Bid No. 2020-21-02

MILL VALLEY SHADE STRUCTURE PROJECT

Bid Responses due at May 24, 2021 at 2:00pm

ATTN:
Mill Valley School District
Julio Arroyo

Director of Maintenance, Operations, & Safety

411 Sycamore Avenue Mill Valley, California 94941
415-389-7700

BID DOCUMENTS
TABLE OF CONTENTS

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

1. Notice to Bidders

NOTICE TO BIDDERS

1. Notice is hereby given that the Board of Trustees of the Mill Valley School District (the "District"), of the County of Marin, State of California, will receive sealed bids for Mill Valley Shade Structure Project ("Project") up to, but not later than, [**May 24, 2021 at 2:00pm**], and will thereafter publicly open and read aloud the bids. All bids shall be received at the District Office located at 411 Sycamore Avenue, Mill Valley, California 94941. The Project includes work at four (4) school sites, and the District is seeking bids both in the aggregate and per site, as further set forth herein.

2. Each bid shall be completed on the Bid Proposal Form included in the Contract Documents, and must conform and be fully responsive to this invitation, the plans and specifications, and all other Contract Documents. Copies of the Contract Documents are available on the District's website or by contacting Julio Arroyo, Director of Maintenance, Operations, & Safety in writing, by email at communications@mvschools.org.

3. Each bid shall be accompanied by cash, a cashier's or certified check, or a bidder's bond executed by a surety licensed to do business in the State of California as a surety, made payable to the District, in an amount not less than ten percent (10%) of the maximum amount of the aggregate bid. The check or bid bond shall be given as a guarantee that the bidder to whom the Contract is awarded will execute the Contract Documents and will provide the required payment, performance bonds, and insurance certificates within ten (10) days after the notification of the award of the Contract.

4. This is a public works project and the successful bidder shall comply with the provisions of the Labor Code pertaining to payment of the generally prevailing rate of wages and apprenticeships or other training programs. The Department of Industrial Relations has made available the general prevailing rate of per diem wages in the locality in which the work is to be performed for each craft, classification or type of worker needed to execute the Contract, including employer payments for health and welfare, pension, vacation, apprenticeship and similar purposes. Copies of these prevailing rates are available to any interested party upon request and are online at http://www.dir.ca.gov/DLSR. The Contractor and all subcontractors shall pay not less than the specified rates to all workers employed by them in the execution of the Contract. It is the Contractor's responsibility to determine any rate change.

5. The schedule of per diem wages is based upon a working day of eight hours. The rate for holiday and overtime work shall be at least time and one half.

6. The substitution of appropriate securities in lieu of retention amounts from progress payments in accordance with Public Contract Code § 22300 is permitted.

7. Pursuant to Public Contract Code § 4104, each bid shall include the name, license number, and location of the place of business of each subcontractor who shall perform work or service or fabricate or install work for the contactor in excess of one-half of one percent (0.5%) of the bid price. The bid shall describe the type of the work to be performed by each listed subcontractor.

8. No bid may be withdrawn for a period of sixty (60) days after the date set for the opening for bids except as provided by Public Contract Code § 5100 et seq. ***The District reserves the right to reject any and all bids and to waive any informalities or irregularities in the bidding.***

9. Minority, female, and disabled veteran contractors are encouraged to submit bids.

10. The Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations. In accordance with Labor Code § 1771.1, all bidders, contractors and subcontractors working at the site shall be registered with the Department of Industrial Relations at time of bid opening and at all relevant times. Proof of registration shall be provided as to all such contractors prior to the commencement of any work.

11. Each bidder must possess at the time the bid is awarded the following classifications of California State Contractor's license: A or B License or both.

    The Contractor's California State License number shall be clearly stated on the bidder's proposal.

12. The Board of Trustees has not found that the Project is substantially complex and therefore requires a standard retention amount of only five percent (5%).

13. Bidders' Conference and Site Walk. A bidders' conference and site walk in compliance with Public Contract Code § 6610 will be held at 350 Bell Lane, Mill Valley on [April 23, 2021 at 10:00am] for the purpose of acquainting all prospective bidders with the Contract Documents and the Project sites. We will visit all project sites on April 23, 2021. Failure to attend the conference may result in the disqualification of the bid of the non-attending bidder.

15. A payment bond is required for a public works contract involving an expenditure in excess of twenty-five thousand dollars ($25,000). Separate payment and performance bonds, each in an amount equal to 100% of the total Contract amount, are required, and shall be provided to the District prior to execution of the Contract and shall be in the form set forth in the Contract Documents. All bonds (Bid, Performance, and Payment) must be issued by a California admitted surety as defined in California Code of Civil Procedure section 995.120.

16. As is further set forth in the Contract Documents, the District is requesting bids for this Project both in the aggregate (e.g., a single bid amount for completion of the Project at all four sites) and per site. The District reserves the right to determine the lowest bid on an aggregate basis, a per site basis, or a grouped site basis (e.g., awarding the contract for Sites A and B to the bidder who submitted the lowest bid for Sites A and B combined).

By: Mill Valley School District
411 Sycamore Avenue, Mill Valley, California 94941
Attn: Julio Arroyo; email communications@mvschools.org

DATED: [April 15, 2021]

Publication Date: [April 15, 2021 and Mill Valley School District]

Notice sent to the following contractor trade journals in compliance with Public Contract Code §§ 22036, 22037:

Construction Journal - April 15, 2021

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

2. Instructions to Bidders

INSTRUCTIONS TO BIDDERS

Each bid submitted to the District for the Project shall be in accordance with the following instructions and requirements, which are part of the Contract Documents for this Project.

1. Deadline For Receipt of Bids. Each bid shall be sealed and submitted to the [Julio Arroyo, Director of Maintenance, Operations, & Safety] no later than [May 24, 2021 at 2:00pm]. The District suggests that bids be hand delivered in order to ensure their timely receipt. Any bids received after the time stated, regardless of the reason, shall be returned, unopened, to the bidder.

2. Schedule of Events.

Event	Dates
Publish Bid Documents	[April 15, 2021]
Mandatory Site Visit at [350 Bell Lane, Mill Valley]	[April 23, 2021]
Requests for Information/Clarifications to the Bid Documents Due	[May 3, 2021]
Responses to Requests for Information/Clarifications Sent	[May 5, 2021]
Responses to the Bid Documents Due	[May 24, 2021]
District Sends Out Notice of Intent to Award	[June 1, 2021]
District Awards Contract at [June 9, 2021] Board Meeting	[June 9, 2021]

3. Bidders' Conference and Site Walk. A bidders' conference and site walk will be held on [April 23, 2021 at 9:00am] for the purpose of acquainting all prospective bidders with the Contract Documents and the Project site. The failure to attend the conference may result in the disqualification of the bid of the non-attending bidder.

4. Requests for Information. A bidder's failure to request clarification or interpretation of an apparent error, inconsistency or ambiguity in the Contract Documents waives that bidder's right to thereafter claim entitlement to additional compensation based upon an ambiguity, inconsistency, or error, which should have been discovered by a reasonably prudent Contractor, subject only to the limitations of Public Contract Code § 1104. To the fullest extent permitted by law, the District expressly disclaims responsibility for assumptions a bidder may draw from the presence or absence of information in the bid documents. Any questions relative to the bid shall be in writing and directed to Julio Arroyo, Director of Maintenance, Operations, & Safety at the address specified for receipt of bid proposals. These requests shall be submitted to the District on or before the date set forth above in the Schedule of Events.

5. Bid Proposal Forms. All bid proposals shall be made on the form provided by the District. All items on the form shall be filled out in ink. Numbers should be stated in figures, and the signatures of all individuals must be in long hand. The completed form should be without interlineations, alterations, or erasures.

6. Execution of Forms. Each bid shall give the full business address of the bidder and must be signed by the bidder or bidder's authorized representative with his or her usual signature. Bids by partnerships must furnish the full names of all partners and must be signed in the partnership name by a general partner with authority to bind the partnership in such matters. Bids by corporations must be signed with the legal name of the corporation, followed by the signature and designation of the president, secretary, or other person authorized to bind the corporation in this matter. The name of each person signing shall also be typed or printed below the signature. When requested by the District, satisfactory evidence of the authority of the officer signing on behalf of the corporation or partnership shall be furnished. A bidder's failure to properly sign required forms may result in rejection of the bid. All bids must include the bidder's contractor license number(s) and expiration date(s).

7. Bid Security. Bid proposals shall be accompanied by a certified or cashier's check or bid bond for an amount not less than ten percent (10%) of the aggregate bid amount, payable to the District. A bid bond shall be secured from an admitted surety company, licensed in the State of California, and satisfactory to the District. The bid security shall be given as a guarantee that the bidder will enter into the Contract if awarded the work, and in the case of refusal or failure to enter into the Contract within ten (10) calendar days after notification of the award of the Contract or failure to provide the payment and performance bonds and proof of insurance as required by the Contract Documents, the District shall have the right to award the Contract to another bidder and declare the bid security forfeited. The District reserves the right to pursue all other remedies in law or equity relating to such a breach including, but not limited to, seeking recovery of damages for breach of contract. Failure to provide bid security, or bid security in the proper amount, may result in rejection of the bid.

8. Withdrawal of Bid Proposals. Bid proposals may be withdrawn by the bidders prior to the time fixed for the opening of bids, but may not be withdrawn for a period of sixty (60) days after the opening of bids, except as permitted pursuant to Public Contract Code § 5103.

9. Addenda or Bulletins. The District reserves the right to issue addenda or bulletins prior to the opening of the bids subject to the limitations of Public Contract Code § 4104.5. Any addenda or bulletins issued prior to bid time shall be considered a part of the Contract Documents.

10. Bonds. The successful bidder shall be required to submit payment and performance bonds as specified in and using the bond forms included with the Contract Documents. All required bonds shall be based on the maximum total contract price as awarded, including additive alternates, if applicable.

11. Rejection of Bids and Award of Contract. ***The District reserves the right to waive any irregularities in the bid and reserves the right to reject any and all bids.*** The Contract will be awarded, if at all, within sixty (60) calendar days after the opening of bids to the lowest responsible and responsive bidder, in the aggregate or by school site (see below in Paragraph 35 for the full list of school sites), subject to Board of Trustees approval. The time for awarding the Contract may be extended by the District with the consent of the lowest responsible, responsive bidder.

12. Execution of Contract. The successful bidder shall, within ten (10) calendar days of the Notice of Award of the Contract, sign and deliver to the District the executed Contract along with the bonds and certificates of insurance required by the Contract Documents. In the event the successful bidder fails or refuses to execute the Contract or fails to provide the bonds and certificates as required, the District may declare the bidder's bid deposit or bond forfeited as liquidated damages, and may award the work to the next lowest responsible, responsive bidder, or may reject all bids and, in its sole discretion, call for new bids. In all cases, the District reserves the right, without any liability, to cancel the award of the Contract at any time prior to the full execution of the Contract.

13. Drawings and Specifications. All drawings, specifications and other documents used or prepared during the project shall be the exclusive property of the District.

14. Evidence of Responsibility. Upon the request of the District, a bidder shall submit promptly to the District satisfactory evidence showing the bidder's financial resources, the bidder's experience in the type of work being required by the District, the bidder's availability to perform the Contract and any other required evidence of the bidder's qualifications and responsibility to perform the Contract. The District may consider such evidence before making its decision to award the Contract. Failure to submit requested evidence may result in rejection of the bid.

15. Taxes. Applicable taxes shall be included in the bid prices.

16. Bid Exceptions. Bid exceptions are not allowed. If the Bidder has a comment regarding the bid documents or the scope of work, the Bidder shall submit those comments to the District for evaluation at least five working days prior to the opening of the bids. No oral or telephonic modification of any bid submitted will be considered and a sealed written modification may be considered only if received prior to the opening of bids. Emailed or faxed bids or modifications will not be accepted.

17. Discounts. Any discounts which the bidder desires to provide the District must be stated clearly on the bid form itself so that the District can calculate the net cost of the bid proposal. Offers of discounts or additional services not delineated on the bid form will not be considered by the District in the determination of the lowest responsible responsive bidder.

18. Quantities. The quantities shown on the plans and specifications are approximate. The District reserves the right to increase or decrease quantities as desired.

19. Prices. Bidders must quote prices F.O.B. unless otherwise noted. Prices should be stated in the units specified and bidders should quote each item separately.

20. Samples. On request, samples of any products being bid shall be furnished to the District.

21. Substitutions. In describing any item, the use of a manufacturer or brand does not restrict bidding to that manufacturer or brand. It is intended only to indicate quality and type of item

desired, except as provided in Public Contract Code § 3400. Substitute products may be considered either prior to or after the award of the Contract in accordance with § 3400 and as set forth in either the Special Conditions or the Specifications. All data substantiating the proposed substitute as an "equal" item shall be submitted with the written request for substitution. The District reserves the right to make all final decisions on product and vendor selection.

22. Container Costs and Delivery. All costs for containers shall be borne by the bidder. All products shall conform to the provisions set forth in the federal, county, state and city laws for their production, handling, processing and labeling. Packages shall be so constructed to ensure safe transportation to the point of delivery.

23. Bid Negotiations. A bid response to any specific item of the bid using terms such as "negotiable," "will negotiate," or similar phrases, will be considered non-responsive.

24. Prevailing Law. In the event of any conflict or ambiguity between these instructions and state or federal law or regulations, the latter shall prevail. All equipment to be supplied or services to be performed under the bid proposal shall conform to all applicable requirements of local, state and federal law, including, but not limited to, Labor Code §§ 1771, 1778, and 1779.

25. Allowances. An "allowance" means an amount included in the bid proposal for work that may or may not be included in the Project, depending on conditions that will become known only after the Project is underway.

26. Subcontractors. Pursuant to the Subletting and Subcontracting Fair Practices Act, Public Contract Code §§ 4100 *et seq*., every bidder shall, on the enclosed Subcontractor List Form, set forth:

    a. The name, license number, and location of the place of business of each Subcontractor who will perform work or labor or render service to the bidder in or about the work or fabricate and install work in an amount in excess of one-half of the one percent (0.5%) of the bidder's total bid.

    b. If the bidder fails to specify a Subcontractor for any portion of the work to be performed under the Contract in excess of one-half of one percent (0.5%) of the bidder's total bid, bidder agrees that bidder is fully qualified to and shall perform that portion of the work. The successful bidder shall not, without the written consent of the District or compliance with Public Contract Code §§ 4100 *et seq*., either:

        1) Substitute any person as Subcontractor in place of the Subcontractor designated in the original bid;

        2) Permit any subcontract to be voluntarily assigned or transferred or allow the work to be performed by anyone other than the original Subcontractor listed in the bid; or

3) Sublet or subcontract any portion of the work in excess of one-half of one percent (0.5%) of the total bid as to which the bidder's original bid did not designate a Subcontractor.

27. Examination of Contract Documents and Work Site. Before submitting a bid proposal, all bidders shall carefully examine the Contract Documents, including the plans and specifications, shall visit the site(s) of the proposed work, and shall fully inform themselves of all conditions in and about the work site, as well as applicable federal, state and local laws, and regulations that may affect the work. No bidder shall visit the site without prior authorization of the District. Bidders shall contact Purchasing Department designee for coordination of site visits.

28. Form and Approval of Contract. The Contract Documents must be approved by the Board of Trustees of the District and its legal counsel. The bidder selected by the District shall execute the contract provided by the District.

29. Licenses and Permits. Each bidder shall at all times possess all appropriate and required licenses or other permits to perform the work as identified in the Contract Documents. Upon request, each bidder shall furnish the District with evidence demonstrating possession of the required licenses or permits.

30. Denial of Right to Bid. Contractors or Subcontractors who have violated state law governing public works shall be denied the right to bid on this public works contract pursuant to Labor Code § 1777.7.

31. Bidders Interested in More Than One Bid. No person, firm, or corporation shall make, or file, or be interested in more than one bid. However, a person, firm, or corporation that has submitted a subproposal to a bidder, or that has quoted prices of materials to a bidder, is not thereby disqualified from submitting a sub-proposal or quoting prices to other bidders or from submitting a prime proposal.

32. Contractor's State License Board. Contractors and Subcontractors are required by law to be licensed and regulated by the California Contractors' License Board.

33. Fingerprinting. By law it is the District's responsibility to determine whether a contractor must provide fingerprint certification. Pursuant to Education Code § 45125.2, the District considers the totality of the circumstances in order to determine if fingerprinting of employees of a contractor working on a school site is required. Factors to be considered include the length of time the contractor's employees are on school grounds, whether students are in proximity to the location where the contractor's employees are working, and whether the contractor's employees are working alone or with others.

34. Labor Compliance Monitoring. The Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations. In accordance with Labor Code § 1771.1, all bidders, contractors and subcontractors working at the site shall be duly registered with the Department of Industrial Relations at time of bid opening and at all relevant

times. Proof of registration shall be provided as to all such contractors prior to the commencement of any work.

35. Method of Determining Lowest Bid

1. Aggregate versus Per Site. The District is requesting bids for this Project in the aggregate, meaning a total bid amount for completion of the Project at all four sites, as well as bids per site. The District reserves the right to determine the lowest bid on an aggregate basis, a per site basis, or a grouped site basis (e.g., awarding the contract for Sites A and B to the bidder who submitted the lowest bid for Sites A and B combined).

2. Additive and Deductive Items. Pursuant to Public Contract Code § 20103.8, if the bid solicitation includes additive and/or deductive items, the checked [X] method below shall be used to determine the lowest bid.

____ (a) The lowest bid shall be the lowest bid price on the base contract without consideration of the prices on the additive or deductive items.

_X_ (b) The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items that were specifically identified in the bid solicitation or Bid Proposal Form as being used for the purpose of determining the lowest bid price.

_____ (c) The lowest bid shall be the lowest total of the bid prices on the base contract and those additive or deductive items taken in order from a specifically identified list of those items that, when in the solicitation, and added to, or subtracted from, the base contract, are less than, or equal to, a funding amount publicly disclosed by the District before the first bid is opened.

_____ (d) The lowest bid shall be determined in a manner that prevents any information that would identify any of the bidders or the proposed Subcontractors or suppliers from being revealed to the public entity before the ranking of all bidders from lowest to highest has been determined.

If no method is checked, sub-paragraph (a) shall be used to determine the lowest bid.

Notwithstanding the method used by the District to determine the lowest responsible bidder, the District retains the right to add to or deduct from the Contract any of the items included in the bid solicitation.

36. Public Records Act. Responses to the Bid Documents will become the property of the District and subject to the California Public Records Act, Government Code sections 6250 *et seq*. Those elements in each response that are trade secrets as that term is defined in Civil Code section 3426.1(d) or otherwise exempt by law from disclosure and which are prominently marked as "TRADE SECRET," "CONFIDENTIAL," or "PROPRIETARY" may not be subject to disclosure. The District shall not be liable or responsible for the disclosure of any such records including, without limitation, those so marked if disclosure is deemed to be required by law or by an order of the Court. Any responses that indiscriminately identify all or most of its

response as exempt from disclosure without justification may be deemed non-responsive. In the event the District is required to defend an action on a Public Records Act request for any of the contents of a response marked "Confidential," "Proprietary," or "Trade Secret," each respondent agrees, by submission of its response for the District's consideration, to defend and indemnify the District from all costs and expenses, including attorneys' fees, in any action or liability arising under the Public Records Act.

37. Quality. All equipment and materials used in the installation should be new. Used, refurbished, or repurposed equipment or material will not be acceptable.

38. Bid Protest. Any bid protest must be in writing, addressed to the attention of [Julio Arroyo] and received by the District at [411 Sycamore Ave, Mill Valley] by 5:00 p.m. no later than five (5) calendar days following the issuance of a Notice of Intent to Award the bid, and shall comply with the following requirements:

a. The bid protest must contain a complete statement of the basis for the protest and all supporting documentation.

b. The party filing the protest must have actually submitted a bid for the Project. A Subcontractor of a bidder submitting a bid for the Project may not submit a bid protest. A bidder may not rely on the bid protest submitted by another bidder, and must timely pursue its own protest.

c. The protest must refer to the specific portion or portions of the Contract Documents upon which the protest is based.

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

e. The bidder filing the protest must concurrently transmit a copy of the bid protest and all supporting documentation to all other bidders with a direct financial interest which may be affected by the outcome of the protest, including all other bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

f. The bidder whose bid has been protested may submit a written response to the bid protest. Such response shall be submitted to the District at [411 Sycamore Ave, Mill Valley] before 5 p.m. no later than two (2) working days after the deadline for submission of the bid protest or receipt of the bid protest, whichever is sooner, and shall include all supporting documentation. Such response shall also be transmitted by the responding party concurrently to the protesting bidder and to all other bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

g. The procedure and time limits set forth in this section are mandatory and are the bidder's sole and exclusive remedy in the event of bid protest. By submitting a bid,

each bidder agrees that failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code claim or legal proceedings.

h. If the District determines that a protest is frivolous, the protesting bidder may be determined to be non-responsible and that bidder may be determined to be ineligible for future contract awards by the District.

i. A "working day" for purposes of this section means a weekday during which the District's office is open and conducting business, regardless of whether school is in session.

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

3. Bid Forms

BID FORM

Board of Trustees of the Mill Valley School District

Dear Members of the Board of Trustees:

The undersigned, doing business under the name of _____ _____, having carefully examined the location of the proposed work, the local conditions of the place where the work is to be done, the Notice to Bidders, the General Conditions, the Instructions to Bidders, the Plans and Specifications, and all other Contract Documents for the proposed installation services associated with the Mill Valley Shade Structure Project (the "Project"), and having accurately completed the Bidder's Questionnaire, proposes to perform all work and activities in accordance with the Contract Documents, including all of its component parts, and to furnish all required labor, materials, equipment, transportation and services required for the construction of the Project in strict conformity with the Contract Documents, including the Plans and Specifications, as follows:

BASE BID:

For all four school sites, an aggregate sum of

_____
_____Dollars ($ _____).

PER SITE BID:

Site	**Bid**
Old Mill School	The sum of _____ Dollars ($_____).
Park School	The sum of _____ Dollars ($_____).
Strawberry Point	The sum of _____ Dollars ($_____).
Tamalpais Valley School	The sum of _____ Dollars ($_____).

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ADDITIVE/DEDUCTIVE ALTERNATE *[if applicable]*:

Additive/Deductive Alternate #1 _____
Add/Subtract _____ Dollars ($_____)

Additive/Deductive Alternate #2 _____
Add/Subtract _____ Dollars ($_____)

Additive/Deductive Alternate #3 _____
Add/Subtract _____ Dollars ($_____)

The undersigned has checked carefully all the above figures and understands that the District is not responsible for any errors or omissions on the part of the undersigned in making this bid.

Enclosed find certified or cashier's check no._____ of the _____ Bank for _____ Dollars ($_____) or Bidder's Bond of the _____ surety company in an amount of not less than ten percent (10%) of the entire bid. The undersigned further agrees, on the acceptance of this proposal, to execute the Contract and provide the required bonds and insurance and that in case of default in executing these documents within the time fixed by the Contract Documents, the proceeds of the check or bond accompanying this bid shall be forfeited and shall become the property of the District.

Contractor agrees to commence the work within the time specified in the Notice to Proceed. It is understood that this bid is based upon completing the work within the number of calendar days specified in the Contract Documents.

ADDENDA:
Receipt of the following addenda is hereby acknowledged:

Addendum # _____ Dated: _____ Addendum # _____ Dated: _____
Addendum # _____ Dated: _____ Addendum # _____ Dated: _____
Addendum # _____ Dated: _____ Addendum # _____ Dated: _____

Respectfully submitted,

Company: _____

Address: _____

_____

By: _____

(Please Print Or Type)

Signature: _____

Title: _____

Date: _____

Telephone: _____

Contractor's License No: _____ Expiration Date _____

Required Attachments:

Subcontractor List Form
Workers' Compensation Certificate
Non-Collusion Declaration
Bid Bond (or Cashier's or Certified Check)

SUBCONTRACTOR LIST FORM

Each bidder shall list below the name, license number, and location of place of business for each Subcontractor who will perform a portion of the Contract work in an amount in excess of one half of one percent (0.5%) of the total contract price. The nature of the work to be subcontracted shall also be described.

DESCRIPTION OF WORK NAME LOCATION
LICENSE #

WORKERS' COMPENSATION CERTIFICATE

Labor Code § 3700 in relevant part 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 as 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."

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

_____
Contractor

By: _____

In accordance with Labor Code § 1860, the above certificate must be signed and filed with the awarding body prior to performing any work under this Contract.

NON-COLLUSION DECLARATION

To be executed by the bidder and submitted with the bid.

_____, declares that he or she is _____ of _____, the party making the foregoing bid, and affirms that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that 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 bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true and correct; and, further, that the bidder has not, directly or indirectly, submitted his or her bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid.

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

Date: _____ _____

Signature

BID BOND

We, the Contractor,_____ as principal ("Principal"), and _____, as surety ("Surety"), are firmly bound unto the Mill Valley School District ("District") in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the District for the work described below for the payment of which sum in lawful money of the United States, we bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by this agreement.

Whereas, the Principal has submitted the accompanying bid ("Bid") dated _____, for the following project ("Project"):
_____ Project

Now, therefore, if the Principal does not withdraw its Bid within the period specified, and if the Principal is awarded the Contract and within the period specified fails to enter into a written contract with the District, in accordance with the Bid as accepted, or fails to provide the proof of required insurance, the performance bond and/or the payment bond by an admitted surety within the time required, or in the event of unauthorized withdrawal of the Bid, if the Principal pays the District the difference between the amount specified in the Bid and the amount for which the District may otherwise procure the required work and/or supplies, if the latter amount is in excess of the former, together with all related costs incurred by District, then the above obligation shall be void and of no effect. Otherwise, the Principal and Surety shall pay to the District the penal sum described above as liquidated damages.

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

In witness whereof the above-bound parties have executed this instrument under their several seals this _____ day of _____, 2021, the name and corporate seal of each corporate Party being hereunder affixed and these presents duly signed by its undersigned representative, pursuant to the authority of its governing body.

(Corporate Seal)

_____
Principal/Contractor

By _____

Title:_____

(Corporate Seal)

_____
Surety

Attach Attorney-In-Fact Certificate

By _____

_____
Title

To be signed by Principal and Surety and Acknowledgment and Notary Seal to be attached.

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

4. Contract

CONTRACT

This Contract ("Contract") is made by and between the Mill Valley School District ("District"), and _____ ("Contractor").

District and Contractor hereby agree as follows:

1. Description of Work

The Contractor agrees to furnish all labor, cabling and materials, equipment, tools, supervision, appurtenances, and services, including transportation and utilities, required to perform and satisfactorily complete the Mill Valley Shade Structures Project in accordance with the Contract Documents and the Specifications.

2. Contract Documents

The Contract Documents consist of the executed Contract and all Addenda, all approved change orders, the completed Bid Forms, the required Bonds and the Insurance forms, the Notice to Bidders, the Instructions to Bidders, the Notice of Award, the Notice to Proceed, the General Conditions and any special conditions, and the Specifications.

3. Compensation

As full compensation for the Contractor's complete and satisfactory performance of the work and activities described in the Contract Documents, the District agrees to pay Contractor, and Contractor agrees to accept the sum of _____ Dollars ($ _____), which shall be paid to the Contractor according to the Contract Documents.

4. Prevailing Wages

This Project is a public works project subject to prevailing wage requirements and Contractor and its Subcontractors are required to pay all workers employed for the performance of this Contract no less than the applicable prevailing wage rate for each such worker. Contractor acknowledges that the Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations in accordance with Labor Code § 1770 *et seq*.

5. Time for Completion

The starting date of the Contract shall be the day listed by the District in the Notice to Proceed, estimated to be approximately [June 21, 2021], and the Contractor shall fully complete all the work before [August 11, 2021]. Time is of the essence in the performance of this Contract.

6. Liquidated Damages

Liquidated damages for the Contractor's failure to complete the Contract within the time fixed for completion are established in the amount of five hundred dollars ($500.00) per calendar day.

7. Audit

The District and Contractor are subject to the examination and audit of the California State Auditor for a period of three (3) years after the final payment under this Contract, in compliance with Government Code § 8546.7.

IN WITNESS WHEREOF, the parties agree to the terms of this Contract on the day and year written below.

MILL VALLEY SCHOOL DISTRICT

_____
Name

_____
Signature

_____
Title

_____
_____
Date

_____
Contractor Name

_____
Contractor License No.
and Expiration Date

_____
Individual Signature

Title

_____
Date

For:

_____
Corporation or Partnership

If Corporation, Seal Below.

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

5. Performance Bond

PERFORMANCE BOND

WHEREAS, the Board of Trustees of the Mill Valley School District (the "District"), at its meeting on _____, 2021, has awarded to _____ ("Principal"), the Contract for performance of the following project ("Project"):

Mill Valley Shade Structure Project.

WHEREAS, the Principal is required under the terms of the Contract to furnish a bond to the District as obligee ensuring its full and faithful performance of the Contract Documents, which are fully incorporated herein by this reference,

NOW, THEREFORE, we, the Principal and _____, as Surety, hereby guarantee the Principal's full, faithful and complete performance of the Contract Document requirements in the penal sum of _____ dollars ($_____) for the payment of which sum will and truly be made, we bind ourselves, our heirs, executors, administrators and successors, jointly, severally, and firmly by this agreement to perform or have performed all of the work and activities required to complete the Project pursuant to the Contract Documents and to pay to the District all damages the District incurs as a result of the Principal's failure to fully perform in accordance with the Contract Documents.

The condition of the obligation is such that if the Principal, its heirs, executors, administrators, successors or assigns shall in all things abide by, and well and truly keep and perform the covenants, conditions and agreements in the Contract Documents and any amendment thereof made as therein provided, on its or their parts to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall insure and indemnify and save harmless the District, its officers and agents, as therein stipulated, then this obligation shall become null and void. Otherwise, it shall be and remain in full force and effect.

The Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the Contract Documents shall in any way affect its obligations on this bond and it does hereby waive notice of any such change, extension of time, alteration or addition.

In the event of the District's termination of the Contract due to the Principal's breach or default of the Contract Documents, within sixty (60) days after written notice from the District to the Surety of the Principal's breach or default of the Contract Documents and the District's termination of the Contract, the Surety shall notify District 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 ("Notice of Election"); provided, however, that the procedure by which the Surety undertakes to discharge its obligations under this Bond shall be subject to the advance written approval of the District, which approval shall not be unreasonably withheld, limited or restricted. The insolvency of the Principal or the Principal's mere 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.

In the event the Surety fails to issue its Notice of Election to District within the time specified herein, the District may take all such action or actions necessary to cure or remedy the Principal's failure of performance or default or to complete the Work. The Principal and the Surety shall be each jointly and severally liable to the District for all damages and costs sustained by the District 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 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 District upon the Principal's failure of performance under or default under the Contract Documents shall be limited to the penal sum hereof, which shall be deemed to include the costs or value of any Changes of any Work which increases the Contract Price.

Principal and Surety further agree to pay all costs incurred by the District in connection with enforcement of this bond, including, but not limited to the District's reasonable attorney's fees and costs incurred, with or without suit, in addition to any other sum required by this bond. Surety further agrees that death, dissolution, or bankruptcy of the Principal shall not relieve the Surety of its obligations hereunder.

In witness whereof, two (2) identical counterparts of this instrument, each of which shall for all purposes be deemed an original thereof, have been duly executed by the Principal and Surety on the _____ day of _____, 2021.

To be signed by Principal and Surety and acknowledgment and notarial seal to be attached.

_____
Principal

By: _____

Title: _____

_____
Surety

By: _____

Title: _____

The above bond is accepted and approved this _____ day of _____, 2021.

By: _____
Authorized District Signature

PAYMENT BOND

WHEREAS, the Mill Valley School District ("District") and the Contractor, _____ ("Principal") have entered into a contract ("Contract") for the furnishing of all materials, labor, services, equipment, tools, supervision and transportation necessary, convenient and proper for the installation services associated with the Mill Valley Shade Structure Project ("Project") which Contract dated [June 21, 2021], and all of the Contract Documents made part thereof are fully incorporated herein by this reference; and

WHEREAS, Contractor/Principal is required by California Civil Code sections 9550 *et seq*. to furnish a bond in connection with the contract;

NOW, THEREFORE, we, the Contractor/Principal and _____ as Surety, are held firmly bound unto District in the penal sum of $_____ Dollars ($_____), lawful money of the United States of America for the payment of which sum well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if the Contractor/Principal, his/her or its heirs, executors, administrators, successors, or assigns, or a subcontractor, shall fail to pay any person or persons named in Civil Code section 9100 or fail to pay for any materials or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code with respect to work or labor thereon of any kind, or shall fail to deduct, withhold, and pay over to the Employment Development Department any amounts required to be deducted, withheld, and paid over by Section 13020 of the Unemployment Insurance Code with respect to work and labor thereon of any kind, then said Surety will pay for the same, in or to an amount not exceeding the amount set forth above, and in case suit is brought upon this bond, the Surety will also pay such reasonable attorney's fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code sections 9550 *et seq*.

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

It is further stipulated and agreed that the Surety of this bond shall not be exonerated or released from the obligation of the bond by any change, extension of time for performance, addition, alteration, or modification in, to, or of any contract, plans, specifications, or agreement pertaining or relating to any scheme or work of improvement described above or pertaining or relating to the furnishing of labor, materials, or equipment therefor, nor by any change or modification of any terms of payment or extension of the time for any payment pertaining or relating to any scheme or work of improvement described above, nor by any rescission or attempted rescission of the contract, agreement, or bond, nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond, nor by any fraud practiced by any person other than the claimant seeking to recover on the bond, and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given, and under no circumstances shall Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the District and original contractor or on the part of any obligee named in such bond, unless permitted pursuant to law.

In witness whereof, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 2021.

To be signed by Principal and Surety and acknowledgment and notarial seal to be attached.

_____
PRINCIPAL

By:
_____

_____
Title

_____
SURETY

By:
_____

_____
Title

The above bond is accepted and approved this _____ day of _____, 2021.

By:_____
Authorized District Signature

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

6. General Conditions

GENERAL CONDITIONS
TABLE OF CONTENTS

1. DEFINITIONS

Addendum: A written change or revision to the Contract Documents issued to the prospective bidders prior to the time of receiving bids.

Alternate: The sum to be added to or deducted from the base Bid if the change in scope of work as described in Alternates is accepted by the District.

Approved: Approved by the District or the District's authorized representative unless otherwise indicated in the Contract Documents.

Architect: The person or firm holding a valid license to practice architecture or engineering which has been designated (if any designated) to provide architectural or engineering design services on this Project. When Architect is referred to within the Contract Documents and no architect or engineer has in fact been designated, the matter shall be referred to the District.

As Directed: As directed by the District or its Architect, unless otherwise indicated in the Contract Documents.

As Selected: As selected by the District or its Architect, unless otherwise indicated in the Contract Documents.

Bid: The properly completed and signed proposal to perform the construction work for the Project as described in the Contract Documents.

Construction Manager: The individual or entity named as such by the District. If no Construction Manager is designated for the Project, all references to the Construction Manager in these Contract Documents shall mean the District and/or its designee.

Contract: The legally binding agreement between the District and the Contractor wherein the Contractor agrees to furnish the labor, materials, equipment, and appurtenances required to perform the work described in the Contract Documents and the District agrees to pay the Contractor for such work.

Contract Documents: The Contract Documents are described in the Contract for this Project.

Contractor: The person or entity holding a valid license in the State of California required for performing this Project and who has contracted with the District to perform the construction work described in the Contract Documents. The term Contractor shall be construed to mean all of the officers, employees, Subcontractors, suppliers, or other persons engaged by the Contractor for the work of this Project.

District and/or Owner: The District, its Board of Trustees, authorized officers and employees, and authorized representatives.

DSA: The State of California Division of the State Architect which has the authority to review, approve and inspect the design, alteration and construction of school buildings.

Final Completion: Final Completion is achieved when the Contractor has fully completed all Contract Document requirements, including, but not limited to, all final punch list items, to the District's satisfaction.

Inspector: The person engaged by the District to conduct the inspections required by the Education Code and Title 24.

Furnish: Purchase and deliver to the site of installation.

Board of Trustees: The Board of Trustees of the District.

Indicated or As Shown: Shown on drawings and/or as specified.

Install: Fix in place, for materials; and fix in place and connect, for equipment.

Modification: An authorized change to the Contract Documents which may or may not include a change in contract price and/or time.

Project: The total construction work and activities described in these Contract Documents.

Secure: Obtain.

Subcontractor: A person, firm, or corporation, duly licensed by the State of California, who has a contract with the Contractor to furnish labor, materials and equipment, and/or to install materials and equipment for work in this Contract.

2. ARCHITECT

The Architect is responsible for the overall design of the Project. The working drawings, technical Specifications, sketches and other information necessary to define the work covered by these Contract Documents have been prepared by the Architect. The Architect shall visit, inspect and observe the construction to determine general compliance with the Contract Documents, and interpret the drawings and Specifications consistent with their intent. The Architect shall evaluate the samples and other submittals required in the technical Specifications, and maintain an up-to-date log of all such items processed. The Architect will consult with the District, Contractor, and any state, county or city agency having jurisdiction over the work whenever necessary to further the best interests of the Project.

3. CONTRACT DOCUMENTS

a. Contents and Precedence

The Contract Documents consist of the executed Contract and all Addenda, all approved change orders, the completed Bid Form, the required Bonds and the Insurance

forms, the Notice to Bidders, the Instructions to Bidders, the Notice of Award, the Notice to Proceed, the General Conditions, any special conditions, and the Specifications. The Contract Documents are complementary and anything required by one shall be as binding as if required by all. In case of conflicts within the Contract Documents, the order of precedence of interpretation shall be as listed above, with the executed Contract and any change order thereto having priority, and subsequent Addenda having priority over prior Addenda only to the extent modified by the subsequent Addenda. In case of conflict within the drawings, larger scale drawings shall govern smaller scale drawings, and written dimensions shall govern over scaled dimensions.

b. Ambiguities, Errors, and Inconsistencies

If, in the opinion of the Contractor, the construction details indicated on the drawings or otherwise specified are in conflict with accepted industry standards for quality construction and therefore might interfere with its full guarantee of the work involved, the Contractor shall promptly bring this information to the attention of the Architect for appropriate action before submittal of the bid. Contractor's failure to request clarification or interpretation of an apparent ambiguity, error or inconsistency waives that Contractor's right to thereafter claim any entitlement to additional compensation based upon an ambiguity, inconsistency, or error, which should have been discovered by a reasonably prudent Contractor, subject to the limitations of Public Contract Code § 1104. During the Project, should any discrepancy appear or any misunderstanding arise as to the import of anything contained in the Contract Documents, the matter shall be promptly referred to the Architect (with written notice to the District's Construction Manager), who will issue instructions or corrections.

c. Lines and Planes

All lines and planes appearing on Contract drawings to be horizontal or vertical and not explicitly indicated otherwise shall be constructed true and plumb. All lines and planes appearing on Contract drawings to intersect at right angles and not explicitly indicated otherwise shall be constructed at true right angles. Where details are indicated covering specific conditions, such details also apply to all similar conditions not specifically indicated.

d. Standards

The specification standards of the various sections of the Specifications shall be the procedural, performance, and material standards of the applicable association publications identified and shall be the required level of installation, materials, workmanship, and performance for the applicable work. Except where a specific date of issue is mentioned hereinafter, references to specification standards shall mean the edition, including amendments and supplements, in effect on the date of the Notice to Bidders. Where no standard is identified and a manufacturer is specified, the

manufacturer's specifications are the standards. All standards shall be subordinate to the requirements of the applicable codes and regulations.

e. Reference to the Singular

Wherever in the Specifications an article, device or piece of equipment is referred to in the singular number, such reference shall include as many such items as are shown on drawings or required to complete the installation.

4. INTENT OF DRAWINGS AND SPECIFICATIONS

a. Drawings and Specifications are to be read as an integrated document. The Contractor shall promptly report to the Architect any ambiguities, discrepancies, or errors which come to the Contractor's attention.

b. Figured dimensions shall be followed in preference to scaled dimensions, and the Contractor shall make all additional measurements necessary for the work and shall be responsible for their accuracy. Before ordering any material or doing any work, the Contractor shall verify all measurements at the Project site and shall be responsible for the correctness of same.

c. It is the intent of the drawings and Specifications to show and describe complete installations. Items shown but not specified, or specified but not shown, shall be included unless specifically omitted.

1) The Specifications shall be deemed to include and require everything necessary and reasonably incidental to the completion of all work described and indicated on the drawings, whether particularly mentioned or shown, or not.

