 PSF/FT	SOIL CLASS 5 (LATERAL BEARING) 400 PSF/FT
	COHESION 130 PSF	FRICTION COEFFICIENT 0.25	FRICTION COEFFICIENT 0.30

STEP 7: SELECT MISCELLANEOUS OPTIONS FOR YOUR PROJECT
- MAXIMUM CLEAR HEIGHT IS 12'-0" (SEE "ARCHITECTURAL VIEWS" SHEET FOR REFERENCE)
- MARK UP PIC DRAWINGS WITH SIZE AND LOCATION OF CUTOUTS BEFORE SUBMITTING TO DSA

STEP 7	MISCELLANEOUS		
		DESIGN OPTIONS	
	CLEAR HEIGHT	[ ] 8' [ ] 10' [ ] 12'	[ ] ' (12' MAX)
	ELECTRICAL CUTOUTS	[ ] YES	[ ] NO
	GUTTERS	[ ] YES	[ ] NO

STEP 8: SELECT APPLICABLE SHEET INDEX FOR YOUR PROJECT
- REFERENCE THE BASE FRAME (STEP 1) AND THE ROOF PANEL TYPE (STEP 2)
- IDENTIFY THE APPLICABLE SHEET INDEX

STEP 8	SHEET INDEX											
	BASE FRAME	RG 20			RG 30			RG 40		
	ROOF PANEL TYPE	M	G	S	M	G	S	M	G	S
	SELECT ONE	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]	[ ]
	GENERAL NOTES	LS1.0	LS1.0	LS1.0	LS1.0	LS1.0	LS1.0	LS1.0	LS1.0	LS1.0
	FOUNDATION PLAN	LS2.0	LS2.0	LS2.0	LS3.0	LS3.0	LS3.0	LS4.0	LS4.0	LS4.0
	FRAMING PLAN	LS2.1	LS2.1	LS2.1	LS3.1	LS3.1	LS3.1	LS4.1	LS4.1	LS4.1
	FRAME CONNECTION DETAILS	LS2.1	LS2.1	LS2.1	LS3.1	LS3.1	LS3.1	LS4.1	LS4.1	LS4.1

STEP 9: INCLUDE APPLICABLE SHEETS WITH YOUR DSA SUBMITTAL
- INCLUDE 'MISC DESIGN OPTIONS' SHEET FOR PROJECTS WITHOUT ELECTRICAL CUTOUTS OR GUTTERS

STEP 10: IDENTIFY PROJECT NAME AND LOCATION

PROJECT NAME:	SCHOOL DISTRICT:

STEP 11: CROSS OUT EXAMPLE 103 FORMS & INCORPORATE REQUIRED SPECIAL INSPECTIONS 103 FORMS THAT ARE PROJECT SPECIFIC

SELECT ONE

Fa = _____ psf
Ce = _____ psf

WIND
V = _____ mph < XX mph
Kzt = _____ <1
EXPOSURE: C☐ D☐

SIESMIC
☐ DESIGN BASED ON SITE CLASS D
NO GEOTECHNICAL INVESTIGATION REQUIRED
Ss = _____ Fa = 1.2

☐ DESIGN BASED ON SITE CLASS DETERMINED PER CHAPTER 20 OF ASCE 7-16
GEOTECHNICAL INVESTIGATION PROVIDED
SITE CLASS: C ☐ D☐ E☐
Ss = _____ Fa = _____PER ASCE 7-16 SUPPL 3, TABLE 11.4-1

☐ DESIGN BASED ON SITE SPECIFIC GROUND MOTION HAZARD ANALYSIS PER CHAPTER 21 OF ASCE 7-16
SHORT-PERIOD DESIGN SPECTRAL RESPONSE PARAMETER, Sds, SHALL BE AS SPECIFIED IN GEOTECHNICAL INVESTIGATION
AREA OVER 4000 SQFT REQUIRES A GEOHAZARD REPORT
CGS APPROVAL REQUIRED
NOT ELEGIBLE FOR DTC REVIEW
SITE CLASS: C☐ D☐ E☐

Sds = Fa Ss = _____
☐ SITE CLASS C or D: 0.7 x Sds* = 0.7 x _____ = _____ ≤ X.XX
☐ SITE CLASS E: Sds = _____ ≤ X.XX
Cs= X.XXX USED IN DESIGN
SEISMIC DESIGN CATEGORY D☐ E☐
*SITE SPECIFIC Sds VALUE BEFORE APPLYING REDUCTION ALLOWED BY ASCE 7 SECTION 12.8.1.3

ABBREVIATIONS:

ACI	AMERICAN CONCRETE INSTITUTE	MPH	MILES PER HOUR
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	M	MULTI-RIB ROOF PANEL (MCELROY)
ASM	ASSEMBLY (INTERNAL REFERENCE)	NTS	NOT TO SCALE
ASTM	AMERICAN SOCIETY FOR TESTING AND MATLS	NO	NUMBER
AWS	AMERICAN WELDING SOCIETY	OC	ON CENTER
CBC	CALIFORNIA BUILDING CODE	OSHA	OCCUPATIONAL HEALTH AND SAFETY ADMIN
CJP	COMPLETE JOINT PENETRATION	PCF	POUNDS PER CUBIC FOOT
CLR	CLEAR	PJ	PRETENSIONED JOINT
DEG	DEGREE	PLCS	PLACES
DIA	DIAMETER	PLT	PLATE
DIM	DIMENSION	PSF	POUNDS PER SQUARE FOOT
DSA	DIVISION OF THE STATE ARCHITECT	PSI	POUNDS PER SQUARE INCH
EQ	EQUAL	QTY	QUANTITY
FT	FEET	REF	REFERENCE
GA	GAGE	SQ	SQUARE
IN	INCHES	SS	STANDING SEAM ROOF PANEL (MCELROY)
KSI	KIPS PER SQUARE INCH	TYP	TYPICAL
MAX	MAXIMUM	UNO	UNLESS NOTED OTHERWISE
MIN	MINIMUM	USGS	U.S. GEOLOGICAL SURVEY
MISC	MISCELLANEOUS	W/	WITH

STRUCTURAL SEPARATION

ALL DEFLECTIONS SHOWN ALSO INCLUDE THE P-DELTA ROTATION PER IR PC-7

SEPARATION IS THE SUM OF 2 OF THESE SELECTED DEFLECCTION

DEFLECTIONS ARE FOR (1) STRUCTURE

SOIL CLASSES PER CBC TABLE 1806A.2

MAXIMUM DRIFT δ_{max} SIDE COLUMNS		Soil Class 5	Soil Class 4	Soil Class 3
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.40	[ ] 2.55	[ ] 2.65
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.15	[ ] 2.30	[ ] 2.40
40' WIDE (8' EAVE + T, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.20	[ ] 2.20	[ ] 2.30
MINIMUM SEPARATION ($\delta_m = C_d\ \delta_{max}$) C_d = 1.25				
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 3.00	[ ] 3.19	[ ] 3.31
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.69	[ ] 2.88	[ ] 3.00
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.75	[ ] 2.75	[ ] 2.88

MAXIMUM DRIFT δ_{max} END COLUMNS		Soil Class 5	Soil Class 4	Soil Class 3
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.40	[ ] 2.55	[ ] 2.65
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.15	[ ] 2.30	[ ] 2.40
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.20	[ ] 2.20	[ ] 2.30
MINIMUM SEPARATION ($\delta_m = C_d\ \delta_{max}$) C_d = 1.25				
20' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 3.00	[ ] 3.19	[ ] 3.31
30' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.69	[ ] 2.88	[ ] 3.00
40' WIDE (8' EAVE HT, 10' EAVE HEIGHT, 12' EAVE HT)	(INCHES)	[ ] 2.75	[ ] 2.75	[ ] 2.88

ARCHITECTURAL REQUIREMENTS	
DESCRIPTION	DESIGN VAULES
TYPE OF CONSTRUCTION	II-B
OCCUPANCY CLASSIFICATION	A-3
NUMBER OF STORIES	1
FIRE SPRINKLER SYSTEM	NOT BY ICON/WEIGHT NOT INCLUDED IN DESIGN
MOST COMMON RG20 MIN/MAX SQ.FT (SEE STEP 1)	480/2,080
MOST COMMON RG30 MIN/MAX SQ.FT (SEE STEP 1)	720/3,120
MOST COMMON RG40 MIN/MAX SQ.FT (SEE STEP 1)	960/4,160

AREA OVER 4000 SQFT REQUIRES GEOHAZARD REPORT
ALLOWABLE AREA FOR II-B / A-3 IS 9500 SQ.FT

(PART 1, TITLE 24, CCR)
TITLE 24 CCR =
2022 CALIFORNIA ELECTRICAL CODE.....(PART 3, TITLE 24, CCR)
2022 CALIFORNIA MECHANICAL CODE (CMC).....(PART 4, TITLE 24, CCR)
2022 CALIFORNIA PLUMBING CODE (CPC).....(PART 5, TITLE 24, CCR)
2022 CALIFORNIA ENERGY CODE.....(PART 6, TITLE 24, CCR)
2022 CALIFORNIA FIRE CODE (CFC).....(PART 9, TITLE 24, CCR)
2022 CALIFORNIA GREEN BUILDING STANDARDS CODE.....(PART 11, TITLE 24, CCR)
2022 CALIFORNIA REFERENCE STANDARDS CODE.....(PART 12, TITLE 24, CCR)
TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2022 CBC, CHAPTER 35
2022 CFC, CHAPTER 80

SCOPE OF WORK NARRATIVE

THESE DRAWINGS ILLUSTRATE THE FABRICATION AND INSTALLATION REQUIREMENTS FOR A FREE-STANDING PREFABRICATED STEEL SHADE STRUCTURE. THE ENTIRE STRUCTURAL SYSTEM IS COMPRISED OF HOLLOW STRUCTURAL STEEL MEMBERS SUPPORTED BY CONCRETE FOUNDATIONS. THE FLEXIBILITY INCLUDED HEREIN ALLOWS THE STRUCTURE TO COMPLY WITH A WIDE VARIETY OF PROJECT SITES AND LOADING REQUIREMENTS.

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-121754 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 02/21/2024

ICON STD	RG/DSA-PC
DRAWN BY	JD
DATE	3/21/2023
REV	
REV DATE	

JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST I BREA, CA 92821
T. 714.524.1870 I F. 714.524.1875
WWW.JRMA.COM

REGISTERED PROFESSIONAL ENGINEER RUSSELL D. WOOD No. 30998 STRUCTURAL STATE OF CALIFORNIA

Aug 31, 2023

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122188 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/21/2023

GENERAL INFO

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM
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1455 LINCOLN AVE
HOLLAND MI, 49423
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PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required.