5. TRADE DIVISIONS

Segregation of the Specifications into the designated trade divisions is only for the purpose of facilitating descriptions and shall not be considered as limiting the work of any subcontract or trade. Subject to other necessary provisions set forth in the Specifications, the terms and conditions of such limitations or inclusions shall lie solely between the Contractor and its Subcontractors. "Scope" as indicated in each section of the Specifications shall serve only as a general guide to what is included in that section. Neither the stated description nor the division of the plans and Specifications to various sections, which is done solely for convenience, shall be deemed to limit the work required, divide or indicate it by labor jurisdiction or trade practice, or set up any bidding barriers to the various sub-contractors or suppliers.

a. The Contractor shall be responsible for the proper execution of all work required by the Contract Documents and for allocating such portions as the Contractor sees fit to the various Subcontractors, subject to applicable law. The Contractor is cautioned that the various individual sections may not contain all work that the Contractor may wish to

allocate to a particular Subcontractor or everything bearing on the work of a particular trade, some of which may appear in other portions of the plans or Specifications.

b. If the Contractor elects to enter into any subcontract for any section of the work the Contractor assumes all responsibility for ascertaining that the Subcontractor for the work is competent, licensed, solvent, thoroughly acquainted with all conditions and legal requirements of the work, has included all materials and appurtenances in connection therewith in the subcontract, and has performed its work in strict compliance with the Contract Documents.

c. It shall be the responsibility of the Contractor to notify each prospective Subcontractor at the time of request for bids of all portions of the Contract Documents, including the General Conditions, special conditions and any parts of sections of Specifications or plans that the Contractor intends to include as part of the subcontract.

6. MASTER MANDATORY PROVISIONS

a. Any material, item, or piece of equipment mentioned, listed or indicated without definition of quality, shall be consistent with the quality of adjacent or related materials, items, or pieces of equipment on the Project.

b. Any method of installation, finish, or workmanship of an operation called for, without definition of standard of workmanship, shall be followed or performed and finished in accordance with best practices and consistent with adjacent or related installations on the Project.

c. Any necessary material, item, piece of equipment or operation not called for but reasonably implied as necessary for proper completion of the work shall be furnished, installed or performed and finished; and shall be consistent with adjacent or related materials, items, or pieces of equipment on the Project, and in accordance with best practices.

d. Names or numbered products are to be used according to the manufacturers' directions or recommendations unless otherwise specified.

7. CONTRACTOR

a. The Contractor shall perform all the work and activities required by the Contract Documents and furnish all labor, materials, equipment (other than those specified as being provided by the District), tools and appurtenances necessary to perform the work and complete it to the District's satisfaction within the time specified. The Contractor shall at all times perform the work of this Contract in a competent and workmanlike manner and, if not specifically stated, accomplish the work according to the best standards of construction practice. The Contractor in no way is relieved of any responsibility by the activities of the architect, engineer, inspector or DSA in the performance of such duties.

b. The Contractor shall employ a full-time competent superintendent and necessary assistants who shall have complete authority to act for the Contractor on all matters pertaining to the work. The superintendent shall be satisfactory to the District and, if not satisfactory, shall be replaced by the Contractor with one that is acceptable. Also, the superintendent shall not be changed without the written consent of the District unless the superintendent ceases to be employed by the Contractor.

c. Contractor shall make the layout of lines and elevations and shall be responsible for the accuracy of both the Contractor's and the Subcontractors' work resulting therefrom. All dimensions affecting proper fabrication and installation of all Contract work must be verified by the Contractor prior to fabrication and installation by taking field measurements of the true conditions. The Contractor shall take, and assist Subcontractors in taking, all field dimensions required in performance of the work, and shall verify all dimensions and conditions on the site. If there are any discrepancies between dimensions in drawings and existing conditions which will affect the work, the Contractor shall promptly bring such discrepancies to the attention of the Architect for adjustment before proceeding with the work. Contractor shall be responsible for the proper fitting of all work and for the coordination of all trades, Subcontractors and persons engaged upon this Contract.

d. Contractor shall do all cutting, fitting, or patching of Contractor's work that may be required to make its several parts come together properly and fit it to receive or be received by work of other contractors as shown, or reasonably implied by, the drawings and Specifications for the completed work. Any cost incurred by the District due to defective or ill-timed work shall be borne by the Contractor.

8. RESPONSIBILITY OF CONTRACTOR

a. Contractor shall be held strictly responsible for the proper performance of all work covered by the Contract Documents, including all work performed by Subcontractors. All work performed under this Contract shall comply in every respect to the rules and regulations of all agencies having jurisdiction over the Project or any part thereof.

b. Contractor shall submit Verified Reports as defined in 24 California Code of Regulations ("CCR") §§ 4-336 and 4-343(c). The duties of the Contractor are as defined in 24 CCR § 4-343. Contractor shall keep and make available a copy of Title 24 of the CCR at the job site at all times.

c. Where any item of fabricated materials and/or equipment, indicated on drawings or specified is unobtainable and it becomes necessary, with the consent of the Architect and District, to substitute equivalent items differing in details or design, the Contractor shall promptly submit complete drawings and details indicating the necessary modifications of the work. To the extent the items represent a lower cost to contractor than what was originally specified, District shall be entitled to a corresponding decrease

in the contract price. This provision shall be governed by the terms of the General Conditions regarding Submittals: Shop Drawings, Cuts and Samples.

d. With respect to work performed at or near a school site, Contractor shall at all times take all appropriate measures to ensure the security and safety of students and staff, including, but not limited to, ensuring that all of Contractor's employees, Subcontractors, and suppliers entering school property strictly adhere to all applicable District policies and procedures, e.g., sign-in requirements, visitor badges, and access limitations.

9. SUBCONTRACTORS

a. Nothing contained in the Contract Documents shall create any contractual relationship between any Subcontractor and the District. The District shall be deemed to be the third party beneficiary of the contract between the Contractor and each Subcontractor. If the Contractor does not specify a Subcontractor for any portion of the work to be performed under this Contract, as required by law, Contractor shall perform that portion of the work with its own forces. The Contractor shall not substitute any other person or firm as a Subcontractor for those listed in the bid submitted by the Contractor, without the written approval of the District and in conformance with the requirements of the Public Contract Code. The District reserves the right of approval of all Subcontractors proposed for use on this Project, and to this end, may require financial, performance, and such additional information as is needed to secure this approval. If a Subcontractor is not approved, the Contractor shall promptly submit another firm of the same trade for approval.

b. The Contractor shall insert appropriate provisions in all subcontracts pertaining to work on this Project requiring the Subcontractors to be bound by all applicable terms of the Contract Documents. The Contractor shall be as fully responsible for the acts and omissions of the Subcontractors, and of persons either directly or indirectly employed by them, as the Contractor is for the acts and omissions of persons directly employed by the Contractor.

10. PERFORMANCE AND PAYMENT BONDS

a. As directed in the Notice of Award, the Contractor shall file with the District the following bonds, using the bond forms provided with these Contract Documents:

1) A corporate surety bond, in a sum not less than 100 percent of the amount of the Contract, to guarantee the faithful performance of the Contract.

2) A corporate surety bond, in a sum not less than 100 percent of the amount of the Contract, to guarantee the payment of wages for services engaged and of bills contracted for materials, supplies, and equipment used in the performance of the Contract.

b. Corporate sureties on these bonds and on bonds accompanying bids must be admitted sureties as defined by law, legally authorized to engage in the business of furnishing surety bonds in the State of California. All sureties and bond forms must be satisfactory to the District. Failure to submit the required bonds within the time specified by the Notice of Award, using the forms provided by the District, may result in cancellation of the award of Contract and forfeiture of the Bid Bond.

c. The amount of the Contract, as used to determine the amounts of the bonds, shall be the total amount fixed in the Contractor's proposal for the performance of the required work.

d. During the period covered by the Contract, if any of the sureties upon the bonds shall become insolvent or unable, in the opinion of the District, to pay promptly the amount of such bonds to the extent to which surety might be liable, the Contractor, within thirty (30) days after notice given by the District to the Contractor, shall provide supplemental bonds or otherwise substitute another and sufficient surety approved by the District in place of the surety becoming insolvent or unable to pay. If the Contractor fails within such thirty (30) day period to substitute another and sufficient surety, the Contractor shall, if the District so elects, be deemed to be in default in the performance of its obligations hereunder and upon the bid bond, and the District, in addition to any and all other remedies, may terminate the Contract or bring any proper suit or other proceedings against the Contractor and the sureties or any of them, or may deduct from any monies then due or which thereafter may become due to the Contractor under the Contract, the amount for which the surety, insolvent or unable to pay, shall have been liable on the bonds, and the monies so deducted shall be held by the District as collateral security for the performance of the conditions of the bonds.

11. INSURANCE

a. Contractor shall obtain insurance from a company or companies acceptable to District. All required insurance must be written by an admitted company licensed to do business in the State of California at the time the policy is issued. All required insurance shall be equal to or exceed an A VIII rating as listed in Best's Insurance Guide's latest edition. On a case-by-case basis, the District may accept insurance written by a company listed on the State of California Department of Insurance List of Eligible Surplus Lines ("LESLI List") with a rating of A VIII or above as listed in Best's Insurance Guides' latest edition. Required documentation of such insurance shall be furnished to the District within the time stated in the Notice of Award. Contractor shall not commence work nor shall it allow its employees or Subcontractors or anyone to commence work until all insurance required hereunder has been submitted and approved by the District and a notice to proceed has been issued.

b. Contractor shall take out and maintain at all times during the life of this Contract, up to the date of acceptance of the work by the District, the following policies of insurance:

Type of Coverage	**Minimum Requirement**

Commercial General Liability Insurance, Including Bodily Injury, Personal Property Damage, Advertising Injury, and Medical Payments. Each Occurrence General Aggregate	 $1,000,000 $2,000,000
Automobile Liability Insurance – Any Auto Each Occurrence General Aggregate	 $1,000,000 $1,000,000 $2,000,000
Workers Compensation	Statutory Limits
Employer's Liability	$1,000,000

1) General Liability Insurance: Personal injury and replacement value property damage insurance for all activities of the Contractor and its Subcontractors arising out of or in connection with this Contract, written on a comprehensive general liability form including contractor's protected coverage, blanket contractual, completed operations, vehicle coverage and employer's non-ownership liability coverage, in an amount no less than:

   a. $1,000,000.00 combined single limit personal injury and property damage for each occurrence and $2,000,000.00 annual aggregate.

2) Automobile Liability Insurance: Covering bodily injury and property damage in an amount no less than $1,000,000.00 combined single limit for each occurrence and $2,000,000.00. Such insurance shall include coverage for owned, hired, and non-owned vehicles and be included on the umbrella/excess policy.

c. The certificate(s) for the General Liability Policy(ies) and the Automobile Liability Policy specified above must state that the insurance is under an occurrence based, and not claims made, policy(ies) and shall be endorsed with the following specific language:

> "The Mill Valley School District is an additional insured for all liability arising out of the operations by or on behalf of the named insured, and this policy protects the additional insured, its officers, agents and employees against liability for bodily injuries, deaths or property damage or destruction arising in any respect directly or indirectly in the performance of the Contract."

d. The certificate(s) for both the General Liability Policy and the Automobile Liability Policy, shall be endorsed with the following specific language:

1) The inclusion of more than one insured shall not operate to impair the rights of one insured against another insured and the coverages afforded shall apply as though separate policies have been issued to each insured.

2) The insurance provided herein is primary and no insurance held or owned by the District shall be called upon to contribute to a loss.

3) Coverage provided by this policy shall not be reduced or canceled without thirty (30) days written notice given to the Owner by certified mail.

4) This policy does not exclude explosion, collapse, underground excavation hazard, or removal of lateral support.

5) The certificates must state that the insurance is under an occurrence based, and not a claims-made, or "modified occurrence," policy (policies).

e. Within ten (10) days following issuance of the Notice of Award of the Contract, the following documentation of insurance shall be submitted to District for approval prior to issuance of the Notice to Proceed: Certificates of insurance showing the limits of insurance provided, certified copies of all policies, and signed copies of the specified endorsements for each policy. At the time of making application for an extension of time, the Contractor shall submit evidence that the insurance policies will be in effect during the requested additional period of time.

f. If the Contractor fails to maintain such insurance, the District may take out such insurance to cover any damages of the above mentioned classes for which the District might be held liable on account of the Contractor's failure to pay such damages, and deduct and retain the amount of the premiums from any sums due the Contractor under the Contract.

g. Workers' Compensation Insurance:

1) Within ten (10) calendar days following issuance of the Notice of Award of the Contract, the Contractor shall furnish to the District satisfactory proof that the Contractor and all Subcontractors it intends to employ have procured, for the period covered by the Contract, full Workers' Compensation insurance and employer's liability coverage in the amount of the statutory limit, with an insurance carrier satisfactory to the District for all persons whom the Contractor may employ in carrying out the work contemplated under this Contract in accordance with the Workers' Compensation Insurance and Safety Act, approved May 26, 1913, and all acts amendatory or supplemental thereto (the "Act"). Such insurance shall be maintained in full force and effect during the

period covered by the Contract. In the event the Contractor is self-insured, Contractor shall furnish a Certificate of Permission to Self-Insure, signed by the Department of Industrial Relations Administration of Self-Insurance, Sacramento, California.

2) If the Contractor fails to maintain such insurance, the District may take out workers' compensation insurance to cover any compensation which the District might be liable to pay under the provisions of the Act, by reason of any employee of the Contractor being injured or killed, and deduct and retain the amount of the premiums for such insurance from any sums due the Contractor under the Contract, or otherwise recover that amount from the Contractor or the Surety.

3) If an injury occurs to any employee of the Contractor for which the employee, or the employee's dependents in the event of the employee's death, is entitled to compensation under the provisions of the Act, or for which compensation is claimed from the District, the District may retain from the sums due the Contractor under this Contract an amount sufficient to cover such compensation, as fixed by the Act, until such compensation is paid, or until it is determined that no compensation is due, and if the District is compelled to pay such compensation, it will deduct and retain from such sums the amount so paid, or otherwise recover this sum from the Contractor or its Surety.

4) The policies represented by the certificates shall be endorsed with a Waiver of Subrogation and must contain the provision (and the certificates must so state) that the insurance cannot be canceled until thirty (30) days after written notice of intended cancellation has been given to the District by certified mail.

12. CODES AND REGULATIONS

a. The Contractor shall be knowledgeable regarding and shall comply with applicable portions of California Code of Regulations Title 24, the applicable Building Code, and all other codes, ordinances, regulations or orders of properly constituted authority having jurisdiction over the work of this Project. The Contractor shall examine the Contract Documents for compliance with these codes and regulations and shall promptly notify the Architect of any discrepancies.

b. All work and materials shall be in full accordance with the latest rules and regulations of the Safety Orders of the Division of Industrial Safety and the applicable State laws and/or regulations. Nothing in the Project plans or Specifications is to be construed to permit work not conforming to the applicable Codes. Buildings and/or all other construction covered by this Contract shall meet all the regulations for access by the physically handicapped as administered by the Division of the State Architect and as may be required by federal or state law.

c. If the work under this Contract is for the construction of a school building as defined by the Education Code, then the following provisions shall apply to the Contract:

1) All work shall be executed in accordance with the current requirements of the Education Code and California Code of Regulations: Title 24 and Title 19. No deviations from the DSA approved plans and Specifications will be permitted except upon a Change Order or Addenda, signed by the District and Architect and approved by the Division of the State Architect and the State Fire Marshal, if applicable.

2) The Division of the State Architect shall be notified 48 hours in advance of the first pour of concrete.

13. PERMITS AND TAXES

a. The Contractor shall obtain and pay for all permits, fees and licenses that are required in order to perform the work under this Contract. The District shall pay connection charges and meter costs for new permanent utilities required by these Contract Documents. The Contractor shall notify the District sufficiently in advance to submit requests for service to the appropriate utility companies so as to insure connections or installation of utility services in accordance with the Project schedule.

b. The Contractor shall pay for all taxes on materials and equipment. The District is exempt from Federal Excise Tax. Contractor shall not pay Federal Excise Tax on any item in this Contract.

14. PATENTS AND ROYALTIES

All fees or claims for patents, royalties or licenses on materials, equipment or processes used in the performance of work on this Project shall be included in the amount of the Bid. The Contractor shall indemnify, defend, and hold harmless the District, its Board of Trustees, the Architect, and their officers and employees, from all claims or liability, including costs and expenses, which may arise from the use on this Project of any patented or copyrighted materials, equipment, or processes.

15. SAFETY AND FIRE PREVENTION

a. The Contractor, Subcontractors and all of their agents and employees shall fully comply with all of the provisions and requirements of CAL/OSHA, Title 8, California Code of Regulations and all other safety codes applicable to the Project. The Contractor shall take thorough precautions at all times for the protection of persons and property, and shall be liable for all damages to persons or property, either on or off the site, which occur as a result of Contractor's prosecution of the work. The Contractor shall obtain permits for, install and maintain in safe condition barricades, walkways, fences, railings, and whatever other safeguards that may be necessary to protect persons and property from damage as a result of the construction under this Contract.

b. Contractor is required to ensure Material Safety Data Sheets ("MSDS") are available in a readily accessible place at the work site for any material requiring a MSDS pursuant to the federal "Hazard Communication" standard or employee "right to know" laws. Contractor is also required to ensure proper labeling on materials brought on the job site such that any person working with the material or within the general area of the material is informed of the hazards of the material and follows proper handling and protection procedures. A copy of the MSDS shall also be promptly submitted directly to the District.

c. Contractor shall not endanger any work by cutting, excavating, or otherwise altering the work and shall not cut or alter the work of any other contractor except with the written consent of the Architect, nor overload any new or existing structures by the placing or storage of materials, equipment, or other items thereon, and, if necessary, shall provide calculations proving the safety in so doing.

d. If it is necessary to work at night, or where daylight is obscured, the Contractor shall provide and maintain lighting of an adequate level to properly prosecute the work, to permit the thorough inspection of same, and to ensure the safety to workers and others.

e. Contractor shall take extraordinary care to prevent fires and keep all flammable materials and oily rags in tightly closed metal containers. Contractor shall exercise particular care when welding or cutting, and with regard to the disposition of waste materials, the nature and quantity of which might create or increase a fire hazard.

16. HAZARDOUS MATERIALS

Unless otherwise specified, this Contract does not include the removal, handling, or disturbance of any hazardous substances or materials encountered in the new construction or on the Project grounds. If such substances or materials are encountered, work shall cease in that area and the District shall be promptly notified to take appropriate action for removal or otherwise abating the condition in accordance with current regulations applicable to the District.

a. General:

1) No asbestos, asbestos-containing products or other hazardous materials shall be used in this construction or in any tools, devices, clothing or equipment used to further this construction.

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

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

4) Any disputes involving the question of whether or not material contains asbestos shall be settled by electron microscopy; the cost of any such tests shall be paid by the Contractor.

5) All work or materials found to contain asbestos or work or material installed with asbestos containing equipment will be immediately rejected and this work shall be removed by the Contractor at no additional cost to the District.

6) In compliance with Education Code § 32244, no lead-based paint shall be used on the Project.

b. Decontamination and Removal of Hazardous Material from Prior Work:

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

2) The asbestos removal contractor shall be an EPA-accredited contractor qualified in the removal of asbestos subject to the approval of the District.

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

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

c. Hold Harmless:

1) Interface of work under this Contract with work containing asbestos shall be executed by the Contractor at Contractor's risk and at Contractor's discretion with full knowledge of the currently accepted standards, hazards, risks and liabilities associated with asbestos work and asbestos containing products. By execution of this Contract the Contractor acknowledges the above and agrees to hold harmless, as set forth in the indemnity provisions of this Contract, the District, its employees, agents and assigns for all asbestos liability which may be associated with this work and agrees to instruct Contractor's employees and agents with respect to the above-mentioned standards, hazards, risks and liabilities.

2) The Contractor shall, prior to commencement of this work, provide a duly signed and notarized affidavit that Contractor has instructed Contractor's employees and agents with respect to the above mentioned standards, hazards, risks and liabilities and the contents and requirements of this portion of the Contract Documents.

d. Certification:

The Contractor agrees that materials containing asbestos or other hazardous materials as defined in Federal and State law shall not be used in construction.

17. TEMPORARY FACILITIES

a. The Contractor shall obtain permits for, install and maintain in safe condition all scaffolds, hoisting equipment, barricades, walkways, or other temporary structures that may be required to accomplish the work. Such structures shall be adequate for the intended use and capable of safely accepting all loads that may be imposed upon them. They shall be installed and maintained in accordance with all applicable codes and regulations.

b. The Contractor shall provide and maintain temporary heat from an approved source whenever in the course of the work it may become necessary for curing, drying or warming spaces as may be required for the proper installation of materials or finishes. The Contractor shall provide and maintain any and all facilities that may be required for dewatering in order that work may proceed on the Project. If it is necessary for dewatering to occur continually, the Contractor shall have on hand whatever spare parts or equipment that may be required to avoid interruption of service or work.

c. The Contractor shall promptly remove all such temporary facilities when they are no longer needed for the work or on completion of the Project. The Contractor shall repair any damage to premises or property which resulted from the construction, use, or removal of temporary facilities and shall restore the premises and property to their original condition.

d. See the special conditions and/or specifications for requirements concerning temporary sanitary facilities and utilities.

18. SIGNS

No signs may be displayed on or about the District's property (except those which may be required by law) without the District's prior written approval of size, content, and location. Any signs required by the District will be designated in the special conditions.

19. TIME

a. The Contractor shall commence the work on the date indicated in the Notice to Proceed. Time is of the essence regarding the Contract work, and the Contractor shall prosecute the work diligently and regularly at such a rate of progress as to ensure completion of this Project within, or sooner than, the time specified.

b. The Contractors and Subcontractors shall investigate and become aware of the amount of time required for the delivery of all equipment and materials required to perform the work under this Contract, and no extension of time shall be granted due to failure to

order the equipment and materials sufficiently before their incorporation into the work so as to avoid delay to the Project.

c. The Contractor and Subcontractors shall provide and maintain enough manpower, materials and equipment to ensure a rate of construction progress that will complete the Project within or sooner than the time specified and according to the schedule of work. If, in the District's opinion, the Contractor and/or Subcontractors are not prosecuting the work at a sufficient rate of progress to meet the Project schedule, the District may direct the Contractor to provide additional manpower, materials, or equipment, or to work additional hours, holidays or weekends without additional cost to the District until the work is progressing in a manner satisfactory to the District. Failure to prosecute the work in a timely manner according to the Project schedule is considered a breach of Contract and shall be cause for termination of the Contract.

20. CONSTRUCTION SCHEDULE

a. Within fifteen (15) calendar days after the award of the Contract, the Contractor shall prepare and submit to the Architect and District an as-planned construction schedule showing in detail how the Contractor plans to prosecute the work within the time set for Final Completion. The schedule shall include the work of all trades necessary for construction of the Project, and shall be sufficiently complete and comprehensive to enable progress to be monitored on a day-by-day basis. The information for each activity shall include at a minimum the activity description, duration, start date and completion date.

b. The Contractor shall take care in the preparation of the schedule to ensure that it represents an accurate and efficient plan for accomplishing the work. If the Project is more than one week behind schedule, it must be promptly revised showing how the Contractor plans to complete the work, but in no case shall it show a completion date later than that required by the Contract, unless a time extension has been granted. The current schedule shall be kept posted in the Contractor's project office on site.

c. The Contractor shall be responsible for the coordination of all work necessary and pertaining to the construction whether actually a part of this Contract or attendant thereto. The Contractor shall notify the District and various utility companies, as far as possible in advance of their required work, in order that work schedules may be developed for all concerned, which will permit the most effective and timely accomplishment of the entire Project.

21. DELAYS AND TIME EXTENSIONS

a. The Contractor may be granted a time extension if the Contractor encounters an unavoidable delay of the work due to causes completely beyond the Contractor's control and which the Contractor could not have avoided by the exercise of reasonable care, prudence, foresight and diligence. Causes for which a claim for extension of time may be made include: acts of the public enemy, acts of another contractor in the

performance of another contract with the District, priority of a governmental agency for materials or equipment, fire, flood, violent wind storm, epidemic, pandemic, quarantine restriction, strike, freight embargo, or weather of an unusually severe nature. The Contractor will not be granted time extensions for weather conditions which are normal for the location of the Project, according to the U. S. Weather Bureau Records.

b. A request for extension of time and compensation related thereto shall be made in writing to the Architect and District within ten (10) calendar days of the date the delay is encountered, or shall be deemed waived. The request shall include a detailed description of the reasons for the delay and corrective measures by the Contractor. The request shall be accompanied by evidence that the insurance policies required by the Contract shall be in effect during the requested additional period of time. In order for the Architect to consider a request for time extension, the Contractor must prove that the reasons stated for the delay actually caused a delay in portions of the work which will result in completion beyond the date specified in the Contract. The Contractor may also be granted a time extension for a significant change in the scope of work which request for extension of time shall be included in a Contract modification proposal.

c. No damages or compensation or any kind shall be paid to a Contractor because of delays in the progress of work, whether such delays be avoidable or unavoidable, that are not the responsibility of District. District's liability to Contractor for delays for which District is responsible shall be limited to an extension of time unless such delays were unreasonable under the circumstances involved and were not within the contemplation of the parties when the Contract was awarded. The Contractor shall provide to the District the actual, substantiated costs to Contractor for which the Contractor may claim damages from the District. Such costs, if any, shall be directly related to the Project, and shall not include costs that would be borne by the Contractor in the regular course of business, including, but not limited to, home office overhead and ongoing insurance or bond costs. Delay damages shall not include Contractor or Subcontractor markup for overhead and profit, but only actual, documented, and direct actual costs. The District shall not be liable for any damages that the Contractor could have avoided by any reasonable means including, but not limited to, the more judicious handling of forces or equipment.

d. The granting of an extension of time because of unavoidable delays shall in no way operate as a waiver on the part of the District of the right to collect liquidated damages for other delays or of any other rights to which the District is entitled.

22. LIQUIDATED DAMAGES

a. The parties understand and agree that the goodwill, educational process, and other business of District will be damaged if the Project is not completed within the time limits required. Liquidated damages are to cover the District's loss of use of the facilities included in the specified project. The parties have further agreed that the exact amount of damages for failure to complete the Work within the time specified is, in some cases, extremely difficult, impractical, or impossible to determine. As to those

damages that are difficult, impractical, or impossible to determine, should the Contractor fail to achieve Substantial and Final Completion of this Contract within the time fixed for Substantial and Final Completion, together with extensions granted by the District for unavoidable delays, Contractor shall become liable to the District in the amount specified in the Contract per calendar day for each day the Contract remains incomplete beyond the time for Substantial and Final Completion, as liquidated damages and not as a penalty. Contractor shall not be charged with liquidated damages when the delay in completion of the work beyond the time for Substantial and Final Completion is due to acts of the District.

b. In addition to any liquidated damages which may be assessed, if Contractor fails to achieve Substantial and Final Completion of this Contract within the time fixed for Substantial and Final Completion, together with extensions granted by the District for unavoidable delays, and if as a result District finds it necessary to incur any costs and/or expenses, or if District receives any claims by other contractors, subcontractors, or third parties claiming time or other compensation by reason of Contractor's failure to complete work on time, Contractor shall pay all those costs and expenses incurred by District. These costs and expenses may include but are not limited to such items as rental payments, inspection fees, and additional architectural fees, whether related to the acquisition of facilities or caused by the delay in completion.

c. Any money due or to become due the Contractor may be retained to cover liquidated and other delay damages. Should such money not be sufficient to cover those damages, the District shall have the right to recover the balance from the Contractor or Contractor's sureties.

d. Should the District authorize suspension of the work for any cause, the time work is suspended will be added to the time for completion. Suspension of the work by the District shall not be a waiver of the right to claim liquidated or other delay damages as set forth in this section.

23. DISTRICT'S RIGHT TO STOP WORK; TERMINATION OR SUSPENSION OF THE CONTRACT

a. District's Right to Stop Work:

In addition to or as an alternative to any and all other remedies available to the District, if the Contractor fails to correct work which is not performed in accordance with the Contract Documents, or if the Contractor persistently fails to perform the work in accordance with 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 order has been eliminated to the satisfaction of the District. However, the right of the District to stop the work shall not give rise to a duty on the part of the District to exercise this right for the benefit of the Contractor or any other person or entity, and the failure of the District to do so shall not be raised as a defense to the Contractor's failure to perform the work in accordance with the Contract Documents.

b. Termination for Cause:

1) If the Contractor refuses or fails to furnish sufficient materials, work force, equipment, and appurtenances to properly prosecute the work in a timely manner, or if Contractor refuses or fails to comply with any provisions of the Contract Documents, or if Contractor should file a bankruptcy petition or make a general assignment for the benefit of Contractor's creditors or if a receiver should be appointed on account of Contractor's insolvency, then the District may give the Contractor and Contractor's Surety written notice of intention to terminate the Contract. Unless within seven (7) calendar days after the serving of such notice upon the Contractor and Contractor's Surety such violation shall cease and arrangements for correction of such conditions shall be made satisfactory to the District, the Contract shall cease and terminate. In the event of such termination, the District shall immediately serve written notice thereof upon the Contractor and Contractor's Surety.

2) In the event of termination for cause, in addition to all remedies available to the District, the Contractor's Surety shall have the right to take over and perform the Contract; provided, however, that if the Surety does not commence performance within five (5) calendar days from the date of the issuance of such notice of termination, the District may take over the work and prosecute the same to completion by letting another Contract, or by any other method that the District deems advisable. The Contractor and Contractor's Surety shall be liable for any excess cost incurred by the District thereby, and in any such event the District may take possession of such materials, equipment, and other property belonging to the Contractor as may be on the site and use same in completing the work.

c. Termination or Suspension for Convenience:

The District reserves the right, in its sole discretion, to terminate or suspend all or part of the Contract for convenience following three (3) days written notice to the Contractor. In the event of termination or suspension for convenience, Contractor shall have no claims against the District, except:

1) The actual cost of labor, materials and services provided pursuant to the Contract, and which have not yet been paid for, as documented by timesheets, invoices, receipts and the like; and

2) Five percent (5%) of the total cost of the work performed as of the date of notice of termination or suspension or five percent (5%) of the value of the work yet to be completed, whichever is less. The parties agree that this amount shall constitute full, final and fair compensation for all Contractor's lost profits and other damages resulting from the termination or suspension for convenience.

24. ASSIGNMENT OF CONTRACT

The Contractor may not assign or delegate all or any portion of this Contract without the written consent of the District and no such consent shall be given which would relieve the Contractor or its Surety of their responsibilities under the Contract. The Contractor may assign, without liability to the District, monies due the Contractor under the Contract to banks, trust companies or other financial institutions provided written notice thereof is promptly delivered to the District. Assignment of monies earned by the Contractor shall be subject to the same retention as other payments made to Contractor, and shall also be subject to setoffs and back charges as provided by this Contract.

25. COORDINATION WITH OTHER CONTRACTS

a. The District reserves the right to do other work or award other contracts in connection with this Project. By entering into this Contract, Contractor acknowledges that there may be other contractors on or adjacent to the Project site whose work must be coordinated with that of its own. Contractor expressly warrants and agrees that it will cooperate with other contractors and will do nothing to delay, hinder, or interfere with the work of other contractors, or that of the District, its Architect and Construction Manager. Contractor also expressly agrees that in the event its work is hindered, delayed, interfered with, or otherwise affected by a separate contractor, its sole remedy will be a direct action against the separate contractor. To the extent allowed by law, the Contractor expressly waives any remedy against the District, its Architect and Construction Manager on account of delay, hindrance, interference or other such events caused by a separate contractor.

b. If any part of Contractor's work depends upon the work of a separate contractor, Contractor shall inspect such other work and promptly report in writing to the District and Architect any defects in such other work that render it unsuitable to receive the work of Contractor. Failure of the Contractor to so inspect and report shall constitute an acceptance of the other contractor's work, except as to defects which the Contractor could not have detected through the reasonable inspection of the other contractor's work prior to the execution of Contractor's work.

c. If Contractor is aware of a current or potential conflict between Contractor's work and the work of another contractor on the site, and is unable to informally resolve the conflict directly with the other contractor, Contractor shall promptly provide written notice to the District, with a copy to the Architect and the other contractor, specifying the nature of the conflict, the date upon which the conflict arose, and the steps taken to attempt to resolve the conflict. The District may issue written instructions to address the conflict.

d. If, through Contractor's negligence, any other contractor or subcontractor shall suffer loss or damage to the work, Contractor shall make a reasonable effort to settle with such other contractor and subcontractor by agreement or arbitration. If such other contractor or subcontractor shall assert any claim against the District or Architect, on account of any damage alleged to have been so sustained, the District or Architect shall notify the

Contractor, who shall defend such proceedings at Contractor's own expense and save harmless and indemnify the District and the Architect from any such claim.

26. SUBMITTALS: SHOP DRAWINGS, CUTS, AND SAMPLES

a. Five (5) copies of shop drawings, brochures and cuts and samples in quantities specified by the Architect shall be submitted to the Architect for all items for which they are required by the plans and Specifications. Prior to transmittal, the Contractor shall examine all submittals for accuracy and completeness in order to verify their suitability for the work and compliance with the Contract Documents and shall sign and date each submittal. Submittals shall be made sufficiently before the items are required for the work so as to cause no delay and shall be in accordance with the Project construction schedule.

b. In addition to information furnished as common practice, submittals shall contain the Project name and location, Contractor's name and address, Subcontractor's or supplier's name and address, date of submittal and any revisions, and reference to appropriate specification section, and/or drawing and detail numbers. The Contractor and/or the Subcontractors shall verify in the field all dimensions and relationships to adjacent work necessary to ensure the proper fit of the items submitted. If necessary, the Contractor shall make any corrections required and resubmit with all due haste in the same number as initially required.

c. Review of submittals, shop drawings, cuts or samples by the District or Architect shall not relieve the Contractor from complying with the requirements of the Contract Documents.

d. Any materials or equipment installed without approval shall be at the Contractor's own risk, and Contractor may be required to remove any such materials or equipment and install the specified items at Contractor's own cost, including repairs to adjacent work.

27. PAYMENTS

a. Cost Breakdown:

Prior to submitting Contractor's first request for payment, the Contractor shall prepare and submit to the Architect and District a cost breakdown (schedule of values) showing the major work items for each trade or operation required in construction of the Project. The work items shall be sufficiently detailed to enable the Architect to accurately evaluate the completion percentages requested by the Contractor. The cost for each work item shall include overhead and profit. The total of all work item costs shall equal the amount of the Contract.

b. Scope of Payment:

Payment to the Contractor at the unit price or other price fixed in the Contract for performing the work required under any item or at the lump sum price fixed in the

Contract for performing all the work required under the Contract shall be full compensation for furnishing all labor, materials, equipment, and tools necessary to the work, and for performing and completing, in accordance with the Specifications, all work required under the item or under the Contract, and for all expense incurred by the Contractor for any purpose in connection with the performance and completion of the work.

c. Progress Payments:

The Contractor will, on or about the last day of each month, make an estimate of the value of the work completed by Contractor in the performance of the Contract. These estimates shall be subject to the review and approval of the Architect. The first such estimate will be of the value of the work completed after the Contractor commenced the performance of the Contract, and every subsequent estimate, except the final estimate, will be of the value of the work completed since the immediately preceding estimate. Such estimates will be based on labor, materials and equipment incorporated into the work, and items of materials and equipment delivered to the Project. The Contractor shall be responsible for the security and protection of such materials and equipment delivered to the Project and not incorporated in the work. Within thirty (30) calendar days after the approval of each estimate for progress payment, the District will pay to the Contractor an amount equal to ninety five (95) percent of the approved estimate, unless a different retention percentage is stated in the Notice to Bidders, in which case that percentage applies. Payments may at any time be withheld if in the judgment of the District the work is not proceeding in accordance with the Contract Documents, the Contractor is not complying with the requirements of the Contract, stop notices have been timely filed, the estimate contains an error, or the District has incurred costs or requests reasonable financial assurances regarding defective work by the Contractor.

d. Final Payment:

Within thirty (30) days after all required work is fully completed in accordance with the Contract Documents, the Contractor shall submit a final invoice for the total value of the work completed in accordance with the Contract, which shall be subject to review and approval by the District. As required by law, District shall pay Contractor the unpaid balance of the Contract price of the work, or the whole Contract price of the work if no progress payment has been made, determined in accordance with the terms of the Contract, less such sums as may be lawfully retained under any provision of the Contract, including, but not limited to, amounts retained as liquidated damages, for stop notices, for third-party claims for which the Contractor is required to indemnify the District, for defective work and costs incurred by the District in connection therewith, or for other such claims and damages attributable to the Contractor ("Final Payment"). Prior progress estimates and payments are subject to correction in the Final Payment. Tender of the Final Payment shall constitute denial by the District of any unresolved claim. Contractor's acceptance of the Final Payment shall operate as a full and final release to the District and its agents from any and all unasserted claims Contractor has, or may have, related to this Contract. 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.

e. Payments Do Not Imply Acceptance of Work:

The granting of any progress payment or payments by the District or the receipt thereof by the Contractor shall not constitute acceptance of the work or of any portion thereof, and shall in no way lessen the liability of the Contractor to replace unsatisfactory work or material, whether or not the unsatisfactory character of such work or material was apparent or detected at the time such payment was made.

f. Retention of Sums Charged Against Contractor:

It is mutually understood and agreed that when under any provision of this Contract the District shall charge any sums of money against the Contractor, the amount of such charge shall be deducted and retained by the District from the amount of the next succeeding progress estimate, or from any other monies due or that may become due the Contractor on account of the Contract. If on completion or termination of the Contract, such monies due the Contractor are found insufficient to cover the District's charges against the Contractor, the District shall have the right to recover the balance from the Contractor or the Contractor's Sureties.

g. Release:

The Contractor and each assignee under an assignment in effect at the time of Final Payment shall, if required by the District, execute and deliver at the time of Final Payment and as a condition precedent to Final Payment, a release in form and substance satisfactory to and containing such exemptions as may be found appropriate by the District, discharging the District, its officers, agents and employees of and from liabilities, obligations and claims arising under this Contract.

h. Payment to Subcontractors and Suppliers:

The Contractor shall pay each Subcontractor and supplier promptly on receipt of each progress payment from the District for the materials, labor and equipment delivered to the site or incorporated in the work by each Subcontractor during the period for which the progress payment is made, less any retention as provided above.

i. Stop Payment Notice Costs:

The District reserves the right to charge the Contractor or Surety, or to withhold from release of retention, all costs incurred by the District, including attorney's fees, for processing and defending stop payment notice claims.

28. MODIFICATIONS OF CONTRACT

a. Changes in the Work:

1) The District, before the date of acceptance of the work, may, without notice to the Sureties, order changes in the work ("Modifications"), may order extra materials and extra work in connection with the performance of the Contract, and the Contractor shall promptly comply with such orders. All Modifications must be approved by DSA and the State Fire Marshall, if applicable, as required by law.

2) If changes ordered in design, workmanship or materials are of such a nature as to increase or decrease the cost of any part of the work, the price fixed in the Contract shall be increased or decreased by such amount as represents the reasonable and proper allowance for the increase or decrease in the cost of the work in accordance with the provisions of this Article, and any other applicable terms of the Contract, including, but not limited to, the Contractor's schedule of values and the price for allowances, if any. Except as provided by law, the total cost of all Modifications shall not exceed ten (10) percent of the original Contract price.

3) In the case of a disputed work item, the District may direct the Contractor to perform the disputed work at no additional cost to the District on the grounds that the work is adequately indicated in the Contract Documents, and therefore already included in the Contract price. If the Contractor maintains that the disputed work represents a modification to the Contract, Contractor may submit a claim in accordance with Article 50, Resolution of Construction Claims. Notwithstanding any dispute regarding the requirements of the Contract Documents, Contractor shall promptly and fully comply with the District's directive. Contractor's failure to do so shall be deemed a material breach of this Contract, and in addition to all other remedies, the District may, at its sole discretion, hire another contractor and/or use its own forces to complete the disputed work at Contractor's sole expense, and may deduct the cost of such work from the Contract price.

b. Cost Breakdown:

When the Modification is proposed, the Contractor shall furnish a complete breakdown of actual costs of both credits and extras, itemizing materials, labor, taxes, overhead and profit. Subcontract work shall be so indicated. All costs must be fully documented. The following limitations shall apply:

1) Limitations Where Contract Price Changes are Involved:

(a) Overhead and Profit for the Contractor. The Contractor's overhead and profit on the cost of subcontracts shall be a sum not exceeding ten percent (10%) of such costs. The Contractor's overhead and profit on the costs of work performed by the Contractor shall be a sum not exceeding fifteen percent (15%) of such costs. Overhead and profit shall not be applied to the cost of taxes and insurance by Contractor or Subcontractors or to credits. No processing or similar fees may be charged by the Contractor in connection with the Modification. "Overhead and profit" shall include all plant, equipment rental and repair, project management, field coordination, job site project supervision and indirect labor and materials.

(b) Bond Premiums. The actual rate of bond premiums as paid on the total cost (including taxes) will be allowed, but with no markup for profit and overhead.

(c) Taxes. State and city sales taxes should be indicated. Federal excise tax shall not be included. (District will issue an exemption on request.)

2) Change Order Certification:

All change orders and requests for proposed change orders shall be deemed to include the following certification by the Contractor:

"The undersigned Contractor approves the foregoing as to the changes in work, if any, and as to the Contract price specified for each item and as to the extension of time allowed, if any, for completion of the Project as stated herein, and agrees to furnish all labor, materials, and service and to perform all work necessary to complete any additional work specified for the consideration stated herein. Submission of claims which have no basis in fact or which Contractor knows are false are made at the sole risk of the Contractor and may be a violation of the False Claims Act, as set forth in Government Code §§ 12650 *et seq.* It is understood that the changes to the Contract Documents set forth herein shall only be effective upon approval by the Board of Trustees of the District.

"It is expressly understood that the value of the extra work or changes expressly includes any and all of the Contractor's costs and expenses, both direct and indirect, resulting from additional time required on the Project or resulting from delay to the Project. Any costs, expenses, damages, or time extensions not included herein are deemed waived."

c. Unit Prices, Schedule of Values, or Allowances:

Where Unit Prices, a Schedule of Values, and/or Allowances are required by the Contract Documents, that pricing shall govern in computing any additions to or

deductions from the Contract price on account of any added or omitted work. Unit Prices listed in the original bid include all costs and no addition of any description will be allowed.

d. Time and Materials:

If it is impractical, because of the nature of the work, or for any other reason, to fix an increase in price in advance, the Change Order may fix a maximum price which shall not under any circumstances be exceeded, and subject to such limitation, such alteration, modification or extra shall be paid for at the actual necessary cost as determined by the sum of the following items (1) to (5) inclusive:

1) Labor, including premium on compensation insurance and charge for Social Security taxes, and other taxes pertaining to labor.

2) Material, including sales taxes and other taxes pertaining to materials.

3) Plant and equipment rental, to be agreed upon in writing before the work is begun. No charge for the cost of repairs to plant or equipment will be allowed.

4) Overhead and profit computed at fifteen percent (15%) of the total of Items (1) to (3) inclusive.

5) The proportionate cost of premiums on bonds computed at one and one-half percent (1-1/2%) of the total of items (1) to (4) inclusive.

If the Time and Materials work is done by a Subcontractor, the amount shall be determined as set forth above under items (1) to (5) inclusive. The Contractor's overhead and profit on the costs of subcontracts (exclusive of taxes and insurance) shall not exceed ten percent (10%) of such costs.

The District reserves the right to furnish such materials as it may deem expedient, and no allowance will be made for profit thereon. The above-described methods of determining the payment for work and materials shall not apply to the performance of any work or the furnishing of any material which, in the judgment of the District, may properly be classified under items for which prices are established in the Contract.

e. Oral Modifications:

No oral statements of any person shall in any manner or degree modify or otherwise affect the terms of the Contract.

29. INDEMNITY

Contractor shall defend with counsel acceptable to the District, indemnify, and hold harmless to the full extent permitted by law, the District and its Board of Trustees, officers, agents, employees and volunteers from and against any and all liability, loss, damage, claims,

expenses, fines, judgments and costs (including, without limitation, attorney's fees and costs and fees of litigation) (collectively, "Liability") of every nature arising out of or in connection with Contractor's performance of the Project or its failure to comply with any of its obligations contained in these Contract Documents, except such Liability caused by the active negligence, sole negligence or willful misconduct of the District. Such indemnification shall extend to all claims, demands, or liabilities occurring after completion of the project as well as during the progress of the work. Pursuant to Public Contract Code § 9201, the District shall timely notify Contractor of receipt of any third-party claim relating to this Project.

30. WARRANTY OF TITLE

Contractor warrants that title to all work, materials or equipment included in a request for payment shall pass and transfer to the District whether or not they are installed or incorporated in the Project, free from any claims, liens, or encumbrances, when such payment is made to the Contractor. Contractor further warrants that no such work, materials, or equipment have been purchased for work under the Contract subject to an agreement by which an interest therein or an encumbrance thereon is retained by the seller or supplier.

31. USE OF COMPLETED PARTS OF THE WORK BEFORE ACCEPTANCE

Whenever the work or any part thereof is in a condition suitable for use, and the best interest of the District requires such use, as determined by the District, the District may take possession of, connect to, open for public use, or use the work or a part thereof. When so used, maintenance and repairs due to ordinary wear and tear or vandalism will be made at District's expense. The use by the District of the work or part thereof as contemplated in this section shall in no case be construed as constituting acceptance of the work or any part thereof, including, but not limited to, the right to assess liquidated damages. Such use shall neither relieve the Contractor of any of Contractor's responsibilities under the Contract nor act as a waiver by the District of any of the conditions thereof. Contractor shall continue to maintain all insurance, including Builder's Risk insurance, on the entire Project, and diligently pursue full completion of the work.

32. GUARANTEE AND WARRANTY

a. By signing this Contract, Contractor agrees to the following guarantee and warranty:

Guarantee & Warranty

Contractor hereby guarantees and warrants its work on the Project for a period of two (2) years from the date of the filing of the Notice of Completion as follows.

Contractor shall promptly repair or replace to the satisfaction of the District any or all work that appears defective in workmanship, equipment and/or

materials for whatever reason, ordinary wear and tear, and unusual abuse or neglect excepted, together with any other work which may be damaged or displaced in so doing.

Contractor agrees to promptly correct and remedy any failure by the Contractor to conform its work, activities, and services to the requirements of the Contract Documents.

In the event of the Contractor's failure to comply with the above-mentioned obligations within the ten (10) calendar days of notice, or sooner if required by an emergency, Contractor hereby authorizes the District to have the defects or deficiencies repaired, remedied, corrected, and made good at Contractor's expense, and Contractor shall pay the costs and charges therefore upon demand. The Surety agrees to be responsible for these costs and charges as well.

This guarantee and warranty does not limit any other applicable guarantee or warranty that may be longer.

33. PROTECTION OF WORK AND PROPERTY

a. The Contractor shall be responsible for each operation and all work on the Project, both permanent and temporary. The Contractor shall protect the work and materials from damage due to negligence, the action of the elements, the carelessness of third parties, vandalism, or any other cause whatsoever, until the final completion and acceptance of the Project. Should improper work by the Contractor be covered by another contractor and damage or defects result, the whole work affected shall be made good by the Contractor to the satisfaction of the Architect and District without expense to the District. The Contractor shall take reasonable care to avoid damage to existing facilities or utilities, whether on the Project or adjacent to it, and Contractor shall be liable for any damage thereto or interruption of service due to Contractor's operations. If the Contractor encounters any facilities or utilities not shown on the drawings or not reasonably inferable therefrom, Contractor shall promptly notify the Architect about them, and shall do no further work which may cause damage to same. If it is determined that some action needs to be taken regarding facilities not shown, the Contractor will be given directives on what action to take, and any additional cost to the Contractor incurred thereby will be handled by Change Order.

b. The property limits of the area of the Project are indicated on the drawings. Except for work specifically shown or noted, Contractor shall confine Contractor's operations within the indicated property limits. The Contractor shall provide, install, and maintain all shoring, bracing and underpinning necessary to support adjacent property, streets, buildings and structures, that may be affected by building operations for this work; shall

serve or cause to be served all legal notices to adjoining property owners that may be necessary for their protection; and shall protect from damage all adjacent buildings, fences, landscaping, and repair or replace any such property damaged in the course of work under the Contract.

34. USE OF ROADWAYS AND WALKWAYS

The Contractor shall not unnecessarily interfere with use of any roadway, walkway or other facility for vehicular or pedestrian traffic by any party entitled to use it. Wherever such interference becomes necessary for the proper and convenient performance of the work and no satisfactory detour route exists, the Contractor shall, before beginning the interference, provide a satisfactory detour, temporary bridge, or other proper facility for traffic to pass around or over the interference and shall maintain it in satisfactory condition as long as the interference continues, all without extra payment unless otherwise expressly stipulated in the Contract Documents.

35. MATERIALS

a. Unless explicitly stated otherwise, all specified equipment and material comprising the work of this Contract, as being provided or furnished or installed, shall imply the inclusion of all components, hardware and accessories, required for complete installation and satisfactory operation as intended by the manufacturer. Wherever the method of installation of any material is not explicitly specified, the installation shall be as recommended by manufacturer.

b. Wherever in the Contract Documents it is provided that the Contractor shall furnish materials or equipment for which no detailed specifications are set forth, such materials or equipment shall be new and of the best grade for the purpose for which they will be used when incorporated in the work. Materials specified by reference to a number or symbol of a specific standard, such as A.S.M., Federal Specification, State Standard, Trade Association, or similar standards, shall comply with requirements in the latest revision thereof and any amendment or supplement in effect on the date of the notice to bidders.

c. None of the materials to be provided furnished or installed on this project shall contain asbestos or any other “hazardous substance” as that term is defined by federal or state law.

36. SUBSTITUTIONS

a. Wherever in the drawings or Specifications a material or product is called for by trade or brand names or manufacturer and model number, alternative items of equal quality and purpose may be proposed for use by the Contractor, as specified in the Instructions to Bidders. The burden of proof of equality is on the Contractor, and Contractor shall furnish all information and supplies necessary for the Architect and District to make a thorough evaluation of the proposed substitution. The decision about the equality of the

proposed substitution is final, and if the proposed substitution is not approved, the Contractor shall install the item called for. Proposed substitutions and any changes in adjacent work caused by them shall be made by the Contractor at no additional cost to the District.

b. Proposed substitutions shall be submitted sufficiently before actual need to allow time for thorough evaluation. Substitutions shall not be proposed for the reason that submittals were not made early enough to avoid delay. The review of substitutions shall not relieve the Contractor from complying with the requirements of the drawings and Specifications.

c. In the event Contractor makes substitutions in materials, equipment, or designs, with or without the District's approval, other than those authorized herein, the Contractor shall then assume full responsibility for the effects of such substitutions on the entire Project, including the design, and shall reimburse the District for any charges resulting from such substitutions, including any charges for modifications in the work of other trades, and including any charges for additional design and review, plus reasonable and customary mark-ups.

37. TESTING

a. Materials, equipment, or other work requiring tests may be specified in the Contract Documents, and they shall be adequately identified and delivered to the site in ample time before intended use to allow for testing. If such materials, equipment, or other work should be covered without required testing and approval, they shall be uncovered at the Contractor's expense, including any repairs or replacement resulting therefrom. The Contractor shall notify the District and Architect when and where such materials, equipment or other work are ready for testing, and Contractor shall bear the cost of making them available for testing. The Contractor shall notify the District and Architect sufficiently before the need for testing so as to cause no delay in the work and, in any case, at least forty-eight (48) hours prior to the need for testing.

b. The cost of initial tests called for will be paid by the District and will be performed by independent testing consultants retained by the District. All other tests and inspections specified or otherwise required to substantiate compliance with specified requirements for quality of material or performance of operation shall be paid for by the Contractor. If retesting or additional testing is necessary because of substandard initial test results, the costs thereof shall be paid by the Contractor, including any repairs or replacement resulting therefrom.

38. INSPECTION

a. All materials, equipment and workmanship used in the work of the Project shall be subject to inspection or testing at all times and locations during construction and/or manufacture. The District's and Architect's authorized representatives and representatives of other agencies having authority over the work shall have access to the

work for the above purposes at all reasonable times and locations. Any material or work found to be unsatisfactory or not according to the Contract Documents shall be replaced with the correct material or work and the defective items promptly removed, all at the Contractor's expense, when directed to do so by any of the above-named persons having authority over the work. The cost of review time and analysis by the Architect or other District consultants necessitated by incomplete or defective work by the Contractor shall be charged to the Contractor.

b. Inspection and testing by the District or its representatives shall not relieve the Contractor from complying with the requirements of the Contract Documents. The Contractor is responsible for its own quality control.

c. Whenever required by the District or Architect, the Contractor shall furnish all tools, labor and materials necessary to make an examination of work in place by uncovering the same. Should such work be found unsatisfactory, the cost of examination and reconstruction shall be paid by the Contractor. Should such work be found satisfactory, the cost of examination and reconstruction of the work shall be paid by Change Order unless the Contractor improperly covered the work before it could be inspected or tested. If the Contractor considers it necessary or desirable to work on Saturday, Sunday, or a holiday, Contractor shall seek written approval from the District at least forty-eight (48) hours before the commencement of such work.

39. CLEANUP

a. The Contractor shall maintain the premises and area of the work in a neat and clean condition. No burning of rubbish on site shall be allowed. The Contractor shall control dust on the site by sprinkling at whatever intervals are necessary to keep it laid down and shall take measures to prevent dust and debris from being accidentally transported outside the area of the work.

b. Final cleaning, such as sweeping, dusting, vacuuming, dry and wet mopping, polishing, sealing, waxing and other finish operations normally required on newly installed work shall be taken to indicate the finished conditions of the various new and existing surfaces at the time of acceptance. Prior to the time of acceptance, all marks, stains, fingerprints, dust, dirt, splattered paint and blemishes resulting from the various operations shall be removed throughout the Project. Stair treads and risers shall be wet-mopped. Glass shall be left clean and polished both inside and outside. Plumbing fixtures and light fixtures shall be washed clean. Hardware and other unpainted metals shall be cleaned and all building papers and other temporary protections shall be removed throughout the building, or portion of the building where Contractor was involved, all to the satisfaction of the Architect and District. The exterior of the buildings, playfields, exterior improvements, and planting spaces and other work areas shall be similarly clean and in good order.

40. CONSTRUCTION WASTE MANAGEMENT REQUIREMENTS

a. Scope:

1) This Article includes requirements for the diversion by the Contractor of construction and demolition debris from landfills. The Contractor shall develop and implement a Waste Management Plan as specified herein. The Contractor shall take a proactive, responsible role in the management of construction and demolition waste and require all subcontractors, vendors, and suppliers to participate in the effort.

2) The District has established that this Project shall generate the least amount of waste practicable and that processes shall be utilized that ensure the generation of as little waste as possible due to overpackaging, error, poor planning, breakage, mishandling, contamination or other factors.

3) As much of the waste materials as economically feasible shall be reused, salvaged or recycled. Waste disposal in landfills shall be minimized.

4) The Contractor is encouraged to use waste hauling companies that separate recyclable materials. The Contractor shall work with its waste haulers in providing other recycling methods as appropriate.

5) The Contractor is responsible for implementation of any special programs involving rebates or similar incentives related to the recycling of waste. Revenues or other savings obtained for salvage or recycling accrue to the Contractor.

b. References:

1) "Builders' Guide to Reuse and Recycling, A Directory for Construction and Demolition Materials."

2) "Construction Site Recycling, a Guide for Building Contractors." For a copy of the guide call 18884422666 or go to www.recycleworks.org.

3) "Where to Recycle Construction and Demolition Debris." For a copy of the guide call 18884422666 or go to www.recycleworks.org.

c. Definitions:

1) General: Construction and demolition waste includes products of demolition or removal, excess or unusable construction materials, packaging materials for construction products, and other materials generated during the construction process but not incorporated into the work.

2) "Divert" means to use material for any lawful purpose other than disposal in a landfill or transfer facility for disposal.

3) "Recycling Service" means an offsite service that provides processing of material and diversion from a landfill.

4) "Hauler" means the entity that transports construction and demolition debris to either a landfill or a recycling service.

d. Compliance with Regulatory Requirements:

1) The Contractor shall perform all handling, storage, transportation, and disposal of construction debris in compliance with all applicable Federal, State, regional, and local statutes, laws, regulations, rules, ordinance, codes and standards.

2) Nothing stated on the drawings, in this Article 40 or in any other provision of the Contract Documents shall be construed as allowing work that is not in strict compliance with all applicable Federal, State, regional, and local statutes, laws, regulations, rules, ordinances, codes and standards.

e. Performance Requirement:

1) The Contractor shall divert a minimum of fifty percent (50%) of the total Project construction and demolition waste from landfills.

f. Quality Control:

1) General:

i) The Contractor shall not permit materials designated for diversion to become contaminated or to contaminate the site or surrounding areas.

2) Training and Coordination:

i) The Contractor shall designate an onsite party [or parties] who will be responsible for instructing workers and subcontractors, and overseeing and documenting the results of the Waste Management Plan for the Project.

ii) The Contractor shall furnish copies of the Waste Management Plan to all onsite supervisors, each subcontractor, and the District's representative.

iii) The Contractor shall include construction waste management as an item on the agenda of all progress meetings.

3) The Waste Management Plan:

i) The Contractor shall prepare a Waste Management Plan for diverting the

specified percentage of construction debris from landfills, including written and graphic information indicating how the waste will be diverted.

ii) Include in the plan both onsite recycling of construction debris and offsite diversion from landfills.

iii) Identify the means and methods for collecting and separating each type of debris deemed reusable or recyclable.

iv) List the offsite recycling service and hauler of each designated debris item who has agreed to accept and divert that item from the landfill in the proposed quantities anticipated. List the service and hauler company name, address, telephone number, and persons contacted.

v) List the name of individuals on the Contractor's staff responsible for waste prevention and management.

vi) List the actions that will be taken to reduce solid waste generation, including coordination with subcontractors to ensure awareness and participation.

vii) Describe the specific approaches to be used in recycling/reuse of the various materials generated, including the areas on site and equipment to be used for processing, sorting, and temporary storage of wastes.

viii) Characterize the waste to be generated, including estimated types and quantities. Name the landfills and/or incinerator to be used.

ix) List the specific waste materials that will be salvaged for resale, salvaged and reused on the Project, salvaged and stored for reuse on a future project, or recycled. Recycling facilities that will be used shall be identified by name, location, and phone number.

x) Identify the materials that cannot be recycled or reused with an explanation or justification, to be approved by the Architect.

The Contractor shall submit the Plan to the Architect within ten (10) calendar days after receipt of the Notice to Proceed, or prior to any waste removal, whichever occurs first. The Contractor shall promptly revise and resubmit the Plan as required by the Architect. Review of the Contractor's Waste Management Plan will not relieve the Contractor of responsibility for compliance with applicable environmental regulations or meeting Project diversion requirements.

g. <u>Plan Implementation</u>

1) The Contractor shall implement the approved Waste Management Plan.

2) The Contractor shall maintain a log of each load and of each category of waste that is diverted from the landfill. The Contractor shall separately log the debris sent to a Class III landfill and materials sent to recycling facilities.

3) The Contractor shall include in the log the type of load, load weight, name of the hauling service, recycling service or landfill, and the date accepted by the recycling service or by the landfill.

4) The Contractor shall retain and make available all weight tickets and copies of receipts and invoices relating to the implementation of the Plan.

5) The District reserves the right to audit the log at any time.

h. Material Handling

1) Designate a specific area or areas on site to facilitate the separation of materials for potential reuse, salvage, recycling, and return. Clearly mark bins for each category of waste.

2) Keep waste bins and pile areas neat and clean. Do not contaminate nonrecyclable waste with materials designated for reuse or recycling.

i. Contractor's Responsibilities

1) Provide onsite instruction of the appropriate separation, handling, recycling, salvage, reuse, and return methods to be used by all parties at the appropriate stages of the Project.

2) Separate, store, protect, and handle at the site identified recyclable and salvageable waste products in a manner that maximizes recyclability and salvagability of identified materials. Provide the necessary containers, bins and storage areas to facilitate effective waste management. Provide barriers and enclosures around recyclable material storage areas which are non-hazardous and recyclable or reusable and which shall be located away from construction traffic. Provide adequate space for pickup and delivery. Use cleaning materials that are non-hazardous and biodegradable.

41. INSTRUCTIONS AND MANUALS

Three copies of the maintenance instructions, application/installation instructions and service manuals called for in the Specifications shall be provided by the Contractor. These shall be complete as to drawings, details, parts lists, performance data and other information that may

be required for the District to easily maintain and service the materials and equipment installed under this Contract. All manufacturer's application/installation instructions shall be given to the Architect at least ten (10) days prior to first material application or installation of the item. The maintenance instructions and manuals, along with any specified guarantees, shall be delivered to the Architect for review prior to submitting to District, and the Contractor or appropriate Subcontractors shall instruct District's personnel in the operation and maintenance of the equipment prior to final acceptance of the Project.

42. AS-BUILT DRAWINGS

The Contractor and all Subcontractors shall maintain on the work site a separate complete set of contract drawings which will be used solely for the purpose of recording changes made in any portion of the work during the course of construction, regardless of the reason for the change. As changes occur, there will be included or marked on this record set on a daily basis if necessary to keep them up to date at all times. Actual locations to scale shall be identified on the drawings for all runs of mechanical and electrical work, including all site utilities installed underground, in walls, floors, and furred spaces, or otherwise concealed. Deviations from the drawings shall be shown in detail. All main runs, whether piping, conduit, duct work, drain lines, etc., shall be located in addition by dimension and elevation. Progress payments may be delayed or withheld until such time as the record set is brought up to date to the satisfaction of the Architect. The Contractor shall verify that all changes in the work are included in the "AS-BUILT" drawings and deliver the complete set thereof to the Architect for review and approval within thirty (30) calendar days after the District's notice of completion. The District's acceptance and approval of the "AS-BUILT" drawings are a necessary condition precedent to the release of the final retention.

43. SUBSTITUTION OF SECURITIES

a. Pursuant to Public Contract Code § 22300, Contractor may request in writing that it be allowed at its own expense to substitute securities for moneys withheld by District to ensure performance under this Contract. Only securities listed in Government Code § 16430 and bank or savings and loan certificates of deposit, interest-bearing demand deposit accounts, standby letters of credit, or any other security mutually agreed to by Contractor and District shall qualify under this Article. Securities equivalent to the amount withheld shall be deposited with the District or with a state or federally chartered bank in California as the escrow agent. Upon satisfactory completion of the Contract and on written authorization by the District, the securities shall be returned to Contractor. Contractor shall be the beneficial owner of the securities and shall receive any interest thereon. The Contractor may alternatively request District to make payment of retentions earned directly to the escrow agent at the expense of the Contractor.

b. At the expense of the Contractor, the Contractor may direct the investment of the payments into securities and the Contractor shall receive the interest earned on the investments upon the same terms provided for above for securities deposited by Contractor. Upon satisfactory completion of the Contract, Contractor shall receive from

the escrow agent all securities, interest, and payments received by the escrow agent from the District. The Contractor shall pay to each Subcontractor, not later than 20 days of receipt of payment, the respective amount of interest earned, net of costs attributed to retention withheld from each Subcontractor, on the amount of retention.

c. Any escrow agreement entered into pursuant to this Article shall comply with Public Contract Code § 22300 and shall be subject to approval by the District's counsel.

44. NO DISCRIMINATION

It is the policy of the District that, in connection with all work performed under this public works contract, there shall be no discrimination against any prospective or active employee or any other person engaged in the work because of actual or perceived race, color, ancestry, national origin, ethnic group identification, religion, sex, gender, sexual orientation, age, physical or mental disability, or marital status. The Contractor agrees to comply with applicable Federal and California laws including, but not limited to, the California Fair Employment Practice Act, beginning with Government Code § 12900, Government Code § 11135, and Labor Code §§ 1735, 1777.5, 1777.6, and 3077.5. In addition, the Contractor agrees to require like compliance by all Subcontractors and suppliers.

45. LABOR STANDARDS

a. Work Hours:

In accordance with Labor Code § 1810, eight (8) hours of labor shall constitute a legal day's work under this Contract. Contractor and any Subcontractor shall pay workers overtime pay as required by Labor Code § 1815. The Contractor shall pay each worker, laborer, mechanic, or persons performing work under this Contract at a rate not less than the prevailing wage for each craft or classification covering the work actually performed.

b. Penalty:

Contractor shall forfeit to District as a penalty the sum of twenty-five dollars ($25.00) for each worker employed in the execution of this Contract by Contractor or any Subcontractor for each calendar day during which the worker is required or permitted to work more than eight (8) hours in any one (1) calendar day or more than forty (40) hours per calendar week in violation of Article 3, Division 2, Part 7, Chapter 1 of the California Labor Code.

c. Employment of Apprentices:

Contractor shall comply with Labor Code §§ 1773.3, 1777.5 and 1777.6, and 3077 *et seq*., each of which is incorporated by reference into this Contract. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one (1) hour of apprentice work for every five (5) hours of labor performed by a journeyman, unless an exception is granted and that Contractors and Subcontractors shall not discriminate against otherwise qualified employees as apprentices on any public works solely on the ground of actual or perceived race, religion, color, national origin, ethnic group identification, sex, gender, sexual orientation, age, or physical or mental disability. Only apprentices who are in training under written apprenticeship occupations shall be employed. The responsibility for compliance with these provisions for all apprenticeable occupations rests with Contractor.

d. The Contractor shall be knowledgeable of and comply with Labor Code §§ 1727, 1773.5, 1775, 1777, 1777.5, 1810, 1813, 1860, including all amendments thereto; each of these sections is incorporated by reference into this Contract.

46. GENERAL RATE OF PER DIEM WAGES

a. On File:

As required by Labor Code § 1773.2, the District has available copies of the general prevailing rate of per diem wages for workers employed on public work as determined by the Director of the Department of Industrial Relations, which shall be available to any interested party on request. Contractor shall post a copy of the document at each job site.

b. Prevailing Wage Rate:

The Contractor and each Subcontractor shall pay each worker performing work under this Contract at a rate not less than the prevailing wage as defined in Labor Code § 1771 and 1774 and 8 CCR § 16000(a).

c. Penalty:

In accordance with Labor Code § 1775, the Contractor shall forfeit to the District as penalty, the sum of not more than two hundred dollars ($200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates, as determined by the Director of the California Department of Industrial Relations, for any work done under this Contract by Contractor or by any Subcontractor. Contractor shall also pay each worker the difference between the stipulated prevailing wages rates and the amount actually paid to such worker.

47. RECORD KEEPING

a. The Contractor agrees to comply with Labor Code §§ 1776 and 1812. The Contractor and each Subcontractor shall keep or cause to be kept an accurate record showing the names, addresses, social security numbers, work classifications, straight time and overtime hours worked each day and week of all workers employed by Contractor in connection with the execution of this Contract or any subcontract thereunder and showing the actual per diem wages paid to each of such workers. These records shall be certified; shall be submitted electronically at least monthly to the Chief of the Division of Labor Standards Enforcement of the Department of Industrial Relations; and shall be open at all reasonable hours to the inspection of the District awarding the Contract, its officers and agents, and to the Chief of the Division of Labor Standards Enforcement of the Department of Industrial Relations, and his or her other deputies and agents.

b. In addition, copies of the above records shall be available as follows:

1) A certified copy of an employee's payroll record shall be made available for inspection or furnished to the employee or his or her authorized representative on request;

2) A certified copy of all payroll records shall be made available for inspection or furnished upon request to the District, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the Department of Industrial Relations;

3) A certified copy of all payroll records shall be made available upon request by the public for inspection or 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 payroll records have not been previously provided, the requesting party shall, prior to being provided the records, reimburse the costs of the Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to the records at the principal office of the Contractor.

c. The Contractor shall file a certified copy of the records with the entity requesting the records within ten (10) days after receipt of a written request. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, shall be marked or obliterated in such a manner as to prevent disclosure of an individual's name, address, and social security number. The name and address of the Contractor awarded the Contract or performing the Contract shall not be marked or obliterated.

d. The Contractor shall inform the District of the location of the records, including the street address, city and county, and shall, within five working days, provide a notice of a change of location and address.

e. In the event of noncompliance with the requirements of this section, the Contractor shall have ten days in which to comply subsequent to receipt of written notice specifying in what respects the Contractor must comply with this section. Should noncompliance still be evident after the ten-day period, the Contractor shall, as a penalty to the District, forfeit one hundred dollars ($100) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due.

f. Responsibility for compliance with this provision shall be with the Contractor.

48. PROJECT COMPLETION

a. When all of the work to be performed under this Contract has been fully completed, the Contractor shall notify the Architect and District, in writing, setting a date for inspection. The Contractor and Subcontractor representatives shall attend the inspection. As a result of this inspection, the Architect will prepare a list of items ("punch list") that are incomplete or not installed according to the Contract Documents. Failure to include items on this list does not relieve the Contractor from fulfilling all requirements of the Contract Documents.

b. The Architect will promptly deliver the punch list to the Contractor and it will include a period of time by which the Contractor shall complete all items listed thereon. On completion of all items on the punch list, verified by a final inspection, and all other Contract requirements, so that Final Completion has been achieved to the District's satisfaction, the District will file a Notice of Completion with the County Recorder. Payment of retention from the Contract, less any sums withheld pursuant to the terms of this Contract or applicable law, shall not be made sooner than thirty-five (35) calendar days after the date of filing of Notice of Completion.

c. District reserves the right to occupy buildings and/or portions of the site at any time before Completion, and occupancy shall not constitute final acceptance of any part of the Work covered by the Contract Documents, nor shall such occupancy extend the date specified for completion of the Work. Beneficial occupancy of building(s) does not commence any warranty period or entitle Contractor to any additional compensation due to such occupancy, or affect in any way or amount Contractor's obligation to pay liquidated damages for failure to complete the Project on time.

49. TRENCHING OR OTHER EXCAVATIONS

a. Excavations or Trenches Deeper than Four Feet:

If the Project involves digging trenches or other excavations that extend deeper than four feet, the following provisions shall be a part of this Contract:

1) The Contractor shall promptly, and before the following conditions are disturbed, provide written notice to the District if the Contractor finds any of the following conditions:

   (a) Material that the Contractor believes may be a hazardous waste, as defined in § 25117 of the Health and Safety Code, which is required to be removed to a Class I, Class II, or Class III disposal site in accordance with the provisions of existing law.

   (b) Subsurface or latent physical conditions at the site which are different from those indicated or expected.

   (c) Unknown physical conditions at the site of any unusual nature or which are materially different from those ordinarily encountered and generally recognized as inherent in work which the Contractor generally performs.

2) In the event that the Contractor notifies the District that Contractor has found any of the conditions specified in subparagraphs (a), (b) or (c), above, the District shall promptly investigate the condition(s). If the District finds that the conditions are materially different or that a hazardous waste is present at the site which will affect the Contractor's cost of, or the time required for, performance of the Contract, the District shall issue a change order in accordance with the procedures set forth in this Contract.

3) In the event that a dispute arises between the District and the Contractor regarding any of the matters specified in Paragraph (2), above, the Contractor shall proceed with all work to be performed under the Contract and the Contractor shall not be excused from completing the Project as provided in the Contract. In performing the work pursuant to this Paragraph, the Contractor retains all rights provided by Article 50 which pertains to the resolution of disputes between the contracting parties.

b. Regional Notification Center:

The Contractor, except in an emergency, shall contact the appropriate regional notification center at least two (2) days prior to commencing any excavation if the excavation will be conducted in an area that is known, or reasonably should be known, to contain subsurface installations other than the underground facilities owned or operated by the District, and obtain an inquiry identification number from that notification center. No excavation shall be commenced and/or carried out by the Contractor unless an inquiry identification number has been assigned to the Contractor or any Subcontractor and the Contractor has given the District the identification number. Any damages or delays arising from Contractor's failure to make appropriate notification shall be at the sole risk and expense of the Contractor and shall not be considered for an extension of the Contract time.

c. Existing Utility Lines:

1) Pursuant to Government Code § 4215, the District assumes the responsibility for removal, relocation, and protection of main or trunk utility lines and facilities located on the construction site at the time of commencement of construction under this Contract with respect to any such utility facilities that are not identified in the plans and Specifications. Contractor shall not be assessed liquidated damages for delay in completion of the Project caused by the failure of the District or the owner of a utility to provide for removal or relocation of such utility facilities.

2) Locations of existing utilities provided by the District shall not be considered exact, but approximate within reasonable margin and shall not relieve Contractor of responsibilities to exercise reasonable care nor costs of repair due to Contractor's failure to do so. The District shall compensate Contractor for the costs of locating and repairing damage not due to the failure of Contractor to exercise reasonable care, and removing or relocating such utility facilities not indicated in the plans and Specifications with reasonable accuracy.

3) No provision herein shall be construed to preclude assessment against Contractor for any other delays in completion of the Project. Nothing in this section shall be deemed to require the District to indicate the presence of existing service laterals, appurtenances, or other utility lines, with the exception of main or trunklines, whenever the presence of such utilities on the site of the construction Project can be inferred from the presence of other visible facilities, such as buildings, meter and junction boxes, on or adjacent to the site of the construction.

4) If Contractor, while performing work under this Contract, discovers utility facilities not identified by the District in the Project plans and Specifications, Contractor shall immediately notify the District and the utility in writing. The

cost of repair for damage to above-mentioned visible facilities without prior written notification to the District shall be borne by the Contractor.

d. Prompt Notification:

Contractor understands, acknowledges and agrees that the purpose for prompt notification to the District pursuant to these provisions is to allow the District to investigate the condition(s) so that the District shall have the opportunity to decide how the District desires to proceed as a result of the conditions. Accordingly, failure of Contractor to promptly notify the District in writing, pursuant to these provisions, shall constitute Contractor's waiver of any claim for damages incurred as a result of the conditions.

e. Trenches Five Feet and Deeper:

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

50. DISPUTE RESOLUTION: ARBITRATION

a. Notwithstanding any other language in the Contract Documents, claims between the District and the Contractor shall first be resolved using the procedures set forth at Public Contract Code § 9204. "Claims" are defined for this Article, pursuant to Public Contract Code § 9204, as a separate demand by the Contractor for one of the following: a time extension for relief from penalties for delay; payment of money or damages arising from work done; or payment of an amount disputed by the District.

b. **Claims Resolution Process**. Upon receiving a Claim sent by registered or certified mail, the District must review and provide a written response within forty-five (45) days that identifies the disputed and undisputed portions of the Claim. The forty-five (45) day period to respond may be extended by mutual agreement. The Claim is deemed rejected in its entirety if the District does not issue a response. Any payment due on an undisputed portion of the Claim must be processed within 60 days after the District's response. If a claimant disputes the District's response or lack thereof, the claimant may demand to meet and confer for settlement of the issues in dispute. Any portion of a claim that remains in dispute after a meet and confer conference will be subject to nonbinding mediation process, as described in Public Contract Code § 9204. Undisputed and unpaid claims accrue interest at 7% per annum. A subcontractor or lower tier subcontractor may make a claim to the District through the Contractor, as specified in Public Contract Code § 9204. However, the procedures in Article 50 shall not supersede the requirements of the Contract Documents with respect to the Contractor's notification to the District of such claim or extend the time for the giving of such notice as provided in the Contract Documents.

c. **Arbitration.** Subject to Article 50., subsection a. above, all 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 arbitration conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association ("AAA") 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 AAA closest to the Site. The award rendered by the Arbitrator(s) shall be final and binding upon the District and the Contractor. 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. 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. In the event more than one Demand for Arbitration is made by either the District or the Contractor, all such controversies 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). The expenses and fees of the Arbitrator(s) shall be divided equally among 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 cost and expense 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. The confirmation, enforcement, vacation or correction of an arbitration award rendered hereunder shall be 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.

51. DISABLED VETERANS PARTICIPATION GOALS

In accordance with Education Code § 17076.11, this District has a participation goal for disabled veteran business enterprises (“DVBE”) of at least 3 percent (3%) per year of the overall dollar amount of funds allocated to the District by the State Allocation Board pursuant to the Leroy F. Greene School Facilities Act of 1998 (the “Act”) for construction or modernization and expended each year by the District. If the Project is funded in whole, or in part, by funds allocated to the District pursuant to the Act, prior to, and as a condition precedent for final payment under any contract for such project, the Contractor shall provide appropriate

documentation to the District identifying the amount paid to DBVE in conjunction with the Contract, so that the District can assess its success at meeting this goal.

52. RETENTION OF DVBE RECORDS

The Contractor agrees that, for all contracts subject to DVBE participation goals, the State and the District have the right to review, obtain and copy all records pertaining to performance of the contract in accordance with DVBE requirements. The Contractor agrees to provide the State or the District with any relevant information requested and shall permit the State or District access to its premises upon reasonable notice for purposes of interviewing employees and inspecting records. The Contractor agrees to maintain such records for a period of three years after final payment under the Contract.

53. FINGERPRINTING

District Determination of Fingerprinting Requirement Application

The District has considered the totality of the circumstances concerning the Project and has determined that the Contractor and Contractor's employees (which includes Subcontractor employees):

___X___ are subject to the requirements of Education Code § 45125.2 and Paragraph (a) below, is applicable.

_____ are not subject to the requirements of Education Code § 45125.2, and Paragraph (b) below, is applicable.

a. Contracts for Construction, Reconstruction, Rehabilitation or Repair of a School Facility Involving More than Limited Contact with Students (§ 45125.2)

By execution of the Contract, the Contractor acknowledges that Contractor is entering into a contract for the construction, reconstruction, rehabilitation, or repair of a school facility where the Contractor and/or Contractor's employees will have more than limited contact with students and the services to be provided do not constitute an emergency or exceptional situation. In accordance with Education Code § 45125.2 the Contractor shall, at Contractor's own expense, (1) install a physical barrier to limit contact with students by Contractor and/or Contractor's employees, and/or (2) provide for the continuous supervision and monitoring of the Contractor and/or Contractor's employees by an employee of the Contractor who has received fingerprint clearance from the California Department of Justice, and/or (3) provide for the surveillance of the Contractor and Contractor's employees by a District employee.

b. Contracts for Construction, Reconstruction, Rehabilitation or Repair of a School Facility Involving Only Limited Contact With Students (§ 45125.2)

By execution of the Contract, the Contractor acknowledges that Contractor is entering into a contract for the construction, reconstruction, rehabilitation or repair of a school facility involving only limited contact with students. Accordingly, the parties agree that the following conditions apply to any work performed by the Contractor and Contractor's employees on a school site: (1) Contractor and Contractor's employees shall check in with the school office each day immediately upon arriving at the school site; (2) Contractor and Contractor's employees shall inform school office staff of their proposed activities and location at the school site; (3) Once at such location, Contractor and Contractor's employees shall not change locations without contacting the school office; (4) Contractor and Contractor's employees shall not use student restroom facilities; and (5) If Contractor and/or Contractor's employees find themselves alone with a student, Contractor and Contractor's employees shall immediately contact the school office and request that a member of the school staff be assigned to the work location.

54. LABOR COMPLIANCE MONITORING

The project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations. In accordance with Labor Code § 1771.1, all bidders, contractors, and subcontractors working at the site shall be duly registered with the Department of Industrial Relations at time of bid opening and at all relevant times. Proof of registration shall be provided as to all such contractors prior to the commencement of any work. Contractor shall coordinate with the Architect to ensure the Department of Industrial Relations is advised of the award of the construction contract in a timely manner by filing form PWC-100 with the Department of Industrial Relations after award of the contract.

55. DRUG-FREE WORKPLACE CERTIFICATION

Contractor certifies all of the following:

1) Contractor is aware of the provisions and requirements of California Government Code §§8350 *et seq*., the Drug Free Workplace Act of 1990.

2) Contractor is authorized to certify, and does certify, that a drug free workplace will be provided by doing all of the following:

   a) Publishing a statement notifying all 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 a 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 Work on the Project be given a copy of the statement required by subdivision (a), above, and that as a condition of employment by Contractor in connection with the Work on the Project, the employee agrees to abide by the terms of the statement.

3) Contractor understands that if the District determines that Contractor has either: (a) made a false certification herein, or (b) violated this certification by failing to carry out and to implement the requirements of Government Code §§ 8350 *et seq*., the Contract is subject to termination, suspension of payments, or both. Contractor further understands 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 Government Code §§ 8350, *et seq*.

56. PROVISIONS REQUIRED BY LAW DEEMED INSERTED

Every provision of law and clause required by law to be inserted in this Contract shall be deemed to be inserted, and this Contract shall be read and enforced as though it were included, and if through mistake or otherwise any provision is not inserted or is not correctly inserted, upon application of either party the Contract shall be amended to make the insertion or correction. All references to statutes and regulations shall include all amendments, replacements, and enactments on the subject which are in effect as of the date of this Contract.