LS1.0

PRINTED ON :

THIS SHEET IS PROVIDED FOR REFERENCE ONLY: THIS SCOPE OF WORK IS NOT UNDER THE GREENHOUSE CONTRACTOR'S CONTRACT

GENERAL:

1. GENERAL NOTES AND TYPICAL DETAILS SHALL APPLY TO ALL PARTS OF THE WORK UNLESS NOTED OTHERWISE. IN CASE OF CONFLICT WITH DETAILS AND NOTES ON OTHER SHEETS, WHERE SPECIFIC DETAILS OR NOTES ARE NOT GIVEN, DETAILS THAT ARE OF SIMILAR CHARACTER TO DETAILS SHOWN, SIMILAR DETAILS OF GOOD CONSTRUCTION PRACTICE SHALL BE USED. SUBJECT TO REVIEW BY THE STRUCTURAL ENGINEER FOR THIS PROJECT.
2. WORK SHALL CONFORM TO THE REQUIREMENTS, AS AMENDED BY LOCAL ORDINANCES, OF THE 2022 EDITION OF THE CBC, C.A.C., TITLE 24, AND ALL STATE AND FEDERAL REGULATIONS APPLICABLE TO THIS WORK.
3. OMISSIONS OR CONFLICTS BETWEEN THE VARIOUS ELEMENTS OF THE WORKING DRAWINGS AND/OR SPECIFICATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT PRIOR TO PROCEEDING WITH ANY WORK INVOLVED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING THE WORK OF ALL TRADES AND SHALL CHECK ALL DIMENSIONS, ALL DISCREPANCIES SHALL BE CALLED TO THE ATTENTION OF THE STRUCTURAL ENGINEER FOR THIS PROJECT AND BE RESOLVED BEFORE PROCEEDING WITH THE WORK.
5. THESE CONSTRUCTION DRAWINGS AND SPECIFICATIONS REPRESENT THE FINISHED STRUCTURE AND DO NOT INDICATE THE METHOD OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS, METHODS, TECHNIQUES, SEQUENCES AND PROCEDURES, INCLUDING, BUT NOT LIMITED TO, BRACING, TEMPORARY SUPPORTS, AND SHORING. OBSERVATION VISIT TO THE SITE BY FIELD REPRESENTATIVES OF THE ARCHITECT/ENGINEER SHALL NOT INCLUDE INSPECTIONS OF THE PROTECTIVE MEASURES OR THE CONSTRUCTION PROCEDURES. ANY SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER DURING THE CONSTRUCTION SHALL BE DISTINGUISHED FROM CONSTRUCTION AND DETAILED INSPECTION SERVICES WHICH ARE FURNISHED BY OTHERS. THESE SUPPORT SERVICES PERFORMED BY THE ARCHITECT/ENGINEER, WHETHER OF MATERIAL OR WORK, ARE FOR THE PURPOSE OF ASSISTING IN QUALITY CONTROL AND IN ACHIEVING CONFORMANCE WITH CONTRACT DOCUMENTS, BUT DO NOT GUARANTEE CONSTRUCTION.
6. ASTM DESIGNATIONS AND ALL STANDARDS REFER TO THE LATEST AMENDMENTS, EXCEPT AS AMENDED BY CBC CHAPTER 35.
7. CONFORM TO APPLICABLE CAL/OSHA CONSTRUCTION SAFETY REGULATIONS FOR ALL WORK PERFORMED DURING CONSTRUCTION. JOB SITE SAFETY IS STRICTLY THE RESPONSIBILITY OF THE CONTRACTOR AND NOT THE ARCHITECT/ENGINEER OR OWNER.
8. THE ENGINEER AND THEIR CONSULTANTS SHALL HAVE NO RESPONSIBILITY FOR THE DISCOVERY, HANDLING, REMOVAL OR DISPOSAL OF HAZARDOUS MATERIALS AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO ASBESTOS, ASBESTOS PRODUCTS, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.
9. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS, OR IF A CHANGE IN THE SCOPE OF WORK IS PROPOSED, A CONSTRUCTION CHANGE DOCUMENT DETAILING AND SPECIFYING THE REQUIRED CHANGE(S) SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
10. THE SCHOOL DISTRICT INSPECTOR ON RECORD SHALL INSPECT AND APPROVE THE ERECTED FRAME PRIOR TO ROOF INSTALLATION.
11. SEE REQUIREMENTS FOR LOCATION IN ANY FIRE HAZARD SEVERITY ZONE FOR WILDLAND URBAN INTERFACE AREAS (WUI) AS SPECIFIED IN THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE. PROVIDE PROTECTION AND DETAILS OF ALL AREAS COMPLYING WITH THE WUI REQUIREMENTS. SEE CBC CHAPTER 7A FOR REQUIREMENTS
12. LOCATING THIS STRUCTURE CLOSER THAN 20 FEET TO OTHER STRUCTURES MAY AFFECT THE ALLOWABLE AREA FOR THE EXISTING CONSTRUCTION PER THE APPLICABLE VERSION OF THE CALIFORNIA BUILDING CODE.
13. VIEWS AND DETAILS ARE NOT DRAWN TO SCALE (UNLESS NOTED OTHERWISE). DO NOT SCALE THESE DRAWINGS.

STRUCTURAL AND MISCELLANEOUS STEEL:

1. ALL STRUCTURAL STEEL SHALL BE DETAILED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC) SPECIFICATION MANUAL REFERENCED BY THE LATEST EDITION OF THE CALIFORNIA BUILDING CODE.
2. PIPE SECTIONS SHALL CONFORM TO ASTM A53, Fy = 35 KSI, GRADE B OR A501 UNLESS NOTED OTHERWISE.
3. STRUCTURAL TUBING (HSS SHAPES) SHALL CONFORM TO ASTM A-500, GRADE B (OR C), Fy = 46 KSI. MIN.
4. IF MATERIAL AVAILABILITY IS LIMITED, MEMBER THICKNESS CAN BE INCREASED BEYOND WHAT IS SHOWN IN THESE DRAWINGS (MAXIMUM INCREASE OF 1/8").
5. ALL CHANNELS, ANGLES, AND MISC. STEEL SHALL CONFORM TO ASTM A-36, Fy = 36 KSI.
6. ALL PLATE STEEL SHALL CONFORM TO ASTM A-572, Fy= 50 KSI.
7. ALL COLD FORM STEEL SHALL CONFORM TO ASTM A-653, CS = TYPE B, Fy = 50 KSI Fu = 65 KSI
8. STRUCTURAL STEEL AND DECK SHALL BE IDENTIFIED FOR CONFORMITY PER CBC 2202A.1.
9. ALL ROOF DECKS SHALL HAVE KYNAR 500 METAL COATING.
10. ALL ROOF DECKS SHALL CONFORM TO ASTM A-792, Fy = 50 KSI.
11. ALL BASE CONNECTIONS ARE A PART OF THE LATERAL FORCE RESISTING SYSTEM

NOTICE OF DISCLAIMER FOR STRUCTURAL ENGINEERING RESPONSIBILITY

1. PER TITLE 24, PART 1, SECTION 4-316(e) OF THE CALIFORNIA CODE OF REGULATIONS, THIS NOTICE SHALL BE GIVEN TO DSA PRIOR TO THE APPROVAL OF PLANS AND SPECIFICATIONS.
2. FOR THE SITE SPECIFIC PROJECT, J. R. MILLER & ASSOCIATES IS NOT THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE.
3. FOR THE SITE SPECIFIC PROJECT, J.R. MILLER & ASSOCIATES' RESPONSIBILITY IS LIMITED TO THE PREPARATION OF THE PLANS AND SPECIFICATIONS FOR THE SHELTERS OF THIS PC ONLY.
4. STRUCTURAL OBSERVATION OF CONSTRUCTION IS SPECIFICALLY EXCLUDED FROM J.R. MILLER & ASSOCIATES' RESPONSIBILITY FOR THE SITE SPECIFIC PROJECT.
5. ALL CONSTRUCTION ACTIVITIES RELATED TO STRUCTURAL ENGINEERING SHALL BE DELEGATED TO A QUALIFIED ENGINEER BY THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE. THESE ACTIVITIES INCLUDE, BUT ARE NOT LIMITED TO, STRUCTURAL OBSERVATION OF CONSTRUCTION, REVIEW OF INSPECTION REPORTS, AND SIGNING OFF OF THE VERIFIED REPORT FOR COMPLETED WORK.
6. J.R. MILLER & ASSOCIATES WILL BE RESPONSIBLE FOR RESPONDING TO QUESTIONS PERTAINING TO THE PLANS AND SPECIFICATIONS FOR THE SHELTERS OF THIS PC WHICH ARISE DURING PLAN REVIEW AND CONSTRUCTION.

CONSTRUCTION NOTES

1. A DSA-CERTIFIED CLASS 3 (MINIMUM) PROJECT INSPECTOR IS REQUIRED FOR THIS PROJECT.
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENT (CCD) APPROVED BY DSA, AS REQUIRED BY SECTION 4-338, PART 1, TITLE 24, CCR.
3. A "DSA CERTIFIED" PROJECT INSPECTOR EMPLOYED BY THE DISTRICT (OWNER) AND APPROVED BY DSA SHALL PROVIDE CONTINUOUS INSPECTION OF WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, PART 1, TITLE 24, CCR.
4. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE DISTRICT (OWNER) SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
5. THE INTENT OF THESE DRAWINGS AND SPECIFICATIONS ARE THAT ALL THE WORK OF THE ALTERATION, REHABILITATION OR RECONSTRUCTION IS TO BE IN ACCORDANCE WITH TITLE 24, CCR. SHOULD ANY EXISTING CONDITIONS SUCH AS DETERIORATION OR NON-COMPLYING CONSTRUCTION BE DISCOVERED WHICH IS NOT COVERED BY THE CONTRACT DOCUMENTS WHEREIN THE FINISHED WORK WILL NOT COMPLY WITH TITLE 24, CCR, A CONSTRUCTION CHANGE DOCUMENT (CCD), OR A SEPARATE SET OF PLANS AND SPECIFICATIONS, DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK. (SECTION 4-317(c), PART 1, TITLE 24, CCR)
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES

[illegible]

4. WELD FILLER METAL MANUFACTURER SHALL PROVIDE WRITTEN CERTIFICATION OF COMPLIANCE WITH CODE AND SPECIFICATIONS.

BOLTING:

1. ALL BOLTS SHOWN ON THESE DRAWINGS ARE HOT DIPPED GALVANIZED ASTM F3125 GRADE A325 HIGH STRENGTH BOLTS (UNO), WITH THE NUTS CONFORMING TO HOT DIPPED GALVANIZED ASTM A-563 GRADE DH.
2. HIGH STRENGTH BOLTS SHALL BE VERIFIED AND INSPECTED PER CBC 1705A2.1.
3. BEFORE ERECTING THE FRAME, VERIFY ALL BOLTS AND NUTS ARE CLEAN OF DEBRIS AND BURRS — INCLUDING THE HARDWARE ALREADY FASTENED INSIDE THE MEMBERS. CHASING SOME OF THE BOLTS AND NUTS MAY BE REQUIRED.
4. HARDENED STEEL WASHERS SHALL CONFORM TO ASTM F-436.
5. THE BOLTING INSTALLATION REQUIREMENTS OUTLINED BELOW ARE CRITICAL TO THE STRUCTURE'S DESIGN AND PERFORMANCE. THE INSTALLER IS REQUIRED TO COORDINATE THIS PHASE OF CONSTRUCTION WITH THE SPECIAL BOLTING INSPECTOR AND THE INSPECTOR OF RECORD PRIOR TO THE ERECTION OF THE FRAME
BE INSTALLED AND INSPECTED PER THE APPLICABLE VERSION OF AISC'S
USING HIGH-STRENGTH BOLTS", CBC 1705A.2.1; "AISC 341-16 J7; AISC 360-16 N5.6.

A)PRETENSIONED JOINTS MUST BE INSTALLED AND INSPECTED TO MEET ONE OF THE FOLLOWING REQUIREMENTS:
1. TURN-OF-NUT PRETENSIONING: PER SECTION 8.2.1 OF THE *SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS* , WASHERS ARE NOT REQUIRED FOR THIS METHOD. THE NUT OR HEAD SHALL BE ROTATED AS SPECIFIED IN TABLE 8.2. THE PART NOT TURNED SHALL BE PREVENTED FROM ROTATING.
2. CALIBRATED WRENCH: PER THE *SPECIFICATION FOR STRUCTURAL JOINTS USING HIGH STRENGTH BOLTS*, WASHERS ARE REQUIRED (NOT SUPPLIED BY ICON) THESE SHALL BE INSTALLED PER THE INSTALLATION TORQUE DETERMINED IN THE PRE-INSTALLATION VERIFICATION OF THE FASTENER ASSEMBLY PER SECTION 7. THE PART NOT TURNED SHALL BE PREVENTED FROM ROTATING.
3. IDENTIFIED ON THE FRAME CONNECTION DETAILS WITH "PT REQUIRED"

B) ALL OTHER JOINTS MUST BE INSTALLED AND INSPECTED TO MEET THE REQUIREMENTS OF THE SNUG-TIGHTENED JOINTS. SNUG TIGHT CONDITION EXISTS WHEN ALL PLIES IN A CONNECTION HAVE BEEN PULLED INTO FIRM CONTACT BY THE BOLTS IN THE JOINT AND ALL OF THE BOLTS IN THE JOINT HAVE BEEN TIGHTENED SUFFICIENTLY TO PREVENT REMOVAL OF THE NUTS WITHOUT THE USE OF A WRENCH.