57. GENERAL PROVISIONS

a. Assignment and Successors

Neither party may transfer or assign its rights or obligations under the Contract Documents, in part or in whole, without the other party's prior written consent. The Contract Documents are binding on the heirs, successors, and permitted assigns of the parties hereto.

b. Third Party Beneficiaries

There are no intended third party beneficiaries to the Contract.

c. Choice of Law and Venue

The Contract Documents shall be governed by California law, and venue shall be in the Superior Court of the county in which the project is located, and no other place.

d. Severability

If any provision of the Contract Documents is determined to be illegal, invalid, or unenforceable, in part of in whole, the remaining provisions, or portions of the Contract Documents shall remain in full force and effect.

e. Entire Agreement

The Contract Documents constitute the final, complete, and exclusive statement of the terms of the agreement between the parties regarding the subject matter of the Contract Documents and supersedes all prior written or oral understandings or agreements of the parties.

f. Waiver

No waiver of a breach, failure of any condition, or any right or remedy contained in or granted by the provisions of the Contract Documents shall be effective unless it is in writing and signed by the party waiving the breach, failure, right, or remedy. No waiver of any breach, failure, right, or remedy shall be deemed a waiver of any other breach, failure, right, or remedy, whether or not similar, nor shall any waiver constitute a continuing waiver unless the writing so specifies.

g. Headings

The headings in the Contract Documents are included for convenience only and shall neither affect the construction or interpretation of any provision in the Contract Documents nor affect any of the rights or obligations of the parties to the Contract.

58. INDEPENDENT CONTRACTOR

This Agreement is not a contract of employment between District and Contractor. At all times the Contractor shall be deemed and act as an independent contractor and is not authorized to bind District to any contracts or other obligations. District and Contractor agree that (a) Contractor will remain free from the control and direction of the District in connection with the performance of the Services; (b) the scope of work contemplated by this Agreement is outside the usual course of the District's business; and (c) Contractor is customarily engaged in an independently established trade, occupation, or business of the same nature as the Services performed under this Agreement.

59. COVID-19 PANDEMIC

Contractor shall at all times comply with any and all state, local, and federal regulations regarding the COVID-19 pandemic at Contractor's own expense, including but not limited to phased reopening and access to the site, wearing masks or other personal protective equipment, social distancing, and any resulting or related reduction at site capacity.

--END GENERAL CONDITIONS--

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

7. Special Conditions

SPECIAL CONDITIONS

A. **Time of Performance**. The Contractor shall mobilize and commence work on the Project on the date specified in the Agreement. The Contractor shall complete the project within the period specified in the Agreement and in accordance with the schedule for the Project developed for the District. Contractor acknowledges and agrees that the construction duration stipulated herein is adequate and reasonable for the size and scope of the Project.

Work under this Contract shall be scheduled and coordinated in compliance with the following:

1. The anticipated date of the award of the Contract is [June 9, 2021].
2. Contract submittals are due on [June 16, 2021].
3. Contractor shall complete work under this Contract as identified in the Specifications.
4. The Contractor acknowledges that it fully understands the Project work to be performed has been scheduled by the District for a specific time period. In addition the Contractor acknowledges that it fully understands that scheduling has been established for this Project in order to promote the best usage of school facilities and to timely provide an appropriate learning environment for students to the fullest extent possible. With these understandings in mind, pursuant to the General Conditions regarding the District's Right to Terminate Contract, it is acknowledged and understood by the Contractor that it is a substantial violation of the Contract for the Contractor to fail to provide all submittals in the time specified and identified. Furthermore, it is acknowledged and understood by the Contractor that it is a substantial violation of the Contract for the Contractor to fail to provide a full work crew or properly skilled workers with proper and sufficient materials and equipment from the first day of Project work scheduled.

   If the site will not be available after the scheduled start date, Contractor shall utilize this time period for administrative tasks and initial mobilization and shall coordinate such activities with District.

B. **Future Work**. All future work awarded from this bid shall be coordinated with the District's [Director of Maintenance, Operations, & Safety] or his or her designee and the Contractor. No work shall start until scheduling has been agreed upon by all parties.

C. **Liquidated Damages – Contract Submittals**. If the executed Contract and required bonds and certificates of insurance are not received by the District prior to the scheduled start date, the agreed liquidated damages established in the General Conditions is Five Hundred Dollars ($500.00) per day for each calendar date the start date is delayed.

Liquidated Damages – Substantial Completion. If work under this Contract is not ready for the intended use within the specified time period for Substantial Completion, the agreed liquidated damages established in the General Conditions is Five Hundred Dollars ($500.00) per day for each calendar date completion is delayed.

Liquidated Damages – Final Completion. If work under this Contract is not ready for the intended use within the specified time period for Final Completion, including completion of all punch list items, the agreed liquidated damages established in the General Conditions is Five Hundred Dollars ($500.00) per day for each calendar date completion is delayed.

D. **Certification Requirements**. The Contractor or subcontractor must be certified by the factory or manufacturer to install any equipment or other products that may require a certification. Such certifications must be obtained prior to submittal of the bid.

E. **Time of Work Restrictions**. The worksite will be available Monday through Saturday, from 7 AM to 5 PM. This schedule is subject to change as the needs of the District require, and would be scheduled with the District's Director of [Maintenance, Operations, and Safety] or his or her designee.

F. **Project Schedule**.

Anticipated Start Date: **[June 21, 2021]**

Completion Date: **[August 11, 2021]**

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

8. Specifications

SPECIFICATIONS

[INCLUDE SPECIFICATIONS]

SUBSTITUTION REQUEST FORM

Pursuant to Public Contract Code section 3400, bidder hereby requests substitution of the following articles, devices, equipment, products, materials, fixtures, patented processes, forms, methods, or types of construction:

Specified Items	Requested Substituted Items	Agree to Provide Specified Item In the Event Request is Denied[1] (circle one)	District Decision on substitution Request (circle one)
1._____	_____	Yes No	Grant Deny
2._____	_____	Yes No	Grant Deny
3._____	_____	Yes No	Grant Deny
4._____	_____	Yes No	Grant Deny
5._____	_____	Yes No	Grant Deny
6._____	_____	Yes No	Grant Deny
7._____	_____	Yes No	Grant Deny
8._____	_____	Yes No	Grant Deny
9._____	_____	Yes No	Grant Deny

[1] Bidder must state whether bidder will provide the Specified Item in the event that District denies the request for substitution. If bidder states that bidder will not provide the Specified Item in the event their request for substitution is denied, bidder's bid may be considered nonresponsive. However, if bidder states that bidder will provide the Specified Item in the event that bidder's request for substitution is denied, bidder shall execute the Agreement and provide such Specified Item(s) and if bidder fails to execute the Agreement with the Specified Item(s), bidder's bond may be forfeited.

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE PROJECT

9. Project Forms

PROJECT FORMS
NOTICE OF INTENT TO AWARD

To:

Project Description: Mill Valley Shade Structure Project

The District has considered the bid submitted by you for the above described work in response to its Notice to Bidders for the Project.

You are hereby notified that the District intends to accept your bid in the amount of:
_____
($ _____) for the Mill Valley Shade Structure Project at [Tamalpais Valley Elementary- 350 Bell Lane, Mill Valley; Old Mill Elementary- 352 Throckmorton Ave, Mill Valley; Park Elementary- 360 Blithedale Ave, Mill Valley; Strawberry Point Elementary 117 E Strawberry Drive, Mill Valley].

You are requested to execute the Contract and furnish the required Performance Bond and Payment Bond using the bond forms provided in the Contract Documents and the required certificates of insurance within ten (10) business days from the date of issuance of this Notice.

If you fail to execute the Contract and to furnish the bonds and insurance within ten (10) business days from the date of issuance of this Notice, the District may consider all your rights arising out of its acceptance of your bid as abandoned and your Bid Bond forfeited. The District will be entitled to such other rights as may be granted by law.

You are required to return an acknowledged copy of this Notice of Award to the District.

Dated this [18] day of [June], 2021.

By _____
Authorized District Signature

Receipt of this above Notice of Intent to Award is hereby acknowledged by:

_____, this is the _____

day of _____, 2021.

By _____

Title _____

NOTICE TO PROCEED

To: Date:

PROJECT: Mill Valley Shade Structure Project

You are hereby notified to commence work in accordance with the Contract dated [June 18, 2021], on [June 21, 2021 of COMMENCE WORK], and you shall complete the work _____ consecutive calendar days thereafter.

By: _____
Authorized District Signature

CONTRACTOR'S CERTIFICATE REGARDING
DRUG-FREE WORKPLACE

Pursuant to Government Code section 8355, every person or organization awarded a contract or grant from a State agency shall certify that it will provide a drug-free workplace by doing all of the following:

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

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

1) The dangers of drug abuse in the workplace;

2) The person's or organization's policy of maintaining a drug-free workplace;

3) The availability of drug counseling, rehabilitation and employee-assistance programs; and

4) The penalties that may be imposed upon employees for drug abuse violations;

c) Requiring that each employee engaged in the performance of the contract or grant be given a copy of the statement required by subdivision (a) and that, as a condition of employment on the contract or grant, the employee agrees to abide by the terms of the statement.

I, the undersigned, agree to fulfill the terms and requirements of Government Code section 8355 listed above and will (a) publish a statement notifying employees concerning the prohibition of controlled substance at the workplace, (b) establish a drug-free awareness program, and (c) require each employee engaged in the performance of the contact be given a copy of the statement required by Section 8355(a) and require such employee agree to abide by the terms of that statement.

I also understand that if the District determines that I have either (a) made a false certification herein, or (b) violated this certification by failing to carry out the requirements of Section 8355, that the contract awarded herein is subject to termination, suspension of payments, or both. I further understand that, should I violate the terms of the Drug-Free Workplace Act of 1990, I may be subject to debarment in accordance with the requirements of Sections 8350 *et seq*. I acknowledge that I am aware of the provisions of Government Code sections 8350 *et seq*. and hereby certify that I will adhere to the requirements of the Drug-Free Workplace Act of 1990.

DATE:_____ _____
Contractor

By:_____
Signature

CONTRACTOR'S CERTIFICATE REGARDING
ALCOHOLIC BEVERAGE AND TOBACCO-FREE CAMPUS POLICY

The Contractor agrees that it will abide by and implement the District's Alcoholic Beverage and Tobacco-Free Campus Policy, which prohibits the use of alcoholic beverages and tobacco products, at any time, on District-owned or leased buildings, on District property and in District vehicles. The Contractor shall procure signs stating "ALCOHOLIC BEVERAGE AND TOBACCO USE IS PROHIBITED" and shall ensure that these signs are prominently displayed in all entrances to school property at all times.

DATE:_____ _____
CONTRACTOR

By:_____
Signature

CONTRACTOR'S CERTIFICATE REGARDING
PARTICIPATION OF
DISABLED VETERAN BUSINESS ENTERPRISES

In accordance with Education Code section 17076.11, the District has a participation goal for Disabled Veteran Business Enterprises of at least three percent (3%) per year of the overall dollar amount of funds allocated by the District by the State Allocation Board pursuant to the Leroy F. Greene School Facilities Act of 1998 for construction or modernization of school buildings and expended each year by the District. If the Project is funded in whole, or in part, by funds allocated to the District pursuant to the Act, at the time of execution of the contract, the Contractor will provide a statement to the District of anticipated participation of Disabled Veteran Business Enterprises in the contract. Prior to, and as a condition precedent for final payment under the contract, the Contractor will provide appropriate documentation to the District identifying the amount paid to Disabled Veteran Business Enterprises pursuant to the contract, so that the District can assess its success at meeting this goal.

I certify that I have read the above and will comply with the anticipated participation of Disabled Veteran Business Enterprises in this contract.

_____	_____
Signature	Typed or Printed Name
_____	_____
Title	Company
_____	
Email	

RECYCLED CONTENT CERTIFICATION

The undersigned declares that he or she is the person who executed the bid for Bid # _____ ("Project"), and submitted it to the District on behalf of _____("Contractor").

Pursuant to Public Contract Code section 10308.5, all contractors are required to certify in writing under penalty of perjury the minimum (if not exact) percentage of recycled content in materials, goods, or supplies offered or products used in the performance of their contract, regardless of whether the product meets the required recycled product percentage as defined in Sections 12161 and 12200. The recycled content shall include both post-consumer material and secondary material as defined in Public Contract Code sections 12161 and 12200 shall apply.

I declare under penalty of perjury under the laws of the State of California that the following percentages of Postconsumer Material and Secondary Material is in the materials, goods or supplies offered for, or products used in, the performance of the Contract for the Project:

_____ % Postconsumer Material _____ % Secondary Material.

Executed on this _____ day of _____, 20__ at _____

_____.

_____
Name of Contractor (Print or Type)

By_____
Signature

_____
Print Name

ASBESTOS-FREE MATERIALS CERTIFICATION

The undersigned declares that he or she is the person who executed the bid for Bid # _____ ("Project"), and submitted it to the District on behalf of _____("Contractor").

To the best of my knowledge, information and belief, in completing the Contractor's Work for the Project, no material furnished, installed or incorporated into the Project will contain, or in itself be composed of, any materials listed by the federal or state EPA or federal or state health agencies as a hazardous material.

Any disputes involving the question of whether or not material installed with asbestos-containing equipment is settled by electron microscopy; the cost of any such tests shall be paid by the Contractor.

All work or materials installed by the Contractor which is found to contain asbestos, or work or material installed with asbestos-containing equipment, will be immediately rejected and this work shall be removed and replaced by the Contractor at no additional cost to the District. Decontamination and removal of work found to contain asbestos or work installed with asbestos-containing equipment shall be done only under supervision of a qualified consultant, knowledgeable in the field of asbestos abatement and accredited by the Environmental Protection Agency.

The ASBESTOS REMOVAL CONTRACTOR shall be an EPA accredited contractor qualified in the removal of asbestos and shall be chosen and approved by the Asbestos Consultant who shall have sole discretion and final determination in this matter.

The asbestos consultant shall be chosen and approved by the Construction Manager/Architect or the District who shall have sole discretion and final determination in this matter.

The work will be not accepted until asbestos contamination is reduced to levels deemed acceptable by the Asbestos Consultant.

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

Executed on this _____ day of _____, 20__.

_____

Name of Contractor (Print or Type)

By _____
Signature

_____ ____
Print Name Title

IRAN CONTRACTING ACT CERTIFICATION

As required by California Public Contract Code section 2204, the Bidder certifies subject to penalty for perjury that the option checked below relating to the Bidder's status in regard to the Iran Contracting Act of 2010 (Public Contract Code sections 2200 *et seq.*) is true and correct:

□ The Bidder is not:

(i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code section 2203; or

(ii) a financial institution that extends, for forty-five (45) days or more, credit in the amount of $20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

□ The District has exempted the Contractor from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, District will be unable to obtain the goods and/or services to be provided pursuant to the Contract.

□ The amount of the Contract payable to the Contractor for the Project does not exceed $1,000,000.

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

_____

Signature Date

_____

Name Title

_____

Name of Firm

FINGERPRINTING/CRIMINAL BACKGROUND INVESTIGATION CERTIFICATION

The undersigned does hereby certify to the governing board of the District that (1) he/she is a representative of the Contractor, (2) he/she is familiar with the facts herein certified, (3) he/she is authorized and qualified to execute this certificate on behalf of Contractor; and (4) that the following is true and correct:

1. **Education Code.** Contractor has taken at least one of the following actions with respect to the Project (check all that apply):

- € The Contractor has complied with the fingerprinting requirements of Education Code section 45125.1 with respect to all Contractor's employees and all of its subcontractors' employees who may have contact with District pupils in the course of providing services pursuant to the Contract, and the California Department of Justice has determined that none of those employees has been convicted of a felony, as that term is defined in Education Code section 45122.1. A complete and accurate list of Contractor's employees and of all of its subcontractors' employees who may come in contact with District pupils during the course and scope of the Contract is attached hereto; and/or

- € Pursuant to Education Code section 45125.2, Contractor has installed or will install, prior to commencement of work, a physical barrier at the Project site, that will limit contact between Contractor's employees and District pupils at all times; and/or

- € Pursuant to Education Code section 45125.2, Contractor certifies that all employees will be under the continual supervision of, and monitored by, an employee of the Contractor who the California Department of Justice has ascertained has not been convicted of a violent or serious felony. The name and title of the employee who will be supervising Contractor's employees and its subcontractors' employees is:

  Name: **Title:**

- € The Work on the Contract is at an unoccupied school site and no employee and/or subcontractor or supplier of any tier of Contract shall come in contact with the District pupils.

2. **Megan's Law (Sex Offenders).** I have verified and will continue to verify that the employees of Contractor that will be on the Project site and the employees of the Subcontractor(s) that will be on the Project site are **not** listed on California's "Megan's Law" Website (http://www.meganslaw.ca.gov/).

Contractor's responsibility for background clearance extends to all of its employees, subcontractors, and employees of subcontractors coming into contact with District pupils regardless of whether they are designated as employees or acting as independent contractors of the Contractor.

On behalf of Contractor:

_____ _____

Title Signature

_____

Name

CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION FORM

Labor Code section 3700 in relevant part provides:

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

1. By being insured against liability to pay compensation by one or more insurers duly authorized to write compensation insurance in this State.

2. By securing from the Director of Industrial Relations a certificate of consent to self-insure, which may be given upon furnishing proof satisfactory to the Director of Industrial Relations of ability to self-insure and to pay any compensation that may become due to employees.

For any county, city, city and county, municipal corporation, public district, public agency, or any political subdivision of the state, including each member of a pooling arrangement under a joint exercise of powers agreement (but not the state itself), by securing from the Director of Industrial Relations a certificate of consent to self-insure against workers' compensation claims, which certificate may be given upon furnishing proof satisfactory to the director of ability to administer workers' compensation claims properly, and to pay workers' compensation claims that may become due to its employees. On or before March 31, 1979, a political subdivision of the state which, on December 31, 1978, was uninsured for its liability to pay compensation, shall file a properly completed and executed application for a certificate of consent to self-insure against workers' compensation claims. The certificate shall be issued and be subject to the provisions of Section 3702. I am aware of the provisions of Labor Code section 3700 which require every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provision before commencing the performance of the work of this Contract.

_____

(Signature)

_____

(Print)

_____

(Date)

In accordance with Article 5 (commencing at section 1860), Chapter 1, Part 7, Division 2 of the Labor Code, the above certificate must be signed and submitted with the Contractor's bid.

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between the **Mill Valley School District**, hereinafter called "OWNER", and _____, hereinafter called "CONTRACTOR", and _____, hereinafter called "Escrow Agent."

For the consideration hereinafter set forth, the OWNER, CONTRACTOR and Escrow Agent agree as follows:

(1) Pursuant to Section 22300 of the Public Contract Code of the State of California, CONTRACTOR has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by OWNER in the amount _____ (**$**_____**)** pursuant to the Construction Contract entered into between the OWNER and CONTRACTOR for _____ **Project** in the amount of _____ (**$**_____**)** dated _____ (hereinafter referred to as the "Contract"). Alternatively, on written request of the CONTRACTOR, the OWNER shall make payments of the retention earnings directly to the escrow agent. When CONTRACTOR deposits the securities as a substitute for Contract earnings, the Escrow Agent shall notify the OWNER within ten (10) days of deposit. The market value of the securities at the time of the substitution shall be at least equal to the cash amount then required to be withheld as retention under the terms of the Contract between the OWNER and CONTRACTOR. Securities shall be held in the name of the OWNER, and shall designate _____ as the beneficial owner.

(2) The OWNER shall make progress payments to the CONTRACTOR for such funds which otherwise would be withheld from progress payments pursuant to the Contract provisions, provided that the Escrow Agent holds securities in the form and amount specified above.

(3) When the OWNER makes payments of retentions earned directly to the Escrow Agent, the Escrow Agent shall hold them for the benefit of the CONTRACTOR until such time as the escrow created under this contract is terminated. The CONTRACTOR may direct the investment of the payments into securities. All terms and conditions of this agreement and the rights and responsibilities of the parties shall be equally applicable and binding when the OWNER pays the Escrow Agent directly.

(4) CONTRACTOR shall be responsible for paying all fees for the expenses incurred by Escrow Agent in administering the Escrow Account and all expenses of the OWNER. These expenses and payment terms shall be determined by the OWNER, CONTRACTOR, and Escrow Agent.

(5) The interest earned on the securities or the money market accounts held in escrow and all interest earned on that interest shall be for the sole account of CONTRACTOR and shall be subject to withdrawal by CONTRACTOR at any time and from time to time without notice to the OWNER.

(6) CONTRACTOR shall have the right to withdraw all or any part of the principal in the Escrow Account only by written notice to Escrow Agent accompanied by written authorization from the OWNER to the Escrow Agent that OWNER consents to the withdrawal of the amount sought to be withdrawn by CONTRACTOR.

(7) The OWNER shall have a right to draw upon the securities in the event of default by the CONTRACTOR. Upon seven (7) days' written notice to the Escrow Agent from the OWNER of the default, the Escrow Agent shall immediately convert the securities to cash and shall distribute the cash as instructed by the OWNER.

(8) Upon receipt of written notification from the OWNER certifying that the Contract is final and complete, and that the CONTRACTOR has complied with all requirements and procedures applicable to the Contract, Escrow Agent shall release to CONTRACTOR all securities and interest on deposit less escrow fees and charges of the Escrow Account. The escrow shall be closed immediately upon disbursement of all moneys and securities on deposit and payment of fees and charges.

(9) Escrow Agent shall rely on the written notifications from the OWNER and the CONTRACTOR pursuant to sections (5) to (8), inclusive, of this agreement and the OWNER and CONTRACTOR shall hold Escrow Agent harmless from Escrow Agent's release and disbursement of the securities and interest as set forth above.

(10) The names of the persons who are authorized to give written notice or to receive written notice on behalf of the OWNER and on behalf of CONTRACTOR in connection with the foregoing, and exemplars of their respective signatures are as follows:

On behalf of Owner:	On behalf of Agent:
_____	
_____	
Title	Title
_____	
_____	
Name	Name
_____	
_____	
Signature	Signature
_____	
_____	
Address	Address

[Contractor signatures continue on the following page.]

On behalf of Contractor:

_____
Title

_____
Name

_____
Signature

_____
Address

At the time the Escrow Account is opened, the OWNER and CONTRACTOR shall deliver to the Escrow Agent a fully executed counterpart of this Agreement.

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

OWNER	CONTRACTOR
_____	_____
Title	Title
_____	_____
Name	Name
_____	_____
Signature	Signature

246-5/6068254.1

0 5' 50' GRAPHIC SCALES: 1/16" = 1'-0"
0 5' 25' 1/8" = 1'-0"
0 1' 12' 1/4" = 1'-0"
0 1' 6' 1/2" = 1'-0"
0 4' 3/4" = 1'-0"
0 1' 3' 1" = 1'-0"
0 2' 1 1/2" = 1'-0"
0 1' 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

FILE: 21-25
APPL: 01-119417

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING CODES LISTED IN "APPLICABLE CODES" AND ALL GOVERNING LOCAL CODES AND REGULATIONS.
2. THE OWNER / ARCHITECT HAVE OBTAINED APPROVAL OF THE PRIMARY AUTHORITY HAVING JURISDICTION (DSA, OSHPD, CITY BUILDING PERMIT). CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, SPECIAL INSPECTION IS REQUIRED FOR SHOP AND FIELD STRUCTURAL WELDING.
4. WHERE INCORPORATED IN THE CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF OSHPD OR DSA PRE-APPROVALS FOR PRE-APPROVED ITEMS OR SYSTEMS INCORPORATED INTO THE CONSTRUCTION AND DISTRIBUTE TO OWNER'S REPRESENTATIVE, ARCHITECT AND INSPECTOR.
5. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH AND AND INSTALL ALL MATERIALS AND WORK DESCRIBED, DEPICTED OR DETAILED WITHIN THESE DOCUMENTS REGARDLESS OF THE LOCATION OF THAT MATERIAL OR WORK WITHIN THE DOCUMENTS OR OMISSION (WHETHER DELIBERATE OR ACCIDENTAL) OF THAT MATERIAL OR WORK BY A SUBCONTRACTOR ON HIS/HER BID.
6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONSIDER THESE DOCUMENTS IN THEIR ENTIRETY. DISCREPANCIES OR CONTRADICTIONS BETWEEN PORTIONS OF THESE DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT LEAST 72 HOURS PRIOR TO BID OPENING FOR CLARIFICATION. OTHERWISE, THE MOST RESTRICTIVE REQUIREMENT SHALL BE IN FORCE AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. CONTRACTOR ESTABLISH PROCEDURES TO ASSURE ALL PERSONS ENTERING A POSSIBLY HAZARDOUS AREA, INCLUDING WORKERS, SUBCONTRACTORS, OTHER CONTRACTORS, VISTORS, AND OTHERS ARE AWARE OF APPROPRIATE / REQUIRED SAFETY PROCEDURES. COMPLY WITH LOCAL, STATE, AND FEDERAL SAFETY STANDARDS, INCLUDING OSHA REQUIREMENTS AND WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY FENCING AND GATES, SIGNAGE, SECURITY LIGHTING OR OTHER SECURITY AND CONTROL MEASURES NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC AND FACILITY USERS UNTIL THE COMPLETION OF THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE TO FOR PROTECTION OF ADJACENT PROPERTY AND SHALL REPAIR AND / OR REPLACE ALL PROPERTY DAMAGED DURING THE COURSE ON THE WORK.
10. THE CONTRACTOR SHALL LIMIT HIS / HER ACTIVITY TO THE AREA DESCRIBED WITHIN THE DOCUMENTS UNLESS OTHERWISE PERMITTED BY THE OWNER'S REPRESENTATIVE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY ITEMS DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK. INSTALLATION SHALL MATCH EXISTING IN KIND, QUALITY, AND PERFORMANCE.
12. WHERE EXISTING CONSTRUCTION AND FINISHES ARE CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, PERFORMANCE CHARACTERISTICS, AND APPEARANCE.
13. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLR" MEAN CLEAR DIMENSION TO FACE OF FINISH. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND.
14. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND. VERIFY DIMENSIONS OF ALL OWNER-FURNISHED ITEMS, INCLUDING FURNITURE AND EQUIPMENT, TO ENSURE PROPER COORDINATION WITH CONSTRUCTION.
15. ALL ITEMS IN THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
16. ALL UTILITIES REQUIRED FOR THE CONTINUOUS OPERATION OF ALL OCCUPIED EXISTING FACILITIES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES. ANY SHUT DOWNS FOR NEW CONNECTIONS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE TWO WEEKS PRIOR TO THE REQUESTED SHUT DOWN.
17. COORDINATION WITH OTHER CONTRACTS: IF ANY PART OF THIS CONTRACTOR'S WORK DEPENDS UPON THE WORK OF A SEPARATE CONTRACTOR, THIS CONTRACTOR SHALL INSPECT SUCH OTHER WORK AND PROMPTLY REPORT IN WRITING TO THE OWNER'S REPRESENTATIVE ANY DEFECTS IN SUCH OTHER WORK THAT RENDER IT UNSUITABLE TO RECEIVE THE WORK OF THIS CONTRACTOR. FAILURE OF THIS CONTRACTOR TO SO INSPECT AND REPORT SHALL CONSTITUTE AN ACCEPTANCE OF THE OTHER CONTRACTOR'S WORK, EXCEPT AS TO DEFECTS WHICH MAY DEVELOP IN OTHER CONTRACTOR'S WORK AFTER EXECUTION OF THIS CONTRACTOR'S WORK.
18. COORDINATION OF SCHEDULE: PORTIONS OF THIS WORK MAY BE REQUIRED TO BE COMPLETED ON SCHEDULE IN ORDER TO AVOID DELAY TO OTHER CONTRACTORS OR OWNERS OPERATIONS. CONTRACTOR SHALL STRICTLY ADHER TO ESTABLISHED COMPLETION DATES AS DESIGNATED IN THE SPECIFICATIONS AND COORDINATE WORK SCHEDULE WITH THE OWNER'S REPRESENTATIVE AND OTHER CONTRACTORS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND LIQUIDATED DAMAGES.
19. SCHEDULE ALL WORK WITH THE OWNER'S REPRESENTATIVE, INCLUDING CONSTRUCTION ACCESS AND STORAGE, AND WORK OUTSIDE THE "EXTENT OF WORK" SET FORTH IN THESE DOCUMENTS. THE CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
20. CONSTRUCTION PROCEDURES SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
21. DEMOLITION IS NOT NECESSARILY LIMITED TO ONLY WHAT IS SHOWN ON THIS OR OTHER DRAWINGS OR AS OUTLINED IN THE SPECIFICATIONS. THE INTENT IS TO INDICATE GENERAL SCOPE OF DEMOLITION REQUIRED. CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS DEMOLITON, CUTTING AND PATCHING REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
22. ALL ITEMS IDENTIFIED TO BE SALVAGED SHALL BE DELIVERED IN GOOD CONDITION TO A PLACE OF STORAGE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL OTHER ITEMS MUST BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
23. ARCHITECT IS NOT RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. TO THE EXTENT THESE DOCUMENTS RELATE TO SUCH ISSUES, ARCHITECT'S PARTICIPATION IS SOLELY ADMINISTRATIVE WITHOUT ANY RESPONSIBILITY FOR THE CONTENT OR EXECUTION OF SUCH DOCUMENTS.
24. DETAIL DRAWINGS WITH REFERENCES TO FIRE-RATED ASSEMBLIES OR CONSTRUCTION WHICH HAVE BEEN TESTED BY UNDERWRITERS LABORATORIES, THE CALIFORNIA BUILDING CODE OR ANY OTHER APPROVED TESTING AGENCY, SHALL BE CONSTRUED TO INCLUDE ALL WORK AND PROCEDURES CONTAINED IN THE REFERENCED ASSEMBLY DESCRIPTION..
25. ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE FIRE STOPPED AND SEALED TO MAINTAIN THE REQUIRED RATING.
26. CONTRACTOR TO MAINTAIN CONTEMPORANEOUSLY RECORDED "AS-BUILT" INFORMATION OF ALL WORK, WHICH SHALL BE MARKED IN COLOR ON THE DRAWINGS AND SPECIFICATIONS. A SCANNED PDF OF THE "AS-BUILT" DRAWINGS AND SPECIFICATIONS SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE PRIOR TO FINAL APPLICATION FOR PAYMENT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
27. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION AND DUST COVERS ADJACENT TO OCCUPIED AREAS AS REQUIRED TO CONTAIN DUST AND DEBRIS WITHIN CONSTRUCTION AREA. BROOM CLEAN ALL AREAS, INLCUDING SIDEWALKS AND DRIVEWAYS EACH DAY. KEEP DIRT AND DUST TO A MINIMUM.
28. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
29. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.

ADMINISTRATIVE NOTES

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO **INSTALL STEEL SHADE STRUCTURES** IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS SUCH THAT THE FINISHED WORK WILL NOT COMPLY WITH THE SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, CONSTRUCTION CHANGE DOCUMENTS DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
2. A COPY OF PARTS 1 AND 2, TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONSTRUCTION CHANGE DOCUMENT AND ADDENDA TO BE SIGNED BY THE ARCHITECT AND THE OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS ARE NOT VALID UNTIL APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24.
4. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24.
5. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RE-TEST MAY BE BACK CHARGED TO THE CONTRACTOR.
6. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF CONCRETE PER SECTION 4-331, PART 1, TITLE 24.
7. THIS PROJECT REQUIRES A DSA CERTIFIED PROJECT INSPECTOR. INSPECTOR SHALL BE APPROVED BY DSA. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(B). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
8. SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.
9. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (FORM DSA-6 IN ACCORDANCE WITH SECTION 4-336 AND 4-343, PART 1, TITLE 24.
10. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTION 4-333(A) AND 4-341, PART 1, TITLE 24.
11. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.

Statement of General Conformance

STATEMENT FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS) PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (FOR PERFORMANCE SPECIFICATION ITEMS)

(Application No. _____ File No. _____)

☒ The drawings or sheets listed on the cover or index sheet
☐ This drawing, page of specifications/calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for"

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and

2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Section 4-336, 4-341, and 4-344" of Title 24, Part 1. (*Title 24, Part 1, Section 4-317 (b)*)

I certify that: ☒ All drawings or Sheets listed ont he cover or indext sheet ☐ This drawing or page

☒ is/are in general conformance and ☒ have been coordinated	☐ is/are in general conformance and ☐ have been coordinated
_____ Signature _____ Date	_____ Signature _____ Date
Architect of Engineer designated to be in responsible charge	Architect of Engineer designated to be in responsible charge
MARCUS HIBSER Print Name	Print Name
_____ License No. _____ Expiration Date	_____ License No. _____ Expiration Date

APPLICABLE CODES

ALL WORK PERFORMED UNDER THIS CONTRACT IS TO CONFORM TO THE FOLLOWING CODES AND REGULATIONS:

2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, CCR BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, CCR BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 CCR (2018 IEB CODE AND CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING CODE (CALGreen), PART 11, TITLE 24, CCR

2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS - 2019 CBC CHAPTER 35 AND 2019 CFC CHAPTER 45

THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

ABBREVIATIONS

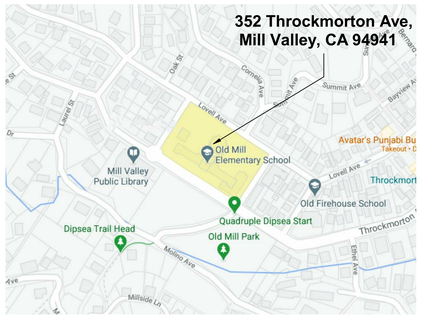
&	AND
@	AT
℄	CENTERLINE
Ø	DIAMETER
#	POUND OR NUMBER
A/C	AIR CONDITIONING
AC	ASPHALTIC CONCRETE
ACOUS	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
ADD	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINIUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BITUM	BITUMINOUS
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CT	CERAMIC TILE
CUST	CUSTODIAN
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DI	DRAIN OR DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DN	DOWN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EVA	EMERGENCY VEHICLE ACCESS
EWC	ELECTRICAL WATER COOLER
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH
FLR	FLOOR
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GSM	GALVANIZED WHEET METAL
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LT	LIGHT
MAX	MAXIMUM
MB	MACHINE BOLT
MDF	MEDIUM DENSITY FIREBOARD
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MUL	MULLION
(N)	NEW
N/A	NOT APPLICABLE
N	NORTH
NIC	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPP	OPPOSITE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
(R)	RELOCATE
RB	RESILIENT OR RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
REQ	REQUIRED
RF	RESILIENT FLOORING
RM	ROOM
RO	ROUGH OPENING
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SD	SOAP DISPENSER
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DRAWINGS
SHT	SHEET
SIM	SIMILAR
SLD	SEE LANDSCAPE DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREW
SND	SANITARY NAPKIN DISPENSER
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPEND
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK
T.O.	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TV	TELEVISION
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WEST
w/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER

DEFERRED APPROVALS

1. NONE

VICINITY MAP

NO SCALE



OWNER

MILL VALLEY SCHOOL DISTRICT
411 SYCAMORE AVE
MILL VALLEY, CA 94941 TEL. (415) 389-7700
CONTACT: JULIO ARROYO FAX. (415) 389-7773

CONSULTANTS

ARCHITECT
HIBSER YAMAUCHI ARCHITECTS, INC.
300 27TH STREET, 2ND FLOOR
OAKLAND, CA 94612 TEL. (510) 446-2222
CONTACT: ERNIE PALEO FAX (510) 446-2211

EXISTING CONDITIONS

SCOPE OF WORK

1. INSTALLATION OF STEEL SHADE STRUCTURES.

INDEX OF DRAWINGS

AGENCY APPROVAL

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

Architect/Engineer Of Record: _____

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

Sheet Title
TITLE SHEET

Client Project Number:

Scale:	As indicated	Sheet	A0.01
Drawn By:	AL		
Checked By:	EP		
Issue Date:			
Revit Version:	2019	Sheet	1 of

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GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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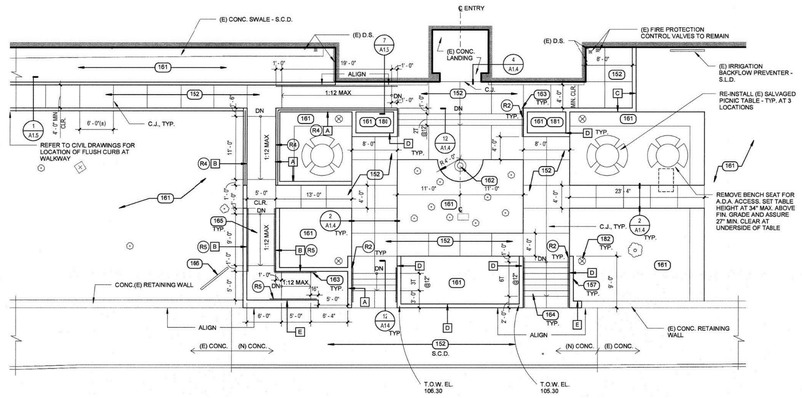
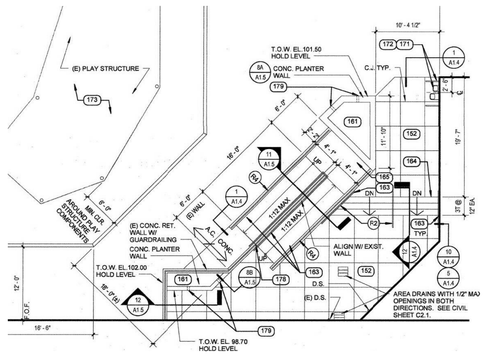


26 MAIN SCHOOL ENTRANCE - FOR REFERENCE ONLY - DSA 01-111689

3/32" = 1'-0"



16 PLAY YARD RAMP - FOR REFERENCE ONLY - DSA 01-111689

1" = 10'-0"

CODE ANALYSIS

MAIN CLASSROOM BUILDING

CONSTUCTION TYPE:	V-B; FULLY SPRINKLERED
ALLOWABLE AREA (CBC TABLE 503):	18,500 SF
OCCUPANCY TYPE:	E
NUMBER OF STORIES:	2
ACTUAL AREA:	
LOWER LEVEL:	7,828 SF
MAIN LEVEL:	14,905 SF
2ND FLOOR:	2,995 SF
	25,728 SF

MULTI-PURPOSE BUILDING

CONSTRUCTION TYPE:	V-B; FULLY SPRINKLERED
ALLOWABLE AREA (CBC TABLE 503):	11,500 SF
OCCUPANCY TYPE:	E
NUMBER OF STORIES:	1
ACTUAL AREA:	4,179 SF

PORTABLE CLASSROOMS BUILDING P-1 & P-2

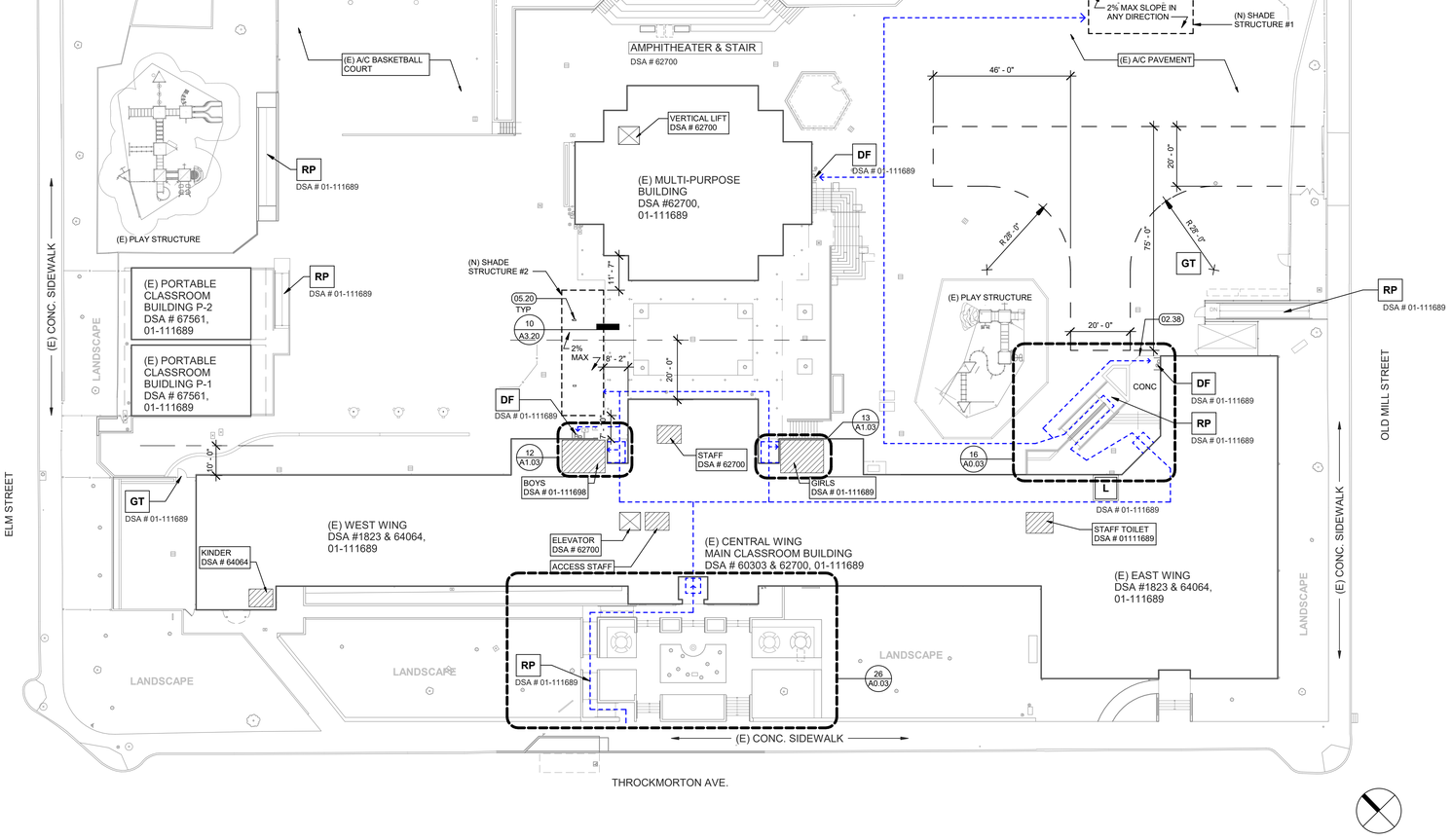
CONSTRUCTION TYPE:	V-A
ALLOWABLE AREA (CBC TABLE 503):	9,500 SF
OCCUPANCY TYPE:	E
NUMBER OF STORIES:	1
ACTUAL AREA:	1,925 SF

SHADE STRUCTURE #1

CONSTRUCTION TYPE:	II-B
ALLOWABLE AREA (CBC TABLE 503):	9,500 SF
OCCUPANCY TYPE:	A2
NUMBER OF STORIES:	1
ACTUAL AREA:	567 SF

SHADE STRUCTURE #2

CONSTRUCTION TYPE:	II-B
ALLOWABLE AREA (CBC TABLE 503):	9,500 SF
OCCUPANCY TYPE:	A2
NUMBER OF STORIES:	1
ACTUAL AREA:	588 SF



30 FIRE SAFETY / CODE ANALYSIS AND ACCESSIBILITY PLAN

1" = 20'-0"

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION	
School District/Owner:	Mill Valley School District
Project Name/School:	Shade Structures at Old Mill Elementary School
Project Address:	352 Throckmorton Avenue, Mill Valley 94941

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐	No ☑	
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐	No ☑	
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☑	No ☐	
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☐	Very High ☑
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☑

KEYNOTE

02.20	(E) PEDESTRIAN GATE
02.38	(E) FLUSH TRANSITION FROM CONCRETE WALKWAY TO ASPHALT. NO CHANGE IN GRADE/ELEVATION. 2% MAX SLOPE IN ANY DIRECTION
05.20	HSS COLUMN, SEE STEEL SHADE STRUCTURE DRAWINGS

LEGEND

- ACCESSIBLE PATH OF TRAVEL AS INDICATED ON PLAN IS A BARRIER - FREE ACCES ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX, AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP REISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTION TO 80" MIN , AND FREE OF PROTRUDING OBJECTS GREATER THAN 4" PROJECTED FROM WALL LOCATED ABOVE 27" AND LESS THAN 80". ARCHITECT SHALL VERIFY THERE ARE NO BARRIERS IN THE PATH OF TRAVEL
- (E) ACCESSIBLE TOILET ROOM FACILITY
- (E) ELEVATOR OR VERTICAL LIFT
- DF (E) ACCESSIBLE DRINKING FOUNTAINS
- L (E) ACCESSIBLE STAIR LIFT
- GT (E) ACCESSIBLE GATE
- RP (E) ACCESSIBLE RAMP
- (E) FENCE

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CAIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN FOR THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLIANCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECTS WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONBLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLAINCE WITH THE CBC AS PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

MILL VALLEY SCHOOL DISTRICT

411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

AGENCY APPROVAL

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel.; 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

Sheet Title
FIRE LIFE SAFETY / CODE ANALYSIS & ACCESSIBILITY SITE PLAN

Client Project Number:

Scale:	As indicated	Sheet	A0.03
Drawn By:	AL		
Checked By:	EP		
Issue Date:			
Revit Version: 2019		Sheet	2 of

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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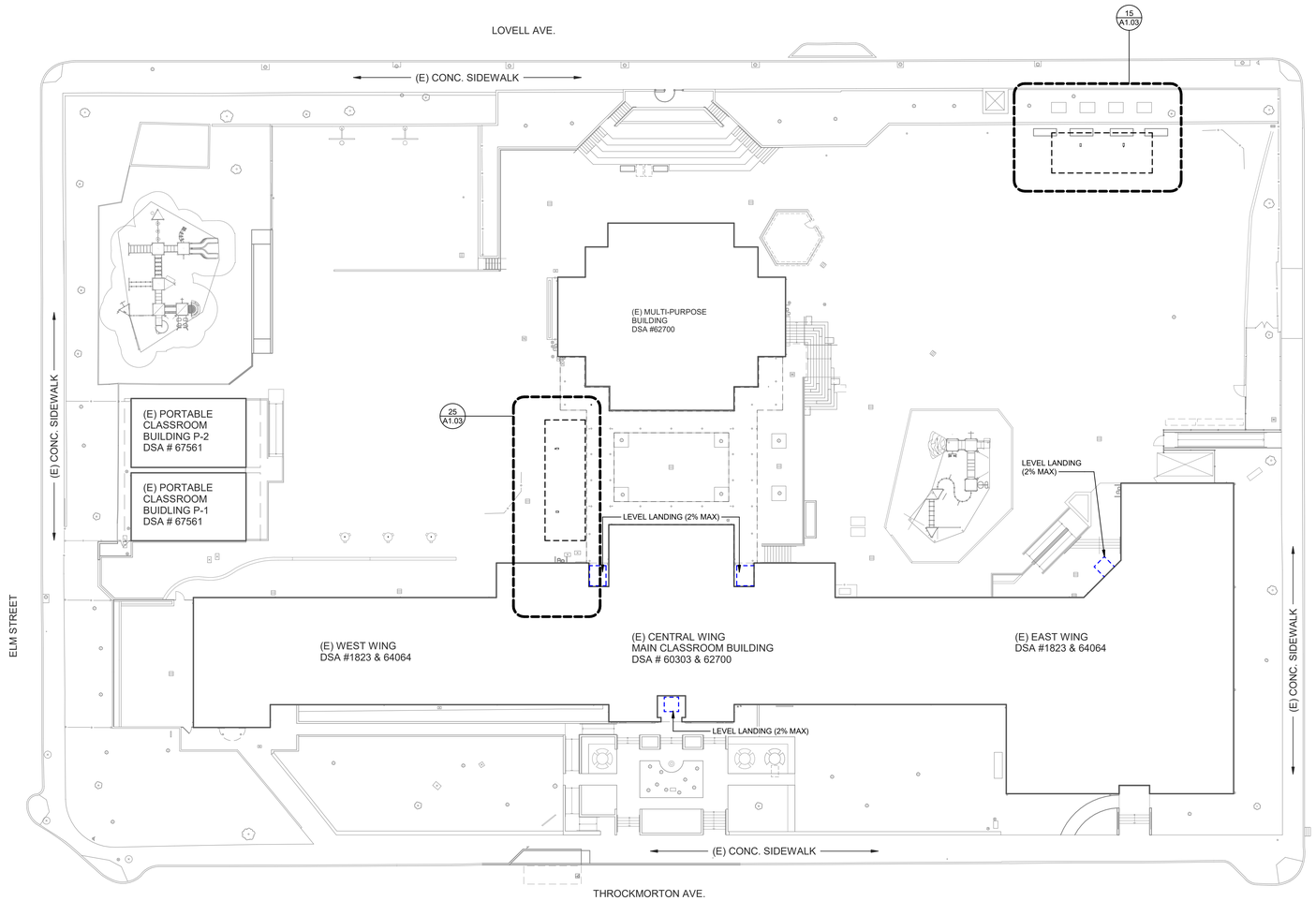

30 SITE PLAN
1" = 20'-0"

GENERAL NOTES

1. NOTIFY ARCHITECT OF ANY IN THE FIELD DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
2. ALL DIMENSIONS SHALL BE FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
3. PATCH & REPAIR (E) A/C AND CONCRETE PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.

LEGEND

DRAWING NOTE

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

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AGENCY APPROVAL

Architect/Engineer Of Record: _____

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300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

Sheet Title
SITE PLAN

Client Project Number:

Scale:	As indicated
Drawn By:	AL
Checked By:	EP
Issue Date:	
Revit Version: 2019	

Sheet
A1.02
Sheet 3 of

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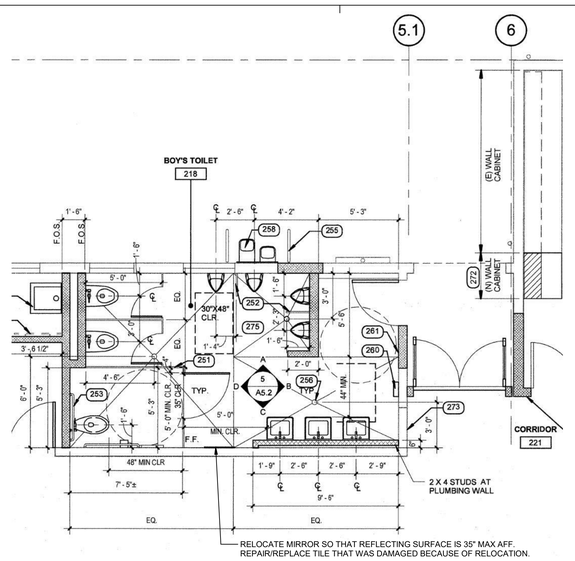
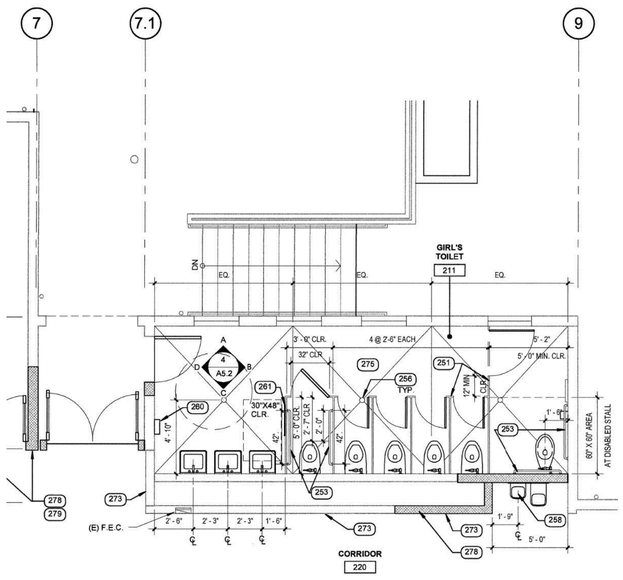


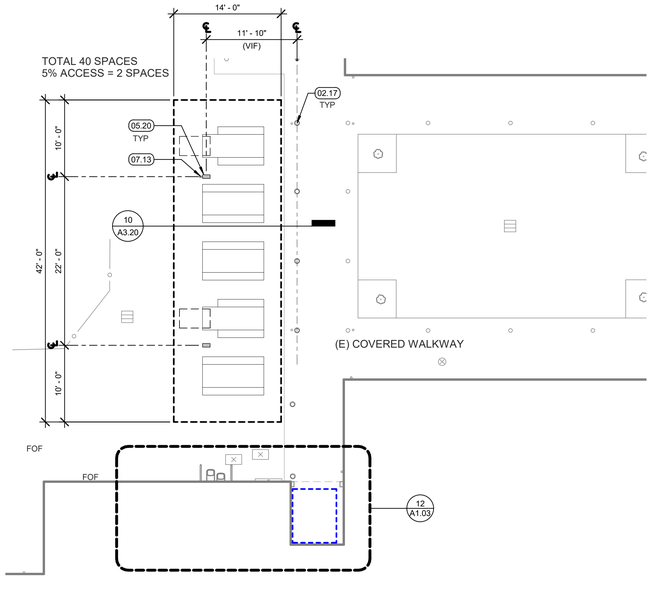
12 EXISTING BOYS TOILET - DSA 01-111689 - RELOCATE MIRROR

1/4" = 1'-0"



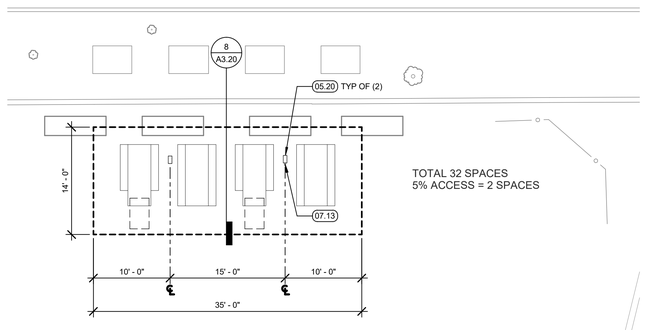
13 EXISTING GIRLS TOILET - DSA 01-111689 - NO WORK

1/4" = 1'-0"



25 ENLARGED SITE PLAN - WEST

1/8" = 1'-0"



15 ENLARGED SITE PLAN - EAST

1/8" = 1'-0"

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3. PATCH & REPAIR (E) A/C AND CONCRETE PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.

KEYNOTES

02.17	(E) STL POST
05.20	HSS COLUMN, SEE STEEL SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

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HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

Sheet Title
PARTIAL SITE PLAN

Client Project Number:

Scale:	As indicated	Sheet	A1.03
Drawn By:	AL		
Checked By:	EP		
Issue Date:			
Revit Version: 2019		Sheet	4 of

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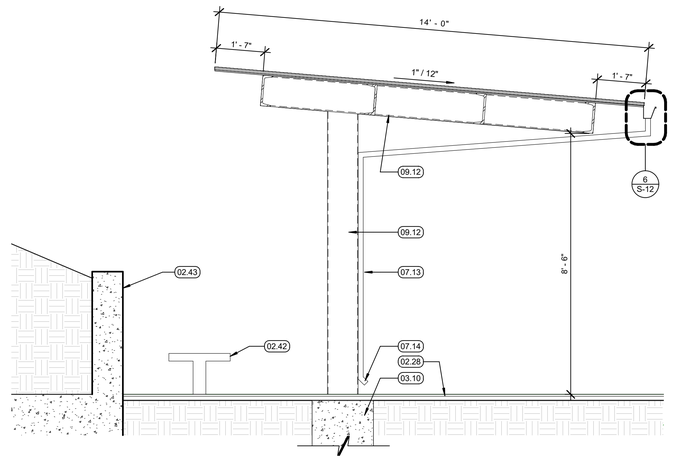
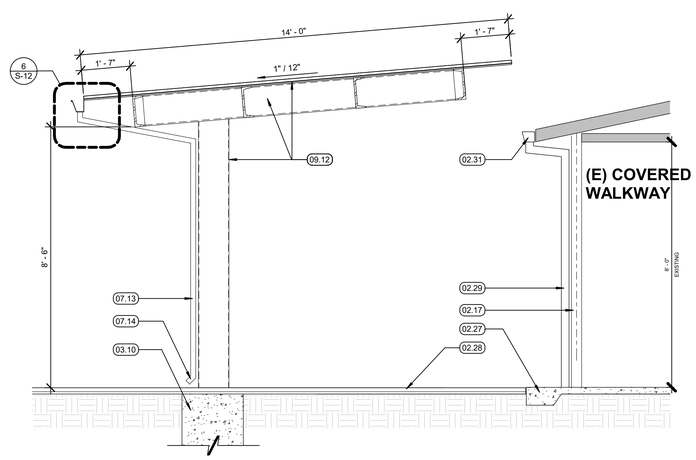
3. PATCH & REPAIR (E) A/C AND CONCRETE PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.

KEYNOTES

02.17	(E) STL POST
02.27	(E) CONC. PAVEMENT
02.28	(E) A/C PAVEMENT
02.29	(E) DOWNSPOUT BEYOND
02.31	(E) GUTTER
02.42	(E) BENCH, PROTECT DURING CONSTRUCTION
02.43	(E) RETAINING WALL
03.10	PIER FOOTING, SEE SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01
07.14	RAINWATER LEADER W/ ANGLED BOTTOM - DRAIN TO GRADE. TERMINATE 3" ABOVE GRADE
09.12	PAINT, COLOR TO BE SELECTED BY ARCHITECT



8 SECTION - SHADE STRUCTURE 1
1/2" = 1'-0"



10 SECTION - WEST WING B
1/2" = 1'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

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300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

Sheet Title
SHADE STRUCTURE SECTIONS

Client Project Number:

Scale:	As indicated	Sheet	A3.20
Drawn By:	AL		
Checked By:	EP		
Issue Date:			
Revit Version:	2019	Sheet	5 of

0 5' 50' GRAPHIC SCALES: 1/16" = 1'-0"
0 5' 25' 1/8" = 1'-0"
0 1' 12' 1/4" = 1'-0"
0 1' 6' 1/2" = 1'-0"
0 4' 3/4" = 1'-0"
0 1' 3' 1" = 1'-0"
0 2' 1 1/2" = 1'-0"
0 1' 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

SECTION 07 71 23
DOWNSPOUTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Galvanized steel downspouts.

1.2 REFERENCES

Contractor's work shall comply with the following standards as applicable. Manufactured items are to be fabricated to these same standards.

The following standards (and publications) are applicable to the extent referenced in the text. The most recent of these standards is implied, unless otherwise stated.

A. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc-Coated Welded and Seamless.

B. ASTM A653 - Steel Sheet, Zinc Coated, (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

C. ASTM A755 - Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

D. ASTM A924 - General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

E. SMACNA - Architectural Sheet Metal Manual.

1.3 SUBMITTALS

A. Submit Shop Drawings of metal items indicating profiles, jointing, terminations, and installation details. Indicate type and spacing of fasteners.

B. Submittal of specific plates from the SMACNA Architectural Sheet Metal Manual constitutes acceptable documentation of installation details.

C. Submit Product Data for pre-coated galvanized steel.

1.4 QUALITY ASSURANCE

A. Applicator: Company specializing in sheet metal Work with five years minimum experience.

B. Perform Work in accordance with SMACNA standard details and requirements.

1.5 STORAGE AND HANDLING

A. Stack preformed material to prevent twisting, bending, or abrasion and to provide ventilation.

B. Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.6 WARRANTY

A. Provide manufacturer's 20-year warranty against defective materials and finish.

B. Provide installer's 2-year warranty coverage for water tightness and integrity of seals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Galvanized Steel: ASTM A653, Grade 33, G90 zinc-coating in accordance with ASTM A924; thickness as specified.

B. Steel Pipe: ASTM A53, Grade B, Schedule 40 steel pipe, standard weight, Type S, one piece without joints, galvanized according to ASTM A53; 1.8 ounces per square foot.

2.2 COMPONENTS

A. Steel Pipe Downspouts: Fabricate from Schedule 40 steel pipe, and other steel stock as indicated, all full penetration welded into one assembly, then hot-dip galvanized. Strainers: Basket-type constructed of 12 gauge stainless steel wire, size to fit correctly into the leader. Provide stainless steel strap tie-downs to clamp to the downspout outlet as indicated.

2.3 ACCESSORIES

A. Anchorage Devices: Meet SMACNA requirements.

B. End Caps, Downspout Outlets, Straps, Support Brackets, Joint Fasteners. Profiled to suit gutters and downspouts.

2.4 FABRICATION

A. Form gutters and downspouts of profiles and sizes indicated.

B. Field measure site conditions prior to fabricating Work.

C. Fabricate with required connection pieces.

D. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance.

E. Hem exposed edges of metal.

F. Seal metal joints.

G. Fabricate gutter and downspout accessories; seal watertight.

H. Form splash pans to size as detailed with rolled edges.

2.5 SHOP FINISHING

A. Shop prepare and prime exposed ferrous metal surfaces.

B. Site paint exposed to view metal surfaces as specified in Section 09 91 00.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive Work. Contractor to correct deficiencies in the surfaces at own expense.

B. Beginning of installation means acceptance of existing conditions.

3.2 INSTALLATION

A. Coordinate layout of downspouts with site conditions and features on the building not shown in the building elevations.

B. Install downspouts, and accessories in accordance with SMACNA requirements.

C. Coordinate installation of sheet metal gutters with steel pipe downspouts.

D. Join lengths with seams sealed watertight. Flash and seal gutters to downspouts and accessories.

E. Seal metal joints watertight.

END OF SECTION

SECTION 09 91 00
PAINTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Surface preparation.

B. Products and application.

C. Surface finish schedule.

1.2 REFERENCES

A. ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.

B. ASTM D2016 - Test Method for Moisture Content of Wood.

1.3 SYSTEM DESCRIPTION

A. Preparation of all surfaces to receive final finish.

B. Painting and finishing Work of this Section using coating systems of materials including primers, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

C. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.

D. Painting and finishing all exterior surfaces of materials.

1.4 DEFINITIONS

A. Conform to ASTM D16 for interpretation of terms used in this Section.

1.5 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

B. Applicator: Company specializing in commercial painting and finishing with five years documented experience.

C. Regulatory Requirements: Comply with applicable codes and regulations of governmental agencies having jurisdiction including those having jurisdiction over airborne emissions and industrial waste disposal. Where those requirements conflict with this specification, comply with the more stringent provisions. Comply

with the current applicable regulations of the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA).

D. Coats: The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as are necessary to produce the required finish.

E. Employ coats and undercoats for all types of finishes in strict accordance with the recommendations of the paint manufacturer.

F. Provide primers and undercoat paint produced by the same manufacturer as the finish coat.

1.6 SUBMITTALS

A. Provide manufacturer's technical information and instructions for application of each material proposed for use by catalog number.

B. List each material by catalog number and cross-reference specific coating with specified finish system.

C. Provide manufacturer's certification that products proposed meet or exceed specified materials.

D. Submit two 8-1/2 inch x 11 inch Samples of each paint color and texture applied to cardboard. Resubmit Samples until acceptable color, sheen and texture is obtained.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.

B. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing. Paint containers not displaying product identification will not be acceptable.

C. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.

D. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.

B. Minimum Application Temperatures for Latex Paints: 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

1.9 EXTRA STOCK

A. Provide a ten gallon container of each finish paint color and sheen to Owner for touchup.

1.10 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Unless specifically identified otherwise, product designations are those of the Dunn-Edwards Corporation, (800) 537-4098 and shall serve as the standard for kind, quality, and function.

B. Subject to compliance with requirements, other manufacturers offering equivalent products are:

1. Benjamin Moore Paints, (213) 722-3484.
2. Frazee Paint (McCloskey, Ameron), (213) 727-2861.
3. Kelly-Moore Paint Company, (650) 592-8337.
4. Pittsburgh Paints, (888) 774-2001.
5. Sherwin Williams, (310) 404-7422.
6. Spectra-Tone Paint Corp., (909) 478-3485.
7. Tnemec Company, Inc., (310) 643-5191.
8. Vista Paint Corporation, (714) 680-3800.

2.2 MATERIALS

A. Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.

B. Good flow and brushing properties; capable of drying or curing free of streaks or sags.

C. Accessory Materials: Linseed oil, shella, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.3 FINISHES

A. Refer to schedule at end of Section for surface finish schedule.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.

B. Examine surfaces to be finished prior to commencement of Work. Report any condition that may potentially affect proper application.

C. Beginning of installation means acceptance of existing surfaces.

3.2 SURFACE PREPARATION

A. Correct minor defects and clean surfaces which affect Work of this Section.

B. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Pretreat with phosphoric acid etch or vinyl wash. Apply coat of etching primer the same day as pretreatment is applied.

C. Shop Primed Steel: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

3.3 PROTECTION OF ADJACENT WORK

A. Protect elements surrounding the Work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by Work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.4 APPLICATION

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to uniform finish.

D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.

E. Sand lightly between coats to achieve required finish.

F. Allow applied coat to dry before next coat is applied.

G. The number of coats specified is the minimum that shall be applied. Apply additional coats when undercoats, stains or other conditions show through final paint coat, until paint film is of uniform finish, color and appearance.

H. Cloudiness, spotting, lap marks, brush marks, runs, sags, spikes and other surface imperfections will not be acceptable.

I. Where spray application is used, apply each coat of the required thickness. Do not double back to build up film thickness of two coats in one pass.

J. Where roller application is used, roll and redistribute paint to an even and fine texture. Leave no evidence of roller laps, irregularity of texture, skid marks, or other surface imperfections.

3.5 CLEANING

A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.

B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.6 PROTECTION OF COMPLETED WORK

A. Protect finished installation.

B. Erect barriers and post warning signs. Maintain in place until coatings are fully dry.

C. Confirm that no dust generating activities will occur following application of coatings.

3.7 COLOR SCHEDULE

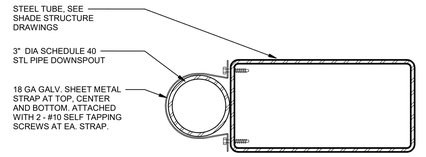
A. Paint and finish colors shall be custom color, mixed and formulated per paint schedule.

3.8 SCHEDULE - EXTERIOR SURFACES

A. The following paint systems shall be used:

1. Steel-Primed or Unprimed (Semi-Gloss Acrylic)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: EVSH50 Evershield
   - 3rd coat: EVSH50 Evershield
2. Steel-Primed or Unprimed (Gloss-Alkyd)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: 10 Syn-Lustro
   - 3rd coat: 10 Syn-Lustro
3. Steel-Galvanized (Semi-Gloss - Acrylic)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: EVSH50 Evershield
   - 4th coat: EVSH50 Evershield
4. Steel-Galvanized (Gloss - Alkyd)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: 10 Syn-Lustro
   - 4th coat: 10 Syn-Lustro

END OF SECTION



1 DOWNSPOUT AT STEEL COLUMNS
3" = 1'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

AGENCY APPROVAL

Architect/Engineer Of Record:_____

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT OLD MILL ELEMENTARY SCHOOL

Sheet Title
MISC. DETAILS

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
A8.01
Sheet 6 of

M BAR C VERSA-CANOPY

PC OWNERSHIP - STRUCTURAL STEEL CONTRACTOR

M BAR C CONSTRUCTION INC.

674 RANCHEROS DR
SAN MARCOS, CA. 92069

PHONE: (760) 744-4131
FAX: (760) 744-4449

LIC # 869960
B AND C51

POINT OF CONTACT: GREG JONES
GREGJ@MBARCONLINE.COM
(775) 787-8845

LEGAL INFORMATION

- USE OF THE PC WITHOUT WRITTEN CONSENT FROM M BAR C CONSTRUCTION, INC. IS STRICTLY PROHIBITED.
- ALL INFORMATION HEREIN IS PROPRIETARY INFORMATION AND UNDER THE OWNERSHIP OF M BAR C CONSTRUCTION, INC.

STANDARD NOTES FOR PC USE

- 4 S.T.E.L. ENGINEERING, INC. IS AVAILABLE TO BID THE GENERATION OF THE FULL DSA SUBMITTAL PACKAGE ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE (DPGRC) OR TO SUPPORT THE DPGRC AS THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD (SEOR).
  CONTACT DUSTIN ROSEPINK AT 4 S.T.E.L. ENGINEERING, INC FOR A PROPOSAL FOR SERVICES AT (949) 305-1150, DKRPINK@4STELENG.COM
- FOR CONSTRUCTION COST INFORMATION, CONTACT M BAR C CONSTRUCTION, INC.
- CUSTOM SIZES AND LOADING REQUIRE SUPPLEMENTARY SHOP DRAWINGS AND CALCULATIONS.

DSA OTC PLAN REVIEWER AND DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE NOTES

1. THE PC STRUCTURAL MEMBERS ARE DESIGNED TO THE FOLLOWING ASCE 7-10 SEISMIC CRITERIA: S_{DS} = 3.2, S_1 = 1.39, R = 1.25.
2. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO VERIFY SITE SPECIFIC DESIGN PARAMETERS COMPLY WITH DESIGN PARAMETERS FOR THE PC SHOWN ON SHEET S-2.
3. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE IS RESPONSIBLE FOR VERIFYING SITE-SPECIFIC WIND PARAMETERS AT ANY AND ALL SITES WHERE THIS PC IS USED. THIS PC DESIGN IS BASED ON WIND SPEED 110 MPH FOR RISK CATEGORY II TYPE STRUCTURES UTILIZING EXPOSURE TYPE C PER ASCE 7-10. SEE DESIGN PARAMETER NOTE 1 ON SHEET S-2.
4. A SITE SPECIFIC GEOTECHNICAL REPORT SHALL BE SUBMITTED JUSTIFYING SOILS VALUES SELECTED IF GREATER THAN 100 PCF FOR LATERAL BEARING AND/OR 1,500 PSF FOR VERTICAL BEARING.
   SEE FOUNDATION NOTES ON SHEET S-3.
5. SITE SPECIFIC DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO SELECT SOILS CLASS FOR SITE SPECIFIC USE.
6. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.
7. DUSTIN ROSEPINK IS NOT ACTING AS SITE SPECIFIC SEOR UNLESS HE IS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR A SIGNED LETTER HAS BEEN SUBMITTED WITH DSA-1 FORM STATING HE ACCEPTS THE RESPONSIBILITY AS THE SEOR FOR THE SITE. REFER TO DSA IR A-18.
8. DUSTIN ROSEPINK WILL NOT SIGN ANY DSA FORMS (e.g. DSA-5, DSA-6, etc.), REVIEW OR APPROVE ANY SUBMITTALS (e.g. CONCRETE MIX DESIGNS, SHOP DRAWINGS, etc.) FOR THE SITE SPECIFIC PROJECT UNLESS HE IS ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD. REFER TO DSA IR A-18.
9. CUSTOM SIZES & LOADINGS REQUIRE SUPPLEMENTARY SHOP DRAWINGS & CALCULATIONS.

DESIGN PARAMETER CHECK LIST

1. VERIFY THE MAXIMUM WIND SPEED AT THE SITE DOES NOT EXCEED 110 MPH EXPOSURE C.
2. VERIFY THE MAXIMUM SEISMIC S_{DS} AT THE SITE DOES NOT EXCEED S_{DS} = 3.2.
3. VERIFY THE SITE SPECIFIC SNOW LOAD AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET OR EXCEED THE SITE SPECIFIC SNOW LOAD. THIS PC HAS OPTIONS FOR NO SNOW AND 20 PSF SNOW LOAD. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS PROVIDED THE PROPER SITE SPECIFIC VALUES FOR P_g, P_f, P_s, C_e, I, C_t.
4. REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET WITH THE GEOTECHNICAL REPORT REQUIREMENTS. IF NO GEOTECHNICAL REPORT IS SUPPLIED VERIFY SOILS CLASS V IS SELECTED.
   - SITES NOT LOCATED IN STATE OR LOCAL GEOHAZARD ZONES UTILIZING THIS PC WITH STRUCTURES NOT EXCEEDING 4,000 SQ FT DO NOT REQUIRE CGS APPROVAL OF THE GEOTECHNICAL REPORT. STRUCTURES MAY BE BROKEN UP INTO MULTIPLE 4,000 SQ FT STRUCTURES WITH SEISMIC BREAKS PER SEISMIC GAPS ON S-2.
5. VERIFY THE SITE SPECIFIC FOUNDATION LOCATIONS MEET WITH SOILS NOTE 8 ON S-3 FOR SET BACK FROM TOP OF SLOPES OR THAT THE GEOTECHNICAL REPORT HAS ALLOWED A SMALLER DISTANCE.
6. VERIFY THE SITE SPECIFIC PLANS PROVIDE THE APPROPRIATE OCCUPANCY AND OCCUPANCY LOAD FACTOR FOR THE SITE. SEE BUILDING DATA ON S-2 FOR SAMPLE ACCEPTABLE OCCUPANCIES AND OCCUPANCY LOAD FACTORS.
7. VERIFY THE SITE SPECIFIC PLANS UTILIZE A RISK CATEGORY II STRUCTURE. RISK CATEGORY II STRUCTURES SHALL NOT PROVIDE SHELTER FOR EMERGENCY VEHICLES OR EQUIPMENT; OR PROVIDE REQUIRED ACCESS TO, REQUIRED EGRESS FROM, OR SHARE A LIFE SAFETY COMPONENT WITH A RISK CATEGORY III OR IV STRUCTURE.
8. VERIFY SELECTION OF USE AND OCCUPANCY CLASSIFICATION PER CBC CHAPTER 3; OCCUPANT LOAD FACTOR PER CBC TABLE 1004.1.2; RISK CATEGORY PER CBC TABLE 1604A.5; TO BE COMPLETED BY DESIGN PROFESSIONAL AT TIME OF DSA OTC OR PROJECT DSA SUBMITTAL.
9. VERIFY APPROPRIATE SEISMIC SEPARATION PER SEISMIC GAPS ON S-2.
10. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS APPROPRIATELY ADDRESSED FIRE SEPARATION AND PROPERTY LINE SETBACKS.
11. VERIFY THE SITE SPECIFIC SOLAR PANEL LAYOUT IS PROVIDED WITH DIMENSIONS THAT DO NOT EXCEED THE PC MAXIMUMS. THE MAXIMUM DIMENSIONS SHALL BE TO THE OUTSIDE EDGES OF THE SOLAR PANEL OR THE STRUCTURAL STEEL, WHICH EVER IS GREATER.
12. VERIFY STEEL SELECTIONS HAVE BEEN PROPERLY COORDINATED WITH BEAM/COLUMN SCHEDULES. REFER TO 2/S-8 & 2/S-9.
13. VERIFY SITE SPECIFIC PURLIN CANTILEVERS HAVE BEEN PROPERLY COORDINATED WITH PURLIN SCHEDULES. REFER TO 1/S-8 & 1/S-9.
14. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.

SHEET INDEX

10 ~~13~~ SHEETS

BID INFORMATION

THE STEEL STRUCTURES IN THIS PC ARE PROPRIETARY TO M BAR C CONSTRUCTION, INC. THE STEEL WORK SHALL NOT GO OUT TO BID.

PRE-CHECK (PC) DOCUMENT

CODE: 2016 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

M BAR C CONSTRUCTION INC.
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREGJ@MBARCONLINE.COM
LIC # 869960
B AND C51
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

COVER SHEET

DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-1

1 OF 13 SHEETS

ABBREVIATIONS

&	AND
@	AT
℄	CENTER LINE
A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
BLDG	BUILDING
BLK'G	BLOCKING
BM	BEAM
BOTT. OR (B)	BOTTOM
CBC	CALIFORNIA BUILDING CODE
CCD	CONSTRUCTION CHANGE DOCUMENT (DSA)
CCR	CALIFORNIA CODE OF REGULATIONS
CFS	COLD FORMED STEEL
C.J.	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CS	CFS C SECTION WITH FLANGE STIFFENING LIPS
DIA., ø	DIAMETER
DPGRC	DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE
DSA	DIVISION OF THE STATE ARCHITECT
DWG	DRAWING
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
EXT.	EXTERIOR
FDN	FOUNDATION
FIN.	FINISH
FLR	FLOOR
FLS	FIRE LIFE SAFETY (DSA)
F.O.C.	FACE OF CONCRETE
F.S.	FAR SIDE
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
H.S.B.	HIGH STRENGTH BOLT (ASTM A325 U.N.O.)
HORIZ.	HORIZONTAL
HT.	HEIGHT
IAMPO	INTERNATIONAL ASSOCIATION OF MECHANICAL AND PLUMBING OFFICIALS
ICC	INTERNATIONAL CODE COUNCIL
INT.	INTERIOR
IOR	INSPECTOR OF RECORD
IR	INTERPRETATION OF REGULATIONS (DSA)
JT	JOINT
LG.	LONG
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M.B.	MACHINE BOLT (ASTM A307 U.N.O.)
MAX.	MAXIMUM
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
(N)	NEW
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NOM.	NOMINAL
N.S.	NEAR SIDE
NTS	NOT TO SCALE
O.C.	ON CENTER
OTC	OVER THE COUNTER (DSA)
O.H.	OPPOSITE HAND
℗ OR PL	PLATE
PJP	PARTIAL JOINT PENETRATION
PC	PRE-CHECK (DSA)
PT	PRESSURE TREATED
PV	PHOTOVOLTAIC
REINFT.	REINFORCEMENT
REQ'D	REQUIRED
SC	SLIP-CRITICAL JOINT PER ASTM SPECS
SCHED.	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SHT'G	SHEATHING
SIM.	SIMILAR
S.M.S.	SHEET METAL SCREW
SQ.	SQUARE
SS	STAINLESS STEEL
ST	SNUG-TIGHTENED JOINT PER ASTM SPECS
STD	STANDARD
(T)	TOP
T&B	TOP AND BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/-	WITH
W/O	WITHOUT
WHS	WELDED HEADED STUD (ASTM A108 U.N.O.)
W.P.	WORK POINT
WT.	WEIGHT
WTS	WELDED THREADED STUD (ASTM A108 U.N.O.)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, 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 THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
4. A 'DSA CERTIFIED' INSPECTOR WITH CLASS 2 CERTIFICATION IS REQUIRED FOR THIS PROJECT.
5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE SCHOOL BOARD SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
7. IF THE PROJECT IS DIVIDED INTO INCREMENTS: THE SCOPE OF WORK FOR EACH INCREMENT MUST BE CLEARLY SPECIFIED ON THE TITLE SHEET OF ALL INCREMENTS SUBMITTED.

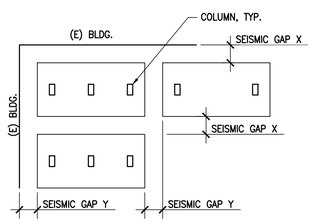
CONSTRUCTION OPTIONS

* ALL CONSTRUCTION OPTIONS INCLUDE OPTIONS FOR CONCRETE DRILLED PIERS AND/OR SPREAD FOOTINGS.

1. 14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW
2. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-9" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
3. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
4. ~~14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-5" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
5. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-6" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
6. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-9" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~

SEISMIC GAPS

OPTION	MAX COLUMN HEIGHT	GAP X	GAP Y
VC14	17'-0"	2½"	7"
VC18	17'-9"	3½"	9½"
VC20	17'-0"	2½"	7"
VC140	17'-5"	3½"	9"
VC180	16'-6"	3"	8½"
VC200	16'-9"	3"	8"



NOTE
1. SEISMIC GAPS LISTED ARE THE MINIMUM GAPS BETWEEN ANY TWO STRUCTURES (I.E. CANOPIES, BUILDINGS) AND DO NOT NEED TO BE COMBINED OR DOUBLED.
2. DIMENSIONS, QUANTITIES, AND LOCATIONS OF STRUCTURES AND COLUMNS SHOWN ABOVE ARE FOR ILLUSTRATIVE PURPOSES ONLY. SEE SITE-SPECIFIC SHEETS FOR LAYOUTS AND QUANTITIES.

STRUCTURAL DATA

LATERAL RESISTING SYSTEM..... STEEL ORDINARY CANTILEVER COLUMN
FOUNDATION ..... CONCRETE DRILLED PIERS AND SPREAD FOOTINGS
TESTING AND INSPECTION LIST..... SEE SHEETS S-3 & S-4

DESIGN PARAMETERS

RISK CATEGORY II

ROOF LIVE LOAD (L_R):
- DECK ONLY ..... 20 psf
- POINT LOAD ..... 300 lb

SNOW LOAD :
- MAX. DRIFT SNOW LOAD..... 0 psf, 20 psf (SEE CONSTRUCTION OPTIONS)

MAXIMUM DEAD LOAD:
- ROOF DECK..... 0.89 psf

WIND: ASCE 7-10 METHOD 2 - ANALYTICAL PROCEDURE
- BASIC WIND SPEED..... 110 mph[1]
- WIND EXPOSURE ..... C[1]
- INTERNAL PRESSURE ..... N/A (OPEN STRUCTURE)
- WIND DIRECTIONALITY FACTOR ..... K_d = 0.85
- VELOCITY PRESSURE COEFFICIENT..... K_z = 0.90
- TOPOGRAPHIC FACTOR ..... K_{zt} = 1.00

SEISMIC: ASCE 7-10
- SEISMIC IMPORTANCE FACTOR ..... I = 1.0
- RESPONSE MODIFICATION FACTOR..... R = 1.25
- MAPPED SPECTRAL RESPONSE ACCELERATION ..... S_S = 3.20[2], S_1 = 1.39
- SITE CLASS ..... D
- DESIGN SPECTRAL RESPONSE ..... S_{DS} = 2.133, S_{D1} = 1.390
- SEISMIC DESIGN CATEGORY ..... D (E WITH GROUND MOTION ANALYSIS)
- SEISMIC FORCE RESISTING SYSTEM ..... STEEL ORDINARY CANTILEVER COLUMN
- SEISMIC RESPONSE COEFFICIENT ..... C_S = 1.707
- ANALYSIS PROCEDURE ..... EQUIVALENT LATERAL FORCE

NOTES:

1. THE PC COMPONENTS & CLADDING AND MAIN WIND FORCE RESISTING SYSTEM DESIGN WIND PRESSURE q_h = 23.7 psf DETERMINED FROM THE CRITERIA LISTED ABOVE. (EXPOSURE C, K_z=0.960, K_{zt}=1.0 , K_d = 0.85).