FOUNDATIONS:

1. ALLOWABLE SOIL PRESSURES ASSUME CLASS 5 SOIL CLASSIFICATION PER CBC TABLE 1806A, UNLESS NOTED OTHERWISE. PASSIVE PRESSURE IS ASSUMED TO START 12" BELOW TOP OF FOOTING.
2. PER CBC SECTION 1803A.2, GEOTECHNICAL REPORTS ARE NOT REQUIRED FOR ONE-STORY LIGHT-STEEL FRAME BUILDINGS OF TYPE II CONSTRUCTION AND 4,000 SQUARE FOOT OR LESS IN FLOOR AREA AND NOT LOCATED WITHIN EARTHQUAKE FAULT ZONESOR SIESMIC HAZARD ZONES AS SHOWN ON THE MOST RECENT MAPS PUBLISHED BY THE CGS. ALLOWABLE FOUNDATION AND LATERAL SOIL PRESSURE VALUES MAY BE DETERMINED FROM TABLE 1806A.2.
3. FILL AND BACKFILL SHALL BE COMPACTED TO 95% OF MAX. DENSITY IN ACCORDANCE WITH ASTM TEST METHOD D-1557 OR AS RECOMMENDED BY THE GEO-TECH ENGINEER. FLOODING NOT PERMITTED.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL SHORING, ETC. NECESSARY TO SUPPORT CUT AND/OR FILL BANKS DURING EXCAVATION, AND FORMING AND PLACEMENT OF CONCRETE.
5. MINIMUM SETBACK FROM TOE OF SLOPE ON AN ASCENDING SLOPE SHALL BE 15 FEET AND MINIMUM SETBACK FROM TOE OF SLOPE ON A DESCENDING SLOPE SHALL BE 40 FEET
6. PER CBC SECTION 1803A.6, GEOHAZARD REPORTS ARE NOT REQUIRED FOR ONE-STORY LIGHT-STEEL FRAME BUILDINGS OF TYPE II CONSTRUCTION AND 4,000 SQUARE FOOT OR LESS IN FLOOR AREA AND NOT LOCATED WITHIN EARTHQUAKE FAULT ZONESOR SIESMIC HAZARD ZONES AS SHOWN ON THE MOST RECENT MAPS PUBLISHED BY THE CGS.
7. GEOHAZRD REPORTS ARE TO COMPLY WITH DSA IR A-4 PER IR-7 SECTION 1.8
8. SITE SPECIFIC GEOTECHNICAL REPORT IS REQUIRED AT THE TIME OF SITE APPLICATION IF USING OTHER THAN CLASS 5 SOIL, PER DSA IR PC-7
9. LATERAL BEARING HAS BEEN INCREASED PER CBC 1806A.3.4 FOR THE 1/2" DEFLECTION & HAS BEEN DESIGNED FOR P-DELTA EFFECTS. NO 1/3 INCREASE HAS BEEN APPLIED.
10. MINIMUM CLEARANCE BETWEEN PIERS SHALL BE 8'-0".

CONCRETE:

1. MIX DESIGN REQUIREMENTS: (NORMAL WEIGHT CONCRETE)

STRENGTH: Pc (28 DAYS)	W/C RATIO (NON-AIR ENTRAINED)	W/C RATIO (AIR ENTRAINED)	SLUMP (±1")	UNIT WEIGHT (NORMAL WEIGHT)
5000 PSI	0.44	0.35	3"	150 PCF

2. CONCRETE MIX DESIGN PARAMETERS ARE GOOD FOR EXPOSURE CATEGORIES F0, F1 & F2. THE AIR ENTRAINMENT FOR THESE CATEGORIES SHALL BE AS FOLLOWS: F0=0, F1=4.5, F2=6
3. CHANGES TO THE MIX DESIGN MUST BE APPROVED BY THE ENGINEER OR ARCHITECT OF RECORD AND DSA.
4. AGGREGATES SHALL CONFORM TO THE ASTM C-33 WITH PROVEN SHRINKAGE CHARACTERISTICS OF LESS THAN 0.005. MAX AGGREGATE SIZE = 1".
5. CEMENT SHALL CONFORM TO ASTM C-150 (TYPE V) UNLESS NOTED OTHERWISE ON THE DRAWINGS.
6. CONCRETE SHALL BE MAINTAINED IN A MOIST CONDITION FOR A MINIMUM OF FIVE DAYS AFTER PLACEMENT. ALTERNATE METHODS WILL BE APPROVED IF SATISFACTORY PERFORMANCE CAN BE ASSURED.
7. CONCRETE SHALL NOT FREE FALL MORE THAN FIVE FEET.
8. CONCRETE DURABILITY SHALL BE PER CBC 1904A.1 ACI 318-19, CHAPTER 19.
9. CONCRETE SHALL BE TESTED PER CBC 1903A, TABLE 1705A.3. AND ACI 318-19, SECTION 26.12.
10. NO ADMIXTURE SHALL CONTAIN CALCIUM CHLORIDE.

2. DETAILING, FABRICATION, AND ERECTION OF REINFORCING BARS SHALL CONFORM TO THE ACI "MANUAL OF STANDARD PRACTICE FOR DETAILING REINFORCING CONCRETE STRUCTURES."
3. MIN. COVER FOR CAST-IN-PLACE CONCRETE SHALL BE AS FOLLOWS:
   A. CAST AGAINST EARTH .....3"
   B. CAST AGAINST FORM BELOW GRADE .....2"
   C. FORMED SLABS (#11 BAR & SMALLER).....3/4"
   D. SLABS ON GRADE (FROM TOP OF SLAB).....1"
4. BARS SHALL BE CLEAN OF RUST, GREASE OR OTHER MATERIAL LIKELY TO IMPAIR BOND. BENDS SHALL BE MADE COLD.
5. REINFORCING SHALL BE LAP SPLICED PER ACI 318-19, SECTION 25.5.
6. PRIOR TO PLACING OF CONCRETE, REINFORCING STEEL AND EMBEDDED ITEMS SHALL BE WELL SECURED IN POSITION.
7. WELDING OF REINFORCING IS NOT ALLOWED.
8. REINFORCING STEEL SHALL BE INSPECTED PER CBC 1705A.3.

POWDER-COAT FINISH SYSTEM:

ALL BUILDINGS THAT HAVE A POWDER-COATED FINISH SHALL MEET THE FOLLOWING SPECIFICATIONS:

1. THE STEEL FRAME (HSS SECTIONS, COLD FORMED & PLATE STEEL) SHALL BE SHOT-BLASTED TO A NEAR WHITE CONDITION PER SSPC-10 SPECIFICATIONS.
2. THE STEEL SHALL BE WASHED IN A ZINC PHOSPHATE IN AN MINIMUM THREE STAGE ELECTRO DEPOSITION PRE-TREATEMENT PROCESS.
3. IMMEDIATELY FOLLOWING PRE-TREATMENT THE STEEL SHALL BE TOTALLY COATED IN AN EPOXY PRIMER TO A UNIFORM THICKNESS OF A MINIMUM OF 0.7 TO 0.9 MILS. THE E-COATING SHALL PROVIDE A MINIMUM OF 1000 HOURS OF SALT SPRAY CORROSION PROTECTION TO THE STEEL.
4. THE STEEL SHALL THEN HAVE A TGIC POLYESTER COLOR COAT APPLIED OVER THE E-COATED SURFACE.
5. THE FINISH THICKNESS OF THESE APPLICATIONS SHALL BE A MINIMUM OF 8 TO 12 MILS.
6. ALL CARBON STEEL MEMBERS (COLUMNS, BEAMS, PLATES & COLD FORMED STEEL ETC.) NOT POWDER-COATED SHALL BE PAINTED WITH PRIME COAT PER THE "AISC CODE OF STANDARD PRACTICE "AND THE "AISC SPECIFICATION SECTION M3"(UNLESS NOTED OTHERWISE).

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APP: 04-122188 PC
REVIEWED FOR
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DATE: 09/21/2023

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DATE	3/21/2023
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Aug 31, 2023

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DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

Application Number: 04-122188
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IMPORTANT: This form is only a summary list of structural tests and some of the special inspections required for the project. Generally, the structural tests and special inspections noted on this form are those that will be performed by the Geotechnical Engineer of Record, Laboratory of Record, or Special Inspector. The actual complete test and inspection program must be performed as detailed on the DSA approved documents. The appendix at the bottom of this form identifies work NOT subject to DSA requirements for special inspection or structural testing. The project inspector is responsible for providing inspection of all facets of construction, including but not limited to, special inspections not listed on this form such as structural wood framing, high-load wood diaphragms, cold-formed steel framing, anchorage of non-structural components, etc., per Title 24, Part 2, Chapter 17A (2022 CBC).

**NOTE: Undefined section and table references found in this document are from the CBC, or California Building Code.

KEY TO COLUMNS

1. TYPE	2. PERFORMED BY
Continuous – Indicates that a continuous special inspection is required Periodic – Indicates that a periodic special inspection is required Test – Indicates that a test is required	GE (Geotechnical Engineer) – Indicates that the special inspection shall be performed by a registered geotechnical engineer or his or her authorized representative. LOR (Laboratory of Record) – Indicates that the test or special inspection shall be performed by a testing laboratory accepted in the DSA Laboratory Evaluation and Acceptance (LEA) Program. See CAC Section 4-335. PI (Project Inspector) – Indicates that the special inspection may be performed by a project inspector when specifically approved by DSA. SI (Special Inspection) – Indicates that the special inspection shall be performed by an appropriately qualified/approved special inspector.

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	S1. GENERAL:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify that: • Site has been prepared properly prior to placement of controlled fill and/or excavations for foundations. • Foundation excavations are extended to proper depth and have reached proper material. • Materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) form for exemptions.)

	S2. SOIL COMPACTION AND FILL:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Perform classification and testing of fill materials.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☑	b. Verify use of proper materials, densities and inspect lift thicknesses, placement and compaction during placement of fill.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (Refer to specific items identified in the Appendix (end of this form) form for exemptions where soils SI and testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil SI and test reporting requirements for the exempt items.)
☑	c. Compaction testing.	Test	LOR*	* Under the supervision of the geotechnical engineer. (Refer to specific items identified in the Appendix (end of this form) for exemptions where soils testing may be conducted under the supervision of a geotechnical engineer or LOR's engineering manager. In such cases, the LOR's form DSA 291 shall satisfy the soil test reporting requirements for the exempt items.)

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	S3. DRIVEN DEEP FOUNDATIONS (PILES):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Verify pile materials, sizes and lengths comply with the requirements.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	b. Determine capacities of test piles and conduct additional load tests as required.	Test	LOR*	* Under the supervision of the geotechnical engineer.
☐	c. Inspect driving operations and maintain complete and accurate records for each pile.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	d. Verify locations of piles and their plumbness, confirm type and size of hammer, record number of blows per foot of penetration, determine required penetrations to achieve design capacity, record tip and butt elevations and record any pile damage.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	e. Steel piles.	Provide tests and inspections per STEEL section below.		
☐	f. Concrete piles and concrete filled piles.	Provide tests and inspections per CONCRETE section below.		
☐	g. For specialty piles, perform additional inspections as determined by the registered design professional in responsible charge.	"	"	* As defined on drawings or specifications.

	S4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):			
	Test or Special Inspection	Type	Performed By	Code References and Note
☐	a. Inspect drilling operations and maintain complete and accurate records for each pier.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

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	Test or Special Inspection	Type	Performed By	Code References and Note
☐	b. Verify pier locations, diameters, plumbness, bell diameters (if applicable), lengths and embedment into bedrock (if applicable); record concrete or grout volumes.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
☐	c. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix (end of this form) for exemptions.)
☐	d. Concrete piers.	Provide tests and inspections per CONCRETE section below.		

	S5. RETAINING WALLS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Placement, compaction and inspection of backfill.	Continuous	GE*	1705A.6.1. * By geotechnical engineer or his or her qualified representative. (See section S2 above).
☐	b. Placement of soil reinforcement and/or drainage devices.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	c. Segmental retaining walls; inspect placement of units, dowels, connectors, etc.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. See DSA IR 18-2.
☐	d. Concrete retaining walls.	Provide tests and inspections per CONCRETE section below.		
☐	e. Masonry retaining walls.	Provide tests and inspections per MASONRY section below.		

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13

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	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	c. Verify in-situ concrete strength prior to stressing of post-tensioning tendons.	Periodic	SI	Table 1705A.3 Item 13. Special inspector to verify specified concrete strength test prior to stressing.
☐	d. Inspect application of post-tensioning or prestressing forces and grouting of bonded prestressing tendons.	Continuous	SI	1705A.3.4. Table 1705A.3 Item 9; ACI 318-14 Section 26.13

	C3. PRECAST CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect fabrication of precast concrete members.	Continuous	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	b. Inspect erection of precast concrete members.	Periodic	SI*	Table 1705A.3 Item 10. * May be performed by PI when specifically approved by DSA.
☐	c. For precast concrete diaphragm connections or reinforcement at joints classified as moderate or high deformability elements (MDE or HDE) in structures assigned to Seismic Design Category D, E or F, inspect such connections and reinforcement in the field for: 1. Installation of the embedded parts 2. Completion of the continuity of reinforcement across joints. 3. Completion of connections in the field.	Continuous	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5
☐	d. Inspect installation tolerances of precast concrete diaphragm connections for compliance with ACI 550.5.	Periodic	SI	Table 1705A.3; ACI 318-19 Section 26.13.1.3; ACI 550.5

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (SOILS), 2022 CBC

Table 1705A.6, Table 1705A.7, Table 1705A.8

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	S6. OTHER SOILS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Soil Improvements	Test	GE*	Submit a comprehensive report documenting final soil improvements constructed, construction observation and the results of the confirmation testing and analysis to CGS (California Geological Survey) for final acceptance. * By geotechnical engineer or his or her qualified representative.
☐	b. Inspection of Soil Improvements	Continuous	GE*	* By geotechnical engineer or his or her qualified representative.
☐	c.			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13

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	C4. SHOTCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect shotcrete placement for proper application techniques.	Continuous	SI	1705A.3.9, Table 1705A.3 Item 7, 1908A.1, 1908A.2, 1908A.3. See ACI 506.2-13 Section 3.4, ACI 506R-16.
☐	b. Test post-installed anchors.	Test	LOR	1910A.5. (See Appendix (end of this form) for exemptions.)

	C6. OTHER CONCRETE:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (CONCRETE), 2022 CBC

Table 1705A.3; ACI 318-19 Sections 26.12 & 26.13

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	C1. CAST-IN-PLACE CONCRETE			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify use of required design mix.	Periodic	SI	Table 1705A.3 Item 5, 1910A.1.
☑	b. Identify, sample, and test reinforcing steel.	Test	LOR	1910A.2; ACI 318-19 Ch.20 and Section 26.6.1.2; DSA IR 17-10. (See Appendix (end of this form) for exemptions.)
☑	c. During concrete placement, fabricate specimens for strength tests, perform slump and air content tests, and determine the temperature of the concrete.	Test	LOR	Table 1705A.3 Item 6; ACI 318-19 Sections 26.5 & 26.12.
☑	d. Test concrete (f'_c).	Test	LOR	1905A.1.17; ACI 318-19 Section 26.12.
☐	e. Batch plant inspection:	See Notes	SI	Default of 'Continuous' per 1705A.3.3. If approved by DSA, batch plant inspection may be reduced to Periodic' subject to requirements in Section 1705A.3.3.1, or eliminated per 1705A.3.3.2. See IR 17-13. (See Appendix (end of this form) for exemptions.)
☐	f. Welding of reinforcing steel.	Provide special inspection per STEEL, Category S/A4(d) & (e) and/or S/A5(g) & (h) below.		

	C2. PRESTRESSED / POST-TENSIONED CONCRETE (IN ADDITION TO SECTION C1):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Sample and test prestressing tendons and anchorages.	Test	LOR	1705A.3.4, 1910A.3
☐	b. Inspect placement of prestressing tendons.	Periodic	SI	1705A.3.4, Table 1705A.3 Items 1 & 9.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMINUM), 2022 CBC

1705A.2.1, Table 1705A.2.3; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4; AWS D1.8

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	S/A1. STRUCTURAL STEEL, COLD-FORMED STEEL AND ALUMINUM USED FOR STRUCTURAL PURPOSES			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify material identification (type and grade)	Periodic	SI	1705A.2.1; AISI S100-20 Section A3.1 & Section D1.1; AISC 360-16 Section A3.1; AISC 341-16 Section A3.1; AISC 303-16 Section 2.1; AISC 358-16 Section 6.3; AISC 341-16 Section A3.1; AISC 358-16 Section 6.3; AISC 360-16 Section A3.1; ASCE/SEI 29-05 Sections A4 & A6. * By registered design professional or approved fabricator, certified welding inspector or welding inspector when performed off-site.
☑	b. Verify material identification (type and grade)	Periodic	SI	* By registered design professional or approved fabricator, certified welding inspector or welding inspector when performed off-site.
☑	c. Verify welding procedure specification (WPS) is available	Periodic	SI	
☑	d. Verify and document steel fabrication per DSA-approved construction documents.	Periodic	SI	Not applicable to cold-formed steel light-frame construction, except for trusses (1705A.2.4).
☐	e. Buckling restrained braces.	Test	LOR	Testing and special inspections in accordance with IR 22-4.

	S/A2. HIGH-STRENGTH BOLTS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify identification markings and manufacturer's certificates of compliance conform to ASTM standards specified in the DSA-approved documents.	Periodic	SI	Table 1705A.2.1 Items 1a & 1b, 2202A.1; AISC 360-16 Section A3.3, J3.1, and M3.2; RCSC 2014 Section 1.5 & 7.1; DSA IR 17-6 & DSA IR 17-9.
☑	b. Test high-strength bolts, nuts and washers.	Test	LOR	Table 1705A.2.1 Item 1c, 2213A.1; RCSC 2014 Section 7.2; DSA IR 17-8.
☑	c. Bearing-type ("snug tight") connections.	Periodic	SI	Table 1705A.2.1 Item 2a, 1705A.2.6, 2304A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Section 8.1; DSA IR 17-9.
☑	d. Pretensioned and slip-critical connections.	"	SI	Table 1705A.2.1 Items 2b & 2c, 1705A.2.6, 2304A.2; AISC 360-16 J3.1, J3.2, M2.5 & N5.6; RCSC 2014 Sections 9.2 & 9.3; DSA IR 17-9. "Continuous" or "Periodic" depends on the tightening method used.

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REGISTERED PROFESSIONAL ENGINEER
RUSSELL D. TOY
No. 30998
EXPIRATION 08/31/2023
STATE OF CALIFORNIA

Aug 31, 2023

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DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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	S/A3. WELDING:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Verify weld filler material identification markings per AWS designation listed on the DSA-approved documents and the WPS.	Periodic	SI	1705A.2.5, Table 1705A.2.1 Items 4 & 5; AWS D1.1 and AWS D1.8 for structural steel; AWS D1.2 for Aluminum; AWS D1.3 for cold-formed steel; AWS D1.4 for reinforcing steel; DSA IR 17-3.
☑	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
☑	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.

	S/A4. SHOP WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1–4; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☑	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds.	Periodic	SI	Table 1705A.2.1 Items 5a.5 & 5a.6; AISC 360-16 (and AISC 341-16 as applicable); DSA IR 17-3.
☐	c. Inspect welding of stairs and railing systems.	Periodic	SI	1705A.2.1; AISC 360-16 (and AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3.
☐	d. Verification of reinforcing steel weldability other than ASTM A706.	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	e. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

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School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

	S/A5. FIELD WELDING (IN ADDITION TO SECTION S/A3):			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds.	Continuous	SI	Table 1705A.2.1 Items 5a.1–4; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	b. Inspect single-pass fillet welds ≤ 5/16".	Periodic	SI	Table 1705A.2.1 Item 5a.5; AISC 360-16 (AISC 341-16 as applicable); DSA IR 17-3.
☐	c. Inspect end-welded studs (ASTM A-108) installation (including bend test).	Periodic	SI	2213A.2; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1; DSA IR 17-3.
☐	d. Inspect floor and roof deck welds.	Periodic	SI	1705A.2.2, Table 1705A.2.1 Item 5a.6; AISC 360-16 (AISC 341-16 as applicable); AWS D1.3; DSA IR 17-3.
☐	e. Inspect welding of structural cold-formed steel.	Periodic	SI*	1705A.2.5; AWS D1.3; DSA IR 17-3. The quality control provisions of AISI S240-20 Chapter D shall also apply. * May be performed by the project inspector when specifically approved by DSA.
☐	f. Inspect welding of stairs and railing systems.	Periodic	SI*	1705A.2.1; AISC 360-16 (AISC 341-16 as applicable); AWS D1.1 & D1.3; DSA IR 17-3. * May be performed by the project inspector when specifically approved by DSA.
☐	g. Verification of reinforcing steel weldability.	Periodic	SI	1705A.3.1; AWS D1.4; DSA IR 17-3. Verify carbon equivalent reported on mill certificates.
☐	h. Inspect welding of reinforcing steel.	Continuous	SI	Table 1705A.2.1 Item 5b, 1705A.3.1, Table 1705A.3 Item 2, 1903A.8; AWS D1.4; DSA IR 17-3.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number: 04-122188
School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

	S/A6. NONDESTRUCTIVE TESTING:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Ultrasonic	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	b. Magnetic Particle	Test	LOR	1705A.2.1, 1705A.2.5; AISC 341-16 J6.2, AISC 360-16 N5.5; AWS D1.1, AWS D1.8; DSA IR 17-2.
☐	c.	Test	LOR	

	S/A7. STEEL JOISTS AND TRUSSES:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Verify size, type and grade for all chord and web members as well as connectors and weld filler material; verify joist profile, dimensions and camber (if applicable); verify all weld locations, lengths and profiles; mark or tag each joist.	Continuous	SI	1705A.2.3, Table 1705A.2.3; AWS D1.1; DSA IR 22-3 for steel joists only. 1705A.2.4; AWS D1.3 for cold-formed steel trusses.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS, 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number: 04-122188
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School District: PC Update
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Increment Number:
Date Created: 2023-04-19 08:36:32

	Test or Special Inspection	Type	Performed By	Code References and Notes
	S/A8. SPRAYED FIRE-RESISTANT MATERIALS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Examine structural steel surface conditions, inspect application, take samples, measure thickness and verify compliance of all aspects of application with DSA-approved documents.	Periodic	SI	1705A.15, 1705A.1, 1705A.2, 1705A.3, 1705A.4.
☐	b. Test density.	Test	LOR	1705A.15.1, 1705A.15.5, ASTM E736
☐	c. Bond strength adhesion/cohesion.	Test	LOR	1705A.15.1, 1705A.15.4, ASTM E605

	S/A9. ANCHOR BOLTS AND ANCHOR RODS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☑	a. Anchor Bolts and Anchor Rods	Test	LOR	Sample and test anchor bolts and anchor rods not readily identifiable per procedures noted in DSA IR 17-11.
☐	b. Threaded rod not used for foundation anchorage.	Test	LOR	Sample and test threaded rods not readily identifiable per procedures noted in DSA IR 17-11.

	S/A10. STORAGE RACK SYSTEMS:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Materials used, to verify compliance with one or more of the material test reports in accordance with the approved construction documents.	Periodic	SI	Table 1705A.13.7
☐	b. Fabricated storage rack elements.	Periodic	SI	1704A.2.5; Table 1705A.13.7

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (STEEL AND ALUMNINUM), 2022 CBC

1705A.2.1, Table 1705A.2.1; AISC 303-16, AISC 341-16, AISC 358-16, AISC 360-16; AISI S100-20; RCSC 2014; AWS D1.1, AWS D1.2, AWS D1.3, AWS D1.4, AWS D1.8

Application Number: 04-122188
School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	c. Storage rack anchorage installation.	Periodic	SI	ANSI/MH16.1 Section 7.3.2; Table 1705A.13.7
☐	d. Completed storage rack system to indicate compliance with the approved construction documents.	Periodic	SI*	Table 1705A.13.7; * May be preformed by the project inspector when specifically approved by DSA.