   THE PC MAY BE USED FOR RISK CATEGORY II TYPE STRUCTURES IN ANY WIND ZONE WHERE $q_h \leq$ 23.7 psf.

   EXAMPLE:
   SITE BASIC WIND SPEED, V =120 mph
   RISK CATEGORY II
   WIND: EXPOSURE B
   K_d = 0.85
   K_z = 0.701
   K_{zt} = 1.00
   q_h = 22.0 psf < 23.7 psf

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

2. THE PC SEISMIC FORCE RESISTING SYSTEM IS GOVERNED BY C_S = 1.707 FROM THE CRITERIA LISTED ABOVE. (R = 1.25, S_S = 3.2, I_E = 1.00).

   THE PC MAY BE USED FOR RISK CATEGORY II STRUCTURES AT ANY SITE WHERE THE SITE SPECIFIC SEISMIC PARAMETER S_S AND R = 1.25 RESULT IN A VALUE $C_S \leq$ 1.707.

   EXAMPLE:
   RISK CATEGORY II
   SOIL: SITE CLASS A
   S_S = 3.4
   S_1 = 1.8
   R = 1.25
   I = 1.00
   S_{DS} = 1.813
   C_S = 1.451 < 1.707

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

BUILDING DATA

TYPE OF CONSTRUCTION..... IIB
OCCUPANCY..... VARIES - SEE EXAMPLES
NUMBER OF STORIES..... 1
BUILDING AREAS..... VARY DUE TO OCCUPANCY - SEE EXAMPLES
MODULE SIZES..... VARY WITH OPTIONS
BUILDING LENGTH:
- ALL WIDTHS..... MAX. 500'-0" LENGTH

NOTE: NO SEISMIC AND/OR THERMAL EXPANSION JOINTS REQUIRED ALONG THE LENGTH OF THE STRUCTURES. (ALL JOINTS ARE INTERNAL)

OCCUPANCY AND BUILDING AREA EXAMPLES:
ALL STRUCTURES SHALL BE BASED ON RISK CATEGORY II STRUCTURE.

A OCCUPANCY:

EXAMPLE 1:
STRUCTURES LOCATED OVER LUNCH AREA WITHOUT FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 15 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 4,500 sq ft

EXAMPLE 2:
STRUCTURES LOCATED OVER LUNCH AREA WITH FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 18"/person ALONG LINEAR BENCH - MAX 300 FOR RISK II
MAX SQ FT: 5,400 LINEAR INCHES OF FIXED SEATING UNDER THE STRUCTURE

EXAMPLE 3:
STRUCTURES LOCATED OVER AN AREA DESIGNATED FOR ASSEMBLY (TYPICALLY AMPHITHEATER, OR OTHER SPACE WITH FIXED SEATING OR DESIGNATED AS A STANDING ASSEMBLY AREA)
OCCUPANCY: A
OCCUPANCY LOAD: 7 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 2,100 sq ft

SHADE STRUCTURE

EXAMPLE 1:
STRUCTURES LOCATED OVER A FIELD, BLACKTOP, PLAYGROUND EQUIPMENT,OR OTHER NON DESIGNATED USE SPACES
OCCUPANCY: E
OCCUPANCY LOAD: 20 sf/person - MAX 250 FOR RISK II
MAX SQ FT: 5,000 sq ft

PARKING

EXAMPLE 1:
STRUCTURES LOCATED OVER PARKING
OCCUPANCY: S-2
OCCUPANCY LOAD: 200 sf/person
MAX SQ FT: UNLIMITED PER CBC 406.5.4 AND 406.5.5

CODES

TITLE 24, CCR CODES:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE (CAC) ..... (PART 1, TITLE 24, CCR)
2. 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2..... (PART 2, TITLE 24, CCR) (2015 INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS)
3. 2016 CALIFORNIA ELECTRICAL CODE ..... (PART 3, TITLE 24, CCR) (2014 NATIONAL ELECTRICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
4. 2016 CALIFORNIA MECHANICAL CODE (CMC) ..... (PART 4, TITLE 24, CCR) (2015 UNIFORM MECHANICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
5. 2016 CALIFORNIA PLUMBING CODE (CPC) ..... (PART 5, TITLE 24, CCR) (2015 UNIFORM PLUMBING CODE WITH 2016 CALIFORNIA AMENDMENTS)
6. 2016 CALIFORNIA ENERGY CODE ..... (PART 6, TITLE 24, CCR) (2016 EDITION CALIFORNIA ENERGY COMMISSION BUILDING ENERGY EFFICIENCY STANDARDS)
7. 2016 CALIFORNIA FIRE CODE (CFC) ..... (PART 9, TITLE 24, CCR) (2015 INTERNATIONAL FIRE CODE WITH 2016 CALIFORNIA AMENDMENTS)
8. 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE ..... (PART 11, TITLE 24, CCR)
9. 2016 CALIFORNIA REFERENCED STANDARDS CODE ..... (PART 12, TITLE 24, CCR)
   NFPA 13 - 2016
   NFPA 72 - 2016

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2016 CBC, CHAPTER 35
2016 CFC, CHAPTER 80

FIRE LIFE SAFETY

AUTOMATIC FIRE SPRINKLERS REQUIRED? (Y/N)..... N

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

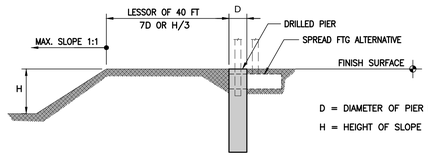
VERSA CANOPY
GENERAL DATA

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-2
2 OF 13 SHEETS

SOILS NOTES

1. IF NO GEOTECHNICAL REPORT IS SUPPLIED AT THE TIME OF DSA REVIEW ADDRESSING SITE-SPECIFIC PARAMETERS, FOUNDATION SELECTIONS SHALL BE BASED ON CLASS W SOILS (SOIL CLASS 5 OF CBC TABLE 1806A.2 WITH DOUBLING OF LATERAL BEARING PRESSURE FOR STRUCTURES NOT ADVERSELY AFFECTED BY ½" MOTION AT GROUND SURFACE) IN THE SOIL CLASS TABLE BELOW.
2. WHEN A GEOTECHNICAL REPORT IS SUPPLIED THE GEOTECHNICAL ENGINEER SHALL REVIEW THE SITE CONDITIONS, TESTING RESULTS, AND ALL ALLOWABLE INCREASES AND SUPPLY THE FINAL SOIL CLASS TO BE USED FROM THE BELOW TABLE. THE GEOTECHNICAL ENGINEER SHALL PROVIDE IN THE GEOTECHNICAL REPORT THE FOLLOWING BASE VALUES WITHOUT INCREASE FOR 24" DIAMETER PIERS: THE ALLOWABLE VERTICAL END BEARING, ALLOWABLE LATERAL BEARING, ALLOWABLE DOWNWARD SKIN FRICTION, ALLOWABLE SKIN FRICTION TO RESIST UPLIFT. THE GEOTECHNICAL ENGINEER SHALL ALSO PROVIDE ANY ALLOWABLE INCREASES TO THE BASE VALUES. ALLOWABLE INCREASES ARE TYPICALLY DUE TO BUT NOT EXCLUSIVE TO: DOUBLE VALUES DUE TO ISOLATED FOUNDATIONS, DOUBLE VALUES DUE TO THE STRUCTURE NOT BEING ADVERSELY AFFECTED BY 1/2" DEFLECTION AT THE SURFACE, A 4/3 INCREASE DUE TO SHORT TERM LOADING, AND ANY OTHER ALLOWABLE INCREASES. THE GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION OF THE SOIL CLASS TO BE USED AFTER ALL INCREASES HAVE BEEN APPLIED. ALL FOUNDATIONS HAVE BEEN DESIGN BASED ON THE VALUES PRESENTED IN THE BELOW TABLE. THE GEOTECHNICAL REPORT SHALL ADDRESS IF THE USE OF STEEL CASING THAT IS TWISTED INTO PLACE AND LEFT INSTALLED AFFECTS ANY ALLOWABLE VALUES.
3. THE GEOTECHNICAL ENGINEER MAY SPECIFY DIFFERENT SOILS CLASSES TO BE USED FOR THE DIFFERENT STRUCTURE TYPES (VC14 OR VC20), DIFFERENT AREAS OF THE SITE (I.E. NORTH LOT OR WEST LOT), OR THE ENGINEER MAY SPECIFY ONE SOILS CLASS TO BE USED FOR THE ENTIRE SITE.
4. THE GEOTECHNICAL ENGINEER SHALL ADDRESS IN THE REPORT ANY CONCRETE DURABILITY REQUIREMENTS IN ACCORDANCE WITH ACI 318-11 CHAPTER 4.
5. THE GEOTECHNICAL REPORT SHALL BE SPECIFIC TO THE LOCATION OF THE STRUCTURES. BORING(S) SHALL BE DONE AT THE SPECIFIC LOCATION(S) WHERE THE STRUCTURES ARE TO OCCUR. THE GEOTECHNICAL REPORT SHALL CONFORM TO 2016 CBC SECTION 1803A.
6. A COPY OF THE GEOTECHNICAL REPORT SHALL BE PROVIDED AT THE TIME OF PLAN REVIEW.
7. AT THE TIME OF PLAN REVIEW, THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE SHALL SELECT A SOILS CLASS ON THE SITE-SPECIFIC PLANS BASED ON THE GEOTECHNICAL REPORT (OR NOTE 1 ABOVE).

   HOLES MAY BE LEFT OPEN FOR ANY AMOUNT OF TIME AS LONG AS THEY ARE PROPERLY COVERED FOR OSHA STANDARDS.
8. FOUNDATIONS ADJACENT TO SLOPED GROUND SURFACES SHALL BE SET BACK PER THE FOLLOWING FIGURE UNLESS OTHERWISE RECOMMENDED BY A SITE SPECIFIC GEOTECHNICAL REPORT.



DESIGN SOIL VERTICAL AND LATERAL BEARING VALUES

SOIL CLASS	VERTICAL BEARING PRESSURE (psf)	LATERAL BEARING PRESSURE (psf/ft)	MAXIMUM LATERAL BEARING (psf)	MIN. DOWNWARD SKIN FRICTION (psf)	MIN. UPWARD SKIN FRICTION (psf)
CLASS V	1,500	133	2,000	175	50
CLASS W	1,500	267	4,000	225	50
CLASS X	2,000	400	6,000	250	75
CLASS Y	2,000	533	8,000	275	75
CLASS Z	3,000	800	12,000	325	100

SPECIAL INSPECTION

1. SOILS:
   - VERIFY THE SITE HAS BEEN PREPARED PROPERLY PRIOR TO PLACEMENT OF CONTROLLED FILL AND/OR EXCAVATIONS FOR FOUNDATIONS.
   - VERIFY THAT THE FOUNDATION EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
   - VERIFY THAT MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
2. PIER FOUNDATIONS:
   - INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER.
   - VERIFY LOCATIONS OF PIERS.
3. CONCRETE:
   - VERIFY USE OF REQUIRED DESIGN MIX, DETERMINE THE TEMPERATURE OF THE CONCRETE, AND (WHERE REQUIRED) PERFORM AIR CONTENT TEST.
   - TEST CONCRETE (COMPRESSION TEST).
   - INSPECT PLACEMENT OF FORMWORK, REINFORCING STEEL, EMBEDDED ITEMS, AND CONCRETE. INSPECT CURING AND FORM REMOVAL.
   - SLUMP TEST SHALL BE PERFORMED PER SITE SPECIFIC DSA-103.
4. STEEL:
   - VERIFY THAT ALL MATERIALS ARE APPROPRIATELY MARKED AND THAT:
     - MILL CERTIFICATES INDICATE MATERIAL PROPERTIES THAT COMPLY WITH REQUIREMENTS.
     - MATERIAL SIZES, TYPES AND GRADES COMPLY WITH REQUIREMENTS.
   - TEST UNIDENTIFIED MATERIALS.
   - VERIFY MEMBER LOCATIONS, BRACING AND ALL DETAILS CONSTRUCTED IN THE FIELD.
   - VERIFY STIFFENER LOCATIONS, CONNECTION TAB LOCATIONS, AND ALL CONSTRUCTION DETAILS FABRICATED IN THE SHOP.
   - HIGH STRENGTH SLIP CRITICAL BOLTING.
5. SHOP FABRICATION:
   - VERIFY FABRICATOR'S FABRICATION AND QUALITY CONTROL PROCEDURES.
   - VERIFY ALL ASPECTS OF SHOP FABRICATION INCLUDING MEMBER LOCATIONS, DIMENSIONAL LAYOUT OF ALL PARTS AND PIECES, BOLTING, ETC.
6. SEE DSA APPROVED 103 FOR ADDITIONAL REQUIREMENTS.

GENERAL NOTES

1. DESIGN PER 2016 C.B.C. AND ITS PRESCRIBED LOADING AND MATERIAL SPECIFICATIONS:
   - ASCE 7-10
   - 14TH EDITION AISC STEEL CONSTRUCTION MANUAL
   - 2012 AISI COLD FORMED STEEL STANDARD
   - ACI 318-14
2. THESE STRUCTURES ARE NOT DESIGNED TO BE, NOR SHALL THEY BE, ENCLOSED.
3. ALL DIMENSIONS, CONDITIONS, AND ELEVATIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY DISCREPANCIES ARE FOUND OR IF ANY CONDITION EXISTS NOT AS SHOWN ON THE DRAWINGS THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY.
4. IF THE SNOW LOAD OPTION IS USED THEN THE SITE-SPECIFIC MAX GROUND SNOW LOADING INCLUDING DRIFT MUST BE LESS THAN OR EQUAL TO 20 PSF.
5. ALL SCREWS TO BE ITW BUILDEX TEK SCREWS PER ICC ESR-1976 OR ELCO DRILL SCREW PER ICC ESR-3294.
6. OWNER TO SIGN AUTHORIZATION TO PROCEED PRIOR TO DRILLING.

   SEE SAMPLE BELOW:

MBarC CONSTRUCTION
THE STRENGTH BETWEEN SUN AND SHADE™

674 Rancheros Drive
San Marcos, CA 92069
PH: 760.744.4131
FAX: 760.744.4449
CA LIC #869960

Authorization to Proceed

Project Name: _____ Foreman: _____

Site Name: _____ Contractor: _____

As an authorized representative of Contractor listed above, I,_____ agree to the following statements below:

_____(initial) **LAYOUT:** The onsite layout for installation of structural steel for carports and canopies has been inspected and is approved as is.

_____(initial) **ARRAY ORIENTATION/CONCRETE POUR:** The tilt and direction of the canopies have been verified and are approved as is.

ARRAYS:

_____

_____

_____

_____

_____

_____

It is understood that additional costs will apply due to the following delays: re-layout not due to M Bar C, underground site conflicts (unmarked utility lines, including but not limited to water, sewer, fire, irrigation, electrical; encountered underground water; change in soils condition, including but not limited to hard drilling, caving soils, obstructions).

BY: _____ DATE: _____
(signature)

www.mbarconline.com

STEEL NOTES

1. COLD FORMED STEEL SIZES ARE BASED ON BARE STEEL THICKNESS.
2. STRUCTURAL PURLIN, BEAM & COLUMN MEMBERS SHALL HAVE MINIMUM STEEL YIELD STRENGTHS AS INDICATED.
3. STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153, CLASS D) OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION.
4. ALL EXPOSED STEEL FASTENERS, INCLUDING CAST IN PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION-PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT COMPLY WITH THE 1000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUIK GUARD BY SIMPSON, KWIK-COTE BY HILTI, STALGARD BY ELCO, VISTACORR BY SFS INTEC, ETC.)
5. STEEL FABRICATION SHALL COMPLY WITH LATEST AISC SPECIFICATIONS.
6. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE ASTM A1085 GR. 50 U.N.O. ASTM A1085 STEEL HAS THE SAME OR BETTER PROPERTIES AND WELDABILITY THAN ASTM A500 GR. B.
7. COLD FORMED STEEL (CFS) MEMMBERS SHALL BE ASTM A653 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi) OR ASTM A1011 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi).
8. ZINC COATING OF STRUCTURAL STEEL SHALL CONFORM WITH G90 STANDARD OR BETTER. COLD FORMED STEEL (CFS) MEMBERS TO BE GALVANIZED IN ACCORDANCE ASTM A653 G90 STANDARD. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS NOTED OTHERWISE.
9. ALL STEEL MEMBERS TO BE GALVANIZED OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT AND FINISH COAT OR EQUIVALENT PAINT SYSTEM. CONTRACT DOCUMENTS SHALL SPECIFY THE TYPE OF SSPC CORROSION RESISTING SYSTEM TO BE UTILIZED AND THE SSPC GRADE FOR CLEANING, MINIMUM SSPC GRADE SP2.
10. BOLTS SHALL CONFORM TO THE ASTM A307 SPECIFICATIONS UNLESS NOTED OTHERWISE. INSPECTION OF A307 BOLTING IS NOT REQUIRED.
11. ASTM A307 BOLTS MAY BE SUBSTITUTED WITH THE SAME NUMBER AND SIZE OF SAE J429 GRADE 2 BOLTS.
12. BOLTS SHALL BE TIGHTENED TO SNUG-TIGHT CONDITION UNLESS NOTED OTHERWISE EXCEPT FOR A325-SC HIGH STRENGTH BOLTS USED IN THE BEAM TO COLUMN CONNECTION.
13. A325-SC BOLTS SHALL BE PRE-TENSIONED PER AISC SPECIFICATIONS USING APPROVED LOAD INDICATOR METHODS INCLUDING BUT NOT LIMITED TO TURN-OF-THE NUT WITH MATCH MARKING, TWIST OFF TENSION CONTROL OR DIRECT TENSION INDICATOR BOLT, NUT AND WASHER ASSEMBLIES.
14. ASTM A307 BOLTS SHALL HAVE STANDARD WASHERS UNDER THE NUT & BOLT HEAD (F436 WASHERS ARE NOT REQUIRED). STANDARD WASHERS DO NOT REQUIRE HARDNESS TEST.
15. BOLT HOLES FOR ½"ø BOLTS SHALL BE AS FOLLOWS: STANDARD HOLES: 9/16"ø

CONCRETE NOTES

1. CONCRETE MIN. 4,500 PSI AT 28 DAYS UNLESS A SOILS REPORT IS PROVIDED THAT ALLOWS FOR A LOWER STRENGTH (3,000 PSI MIN.). BATCH PLANT INSPECTION NOT REQUIRED.
2. CONRETE SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS BASED ON EXPOSURE CLASS IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.2.1 WHEN DETERMINED BY A SITE-SPECIFIC GEOTECHNICAL REPORT.

REQUIREMENTS FOR CONCRETE BASED ON EXPOSURE CLASS

EXPOSURE CLASS ACI TABLE 19.3.2.1	MINIMUM CONCRETE STRENGTH F'_c	CEMENT TYPE ASTM C150	MAX. WATER/CEMENT RATIO W/M
NOT DETERMINED	4,500 PSI	TYPE V	0.45
F0, S0, P0, C0, C1	3,000 PSI	TYPE II	N/A
S1, P1	4,000 PSI	TYPE II	0.50
ALL OTHER	4,500 PSI	TYPE V	0.45

3. CONCRETE EXPOSED TO THAW AND FREEZE CYCLE SHALL BE AIR ENTRAINED PER ACI 318-14 TABLE 19.3.1.1.
4. CONCRETE TO ATTAIN 1000 PSI PRIOR TO REMOVAL OF SHORING AND/OR INSTALLATION OF BEAMS AND PURLINS. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 1000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
5. CONCRETE TO REACH 3000 PSI PRIOR TO INSTALLATION OF ROOF DECK. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 3000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
6. REINFORCEMENT BARS SHALL BE ASTM A615, GR60 TYPICAL, U.N.O.
7. MINIMUM CONCRETE COVER SHALL BE 2½" TO EARTH (DRILLED PIER FOUNDATIONS ONLY), 3" TO EARTH ALL OTHER CONCRETE, 2" TO EXPOSED SURFACES PER CBC TABLE 1808A.8.2
8. ALL REINFORCING STEEL AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED PRIOR TO THE POURING OF CONCRETE.
9. ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 & 318 STANDARDS.
10. AGGREGATE GRADATION AND QUALITY SHALL BE IN ACCORDANCE WITH ACI 302-1R.
11. COLD JOINTS SHALL HAVE A ROUGHENED SURFACE. BONDING AGENT SHALL COMPLY WITH ASTM C1059. A SUBMITTAL FOR CONCRETE BONDING AGENT SHALL BE APPROVED BY DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO INSTALLATION. DSA INSPECTOR OF RECORD TO PERIODICALLY INSPECT INSTALLATION OF BONDING AGENT.
12. BATCH PLANT INSPECTION NOT REQUIRED PER CBC 1705A3.3.2. SUBJECT TO:
    - A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.
    - BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD, AND TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.
11. CONCRETE MAY BE PUMPED, POURED, TAILGATED, OR OTHER SUCH METHODS INTO PLACE. CONCRETE SHALL BE ALLOWED TO FREE FALL THE ENTIRE DEPTH OF THE FOUNDATION. PLACEMENT OF ANY FREE-FALL CONCRETE SHALL BE SUCH THAT THE CONCRETE DOES NOT ALTER THE EMBEDMENT DEPTH OR THE CLEARANCE OF THE REINFORCING BAR CAGE OR OTHER EMBEDDED MATERIALS.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

GENERAL NOTES

DRAWN
GM
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KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-3
3 OF 13 SHEETS

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Spread footings without post installed anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic		**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*).
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
+	**WOOD**			
+	**OTHER**			

3 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY SPREAD FOOTINGS**

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier and Pad Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

1 / - **SAMPLE DSA 103 - STRUCTURES WITH PIER & SPREAD FOOTINGS**

THE EXAMPLE FORM DSA-103'S SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT-SPECIFIC FORM DSA-103'S. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE FORM DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

2 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY PIER FOOTINGS**

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER — DUSTIN K. ROSEBRAK — S 5885 — STRUCTURAL — STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 865960 B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM | (775) 787-8845
GREG JONES

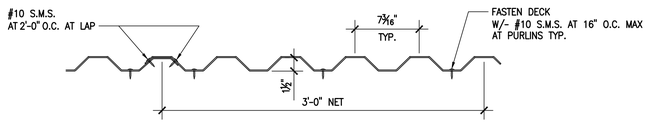
4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

SAMPLE DSA-103 FORMS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-4
4 OF 13 SHEETS

ROOF DECK SPECIFICATIONS						
SECTION PROPERTIES			TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
GA	F_y (ksi)	WEIGHT (psf)	I_+ (in.^{4}/ft.)	S_+ (in.^{3}/ft.)	I_- (in.^{4}/ft.)	S_- (in.^{3}/ft.)
26	80	0.89	0.0840	0.0762	0.0817	0.0623

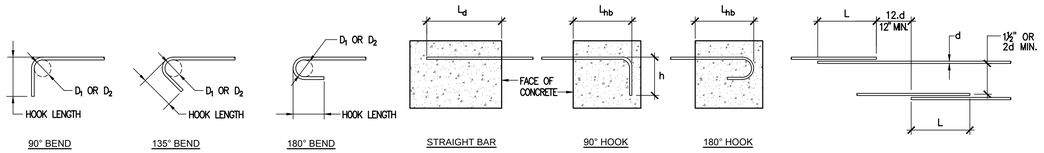


NOTES:

1. MATERIAL AND SECTION PROPERTIES LISTED ABOVE ARE MINIMUM REQUIRED VALUES FOR METAL DECK BASED ON AEP HR-36 26 GA.
2. METAL ROOF DECK SHALL BE CLASS A PER CBC CHAPTERS 7A AND 15.

3 - DECK DETAIL

N.T.S.



90° BEND | 135° BEND | 180° BEND | STRAIGHT BAR | 90° HOOK | 180° HOOK

FINISHED BEND DIAMETERS		
BAR SIZE	D_1	D_2
#3	1½"	2¼"
#4	2"	3"
#5	2½"	3¾"
#6, #7, #8	6d	6d

'D_1' - FINISHED BEND DIA. FOR STIRRUP & TIE HOOKS.
'D_2' - BEND DIA. FOR STD HOOKS.
'd' - BAR DIAMETER

STANDARD HOOK LENGTHS				
BAR SIZE	MAIN REINFT.		STIRRUP & TIE HOOKS	
	90°	180°	90°	180°
#3	6"	4"	3½"	4¼"
#4	8"	4½"	4½"	4½"
#5	10"	5"	5"	6"
#6	12"	6"	12"	7½"
#7	14"	7"	14"	9"
#8	16"	8"	16"	10"

A STANDARD HOOKS

REINFORCEMENT DEVELOPMENT LENGTHS				
CONCRETE STRENGTH		F'_C = 3,000 PSI		
NOMINAL BAR SIZE	h	L_d		L_{hb}
		TOP BARS	OTHER BARS	
#3	6"	1'-10"	1'-5"	9"
#4	8"	2'-5"	1'-10"	11"
#5	10"	3'-0"	2'-4"	1'-2"
#6	12"	3'-7"	2'-9"	1'-5"
#7	14"	5'-3"	4'-0"	1'-7"
#8	16"	6'-0"	4'-7"	1'-10"

NOTES:

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW.

B DEVELOPMENT LENGTHS

REINFORCEMENT LAP SPLICE LENGTH 'L'		
CONCRETE STRENGTH	F'_C=3,000 PSI	
NOMINAL BAR SIZE	TOP BARS	OTHER BARS
#3	2'-4"	1'-10"
#4	3'-2"	2'-5"
#5	3'-11"	3'-0"
#6	4'-8"	3'-7"
#7	6'-9"	5'-3"
#8	7'-9"	6'-0"

NOTES:

1. LAP SPLICE SHALL BE INCREASED 50% WHERE CLEAR SPACE BETWEEN BARS IS LESS THAN 2 BAR DIAMETERS AND/OR THE CLEAR COVER IS LESS THAN ONE BAR DIAMETER.

C OFFSETS AND LAP SPLICES

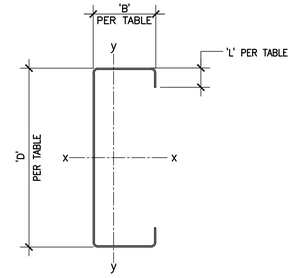
4 - TYPICAL REINFORCEMENT BAR BENDS AND LAPS

N.T.S.

SECTION NAME	D (in)	B (in)	L (in)	GA	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
							I_x (in^4)	S_w (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
CS12 x 4 x 0.102 (12 GA)	12	4.0	1.0	12	7.35	2.16	46.87	6.76	4.66	4.38	1.53	1.42
CS12 x 4 x 0.124 (10 GA)	12	4.0	1.0	10	8.91	2.62	56.37	8.59	4.64	5.20	1.82	1.41
CS14 x 4 x 0.102 (12 GA)	14	4.0	1.0	12	8.04	2.36	67.42	8.22	5.34	4.57	1.55	1.39

NOTES:

1. ALL PURLIN SECTIONS ARE ASTM A653, GR 55, F_y=55 ksi
2. ALL LIGHT GAGE STEEL DESIGNED USING 2012 AISI COLD-FORMED STEEL DESIGN MANUAL.
3. PROPERTIES PER AEP STANDARD SIZES.
4. ACTUAL MANUFACTURER'S PROPERTIES MUST MEET OR EXCEED AEP STANDARD PROPERTIES.



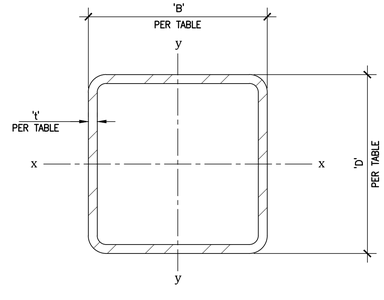
1 - PURLIN & BEAM COLD FORMED C-SECTION

N.T.S.

SECTION NAME	D (in)	B (in)	t (in)	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
						I_x (in^4)	S_x (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
HSS 12 x 6 x $^1/_4$	12	6	1/4	29.23	8.59	161.00	26.80	4.33	55.20	18.40	2.53

NOTES:

1. ALL COLUMNS SHALL BE ASTM A1085 GR. 50 (F_y=50 ksi)



2 - HSS COLUMN

N.T.S.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

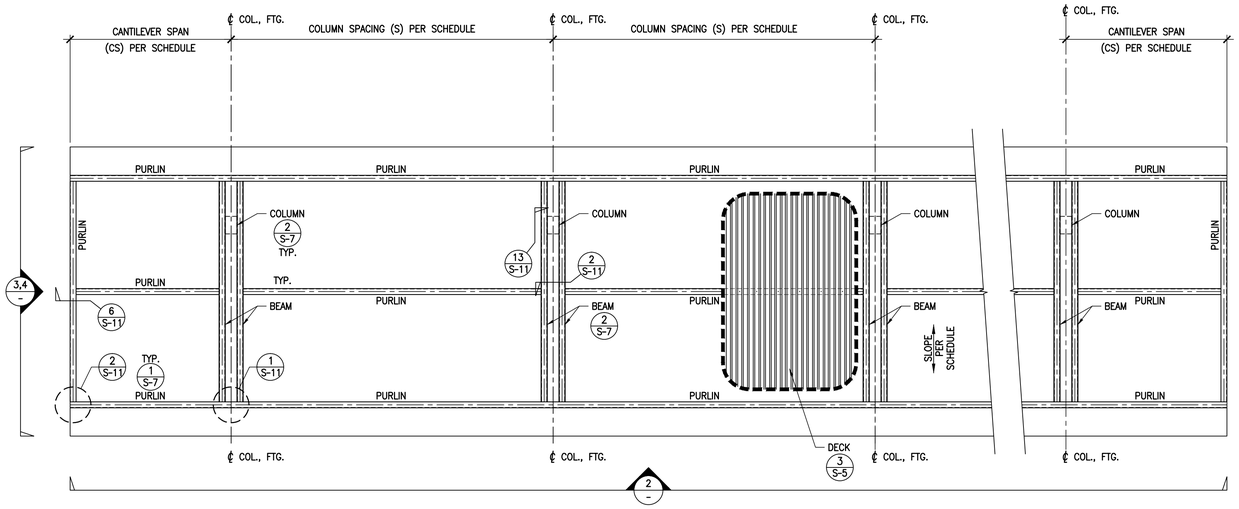
MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

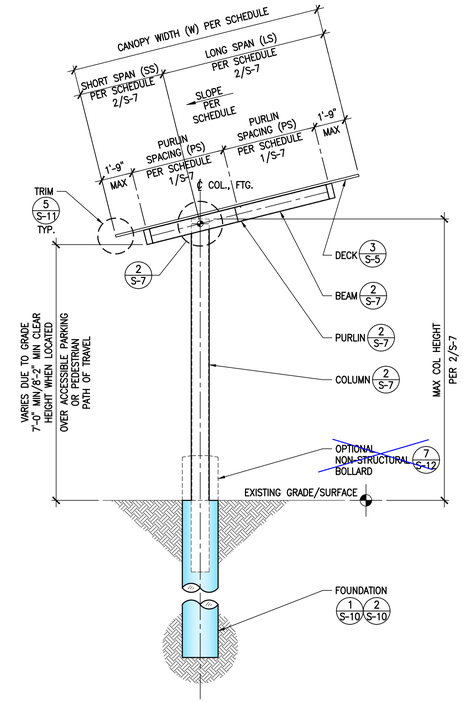
VERSA CANOPY

SECTION PROPERTIES & REBAR DETAILS

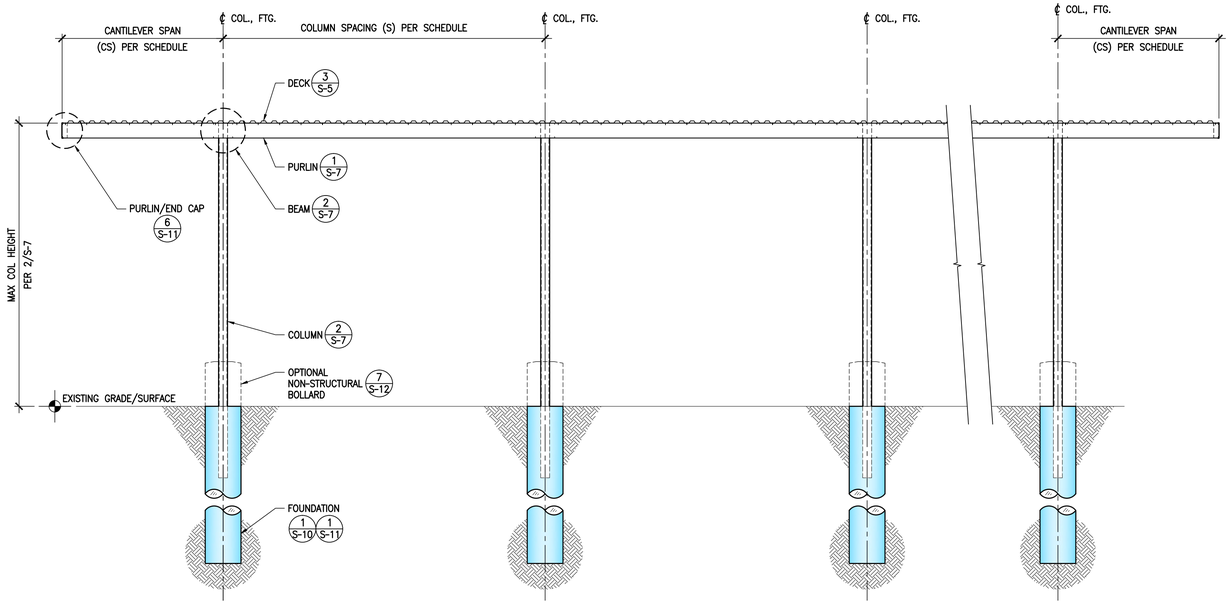
DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-5
5 OF 13 SHEETS



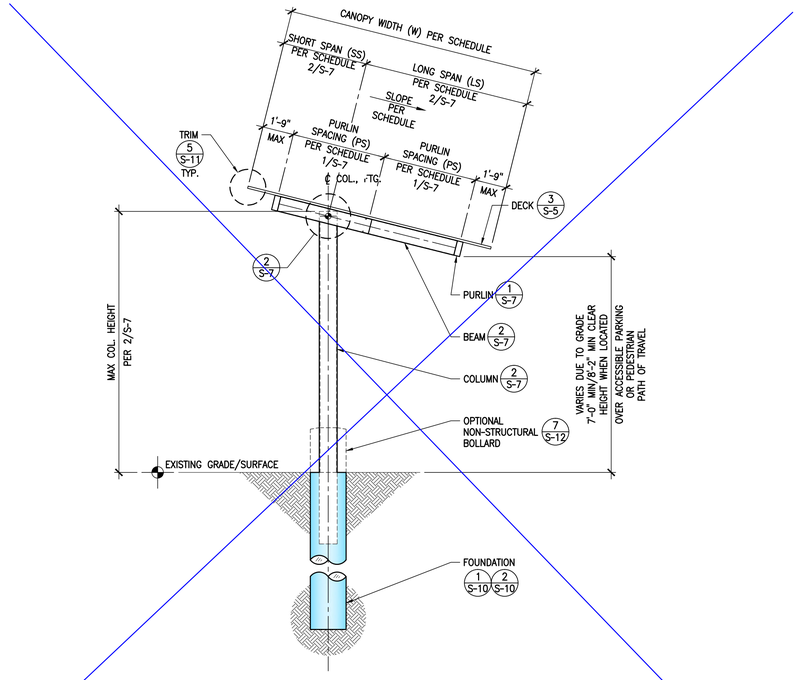
1 - VC14, ~~VC18 & VC20~~ TYPICAL PLAN VIEW 1/4"=1'-0"



3 - VC14, ~~VC18 & VC20~~ TYPICAL SIDE ELEVATION 1 1/4"=1'-0"



2 - VC14, ~~VC18 & VC20~~ TYPICAL FRONT ELEVATION 1/4"=1'-0"



4 - VC14, VC18 & VC20 TYPICAL SIDE ELEVATION 2 1/4"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED 11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960 B AND C51
674 RANCHEROS DR SAN MARCOS, CA 92069
PHONE: (760) 744-4131 FAX: (760) 744-4449
GREG JONES GREGJ@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200 MISSION VIEJO, CA 92691
PHONE: (949) 305-1150 FAX: (949) 305-1420

VERSA CANOPY
VC14, ~~VC18 & VC20~~
FRAMING PLAN & ELEVATIONS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-6
6 OF 13 SHEETS

VC14, VC18 & VC20 PURLIN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX PURLIN SPACING (PS)	MAX COLUMN SPACING (S)	MAX CANTILEVER SPAN (CS)	PURLIN	
					SECTION	DETAIL
VC14	0 psf	63"	27'-0"	10'-0"	CS12 x 4 x 0.102 (12 GA)	1/S-5
~~VC18~~	~~0 psf~~	~~87"~~	~~27'-0"~~	~~10'-0"~~	~~CS12 x 4 x 0.124 (10 GA)~~	1/S-5
~~VC20~~	~~0 psf~~	~~99"~~	~~19'-0"~~	~~8'-0"~~	~~CS14 x 4 x 0.102 (12 GA)~~	1/S-5

NOTES:
1. REFER TO SHEET 'S-2' FOR CONSTRUCTION OPTIONS.
2. REFER TO DETAIL '4/S-12' FOR ALLOWABLE PURLIN PENETRATIONS.
3. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
4. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID'S ROW ONLY.

1 - VC14, VC18 & VC20 TYPICAL PURLIN SCHEDULE

VC14, VC18 & VC20 BEAM/COLUMN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX WIDTH (W)	BEAM SHORT SPAN MIN (SS)	BEAM LONG SPAN MAX (LS)	MAX COLUMN SPACING (S)	ROOF SLOPE	BEAM		BEAM TO COLUMN DETAIL	COLUMN		MAX COLUMN HEIGHT
							SECTION	DETAIL		SECTION	DETAIL	
VC14	0 psf	14'-0"	4'-3"	9'-9"	27'-0"	3:12 MAX	CS12 x 4 x 0.102 (12 GA)	1/S-5	13/S-11	HSS 12 x 6 x 1/4	2/S-5	17'-0"
~~VC18~~	~~0 psf~~	~~18'-0"~~	~~7'-9"~~	~~10'-3"~~	~~27'-0"~~	~~3:12 MAX~~	~~CS12 x 4 x 0.102 (12 GA)~~	~~1/S-5~~	~~13/S-11~~	~~HSS 12 x 6 x 1/4~~	~~2/S-5~~	~~17'-9"~~
~~VC20~~	~~0 psf~~	~~20'-0"~~	~~5'-9"~~	~~14'-3"~~	~~19'-0"~~	~~3:12 MAX~~	~~CS14 x 4 x 0.124 (10 GA)~~	~~1/S-5~~	~~13/S-11~~	~~HSS 12 x 6 x 1/4~~	~~2/S-5~~	~~17'-0"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. THE SHORT SPAN AND LONG SPANS MAY BE ADJUSTED WITH THE FOLLOWING REQUIREMENT:
   THE OVERALL CANOPY WIDTH IS NOT EXCEEDED, NEITHER SPAN IS LESS THAN THE MIN SHORT SPAN & NEITHER SPAN EXCEEDS THE MAX LONG SPAN.