	S/A11. Other Steel			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a.			

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS (OTHER), 2022 CBC

Application Number: 04-122188
School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

	X1. OTHER:			
	Test or Special Inspection	Type	Performed By	Code References and Notes
☐	a. Load test for identified product(s):	Test	LOR	1709A.2, 1709A.3. Testing is not required for: 1) a product with a valid evaluation service report per DSA IR A-5, or 2) a product that can be justified by structural calculation.
☐	b. Installation torque for non-HS bolts	Continuous	SI*	Applicable to communication towers identified as Essential Service Facility Projects (ESFP). Calibrated wrench use required, verified by SI during installation. DSA Policy PL 18-01: Communication Towers, Poles and Buildings Utilized by State Agencies for Essential Services Communications.*EXCEPTION: Non-ESFP may use PI without need for notification to DSA.
☐	c.			

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-122188
School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

Exempt items given in DSA IR A-22 or the 2019 CBC (including DSA amendments) and those items identified below with a check mark by the design professional are NOT subject to DSA requirements for the structural tests / special inspections noted. Items marked as exempt shall be identified on the approved construction documents. The project inspector shall verify all construction complies with the approved construction documents.

	SOILS:
☐	1. Deep foundations acting as a cantilever footing with a design based on maximum allowable pressure per CBC Table 1806.2 and without a geotechnical report for the following cases: A) free standing [illegible] poles, flag poles, poles supporting open mesh fences, etc.), C) [illegible] or D) covered walkway structure with an apex height less than [illegible]
☐	2. Shallow foundations, etc. are exempt from special inspection and testing by a geotechnical engineer for the following cases: A) buildings without a geotechnical report and meeting the exception item #1 criteria in CBC Section 1803A.2 supported by native soil (any excavation depth) or fill soil (not exceeding 12" depth per CBC Section 1804A.6), B) soil scarification/recompaction not exceeding 12" depth, C) native or fill soil supporting exterior non-structural flatwork (e.g., sidewalks, site concrete ramps, site stairs, parking lots, driveways, etc.), D) unpaved landscaping and playground areas, or E) utility trench backfill.

	CONCRETE/MASONRY:
☐	1. Post-installed anchors for the following: A) exempt non-structural components (e.g., mechanical, electrical, plumbing equipment - see item 7 for "Welding" in the Appendix below) given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) or B) interior nonstructural wall partitions meeting criteria listed in exempt item 3 for "Welding" in the Appendix below
☐	2. Concrete batch plant inspection is not required for items given in CBC Section 1705A.3.3.2 subject to the requirements and limitations in that section.
☐	3. Non-bearing non-shear masonry walls may be exempt from certain DSA masonry testing and special inspection items as allowed per DSA IR 21-1. Refer to construction documents for specific exemptions accordingly for each applicable wall condition.
☐	4. Epoxy shear dowels in site flatwork and/or other non-structural concrete.

Appendix: Work Exempt from DSA Requirements for Structural Tests / Special Inspections

Application Number: 04-122188
School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

	CONCRETE/MASONRY:
☐	5. Testing of reinforcing bars is not required for items given in CBC Section 1910A.2 subject to the requirements and limitations in that section.
☐	3. Non-structural interior cold-formed steel framing spanning less than 15'-0", such as in interior partitions, interior soffits, etc. supporting only self weight and light-weight finishes or adhered tile, masonry, stone, or terra cotta veneer no more than 5/8" thickness and apex less than 20'-0" in height and not over an exit way. Maximum tributary load to a member shall not exceed the equivalent of that occurring from a 10'x10' opening in a 15' tall wall for a header or king stud.
☐	4. Manufactured support frames and curbs using hot rolled or cold-formed steel (i.e., light gauge) for mechanical, electrical, or plumbing equipment weighing less than 2000# (equipment only) (connections of such frames to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	5. Manufactured components (e.g., Tolco, B-Line, Afcon, etc.) for mechanical, electrical, or plumbing hanger support and bracing (connections of such components to superstructure elements using welding will require special inspection as noted in selected item(s) for Sections S/A3, S/A4 and/or S/A5 of listing above).
☐	6. TV Brackets, projector mounts with a valid listing (see DSA IR A-5) and recreational equipment (e.g., playground structures, basketball backstops, etc.) (connections of such elements to superstructure elements using welding will require special inspection as noted in selected item(s) for sections S/A3, S/A4 and/or S/A5 located in the Steel/Aluminum category of listing above).
☐	7. Any support for exempt non-structural components given in CBC Section 1617A.1.18 (which replaces ASCE 7-16, Section 13.1.4) meeting the following: A) when supported on a floor/roof, <400# and resulting composite center of mass (including component's center of mass) ≤4' above supporting floor/roof, B) when hung from a wall or roof/floor, <20# for discrete units or <5 plf for distributed systems.

DSA 103-22: LISTING OF STRUCTURAL TESTS & SPECIAL INSPECTIONS(SIGNATURE), 2022 CBC

Application Number: 04-122188
School Name: PC Update
School District: PC Update
DSA File Number:
Increment Number:
Date Created: 2023-04-19 08:36:32

Name of Architect or Engineer in general responsible charge:

Name of Structural Engineer in general responsible charge, or other agency as listed below:

Name of Inspection Agency:

Note: To facilitate DSA electronic mark-ups and identification stamp application, DSA recommends against using secured electronic or digital signatures.

DSA STAMP

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-121754 INC: A
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 02/21/2024

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122188 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/21/2023

ICON STD	RG/DSA-PC
DRAWN BY	JD
DATE	3/21/2023
REV	
REV DATE	

JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST I BREA, CA 92821
T. 714.524.1870 I F. 714.524.1875
WWW.JRMA.COM

Aug 31, 2023

DSA 103

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LS1.3

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required.

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RG40X24 COLUMN LAYOUT
(1 BAY)



RG40X44 COLUMN LAYOUT
(2 BAYS)



RG40X84 COLUMN LAYOUT
(4 BAYS)

RG40X64 COLUMN LAYOUT
(3 BAYS)

ANCHOR ROD DETAIL
1.HEAT TREATED
2.MAX CARBON CONTENT=27%
3.MAX MANGANESE CONTENT
0.6 TO 0.9%

NOTES:
COLUMN BASE PLATES ARE TO HAVE DOUBLE NUTS. PLACE ONE NUT UNDER THE PLATE AND ONE NUT ON TOP, WITH A WASHER UNDER THE NUT.

THE BOTTOM NUT CAN BE USED AS A LEVELING NUT.

AFTER COLUMN IS SET AND LEVELED AND THE NUTS HAVE BEEN TIGHTENED, THE COLUMN MUST HAVE NON-SHRINK GROUT PLACED UNDER THE BASE PLATE BEFORE COVERING THE BASE WITH CONCRETE.

REFER TO FOOTING DETAIL FOR RODS/NUT LOCATIONS AND SIZE.

FOUNDATION ANCHORS ARE TO BE UNTORQUED.

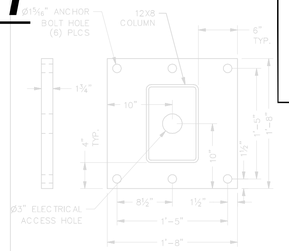
COLUMN BASE CONNECTION DETAIL — SCALE: N.T.S. — C1

RG40X104 COLUMN LAYOUT
(5 BAYS)

NOTES:
COLUMN SIZE AND LOCATION WILL VARY DEPENDING ON MODEL TYPE ORDERED, PLEASE REFER TO JOB SPECIFIC BILL OF MATERIALS AND INSTALLATION MANUAL FOR CORRECT PLACEMENT AND SIZE.

WHERE CONCRETE SLAB SPECIFIED PORTLAND CEMENT CONCRETE PAVING SHALL HAVE A MEDIUM SALTED (MEDIUM BROOM) FINISH ON ALL SURFACES SLOPED LESS THAN 6% AND SLIP RESISTANT (HEAVY BROOM FINISH) ON ALL SURFACES SLOPED GREATER THAN 6% CBC SECTION 1133B.7.1

BASE PLATE LOCATION



12X8 COLUMN BASE PLATE DETAIL — BP1

20X8 COLUMN BASE PLATE DETAIL — BP2

IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-121754 INC: A
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 02/21/2024

ICON STD	RG/DSA-PC
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DATE	3/21/2023
REV	
REV DATE	

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ARCHITECTS ENGINEERS
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Aug 31, 2023

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DIV. OF THE STATE ARCHITECT
APP: 04-122188 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/21/2023

40' WIDE RECTANGULAR GABLE

ALL ANCHOR RODS SHALL BE 1.25"X26" U.N.O.

RG40 - SPREAD

8' End Columns				8' End Columns				8' End Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing			
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size
120	30	15	6	120	30	15	6	96	30	12	6
8' Side Columns				**8' Side Columns**				**8' Side Columns**			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing			
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size
168	30	21	6	168	30	21	6	138	30	17	6
8' Eave - 1500 psf [ ]				**8' Eave - 2000 psf [ ]**				**8' Eave - 3000 psf [ ]**			

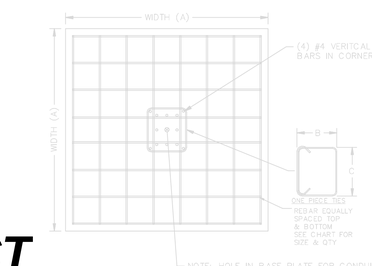
10' End Columns				10' End Columns				10' End Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing			
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size
102	30	13	6	102	30	13	6	90	30	12	6
10' Side Columns				**10' Side Columns**				**10' Side Columns**			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing			
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size
144	30	18	6	144	30	18	6	114	30	14	6
1500 psf 10' Eave [ ]				**2000 psf 10' Eave [ ]**				**3000 psf 10' Eave [ ]**			

12' End Columns				12' End Columns				12' End Columns			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing			
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size
90	30	12	6	90	30	12	6	90	30	12	6
12' Side Columns				**12' Side Columns**				**12' Side Columns**			
Soil Class 5 - 1500 psf Bearing				Soil Class 4 - 2000 psf Bearing				Soil Class 3 - 3000 psf Bearing			
Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size	Size (A) (in)	Depth (in)	T&B Rebar Qty	Rebar Size
144	30	18	6	144	30	18	6	114	30	14	6
1500 psf 12' Eave [ ]				**2000 psf 12' Eave [ ]**				**3000 psf 12' Eave [ ]**			

8' End Columns			
Tie Dimensions			Weld
B (in)	C (in)	Rebar Size	Fillet Weld "W"
22	23.5	4	1/4
8' Side Columns			
			Weld
B (in)	C (in)	Rebar Size	Fillet Weld "W"
24	35.5	4	5/16
8' Eave - Rebar & Weld			

10' End Columns			
			Weld
B (in)	C (in)	Rebar Size	Fillet Weld "W"
22	23.5	4	3/8
10' Side Columns			
			Weld
B (in)	C (in)	Rebar Size	Fillet Weld "W"
22	23.5	4	1/2
12' Side Columns			
			Weld
B (in)	C (in)	Rebar Size	Fillet Weld "W"
24	35.5	4	1/2
12' Eave - Rebar & Weld			

SEE BASE PLATE DETAILS FOR CORRECT ANCHOR LAYOUT



SEE DETAILS BP1, BP2 OR BP3 FOR ANCHOR BOLT PATTERNS
B1 & B2 ARE A (6) BOLT PATTERN WHILE B3 IS AN (8) BOLT

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required.

40' WIDE RECTANGULAR GABLE FOUNDATION PLAN

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
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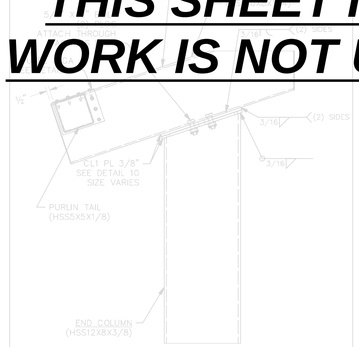
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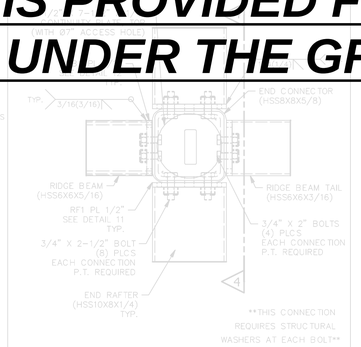
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ALL STRUCTURAL FASTENERS (NUTS, BOLTS & WASHERS) ON THIS SHEET TO BE HOT DIP GALVANIZED

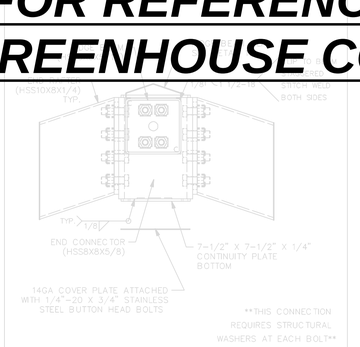
PLAN – PURLIN & END RAFTER CONNECTIONS @ END COLUMN | 1



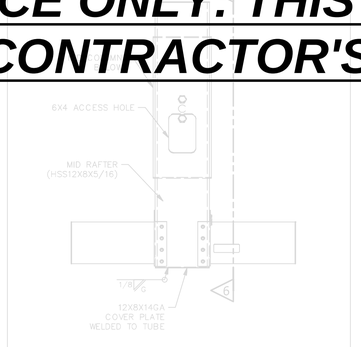
VIEW – PURLIN & END RAFTER CONNECTIONS @ END COLUMN | 2



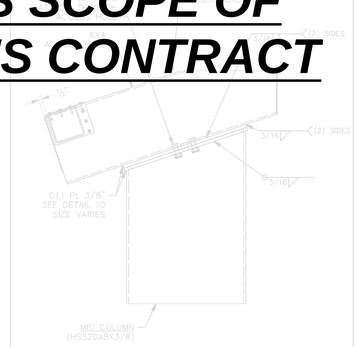
PLAN – END RAFTER & RIDGE BEAM CONNECTIONS @ END CONNECTOR | 3



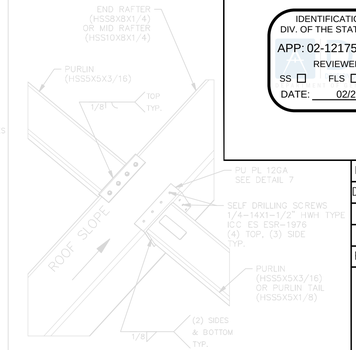
VIEW – END RAFTER & RIDGE BEAM CONNECTIONS @ END CONNECTOR | 4



PLAN – PURLIN & MID RAFTER CONNECTIONS @ MID COLUMN | 5



VIEW – PURLIN & MID RAFTER CONNECTIONS @ MID COLUMN | 6



ISOMETRIC – PURLIN CONNECTIONS @ RAFTER | 7

PLAN – MID RAFTER & RIDGE BEAM CONNECTIONS @ MID CONNECTOR | 8

VIEW – MID RAFTER & RIDGE BEAM CONNECTIONS @ MID CONNECTOR | 9

COLUMN TO RAFTER PLATE DETAILS | 10

12X8 MID RAFTER PLATE DETAIL | 13

10X8 END RAFTER PLATE DETAIL | 11

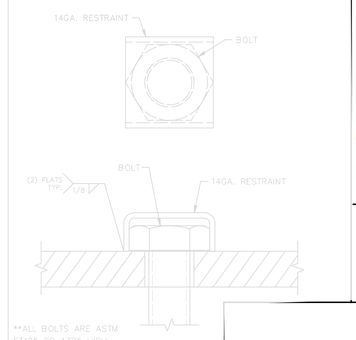
RIDGE BEAM PLATE DETAIL | 12

PURLIN PLATE DETAIL | 14

SECTION PROPERTIES
A=0.657 in^2 Fy=36 ksi
Ix=0.087 in^4 Sx=0.03 in^3
Iy=0.087 in^4 Sy=0.97 in^3

RIDGE BEAM CUP (6" WIDE BEAM) | 15

TYPICAL NUT RESTRAINING SYSTEM | NR



TYPICAL BOLT RESTRAINING SYSTEM | BR

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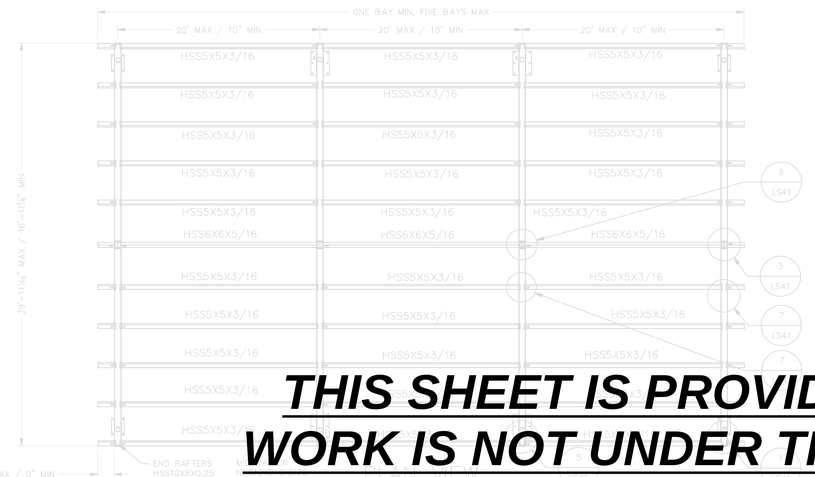
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REGISTERED PROFESSIONAL ENGINEER
WILLIAM D. POLK
No. 29961
STRUCTURAL
STATE OF CALIFORNIA

Aug 31, 2023

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PLAN VIEW

*NOTE:
QUANTITIES WILL VARY DEPENDING ON SHELTER SIZE ORDERED. PLEASE REFER TO JOB SPECIFIC BILL OF MATERIALS AND INSTALLATION MANUAL.

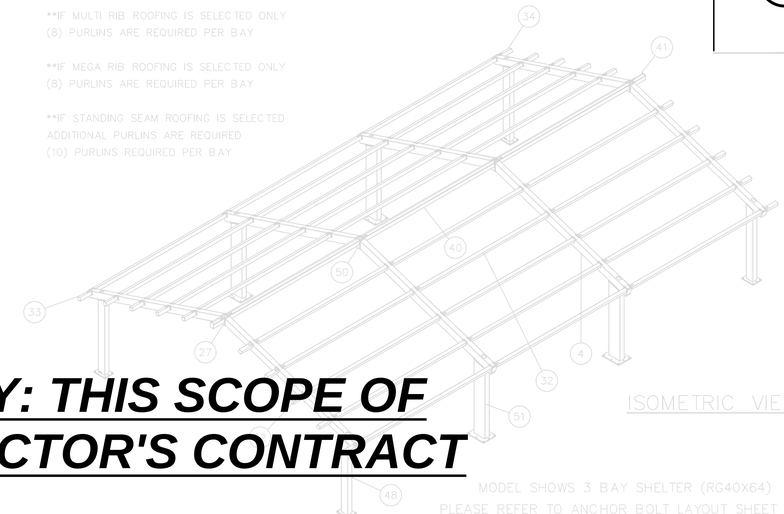
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	LENGTH	UNIT WEIGHT
1	4		END COLUMN	**SEE NOTE BELOW		564 lbmass
2	*		MID COLUMN	**SEE NOTE BELOW		873 lbmass
3	4		END RAFTER	HSS10X8X1/4		626 lbmass
4	*		MID RAFTER	HSS12X8X5/16		872 lbmass
5	**		PURLIN	HSS5X5X3/16		234 lbmass
6	**		PURLIN TAIL 1	HSS5X5X1/8		15 lbmass
7	**		PURLIN TAIL 2	HSS5X5X1/8		15 lbmass
8	*		RIDGE BEAM	HSS6X6X5/16		333 lbmass
9	2		RIDGE BEAM TAIL	HSS6X6X3/16		34 lbmass
10	2		END CONNECTOR	HSS8X8X5/8		54 lbmass
11	*		MID CONNECTOR	HSS8X8X5/8		63 lbmass

**NOTE:
MATERIAL WILL VARY DEPENDING ON SHELTER SIZE ORDERED.
☐ END COLUMN 8' UTB – (HSS12X8X3/8)
☐ MID COLUMN 8' UTB – (HSS20X8X3/8)
☐ END COLUMN 12' UTB – (HSS12X8X3/8)

**IF MULTI RIB ROOFING IS SELECTED ONLY (8) PURLINS ARE REQUIRED PER BAY.

**IF MEGA RIB ROOFING IS SELECTED ONLY (8) PURLINS ARE REQUIRED PER BAY.

**IF STANDING SEAM ROOFING IS SELECTED ADDITIONAL PURLINS ARE REQUIRED (10) PURLINS REQUIRED PER BAY.



ISOMETRIC VIEW

MODEL SHOWS 3 BAY SHELTER (RG40X64)
PLEASE REFER TO ANCHOR BOLT LAYOUT SHEET FOR CORRECT COLUMN PLACEMENT BASED ON SIZE ORDERED

FRONT VIEW

98" MIN IF USED OVER ACCESSIBLE PARKING OR ACCESS AISLES.

114" MIN IF LOCATED OVER ACCESSIBLE PASSENGER LOADING ZONES

SIDE VIEW

MODEL DESIGNATION	
RG40X24	1 BAY
RG40X44	2 BAY
RG40X64	3 BAY
RG40X84	4 BAY
RG40X104	5 BAY

40' WIDE RECTANGULAR GABLE

40' WIDE RECTANGULAR GABLE FRAMING & CONNECTION DETAILS

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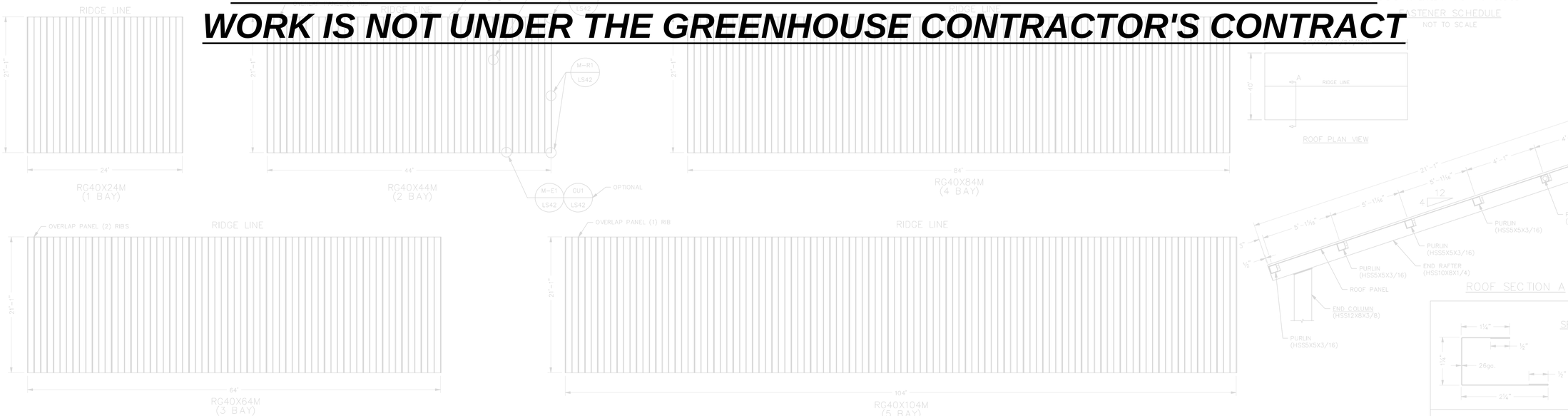
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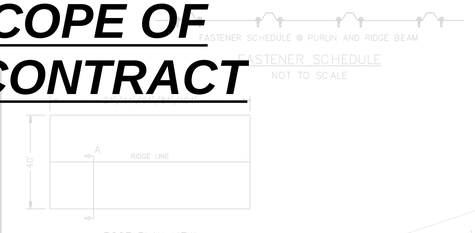
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40' WIDE RECTANGULAR GABLE MULTI RIB ROOFING

MULTI RIB ROOF INSTALLATION — ROOF

MULTI RIB TRIM INSTALLATION — TRIM

MULTI RIB ROOF EAVE CONNECTION DETAIL — M-E1

MULTI RIB ROOF CONNECTION AT RIDGE — M-G1

MULTI RIB ROOF CONNECTION AT PURLIN — M-P1

ROOF NOTES

ATTENTION INSTALLERS
METAL SHAVINGS LEFT ON ROOF WILL QUICKLY RUST AND STAIN THE ROOF FINISH!!