2 - VC14, VC18 & VC20 TYPICAL BEAM/COLUMN SCHEDULE

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MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY
VC14, ~~VC18 & VC20~~
FRAMING SCHEDULES

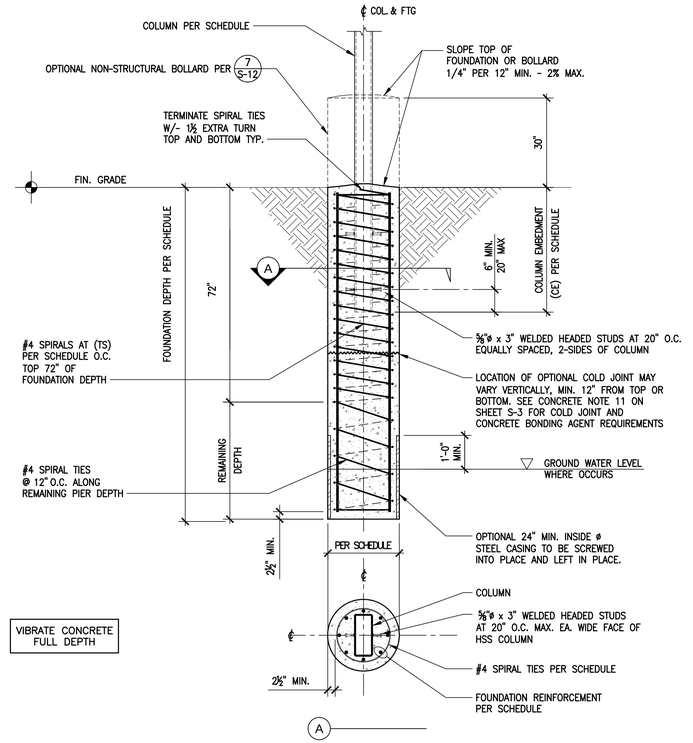
DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-7
7 OF 13 SHEETS

NON-CONSTRAINED PIER FOUNDATION SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	FOUNDATION LONGITUDINAL REINFORCEMENT	FOUNDATION DIAMETER (D)	MIN COLUMN EMBEDMENT (CE)	MAX TIE SPACING AT TOP (TS)	FOUNDATION DETAIL	PIER FOUNDATION MINIMUM DEPTH (SEE SOIL NOTES ON S-3)				
							~~SOIL CLASS V~~	SOIL CLASS W	~~SOIL CLASS X~~	~~SOIL CLASS Y~~	~~SOIL CLASS Z~~
VC14	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~14'-0"~~	11'-0"	~~9'-6"~~	~~8'-9"~~	~~7'-6"~~
VC18	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~14'-9"~~	~~11'-6"~~	~~10'-0"~~	~~9'-0"~~	~~8'-0"~~
VC20	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~15'-0"~~	~~11'-9"~~	~~10'-3"~~	~~9'-3"~~	~~8'-0"~~
VC140	20 psf	4 - #8	2'-0"	3'-6"	6"	3/-	15'-0"	11'-6"	9'-9"	~~8'-9"~~	7'-6"
VC180	20 psf	4 - #8	2'-0"	3'-6"	~~6"~~	3/-	~~15'-3"~~	11'-9"	10'-0"	9'-0"	7'-9"
VC200	~~20 psf~~	4 - #8	2'-0"	3'-6"	6"	3/-	15'-3"	12'-0"	10'-3"	9'-3"	~~8'-3"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.
4. FOR SITUATIONS WHERE WATER MITIGATION IS NECESSARY, OR FOR OTHER CONDITIONS REQUIRING MITIGATION, REFER TO DETAIL 2/- FOR SLEEVED FOUNDATION OPTION.

1/- PIER FOUNDATION SCHEDULE



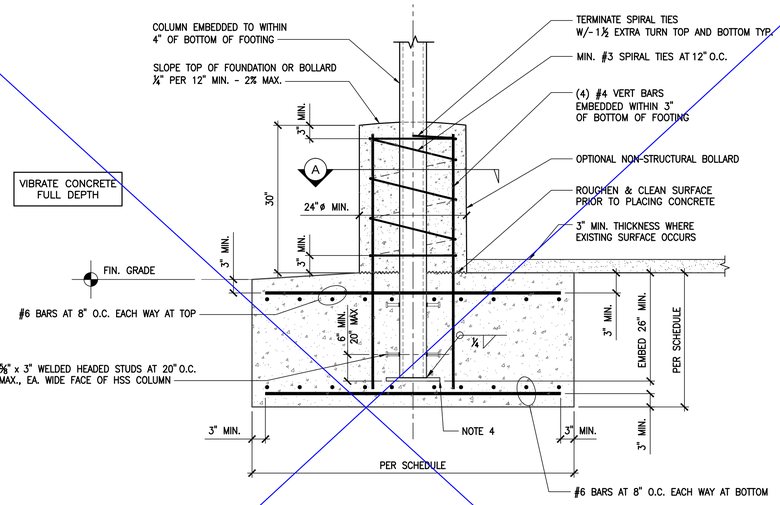
3/- NON-CONSTRAINED PIER FOUNDATION 1/2"=1'-0"

SPREAD FOOTING SCHEDULE

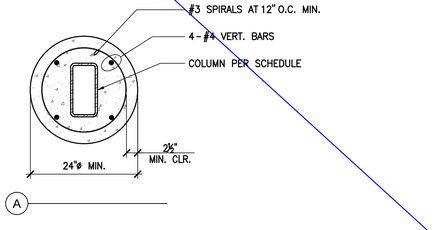
I.D. #	MAX GROUND SNOW LOAD	FOUNDATION DETAIL	SPREAD FOOTING MINIMUM DIMENSIONS FOR SOIL CLASS V (SOILS NOTES S-3)
VC14	0 psf	4/-	9'-6" (SQ.) x 2'-6" DEEP
VC18	0 psf	4/-	10'-3" (SQ.) x 2'-6" DEEP
VC20	0 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC140	20 psf	4/-	9'-3" (SQ.) x 2'-6" DEEP
VC180	20 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC200	20 psf	4/-	9'-9" (SQ.) x 2'-6" DEEP

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.

2/- SPREAD FOOTING SCHEDULE



NOTES:
1. CONCRETE BOLLARDS TO BE POURED IN A SECOND POUR AFTER THE FOUNDATION BELOW GRADE IS POURED. DSA INSPECTOR TO PERIODICALLY INSPECT THE INSTALLATION OF BONDING AGENT WHEN USED.
2. BOLLARD REBAR CAGE SHALL BE CONSTRUCTED INDEPENDENTLY FROM THE FOUNDATION USING 4-#4 VERTICAL BARS. BOLLARD VERTICAL BARS MAY BE TIED TO FOUNDATION BARS PRIOR TO CONCRETE POUR OR WET SET PER NOTE 3.
3. VERTICAL BARS IN THE NONSTRUCTURAL BOLLARD ARE PERMITTED TO BE WET SET INTO THE STRUCTURAL FOUNDATION, PROVIDED THE FOUNDATION IS SUFFICIENTLY WORKABLE SO AS NOT TO REQUIRE HAMMERING IN OR ANY OTHER SUCH METHOD. WET SET SHALL BE PERFORMED USING #4 BARS WITH MINIMUM 20" EMBEDMENT.
4. 1" THICK A36 STEEL PLATE. PLATE TO EXTEND PAST ALL SIDES OF COLUMN BY 4" MIN.



4/- SPREAD FOOTING 3/4"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

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STRUCTURAL ENGINEERING
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VERSA CANOPY

FOUNDATION SCHEDULES

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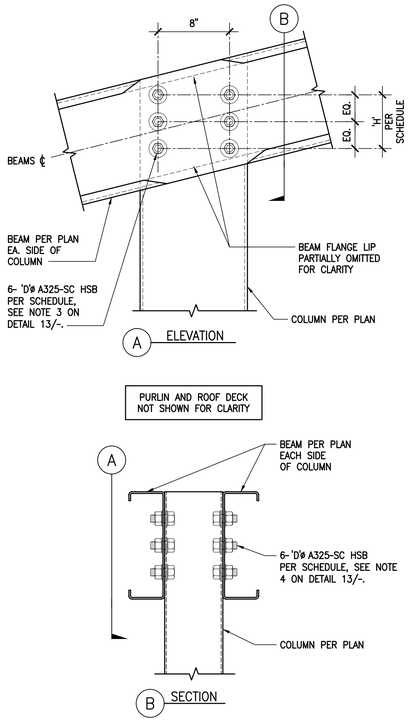
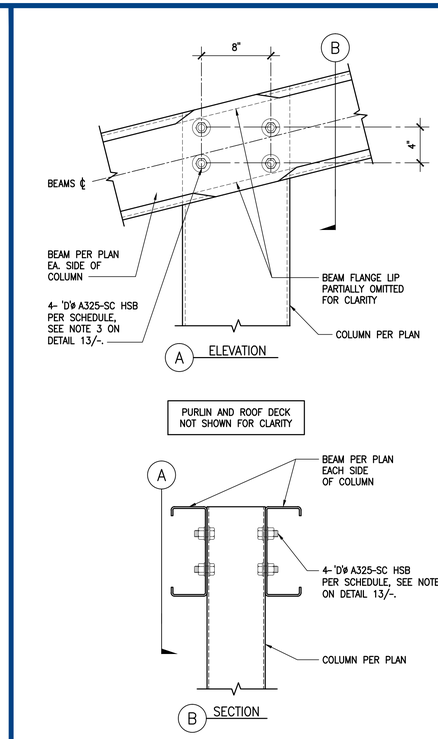
SHEET S-10
10 OF 13 SHEETS

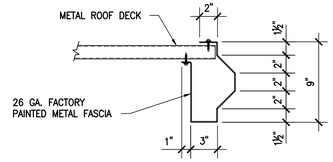


12 BEAM TO COLUMN - 6 BOLT



11 BEAM TO COLUMN - 4 BOLT

1-1/2"=1'-0"

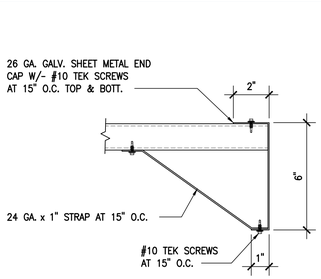


NOTES:

1. #10 TEK SCREWS W/- WATER PROOF WASHER TOP & BOTT. AT 3'-0" O.C. +/-.
2. PROVIDE ⅜"ø WEEP HOLES AT 1'-6" O.C.

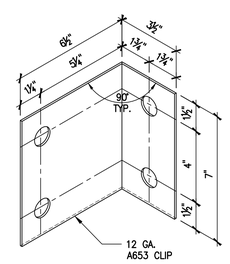
7 ROOF DECK TRIM DETAIL (OPTIONAL)

3"=1'-0"



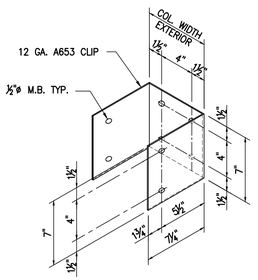
8 ROOF DECK TRIM DETAIL (OPTIONAL)

1-1/2"=1'-0"



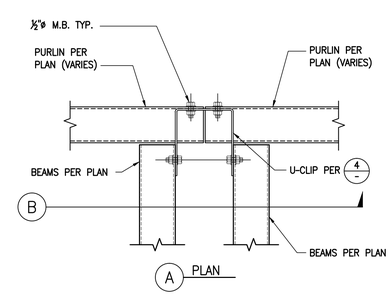
3 L-CLIP INTERIOR PURLIN TO BEAM

3"=1'-0"



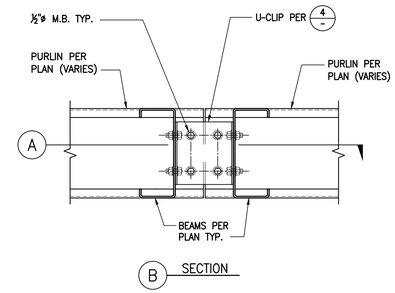
4 U-CLIP EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.
2. PURLINS AT CANTILEVER SHALL BE CONTINUOUS.



1 EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

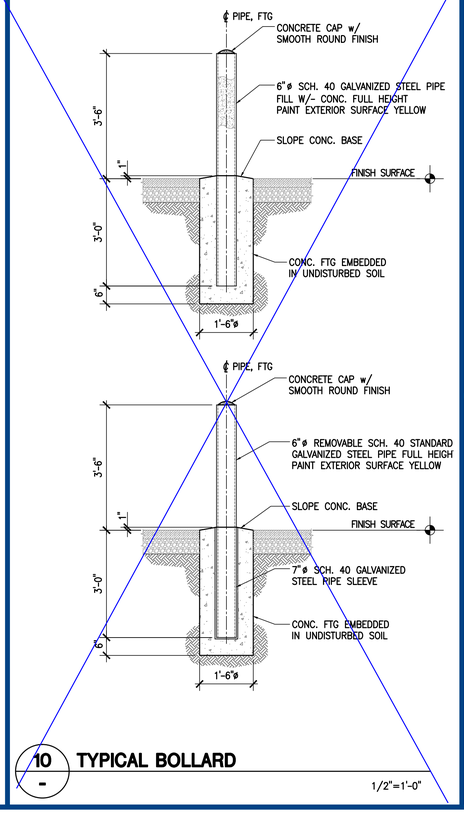
I.D. #	MAX GROUND SNOW LOAD	# OF BOLTS (n)	BOLTED CONNECTION DETAIL	BOLT DIAMETER (D) ASTM A325-SC	BOLT PATTERN (B x H)
VC14	0 psf	4	11/-	1"	8" x 6"
VC18	0 psf	6	12/-	⅞"	8" x 6"
VC20	0 psf	6	12/-	⅞"	8" x 8"
VC140	20 psf	4	11/-	1"	8" x 6"
VC180	20 psf	6	12/-	¾"	8" x 8"
VC200	20 psf	6	12/-	⅞"	8" x 8"

NOTES:

1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. BOLTS SHALL BE PRETENSIONED A325-SC (SLIP-CRTICAL) TYPE N (THREADS NOT EXCLUDED FROM SHEAR PLANE) CLASS A FAYING SURFACE WITH STANDARD NUTS PER ASTM A563 AND WASHERS PER ASTM F436 TYPICAL U.N.O.
4. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

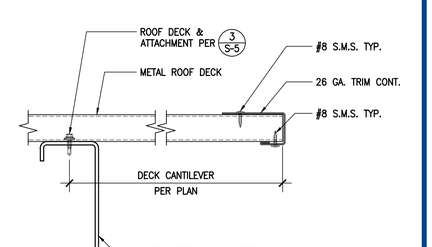
13 BEAM TO COLUMN SCHEDULE

N.T.S.



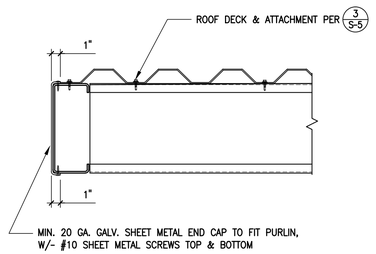
10 TYPICAL BOLLARD

1/2"=1'-0"



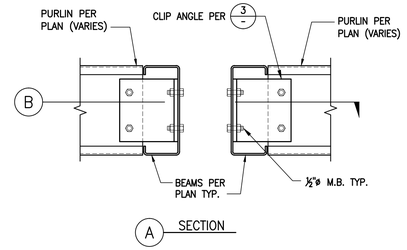
5 ROOF DECK TRIM DETAIL

3"=1'-0"



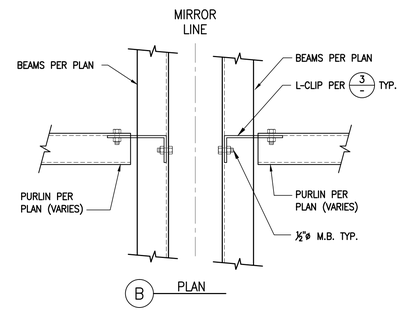
6 END ENCLOSURE DETAIL

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.



2 INTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

ENGINEER'S APPROVAL

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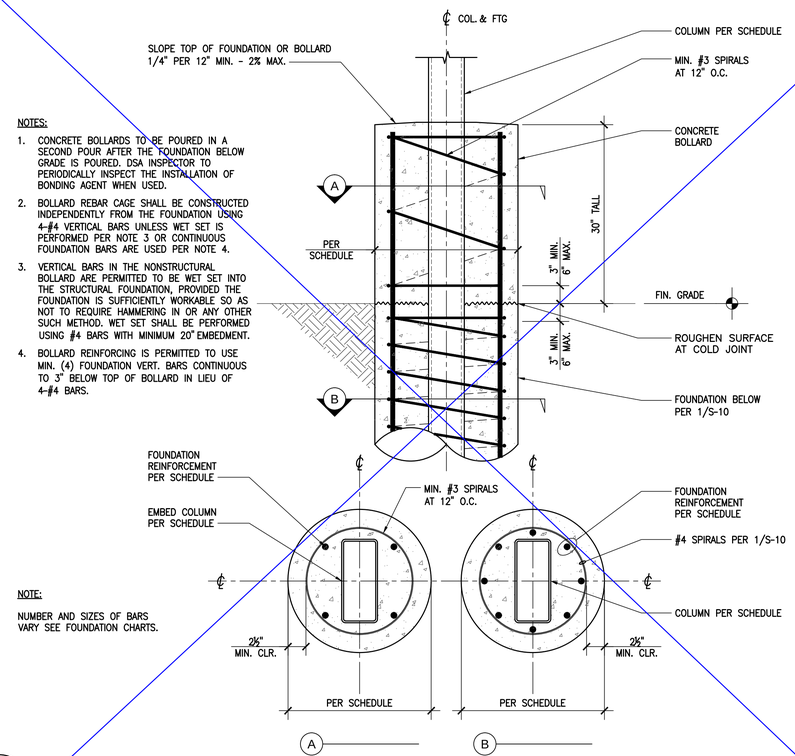
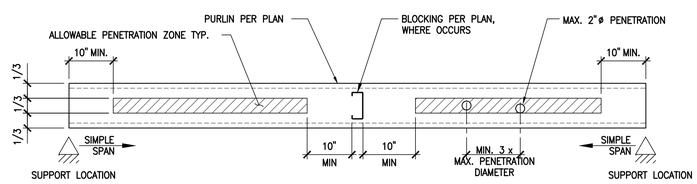
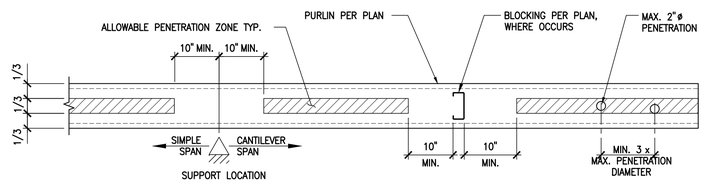


7 - OPTIONAL CONCRETE BOLLARD

1"=1'-0"



SIMPLE SUPPORT SPAN

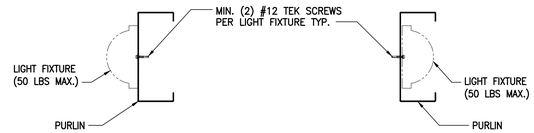


CANTILEVER SPAN

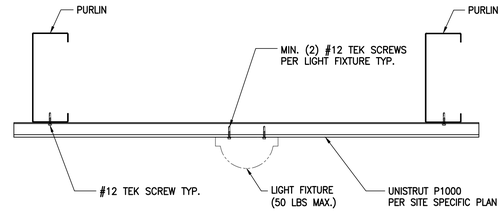
NOTE:
IF MORE THAN 5 PENETRATIONS PER SPAN ARE NEEDED, CONTRACTOR TO SUBMIT AN RFI TO DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO ENSURE REQUIREMENTS OF THIS DETAIL ARE MET AND TO JUSTIFY THE QUANTITY OF PENETRATIONS NEEDED.

4 - ALLOWABLE PURLIN PENETRATIONS

3/4"=1'-0"

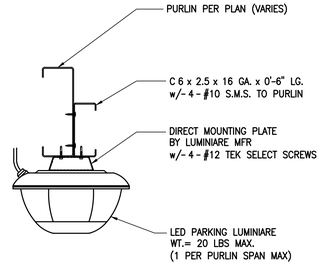


NOTE:
ALL STRUCTURAL CONNECTION POINTS REQUIRED BY MANUFACTURER TO MAINTAIN WARRANTY TO BE FILLED. THIS MAY EXCEED THE MINIMUM NUMBER OF SCREWS.



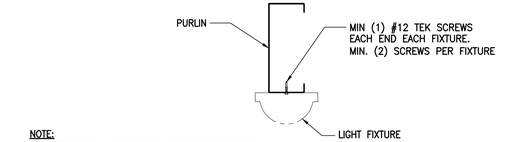
1 - LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"

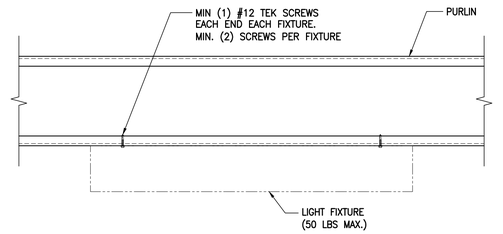


5 - TYPICAL PARKING LUMINAIRE AT PURLIN

1 1/2"=1'-0"

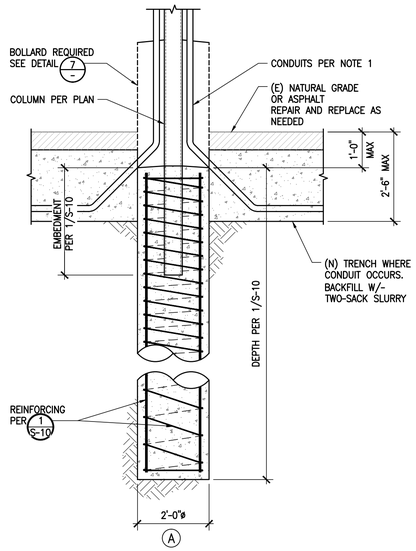


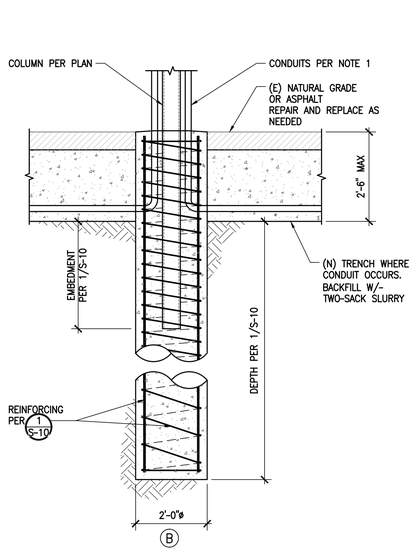
NOTE:
ALL STRUCTURAL CONNECTION POINTS REQUIRED BY MANUFACTURER TO MAINTAIN WARRANTY TO BE FILLED. THIS MAY EXCEED THE MINIMUM NUMBER OF SCREWS.



2 - ALTERNATE LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"

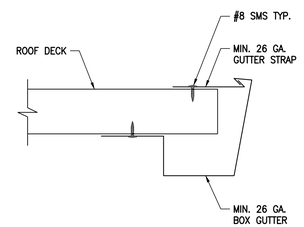




NOTE:
1. CONDUIT IN FOUNDATION SHALL NOT EXCEED (1) 2" MAX ø CONDUIT OR (2) 1½" MAX ø CONDUIT. WHEN (2) CONDUIT ARE USED IN THE SAME FOUNDATION, THE CONDUIT MAY ENTER THE FOUNDATION FROM EITHER SIDE.
2. CONDUIT TRENCH SHALL BE FILLED WITH MIN 2-SACK SLURRY.

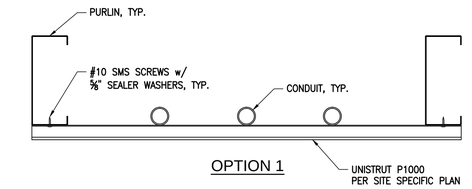
8 - CONDUIT AT DRILLED PIER

1"=1'-0"

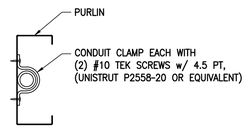


6 - GUTTER DETAIL

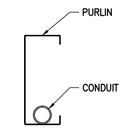
3"=1'-0"



OPTION 1



OPTION 2



OPTION 3

3 - CONDUIT SUPPORT/ LOCATION OPTIONS

1-1/2"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
GREG JONES

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

STANDARD DETAILS 2

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-12
12 OF 13 SHEETS

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

FILE: 21-25
APPL: 01-119416

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING CODES LISTED IN "APPLICABLE CODES" AND ALL GOVERNING LOCAL CODES AND REGULATIONS.
2. THE OWNER / ARCHITECT HAVE OBTAINED APPROVAL OF THE PRIMARY AUTHORITY HAVING JURISDICTION (DSA, OSHPD, CITY BUILDING PERMIT). CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, SPECIAL INSPECTION IS REQUIRED FOR SHOP AND FIELD STRUCTURAL WELDING.
4. WHERE INCORPORATED IN THE CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF OSHPD OR DSA PRE-APPROVALS FOR PRE-APPROVED ITEMS OR SYSTEMS INCORPORATED INTO THE CONSTRUCTION AND DISTRIBUTE TO OWNER'S REPRESENTATIVE, ARCHITECT AND INSPECTOR.
5. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH AND AND INSTALL ALL MATERIALS AND WORK DESCRIBED, DEPICTED OR DETAILED WITHIN THESE DOCUMENTS REGARDLESS OF THE LOCATION OF THAT MATERIAL OR WORK WITHIN THE DOCUMENTS OR OMISSION (WHETHER DELIBERATE OR ACCIDENTAL) OF THAT MATERIAL OR WORK BY A SUBCONTRACTOR ON HIS/HER BID.
6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONSIDER THESE DOCUMENTS IN THEIR ENTIRETY. DISCREPANCIES OR CONTRADICTIONS BETWEEN PORTIONS OF THESE DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT LEAST 72 HOURS PRIOR TO BID OPENING FOR CLARIFICATION. OTHERWISE, THE MOST RESTRICTIVE REQUIREMENT SHALL BE IN FORCE AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. CONTRACTOR ESTABLISH PROCEDURES TO ASSURE ALL PERSONS ENTERING A POSSIBLY HAZARDOUS AREA, INCLUDING WORKERS, SUBCONTRACTORS, OTHER CONTRACTORS, VISTORS, AND OTHERS ARE AWARE OF APPROPRIATE / REQUIRED SAFETY PROCEDURES. COMPLY WITH LOCAL, STATE, AND FEDERAL SAFETY STANDARDS, INCLUDING OSHA REQUIREMENTS AND WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY FENCING AND GATES, SIGNAGE, SECURITY LIGHTING OR OTHER SECURITY AND CONTROL MEASURES NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC AND FACILITY USERS UNTIL THE COMPLETION OF THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE TO FOR PROTECTION OF ADJACENT PROPERTY AND SHALL REPAIR AND / OR REPLACE ALL PROPERTY DAMAGED DURING THE COURSE ON THE WORK.
10. THE CONTRACTOR SHALL LIMIT HIS / HER ACTIVITY TO THE AREA DESCRIBED WITHIN THE DOCUMENTS UNLESS OTHERWISE PERMITTED BY THE OWNER'S REPRESENTATIVE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY ITEMS DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK. INSTALLATION SHALL MATCH EXISTING IN KIND, QUALITY, AND PERFORMANCE.
12. WHERE EXISTING CONSTRUCTION AND FINISHES ARE CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, PERFORMANCE CHARACTERISTICS, AND APPEARANCE.
13. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLR" MEAN CLEAR DIMENSION TO FACE OF FINISH. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND.
14. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND. VERIFY DIMENSIONS OF ALL OWNER-FURNISHED ITEMS, INCLUDING FURNITURE AND EQUIPMENT, TO ENSURE PROPER COORDINATION WITH CONSTRUCTION.
15. ALL ITEMS IN THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
16. ALL UTILITIES REQUIRED FOR THE CONTINUOUS OPERATION OF ALL OCCUPIED EXISTING FACILITIES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES. ANY SHUT DOWNS FOR NEW CONNECTIONS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE TWO WEEKS PRIOR TO THE REQUESTED SHUT DOWN.
17. COORDINATION WITH OTHER CONTRACTS: IF ANY PART OF THIS CONTRACTOR'S WORK DEPENDS UPON THE WORK OF A SEPARATE CONTRACTOR, THIS CONTRACTOR SHALL INSPECT SUCH OTHER WORK AND PROMPTLY REPORT IN WRITING TO THE OWNER'S REPRESENTATIVE ANY DEFECTS IN SUCH OTHER WORK THAT RENDER IT UNSUITABLE TO RECEIVE THE WORK OF THIS CONTRACTOR. FAILURE OF THIS CONTRACTOR TO SO INSPECT AND REPORT SHALL CONSTITUTE AN ACCEPTANCE OF THE OTHER CONTRACTOR'S WORK, EXCEPT AS TO DEFECTS WHICH MAY DEVELOP IN OTHER CONTRACTOR'S WORK AFTER EXECUTION OF THIS CONTRACTOR'S WORK.
18. COORDINATION OF SCHEDULE: PORTIONS OF THIS WORK MAY BE REQUIRED TO BE COMPLETED ON SCHEDULE IN ORDER TO AVOID DELAY TO OTHER CONTRACTORS OR OWNERS OPERATIONS. CONTRACTOR SHALL STRICTLY ADHER TO ESTABLISHED COMPLETION DATES AS DESIGNATED IN THE SPECIFICATIONS AND COORDINATE WORK SCHEDULE WITH THE OWNER'S REPRESENTATIVE AND OTHER CONTRACTORS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND LIQUIDATED DAMAGES.
19. SCHEDULE ALL WORK WITH THE OWNER'S REPRESENTATIVE, INCLUDING CONSTRUCTION ACCESS AND STORAGE, AND WORK OUTSIDE THE "EXTENT OF WORK" SET FORTH IN THESE DOCUMENTS. THE CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
20. CONSTRUCTION PROCEDURES SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
21. DEMOLITION IS NOT NECESSARILY LIMITED TO ONLY WHAT IS SHOWN ON THIS OR OTHER DRAWINGS OR AS OUTLINED IN THE SPECIFICATIONS. THE INTENT IS TO INDICATE GENERAL SCOPE OF DEMOLITION REQUIRED. CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS DEMOLITON, CUTTING AND PATCHING REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
22. ALL ITEMS IDENTIFIED TO BE SALVAGED SHALL BE DELIVERED IN GOOD CONDITION TO A PLACE OF STORAGE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL OTHER ITEMS MUST BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
23. ARCHITECT IS NOT RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. TO THE EXTENT THESE DOCUMENTS RELATE TO SUCH ISSUES, ARCHITECT'S PARTICIPATION IS SOLELY ADMINISTRATIVE WITHOUT ANY RESPONSIBILITY FOR THE CONTENT OR EXECUTION OF SUCH DOCUMENTS.
24. DETAIL DRAWINGS WITH REFERENCES TO FIRE-RATED ASSEMBLIES OR CONSTRUCTION WHICH HAVE BEEN TESTED BY UNDERWRITERS LABORATORIES, THE CALIFORNIA BUILDING CODE OR ANY OTHER APPROVED TESTING AGENCY, SHALL BE CONSTRUED TO INCLUDE ALL WORK AND PROCEDURES CONTAINED IN THE REFERENCED ASSEMBLY DESCRIPTION..
25. ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE FIRE STOPPED AND SEALED TO MAINTAIN THE REQUIRED RATING.
26. CONTRACTOR TO MAINTAIN CONTEMPORANEOUSLY RECORDED "AS-BUILT" INFORMATION OF ALL WORK, WHICH SHALL BE MARKED IN COLOR ON THE DRAWINGS AND SPECIFICATIONS, A SCANNED PDF OF THE "AS-BUILT" DRAWINGS AND SPECIFICATIONS SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE PRIOR TO FINAL APPLICATION FOR PAYMENT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
27. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION AND DUST COVERS ADJACENT TO OCCUPIED AREAS AS REQUIRED TO CONTAIN DUST AND DEBRIS WITHIN CONSTRUCTION AREA. BROOM CLEAN ALL AREAS, INLCUDING SIDEWALKS AND DRIVEWAYS EACH DAY. KEEP DIRT AND DUST TO A MINIMUM.
28. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
29. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.

ADMINISTRATIVE NOTES

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO INSTALL STEEL SHADE STRUCTURES IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS SUCH THAT THE FINISHED WORK WILL NOT COMPLY WITH THE SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, CONSTRUCTION CHANGE DOCUMENTS DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
2. A COPY OF PARTS 1 AND 2, TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONSTRUCTION CHANGE DOCUMENT AND ADDENDA TO BE SIGNED BY THE ARCHITECT AND THE OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS ARE NOT VALID UNTIL APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24.
4. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24.
5. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RE-TEST MAY BE BACK CHARGED TO THE CONTRACTOR.
6. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF CONCRETE PER SECTION 4-331, PART 1, TITLE 24.
7. THIS PROJECT REQUIRES A DSA CERTIFIED PROJECT INSPECTOR. INSPECTOR SHALL BE APPROVED BY DSA. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(B). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
8. SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.
9. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (FORM DSA-6 IN ACCORDANCE WITH SECTION 4-336 AND 4-343, PART 1, TITLE 24.
10. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTION 4-333(A) AND 4-341, PART 1, TITLE 24.
11. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.

Statement of General Conformance

STATEMENT FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS) PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (FOR PERFORMANCE SPECIFICATION ITEMS)

(Application No. _____ File No. _____)

☒ The drawings or sheets listed on the cover or index sheet
☐ This drawing, page of specifications/calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for"

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and

2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Section 4-336, 4-341, and 4-344" of Title 24, Part 1. *(Title 24, Part 1, Section 4-317 (b))*

I certify that: ☒ All drawings or Sheets listed ont he cover or indext sheet ☐ This drawing or page

☒ is/are in general conformance and ☒ have been coordinated	☐ is/are in general conformance and ☐ have been coordinated
Signature _____ Date _____	Signature _____ Date _____
Architect of Engineer designated to be in responsible charge	Architect of Engineer designated to be in responsible charge
MARCUS HIBSER Print Name	Print Name
License No. _____ Expiration Date _____	License No. _____ Expiration Date _____

APPLICABLE CODES

ALL WORK PERFORMED UNDER THIS CONTRACT IS TO CONFORM TO THE FOLLOWING CODES AND REGULATIONS:

2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, CCR BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, CCR BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 CCR (2018 IEB CODE AND CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING CODE (CALGreen), PART 11, TITLE 24, CCR

2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS - 2019 CBC CHAPTER 35 AND 2019 CFC CHAPTER 45

THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

ABBREVIATIONS

&	AND
@	AT
℄	CENTERLINE
ø	DIAMETER
#	POUND OR NUMBER
A/C	AIR CONDITIONING
AC	ASPHALTIC CONCRETE
ACOUS	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
ADD	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINIUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BITUM	BITUMINOUS
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CT	CERAMIC TILE
CUST	CUSTODIAN
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DI	DRAIN OR DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DN	DOWN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EVA	EMERGENCY VEHICLE ACCESS
EWC	ELECTRICAL WATER COOLER
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH
FLR	FLOOR
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GSM	GALVANIZED WHEET METAL
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LT	LIGHT
MAX	MAXIMUM
MB	MACHINE BOLT
MDF	MEDIUM DENSITY FIREBOARD
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MUL	MULLION
(N)	NEW
N/A	NOT APPLICABLE
N	NORTH
NIC	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPP	OPPOSITE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
(R)	RELOCATE
RB	RESILIENT OR RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
REQ	REQUIRED
RF	RESILIENT FLOORING
RM	ROOM
RO	ROUGH OPENING
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SD	SOAP DISPENSER
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DRAWINGS
SHT	SHEET
SIM	SIMILAR
SLD	SEE LANDSCAPE DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREW
SND	SANITARY NAPKIN DISPENSER
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPEND
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK
T.O.	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TV	TELEVISION
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WEST
w/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER

OWNER

MILL VALLEY SCHOOL DISTRICT
411 SYCAMORE AVE
MILL VALLEY, CA 94941 TEL. (415) 389-7700
CONTACT: JULIO ARROYO FAX. (415) 389-7773

CONSULTANTS

ARCHITECT
HIBSER YAMAUCHI ARCHITECTS, INC.
300 27TH STREET, 2ND FLOOR
OAKLAND, CA 94612 TEL. (510) 446-2222
CONTACT: ERNIE PALEO FAX (510) 446-2211

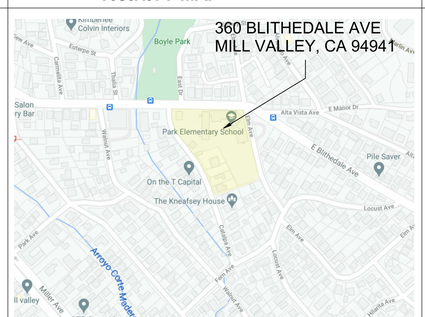
EXISTING CONDITIONS

DEFERRED APPROVALS

1. NONE

VICINITY MAP

NO SCALE



SCOPE OF WORK

1. INSTALLATION OF STEEL SHADE STRUCTURES

INDEX OF DRAWINGS

AGENCY APPROVAL

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

Sheet Title
TITLE SHEET

Client Project Number:

Scale: As indicated	Sheet **A0.01**
Drawn By: AL	
Checked By: EP	
Issue Date:	
Revit Version: 2019	Sheet 1 of 16

C:_Revit Locals\5482_Park ES_MVSD_R19_mdzerda@hy-arch.com.rvt
4/8/2021 5:28:52 PM

0 5' 50' | 0 5' 25' | 0 1' 12' | 0 1' 6' | 0 4' | 0 1' 3' | 0 2' | 0 1'

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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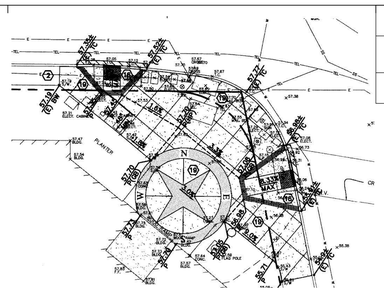

26 EXISTING DRINKING FOUNTAIN
1/2" = 1'-0"

21 ENTRY DOORS
1 1/2" = 1'-0"

16 (E) CURB RAMPS - DSA 01-112405
1 1/2" = 1'-0"

PARKING COUNT

	TOTAL PARKING CAPACITY	# ACC STANDARD STALLS REQUIRED	# ACC VAN STALLS REQUIRED	# ACC STANDARD STALLS (ACTUAL)	# ACC VAN STALLS (ACTUAL)
STAFF LOT	28	1	1	1	1

CODE ANALYSIS

CLASSROOM BUILDING A
CONSTRUCTION TYPE — V-B (NON-RATED), FULLY SPRINKLERED
OCCUPANCY TYPE — E, A-3

BUILDING A1 - MAIN CLASSROOM BUILDING
AREA OF BUILDING - MAIN LEVEL (ONE FLOOR ABOVE GRADE PLANE) — 18,391 SF

BUILDING A2 - ANNEX BUILDING
AREA OF BUILDING - MAIN LEVEL (ONE FLOOR ABOUT GRADE PLANE) — 5,508 SF

TOTAL BUILDING AREA — 23,899 SF

ALLOWABLE FLOOR AREA — 6,000 SF
AUTOMATIC SPRINKLER SYSTEM INCREASE (AREA INCREASE FACTOR = 300% FOR BUILDING W/ ONE STORY ABOVE GRADE PLANE) — 24,000 SF

TOTAL ALLOWABLE FLOOR AREA — 32,000 SF

PORTABLE CLASSROOM BUILDING B
CONSTRUCTION TYPE — V-B (NON-RATED)
OCCUPANCY TYPE — E
ALLOWABLE FLOOR AREA — 9,500 SF
AREA OF BUILDING — 1,440 SF

COVERED WALKWAY STRUCTURE
CONSTRUCTION TYPE — V-B (NON-RATED)

SHADE STRUCTURE #1
CONSTRUCTION TYPE — II-B (NON-RATED)
OCCUPANCY TYPE — A-2
ALLOWABLE FLOOR AREA — 9,500 SF
AREA OF BUILDING — 588 SF

SHADE STRUCTURE #2
CONSTRUCTION TYPE — II-B (NON-RATED)
OCCUPANCY TYPE — A-2
ALLOWABLE FLOOR AREA — 9,500 SF
AREA OF BUILDING — 1,666 SF

SHADE STRUCTURE #3
CONSTRUCTION TYPE — II-B (NON-RATED)
OCCUPANCY TYPE — A-2
ALLOWABLE FLOOR AREA — 9,500 SF
AREA OF BUILDING — 476 SF

EAST BLITHDALE AVENUE (50' WIDE)

(E) CONC. SIDEWALK

LANDSCAPE

(E) BUILDING B PORTABLE CLASSRM DSA #106788, 01-112405

(E) PLAY STRUCTURE

(E) BUILDING A2 ANNEX CLASSRM. DSA #62831, 64140, 28365, 01-112405

(E) BUILDING A1 MAIN CLASSRM BLDG DSA #2560, 62831, 64140, 01-112405

GIRL'S TOILET AT MAIN LEVEL DSA# 01-112405

ELEVATOR DSA# 62831

(E) CORRIDOR WALLS. CORRIDOR FLOORING IS VCT

MEN'S TOILET AT MAIN LEVEL DSA# 01-112405

WOMEN'S TOILET AT MAIN LEVEL DSA# 01-112405

BOY'S TOILET AT MAIN LEVEL DSA# 01-112405

DSA# 64140

(E) COVERED WALKWAY DSA #62831

(E) A/C PLAYGROUND

(E) A/C PAVEMENT

(E) GARDEN

(E) CONC. SIDEWALK

ELM AVENUE (50' WIDE)

CATALPA AVENUE (50' WIDE)

(N) SHADE STRUCTURE #1

(N) SHADE STRUCTURE #2

(N) SHADE STRUCTURE #3

GATE OPENING 30" -0"