DRILLING OR INSTALLING ROOF FASTENERS WILL CAUSE METAL SHAVINGS. THESE SHAVINGS MUST BE CAREFULLY REMOVED AT THE END OF EACH DAY BY EITHER SWEEPING OR BRUSHING THE INSTALLED ROOF.





MULTI RIB PANEL SECTION
24 ga. Fy=50 ksi Fu=65ksi
UES EVALUATION REPORT #270

SECTION PROPERTIES
(PER FT. OF WIDTH)

TOP IN COMPRESSION
Ix=0.050 in^4
Se=0.055 in^3
Ma=1.375 in-kips

BOTTOM IN COMPRESSION
Ix=0.029 in^4
Se=0.046 in^3
Ma=1.148 in-kips

INSTALLED CORRECTLY	INSTALLED TOO TIGHT	INSTALLED TOO LOOSE
THE SEALING MATERIAL SLIGHTLY VISIBLE AROUND THE METAL WASHER	THE SEALING MATERIAL IS DEFORMED BEYOND THE EDGE OF THE METAL WASHER	THE SEALING MATERIAL IS NOT VISIBLE AROUND THE EDGE OF THE METAL WASHER

THE ERECTOR SHOULD THOROUGHLY FAMILIARIZE THEMSELVES WITH ALL INSTALLATION INSTRUCTION MATERIAL BEFORE STARTING WORK.

THE PANELS SHOULD BE INSTALLED PLUMB, STRAIGHT, AND ACCURATELY TO THE ADJACENT WORK.

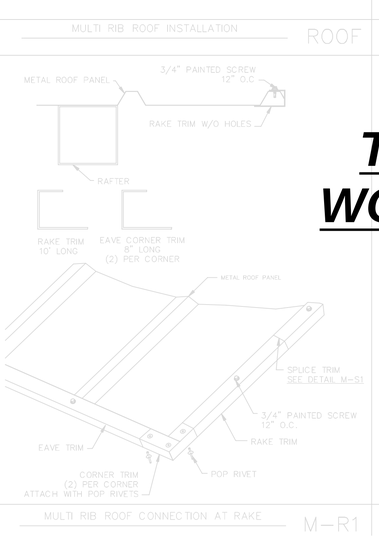
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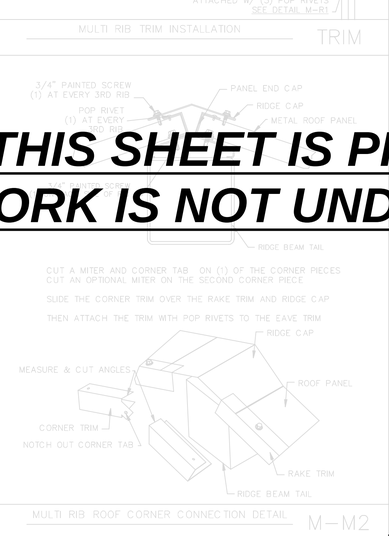
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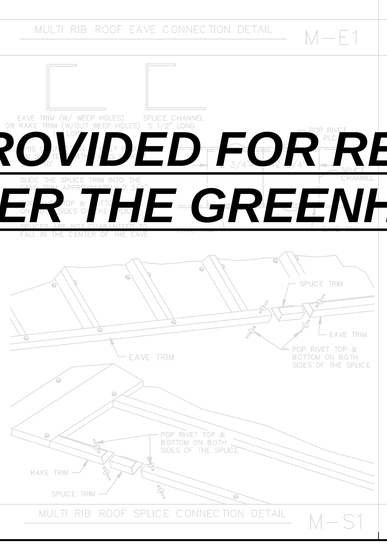
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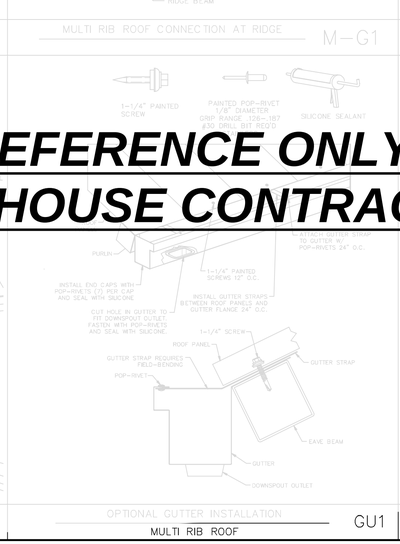
MULTI RIB ROOF CONNECTION AT RAKE — M-R1



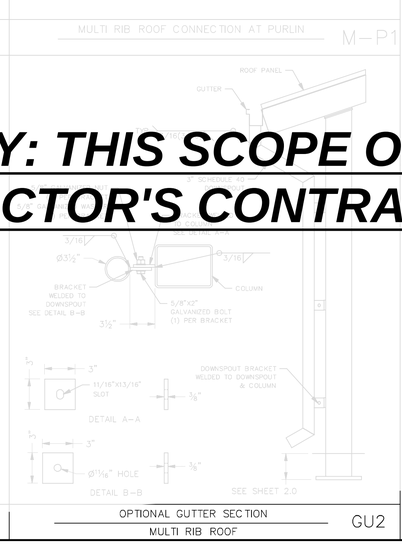
MULTI RIB ROOF CORNER CONNECTION DETAIL — M-M2



MULTI RIB ROOF SPLICE CONNECTION DETAIL — M-S1



OPTIONAL GUTTER INSTALLATION
MULTI RIB ROOF — GU1



OPTIONAL GUTTER SECTION
MULTI RIB ROOF — GU2

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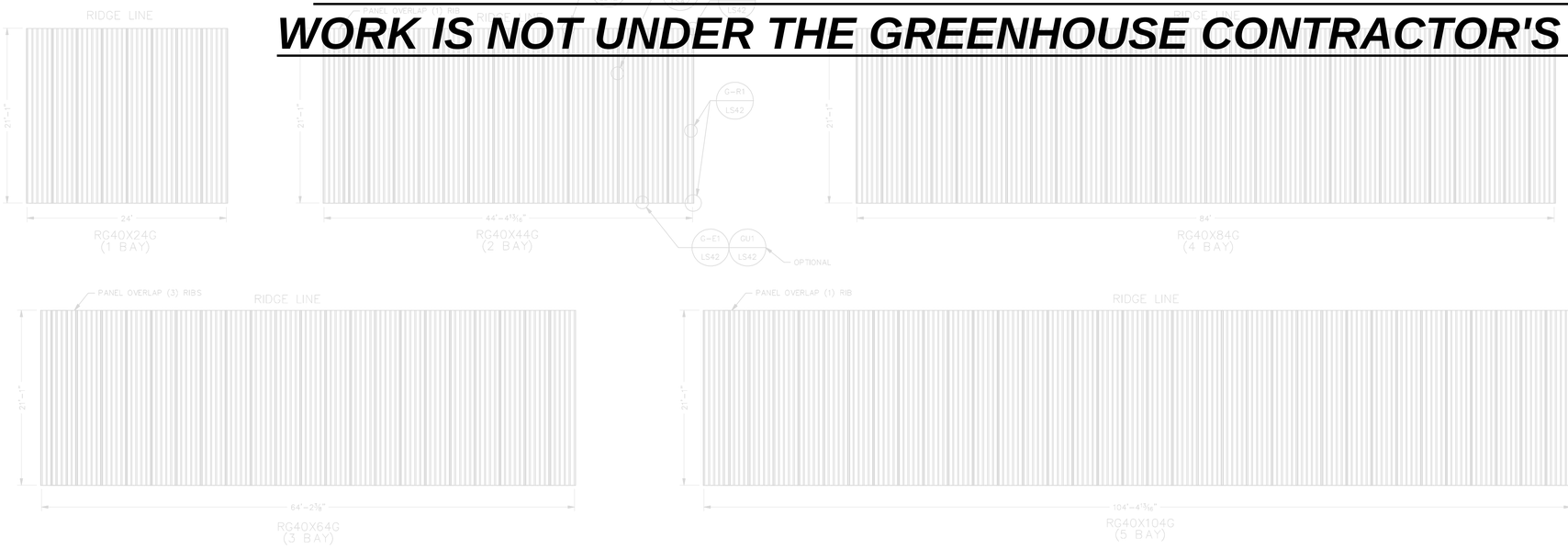
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FASTENER SCHEDULE
NOT TO SCALE

ROOF PLAN VIEW

ROOF SECTION A

SECTION PROPERTIES
Fy = 50 ksi
A = 0.092 in^2
Ix = 0.028 in^4
Iy = 0.061 in^4
Sx = 0.024 in^3
Sy = 0.056 in^3

MULTI RIB EAVE TRIM 1

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40' WIDE RECTANGULAR GABLE MEGA RIB ROOFING

MEGA RIB ROOF INSTALLATION ROOF

MEGA RIB TRIM INSTALLATION TRIM

MEGA RIB ROOF EAVE CONNECTION DETAIL G-E1

MEGA RIB ROOF CONNECTION AT RIDGE G-G1

MEGA RIB ROOF CONNECTION AT PURLIN G-P1

ROOF NOTES

ATTENTION INSTALLERS:
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DRILLING OR INSTALLING ROOF FASTENERS WILL CAUSE METAL SHAVINGS. THESE SHAVINGS MUST BE CAREFULLY REMOVED AT THE END OF EACH DAY BY EITHER SWEEPING OR BRUSHING THE INSTALLED ROOF.

CLASS A ROOFING

MEGA RIB PANEL SECTION
24 ga. Fy=50 ksi Fu=65 ksi
UES EVALUATION REPORT #270

SECTION PROPERTIES
(PER FT. OF WIDTH)

TOP IN COMPRESSION
Ix=0.091 in^4
Se=0.1096 in^3
Mo=2.7433 in-kips

BOTTOM IN COMPRESSION
Ix=0.089 in^4
Se=0.0973 in^3
Mo=2.430 in-kips

INSTALLED CORRECTLY	INSTALLED TOO TIGHT	INSTALLED TOO LOOSE
THE SEALING MATERIAL SLIGHTLY SQUEEZE AROUND THE METAL WASHER	THE SEALING MATERIAL IS DEFORMED BEYOND THE EDGE OF THE METAL WASHER	THE SEALING MATERIAL IS NOT VISIBLE AROUND THE EDGE OF THE METAL WASHER

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MEGA RIB CONNECTION AT RAKE G-R1



MEGA RIB ROOF CORNER CONNECTION DETAIL G-M2



MEGA RIB ROOF SPLICE CONNECTION DETAIL G-S1



OPTIONAL GUTTER INSTALLATION MEGA RIB ROOF GU1



OPTIONAL GUTTER SECTION MEGA RIB ROOF GU2

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40' WIDE
RECTANGULAR GABLE
MEGA RIB ROOFING
PLAN

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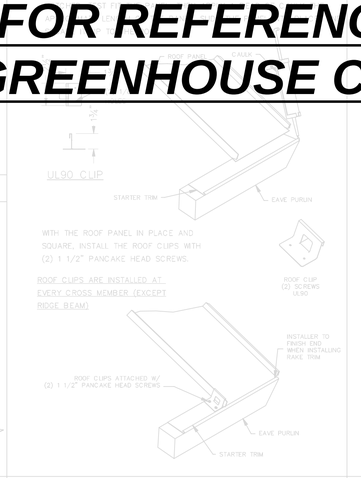
TRIM REFERENCE

ORDER OF INSTALLATION

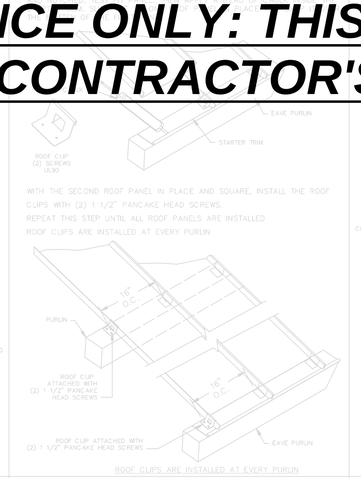


STARTER INSTALLATION S-ST1

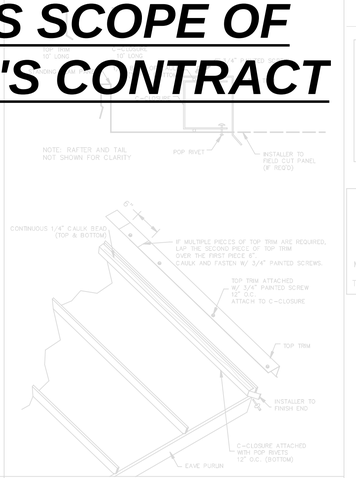
FIELD CUTTING ROOF PANELS S-CP1



INSTALLATION OF FIRST ROOF PANEL S-PI1



INSTALLATION OF SECOND ROOF PANEL S-PI2



TOP TRIM INSTALLATION @ RAKE S-RK1

TO INSTALL C-CLOSURES ALONG THE RIDGE MEASURE, MARK & CUT THE C-CLOSURE TO LENGTH.

APPLY A 1/4" BEAD OF CAULK TO THE BOTTOM OF THE C-CLOSURE AND FASTEN IT TO THE ROOF WITH (2) 3/4" PAINTED SCREWS (12" O.C. MAX CENTERED ON EACH PANEL) ALONG THE RIDGE BEAM. THEN APPLY CAULK TO THE END OF THE C-CLOSURE FOR WATER TIGHTNESS

INSTALLATION OF C-CLOSURE @ RIDGE S-RC1

TO FINISH OFF THE END OF THE RIDGE, CUT THE TOP TRIM AS SHOWN.

INSTALLATION OF CORNER TRIM S-RK2

TO INSTALL RIDGE CAP: FIRST APPLY A BEAD OF CAULK ALONG THE TOP OF THE C-CLOSURES

INSTALLATION OF RIDGE CAP S-RT1

OPTIONAL GUTTER INSTALLATION
STANDING SEAM ROOF GU1

OPTIONAL GUTTER SECTION
STANDING SEAM ROOF GU2

ROOF NOTES

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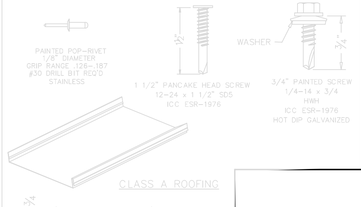
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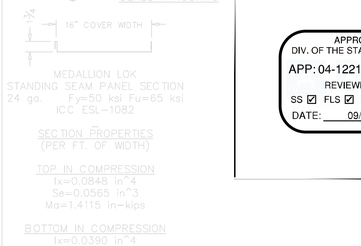
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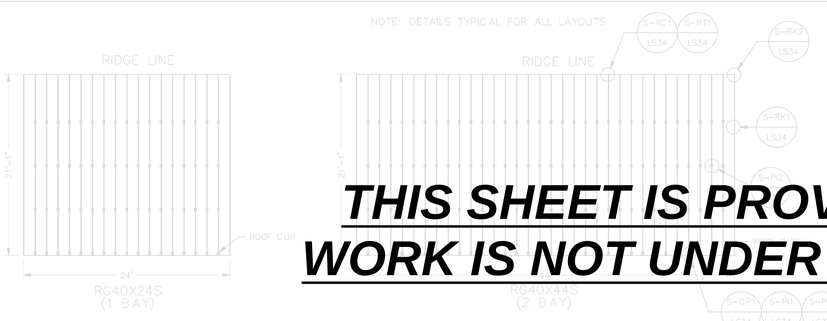
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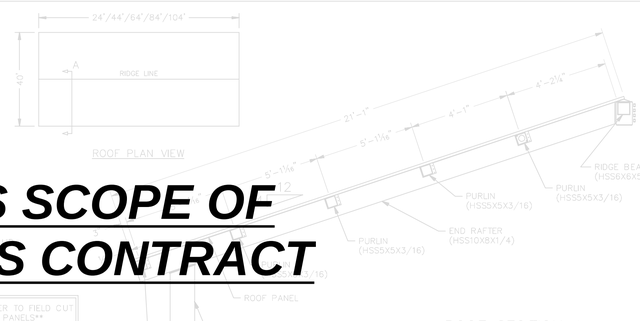
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40' WIDE RECTANGULAR GABLE STANDING SEAM ROOFING





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REGISTERED PROFESSIONAL ENGINEER
WILLIAM D. WARD
No. 29961
STRUCTURAL
STATE OF CALIFORNIA

Aug 31, 2023

40' WIDE RECTANGULAR GABLE STANDING SEAM ROOFING PLAN

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ELECTRICAL INFORMATION - RECTANGULAR CABLE

ICON'S STANDARD [illegible] DESIGNED TO ACCOMMODATE [illegible] WITH [illegible] ELECTRICAL SYSTEM.
THE CONDUIT PATHWAY RUNS THROUGH THE COLUMN, RAFTER, AND RIDGE BEAM THROUGH ALL BOLTED CONNECTIONS AS SHOWN.
IF YOU HAVE SPECIAL ELECTRICAL REQUIREMENTS, PLEASE OUTLINE ANY CHANGES BELOW AS DESCRIBED.

PLEASE NOTE: DESIGN LIMITATIONS ON HOLE/CUTOUT SIZES MAY APPLY.
ICON WILL REACH OUT TO DISCUSS ANY SUCH LIMITATIONS AS NEEDED.

NOTE: ICON SHELTER FRAME IS NOT UL LISTED TO ACT AS A CONDUIT FOR ELECTRICAL WIRING. CONSULT LOCAL BUILDING CODES WHEN PLANNING YOUR ELECTRICAL SYSTEM.

STEPS:

1. CONDUIT HOLE SIZE (DETAIL A)
2. ELECTRICAL EXIT HOLES (DETAIL B)
3. ELECTRICAL ACCESS & COVER PLATES (DETAIL C)
4. ELECTRICAL CONDUIT PATHWAY (DETAIL D)

☐ IF REQUIRED, PLEASE DRAW THE NECESSARY ELECTRICAL CONDUIT PATHWAY ON THE FRAME SHEET REQUIRED FOR BUILDING SIZE (LS2.1, LS3.1 & LS4.1)

DETAIL D

OPTIONAL EXIT HOLES
IF REQUIRED, EXIT HOLES FOR LIGHTING, ETC. CAN BE PLACED IN THE RIDGE BEAM AND/OR CONNECTOR TUBE WITH 14ga COVER PLATE AS SHOWN (CHARGES APPLY)
USE FRAME SHEET OF THIS PRELIMINARY TO SPECIFY REQUIRED EXIT HOLE LOCATIONS AND SIZES.

(1) EXIT HOLE PER CONNECTOR
(2) EXIT HOLES PER RIDGE BEAM

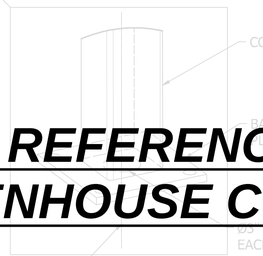
DETAIL B

DETAIL A

ICON PROVIDES A MINIMUM OF (1) 3/4" HOLE AT EACH CONNECTION FOR 1/2" CONDUIT.
IF APPLICABLE, PLEASE SPECIFY REQUIRED CONDUIT SIZE: (CHARGES APPLY)

☐ 3/4" CONDUIT (1" HOLES)
☐ 1" CONDUIT (1 1/4" HOLES)

CONDUIT PATHWAY PROVIDED FOR EACH COLUMN.



BASE DETAIL

.03" HOLE THROUGH EACH COLUMN BASE

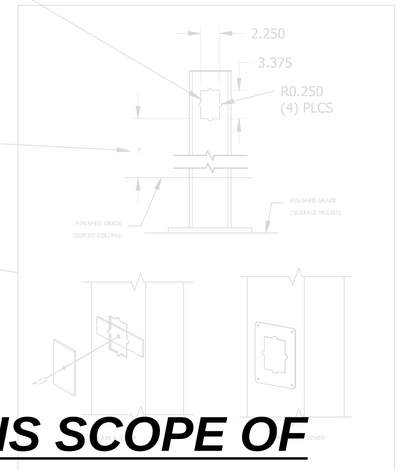
PROVIDE GROUNDING PER CEC ARTICLE 250

OPTIONAL CUTOUTS
USE FRAME SHEET OF THIS PRELIMINARY TO SPECIFY REQUIRED CUTOUT LOCATIONS (CHARGES APPLY)
SEE REQUIRED INFO BELOW

☐ (1) STANDARD CUTOUT SIZE SHOWN FOR TYPICAL GFCI
MAXIMUM CUT OUT SIZE 6 VERTICAL X 4 WIDE
CENTERED ON FACE OF COLUMN
NOT ALLOWED IN 6" FACE

☐ (2) CUTOUTS WILL BE ON INSIDE FACE OF COLUMN UNLESS OTHERWISE INDICATED ON FRAME SHEET.

☐ (3) SPECIFY HEIGHT ABOVE FINISHED GRADE FOR EACH CUTOUT AS SHOWN
18" MIN. FROM TOP OF FINISHED GRADE



PLEASE SPECIFY TYPE AND QUANTITY REQUIRED:

☐ PLATE & STRAP
☐ POP-RIVET COVER PLATE (STAINLESS POP RIVET)
HOW MANY REQUIRED?_____

NOTE: BUILDING DEPICTED ON THIS SHEET FOR ILLUSTRATION PURPOSES ONLY. ACTUAL LAYOUT AND FRAME MEMBER QUANTITIES VARY BY DESIGN. PLEASE REFER TO ELEVATION AND FRAME SHEETS IN THIS PC FOR ORDER-SPECIFIC CONFIGURATION.

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IDENTIFICATION STAMP
DIV. OF THE STATE ARCHITECT
APP: 02-121754 INC:
REVIEWED FOR
SS ☐ FLS ☐ ACS ☑
DATE: 02/21/2024

ICON STD	RG/DSA-PC
DRAWN BY	JD
DATE	3/21/2023
REV	
REV DATE	

JRMA
ARCHITECTS ENGINEERS
2700 SATURN ST I BREA, CA 92821
T. 714.524.1870 I F. 714.524.1875
WWW.JRMA.COM

Aug 31, 2023

APPROVED
DIV. OF THE STATE ARCHITECT
APP: 04-122188 PC
REVIEWED FOR
SS ☑ FLS ☑ ACS ☑ CG ☐
DATE: 09/21/2023

OPTIONAL ELECTRICAL ACCESS

ICON Shelter Systems Inc
DISTINCTIVE STEEL SHELTERS
WWW.ICONSHELTERS.COM

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1455 LINCOLN AVE
HOLLAND MI, 49423

616.396.0919
800.748.0985
616.396.0944 FX

PRE-CHECK (PC) DOCUMENT
Code: 2022 CBC
A separate project application for construction is required.

LS5.0

PRINTED ON :