GATE OPENING 20' -0"

GATE OPENING 28' -0" CLR

20' -0"

2% MAX

05.20 TYP

DSA# 01-112405

DSA #01-112405

DSA# 01-112405 SEE 26/-

LOT 1: 30 SPACES
1 STANDARD ACCESSIBLE
1 VAN ACCESSIBLE

30 FIRE SAFETY, CODE ANALYSIS & ACCESSIBILITY SITE PLAN
1" = 20'-0"

KEYNOTES

02.12	(E) TRASH ENCLOSURE
02.20	(E) PEDESTRIAN GATE
02.22	(E) FDC, CHECK VALVE
02.24	(E) FIRE SPRINKLER RISER & CONTROL VAVLES
02.34	(E) CURB RAMP; PER MARIN COUNTY STANDARDS, CURB RAMPS SHALL COMPLY WITH CALTRANS A88A AND A88B
02.39	(E) BUS STOP
02.40	(E) TOW AWAY SIGN
02.41	(E) DIRECTIONAL SIGNAGE
05.20	HSS COLUMN, SEE STEEL SHADE STRUCTURE DRAWINGS

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CAIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN FOR THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLAINCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONBLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCONFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLAINCE WITH THE CBC AS PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

LEGEND

- ACCESSIBLE PATH OF TRAVL AS INDICATED ON PLAN IS A BARRIER - FREE ACCES ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX, AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP REISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTION TO 80" MIN., AND FREE OF PROTRUDING OBJECTS GREATER THAN 4" PROJECTED FROM WALL LOCATED ABOVE 27" AND LESS THAN 80". ARCHITECT SHALL VERIFY THERE ARE NO BARRIERS IN PATH OF TRAVEL.
- (E) ACCESSIBLE TOILET ROOM FACILITY
- (E) ELEVATOR OR VERTICAL LIFT
- DF (E) ACCESSIBLE DRINKING FOUNTAINS
- L (E) ACCESSIBLE STAIR LIFT
- GT (E) ACCESSIBLE GATE
- RP (E) ACCESSIBLE RAMP
- PA (E) PLANTING AREA
- (E) FENCE

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION	
School District/Owner	Mill Valley School District
Project Name/School	Shade Structures at Park Elementary School
Project Address	360 E Blithedale Ave, Mill Valley 94941

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐		No ☑
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

DGS DSA 810 (revised 12/29/20) DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES — Page 1 of 4 STATE OF CALIFORNIA

MILL VALLEY SCHOOL DISTRICT

411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

AGENCY APPROVAL

Architect/Engineer Of Record:

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

Sheet Title
FIRE LIFE SAFETY,CODE ANALYSIS & ACCESSIBILITY SITE PLAN

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
A0.03
Sheet 2 of 16

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GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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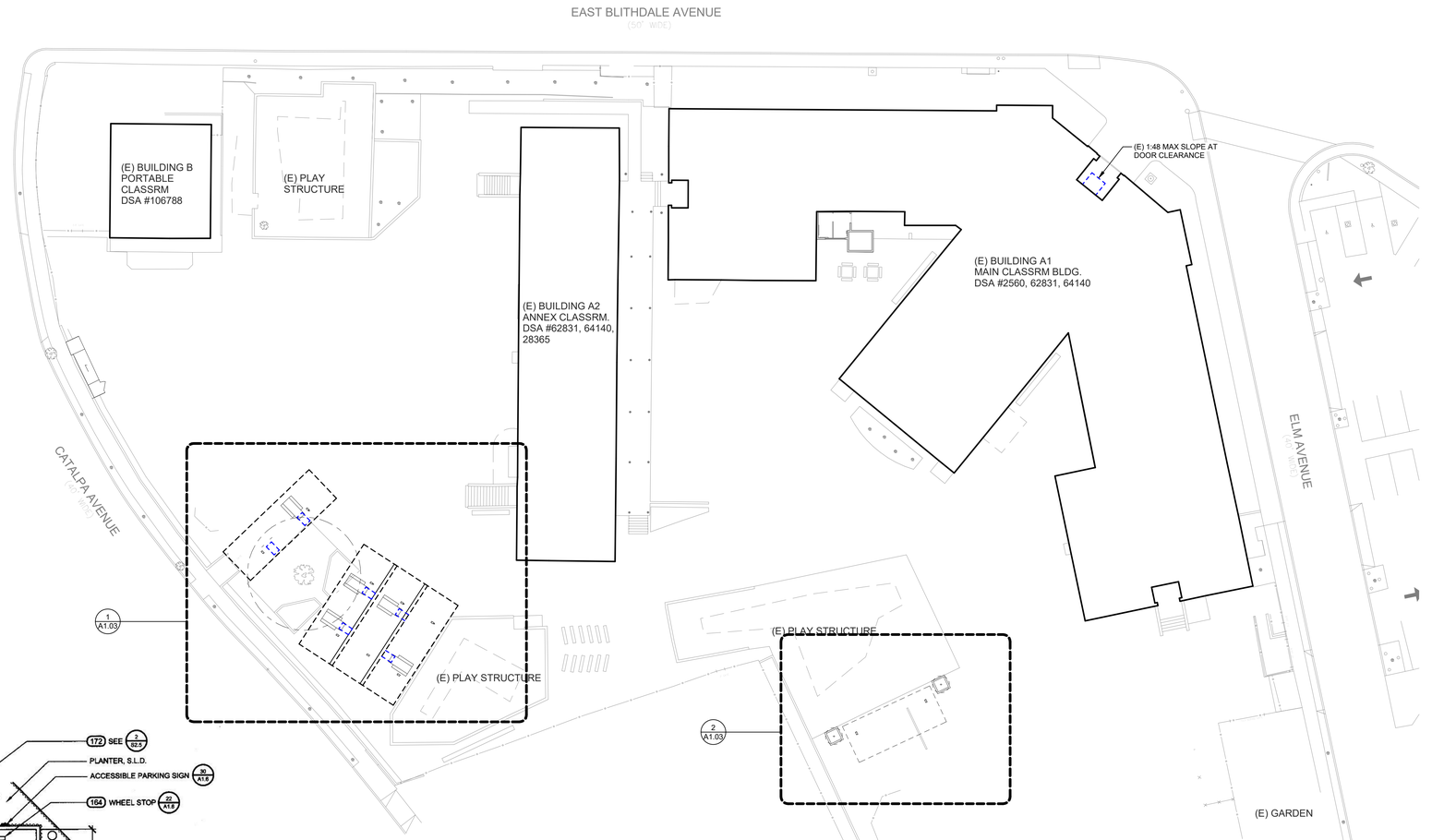
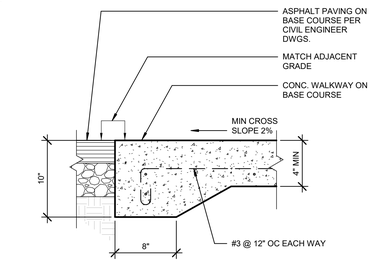
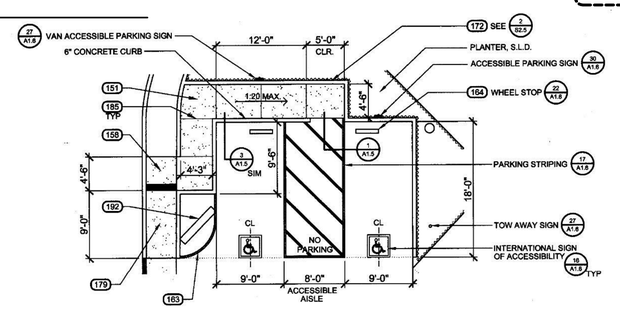
GENERAL NOTES

1. NOTIFY ARCHITECT OF ANY IN THE FIELD DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
2. ALL DIMENSIONS SHALL BE FACE OF STUD. UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
3. PATCH & REPAIR (E) A/C PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.

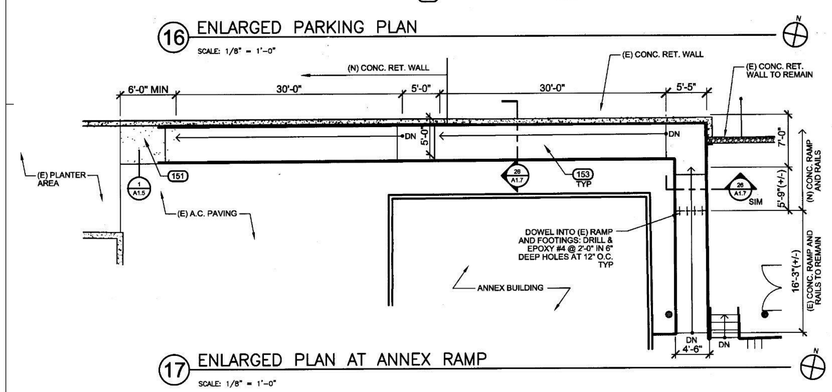




28 CONC. WALKWAY - A#01-112405 - FOR REFERENCE ONLY
1 1/2" = 1'-0"



16 ENLARGED PARKING PLAN
SCALE: 1/8" = 1'-0"



17 ENLARGED PLAN AT ANNEX RAMP
SCALE: 1/8" = 1'-0"

30 ENLARGED SITE PLANS - A#01-112405 - FOR REFERENCE ONLY
1/8" = 1'-0"

20 SITE PLAN OVERALL
1" = 20'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
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Revisions

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300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

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Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

Sheet Title
SITE PLAN

Client Project Number:

Scale:	As indicated
Drawn By:	AN LE
Checked By:	ERNIE PALEO
Issue Date:	
Revit Version: 2019	

Sheet
A1.02
Sheet 3 of 16

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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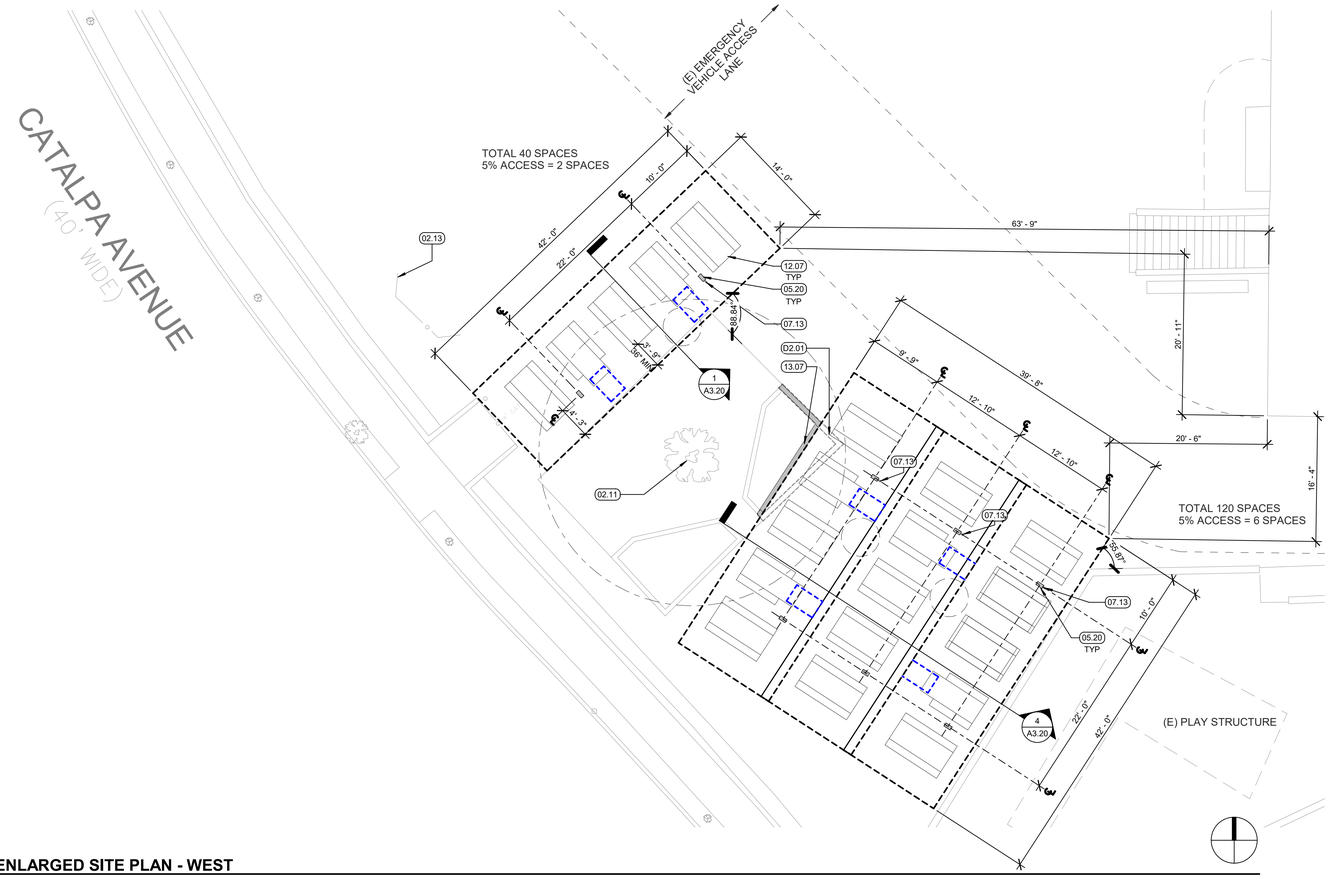
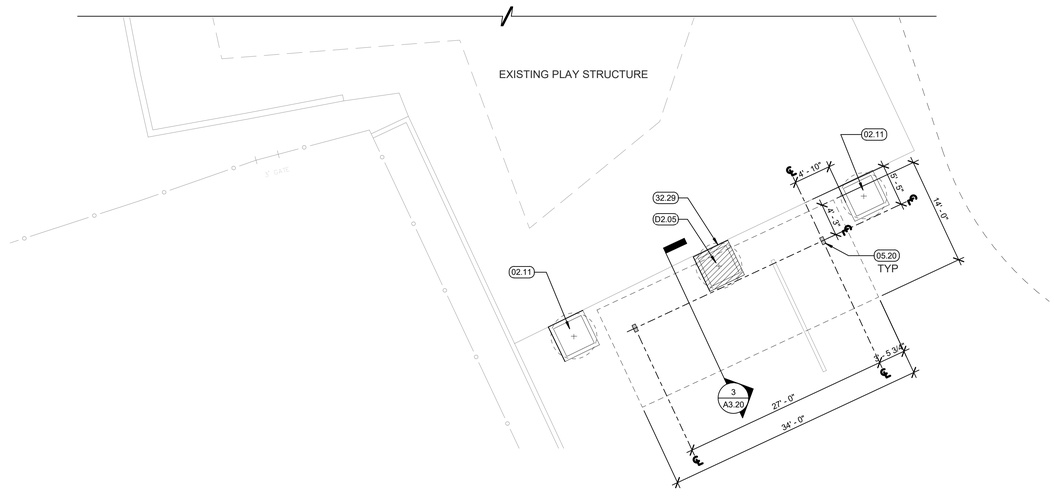


1 ENLARGED SITE PLAN - WEST

1/8" = 1'-0"



2 ENLARGED SITE PLAN - EAST

1/8" = 1'-0"

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3. PATCH & REPAIR (E) A/C PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.

LEGEND

KEY NOTES

02.11	(E) TREES TO REMAIN
02.13	(E) BACKSTOP TO REMAIN
05.20	HSS COLUMN, SEE STEEL SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01
12.07	LUNCH TABLE BY OTHERS
13.07	(N) WD PLANTER WALL
32.29	A/C PAVING, ALIGN T.O. PAVEMENT W/ (E) ADJACENT PAVEMENT
D2.01	DEMO (E) WD PLANTER WALL
D2.05	REMOVE (E) TREE

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
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Revisions

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HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

Sheet Title
PARTIAL SITE PLAN

Client Project Number:

Scale:	As indicated
Drawn By:	AL
Checked By:	EP
Issue Date:	
Revit Version:	2019

Sheet **A1.03**

Sheet 4 of 16

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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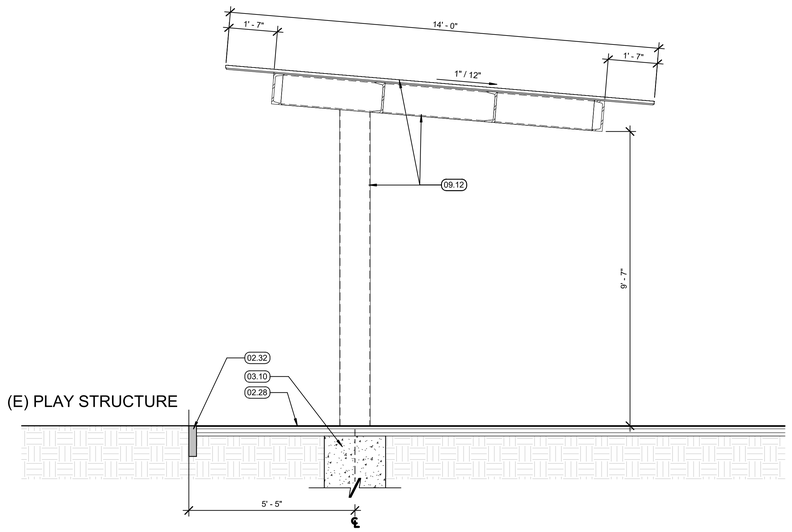
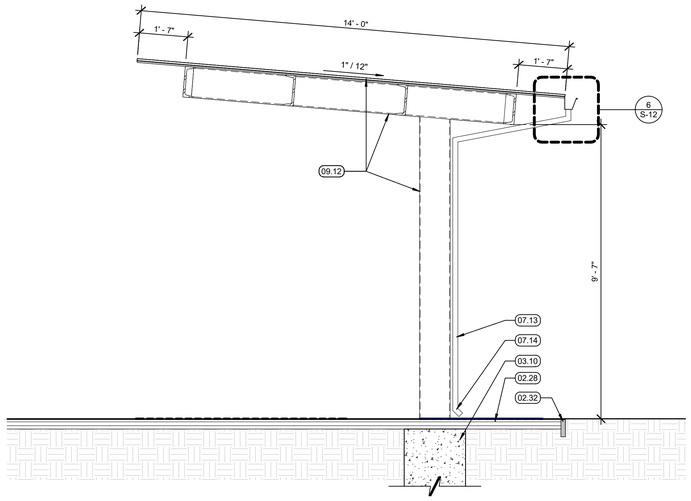
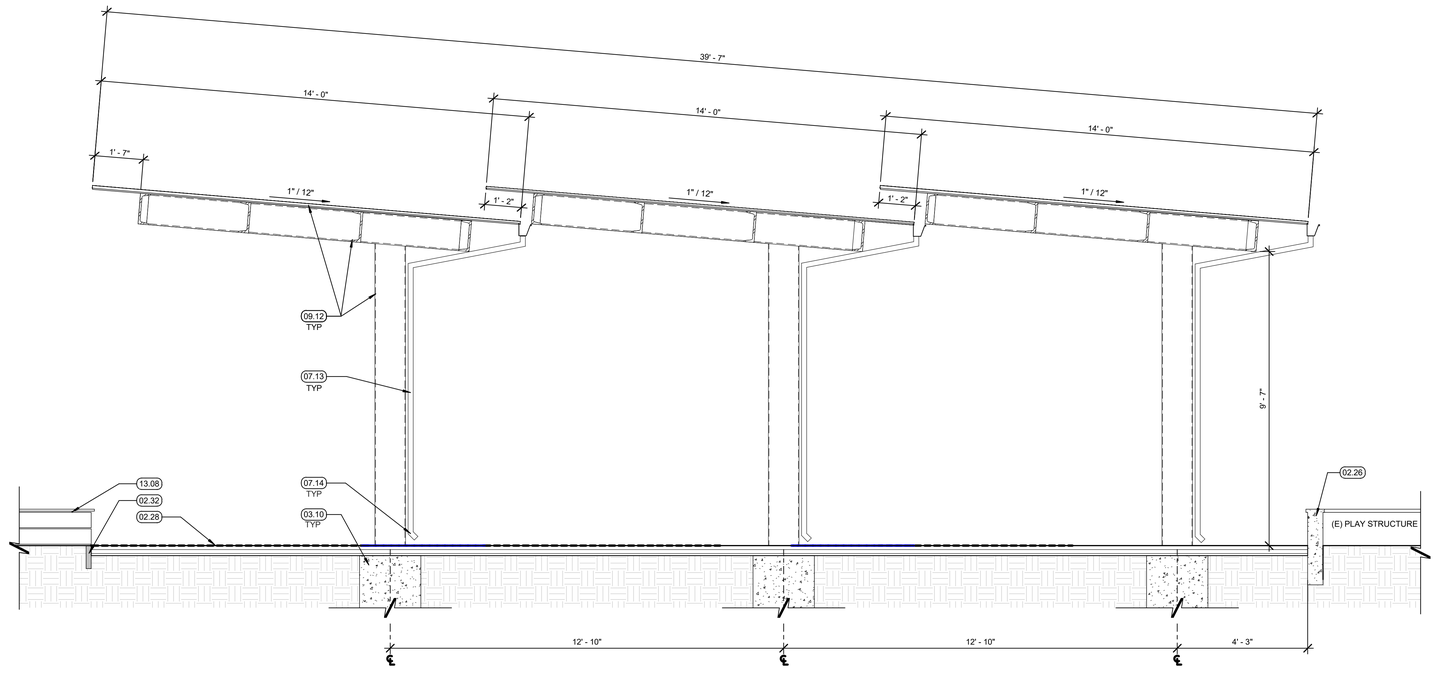


3 SECTION - SHADE STRUCTURE - EAST
1/2" = 1'-0"



1 SECTION - SHADE STRUCTURE - WEST A
1/2" = 1'-0"



4 SECTION - SHADE STRUCTURE - WEST B
1/2" = 1'-0"

GENERAL NOTES

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3. PATCH & REPAIR (E) A/C PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.

KEYNOTES

02.26	(E) CONC. RETAINING WALL
02.28	(E) A/C PAVEMENT
02.32	(E) WD EDGE TRIM
03.10	PIER FOOTING, SEE SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01
07.14	RAINWATER LEADER W/ ANGLED BOTTOM - DRAIN TO GRADE. TERMINATE 3" ABOVE GRADE
09.12	PAINT, COLOR TO BE SELECTED BY ARCHITECT
13.08	RECONFIGURED WD PLANTER BOX BEYOND

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300 – 27th Street
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Facility

MILL VALLEY SCHOOL DISTRICT

Project

SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

Sheet Title

SHADE STRUCTURE SECTIONS

Client Project Number:

Scale:	As indicated	Sheet	A3.20
Drawn By:	Author		
Checked By:	Checker		
Issue Date:			
Revit Version: 2019		Sheet 5 of 16	

SECTION 07 71 23
DOWNSPOUTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Galvanized steel downspouts.

1.2 REFERENCES

Contractor's work shall comply with the following standards as applicable. Manufactured items are to be fabricated to these same standards.

The following standards (and publications) are applicable to the extent referenced in the text. The most recent of these standards is implied, unless otherwise stated.

A. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc-Coated Welded and Seamless.

B. ASTM A653 - Steel Sheet, Zinc Coated, (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

C. ASTM A755 - Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

D. ASTM A924 - General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

E. SMACNA - Architectural Sheet Metal Manual.

1.3 SUBMITTALS

A. Submit Shop Drawings of metal items indicating profiles, jointing, terminations, and installation details. Indicate type and spacing of fasteners.

B. Submittal of specific plates from the SMACNA Architectural Sheet Metal Manual constitutes acceptable documentation of installation details.

C. Submit Product Data for pre-coated galvanized steel.

1.4 QUALITY ASSURANCE

A. Applicator: Company specializing in sheet metal Work with five years minimum experience.

B. Perform Work in accordance with SMACNA standard details and requirements.

1.5 STORAGE AND HANDLING

A. Stack preformed material to prevent twisting, bending, or abrasion and to provide ventilation.

B. Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.6 WARRANTY

A. Provide manufacturer's 20-year warranty against defective materials and finish.

B. Provide installer's 2-year warranty coverage for water tightness and integrity of seals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Galvanized Steel: ASTM A653, Grade 33, G90 zinc-coating in accordance with ASTM A924; thickness as specified.

B. Steel Pipe: ASTM A53, Grade B, Schedule 40 steel pipe, standard weight, Type S, one piece without joints, galvanized according to ASTM A53; 1.8 ounces per square foot.

2.2 COMPONENTS

A. Steel Pipe Downspouts: Fabricate from Schedule 40 steel pipe, and other steel stock as indicated, all full penetration welded into one assembly, then hot-dip galvanized. Strainers: Basket-type constructed of 12 gauge stainless steel wire, size to fit correctly into the leader. Provide stainless steel strap tie-downs to clamp to the downspout outlet as indicated.

2.3 ACCESSORIES

A. Anchorage Devices: Meet SMACNA requirements.

B. End Caps, Downspout Outlets, Straps, Support Brackets, Joint Fasteners. Profiled to suit gutters and downspouts.

2.4 FABRICATION

A. Form gutters and downspouts of profiles and sizes indicated.

B. Field measure site conditions prior to fabricating Work.

C. Fabricate with required connection pieces.

D. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance.

E. Hem exposed edges of metal.

F. Seal metal joints.

G. Fabricate gutter and downspout accessories; seal watertight.

H. Form splash pans to size as detailed with rolled edges.

2.5 SHOP FINISHING

A. Shop prepare and prime exposed ferrous metal surfaces.

B. Site paint exposed to view metal surfaces as specified in Section 09 91 00.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive Work. Contractor to correct deficiencies in the surfaces at own expense.

B. Beginning of installation means acceptance of existing conditions.

3.2 INSTALLATION

A. Coordinate layout of downspouts with site conditions and features on the building not shown in the building elevations.

B. Install downspouts, and accessories in accordance with SMACNA requirements.

C. Coordinate installation of sheet metal gutters with steel pipe downspouts.

D. Join lengths with seams sealed watertight. Flash and seal gutters to downspouts and accessories.

E. Seal metal joints watertight.

END OF SECTION

SECTION 09 91 00
PAINTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Surface preparation.

B. Products and application.

C. Surface finish schedule.

1.2 REFERENCES

A. ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.

B. ASTM D2016 - Test Method for Moisture Content of Wood.

1.3 SYSTEM DESCRIPTION

A. Preparation of all surfaces to receive final finish.

B. Painting and finishing Work of this Section using coating systems of materials including primers, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

C. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.

D. Painting and finishing all exterior surfaces of materials.

1.4 DEFINITIONS

A. Conform to ASTM D16 for interpretation of terms used in this Section.

1.5 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

B. Applicator: Company specializing in commercial painting and finishing with five years documented experience.

C. Regulatory Requirements: Comply with applicable codes and regulations of governmental agencies having jurisdiction including those having jurisdiction over airborne emissions and industrial waste disposal. Where those requirements conflict with this specification, comply with the more stringent provisions. Comply

with the current applicable regulations of the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA).

D. Coats: The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as are necessary to produce the required finish.

E. Employ coats and undercoats for all types of finishes in strict accordance with the recommendations of the paint manufacturer.

F. Provide primers and undercoat paint produced by the same manufacturer as the finish coat.

1.6 SUBMITTALS

A. Provide manufacturer's technical information and instructions for application of each material proposed for use by catalog number.

B. List each material by catalog number and cross-reference specific coating with specified finish system.

C. Provide manufacturer's certification that products proposed meet or exceed specified materials.

D. Submit two 8-1/2 inch x 11 inch Samples of each paint color and texture applied to cardboard. Resubmit Samples until acceptable color, sheen and texture is obtained.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.

B. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing. Paint containers not displaying product identification will not be acceptable.

C. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.

D. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.

B. Minimum Application Temperatures for Latex Paints: 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

1.9 EXTRA STOCK

A. Provide a ten gallon container of each finish paint color and sheen to Owner for touchup.

1.10 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Unless specifically identified otherwise, product designations are those of the Dunn-Edwards Corporation, (800) 537-4098 and shall serve as the standard for kind, quality, and function.

B. Subject to compliance with requirements, other manufacturers offering equivalent products are:

1. Benjamin Moore Paints, (213) 722-3484.
2. Frazee Paint (McCloskey, Ameron), (213) 727-2861.
3. Kelly-Moore Paint Company, (650) 592-8337.
4. Pittsburgh Paints, (888) 774-2001.
5. Sherwin Williams, (310) 404-7422.
6. Spectra-Tone Paint Corp., (909) 478-3485.
7. Tnemec Company, Inc., (310) 643-5191.
8. Vista Paint Corporation, (714) 680-3800.

2.2 MATERIALS

A. Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.

B. Good flow and brushing properties; capable of drying or curing free of streaks or sags.

C. Accessory Materials: Linseed oil, shella, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.3 FINISHES

A. Refer to schedule at end of Section for surface finish schedule.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.

B. Examine surfaces to be finished prior to commencement of Work. Report any condition that may potentially affect proper application.

C. Beginning of installation means acceptance of existing surfaces.

3.2 SURFACE PREPARATION

A. Correct minor defects and clean surfaces which affect Work of this Section.

B. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Pretreat with phosphoric acid etch or vinyl wash. Apply coat of etching primer the same day as pretreatment is applied.

C. Shop Primed Steel: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

3.3 PROTECTION OF ADJACENT WORK

A. Protect elements surrounding the Work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by Work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.4 APPLICATION

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to uniform finish.

D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.

E. Sand lightly between coats to achieve required finish.

F. Allow applied coat to dry before next coat is applied.

G. The number of coats specified is the minimum that shall be applied. Apply additional coats when undercoats, stains or other conditions show through final paint coat, until paint film is of uniform finish, color and appearance.

H. Cloudiness, spotting, lap marks, brush marks, runs, sags, spikes and other surface imperfections will not be acceptable.

I. Where spray application is used, apply each coat of the required thickness. Do not double back to build up film thickness of two coats in one pass.

J. Where roller application is used, roll and redistribute paint to an even and fine texture. Leave no evidence of roller laps, irregularity of texture, skid marks, or other surface imperfections.

3.5 CLEANING

A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.

B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.6 PROTECTION OF COMPLETED WORK

A. Protect finished installation.

B. Erect barriers and post warning signs. Maintain in place until coatings are fully dry.

C. Confirm that no dust generating activities will occur following application of coatings.

3.7 COLOR SCHEDULE

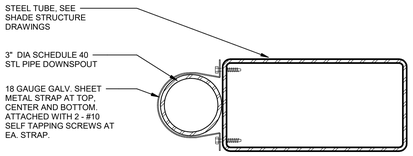
A. Paint and finish colors shall be custom color, mixed and formulated per paint schedule.

3.8 SCHEDULE - EXTERIOR SURFACES

A. The following paint systems shall be used:

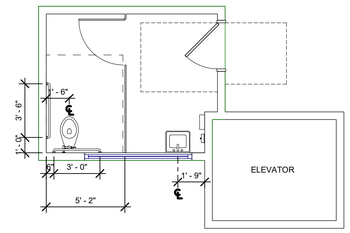
1. Steel-Primed or Unprimed (Semi-Gloss Acrylic)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: EVSH50 Evershield
   - 3rd coat: EVSH50 Evershield
2. Steel-Primed or Unprimed (Gloss-Alkyd)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: 10 Syn-Lustro
   - 3rd coat: 10 Syn-Lustro
3. Steel-Galvanized (Semi-Gloss - Acrylic)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: EVSH50 Evershield
   - 4th coat: EVSH50 Evershield
4. Steel-Galvanized (Gloss - Alkyd)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: 10 Syn-Lustro
   - 4th coat: 10 Syn-Lustro

END OF SECTION

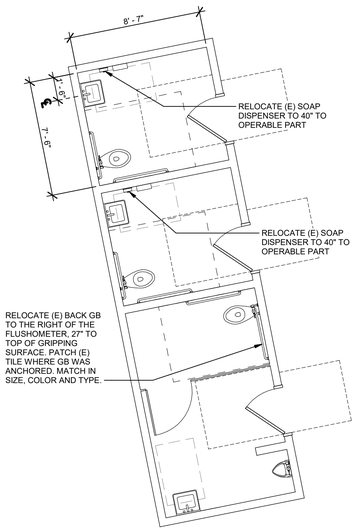


1 DOWNSPOUT AT STEEL COLUMN
3" = 1'-0"

7 EXISTING ELEVATOR - NO WORK
1/2" = 1'-0"



2 ENLARGED PLAN - GIRLS ACCESSIBLE RESTROOM - MAIN LEVEL - NO WORK
1/4" = 1'-0"



3 ENLARGED RESTROOM PLANS - MAIN LEVEL
1/4" = 1'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

AGENCY APPROVAL

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT PARK ELEMENTARY SCHOOL

Sheet Title
MISC. DETAILS

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
A8.01
Sheet 6 of 16

M BAR C VERSA-CANOPY

PC OWNERSHIP - STRUCTURAL STEEL CONTRACTOR

M BAR C CONSTRUCTION INC.

674 RANCHEROS DR
SAN MARCOS, CA. 92069

PHONE: (760) 744-4131
FAX: (760) 744-4449

LIC # 869960
B AND C51

POINT OF CONTACT: GREG JONES
GREGJ@MBARCONLINE.COM
(775) 787-8845

LEGAL INFORMATION

- USE OF THE PC WITHOUT WRITTEN CONSENT FROM M BAR C CONSTRUCTION, INC. IS STRICTLY PROHIBITED.
- ALL INFORMATION HEREIN IS PROPRIETARY INFORMATION AND UNDER THE OWNERSHIP OF M BAR C CONSTRUCTION, INC.

STANDARD NOTES FOR PC USE

- 4 S.T.E.L. ENGINEERING, INC. IS AVAILABLE TO BID THE GENERATION OF THE FULL DSA SUBMITTAL PACKAGE ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE (DPGRC) OR TO SUPPORT THE DPGRC AS THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD (SEOR).
  CONTACT DUSTIN ROSEPINK AT 4 S.T.E.L. ENGINEERING, INC FOR A PROPOSAL FOR SERVICES AT (949) 305-1150, DKRPINK@4STELENG.COM
- FOR CONSTRUCTION COST INFORMATION, CONTACT M BAR C CONSTRUCTION, INC.
- CUSTOM SIZES AND LOADING REQUIRE SUPPLEMENTARY SHOP DRAWINGS AND CALCULATIONS.

DSA OTC PLAN REVIEWER AND DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE NOTES

1. THE PC STRUCTURAL MEMBERS ARE DESIGNED TO THE FOLLOWING ASCE 7-10 SEISMIC CRITERIA: S_{DS} = 3.2, S_1 = 1.39, R = 1.25.
2. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO VERIFY SITE SPECIFIC DESIGN PARAMETERS COMPLY WITH DESIGN PARAMETERS FOR THE PC SHOWN ON SHEET S-2.
3. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE IS RESPONSIBLE FOR VERIFYING SITE-SPECIFIC WIND PARAMETERS AT ANY AND ALL SITES WHERE THIS PC IS USED. THIS PC DESIGN IS BASED ON WIND SPEED 110 MPH FOR RISK CATEGORY II TYPE STRUCTURES UTILIZING EXPOSURE TYPE C PER ASCE 7-10. SEE DESIGN PARAMETER NOTE 1 ON SHEET S-2.
4. A SITE SPECIFIC GEOTECHNICAL REPORT SHALL BE SUBMITTED JUSTIFYING SOILS VALUES SELECTED IF GREATER THAN 100 PCF FOR LATERAL BEARING AND/OR 1,500 PSF FOR VERTICAL BEARING.
   SEE FOUNDATION NOTES ON SHEET S-3.
5. SITE SPECIFIC DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO SELECT SOILS CLASS FOR SITE SPECIFIC USE.
6. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.
7. DUSTIN ROSEPINK IS NOT ACTING AS SITE SPECIFIC SEOR UNLESS HE IS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR A SIGNED LETTER HAS BEEN SUBMITTED WITH DSA-1 FORM STATING HE ACCEPTS THE RESPONSIBILITY AS THE SEOR FOR THE SITE. REFER TO DSA IR A-18.
8. DUSTIN ROSEPINK WILL NOT SIGN ANY DSA FORMS (e.g. DSA-5, DSA-6, etc.), REVIEW OR APPROVE ANY SUBMITTALS (e.g. CONCRETE MIX DESIGNS, SHOP DRAWINGS, etc.) FOR THE SITE SPECIFIC PROJECT UNLESS HE IS ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD. REFER TO DSA IR A-18.
9. CUSTOM SIZES & LOADINGS REQUIRE SUPPLEMENTARY SHOP DRAWINGS & CALCULATIONS.

DESIGN PARAMETER CHECK LIST

1. VERIFY THE MAXIMUM WIND SPEED AT THE SITE DOES NOT EXCEED 110 MPH EXPOSURE C.
2. VERIFY THE MAXIMUM SEISMIC S_{DS} AT THE SITE DOES NOT EXCEED S_{DS} = 3.2.
3. VERIFY THE SITE SPECIFIC SNOW LOAD AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET OR EXCEED THE SITE SPECIFIC SNOW LOAD. THIS PC HAS OPTIONS FOR NO SNOW AND 20 PSF SNOW LOAD. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS PROVIDED THE PROPER SITE SPECIFIC VALUES FOR P_g, P_f, P_s, C_e, I, C_t.
4. REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET WITH THE GEOTECHNICAL REPORT REQUIREMENTS. IF NO GEOTECHNICAL REPORT IS SUPPLIED VERIFY SOILS CLASS V IS SELECTED.
   - SITES NOT LOCATED IN STATE OR LOCAL GEOHAZARD ZONES UTILIZING THIS PC WITH STRUCTURES NOT EXCEEDING 4,000 SQ FT DO NOT REQUIRE CGS APPROVAL OF THE GEOTECHNICAL REPORT. STRUCTURES MAY BE BROKEN UP INTO MULTIPLE 4,000 SQ FT STRUCTURES WITH SEISMIC BREAKS PER SEISMIC GAPS ON S-2.
5. VERIFY THE SITE SPECIFIC FOUNDATION LOCATIONS MEET WITH SOILS NOTE 8 ON S-3 FOR SET BACK FROM TOP OF SLOPES OR THAT THE GEOTECHNICAL REPORT HAS ALLOWED A SMALLER DISTANCE.
6. VERIFY THE SITE SPECIFIC PLANS PROVIDE THE APPROPRIATE OCCUPANCY AND OCCUPANCY LOAD FACTOR FOR THE SITE. SEE BUILDING DATA ON S-2 FOR SAMPLE ACCEPTABLE OCCUPANCIES AND OCCUPANCY LOAD FACTORS.
7. VERIFY THE SITE SPECIFIC PLANS UTILIZE A RISK CATEGORY II STRUCTURE. RISK CATEGORY II STRUCTURES SHALL NOT PROVIDE SHELTER FOR EMERGENCY VEHICLES OR EQUIPMENT; OR PROVIDE REQUIRED ACCESS TO, REQUIRED EGRESS FROM, OR SHARE A LIFE SAFETY COMPONENT WITH A RISK CATEGORY III OR IV STRUCTURE.
8. VERIFY SELECTION OF USE AND OCCUPANCY CLASSIFICATION PER CBC CHAPTER 3; OCCUPANT LOAD FACTOR PER CBC TABLE 1004.1.2; RISK CATEGORY PER CBC TABLE 1604A.5; TO BE COMPLETED BY DESIGN PROFESSIONAL AT TIME OF DSA OTC OR PROJECT DSA SUBMITTAL.
9. VERIFY APPROPRIATE SEISMIC SEPARATION PER SEISMIC GAPS ON S-2.
10. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS APPROPRIATELY ADDRESSED FIRE SEPARATION AND PROPERTY LINE SETBACKS.
11. VERIFY THE SITE SPECIFIC SOLAR PANEL LAYOUT IS PROVIDED WITH DIMENSIONS THAT DO NOT EXCEED THE PC MAXIMUMS. THE MAXIMUM DIMENSIONS SHALL BE TO THE OUTSIDE EDGES OF THE SOLAR PANEL OR THE STRUCTURAL STEEL, WHICH EVER IS GREATER.
12. VERIFY STEEL SELECTIONS HAVE BEEN PROPERLY COORDINATED WITH BEAM/COLUMN SCHEDULES. REFER TO 2/S-8 & 2/S-9.
13. VERIFY SITE SPECIFIC PURLIN CANTILEVERS HAVE BEEN PROPERLY COORDINATED WITH PURLIN SCHEDULES. REFER TO 1/S-8 & 1/S-9.
14. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.

SHEET INDEX

10 ~~13~~ SHEETS

BID INFORMATION

THE STEEL STRUCTURES IN THIS PC ARE PROPRIETARY TO M BAR C CONSTRUCTION, INC. THE STEEL WORK SHALL NOT GO OUT TO BID.

PRE-CHECK (PC) DOCUMENT

CODE: 2016 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

M BAR C CONSTRUCTION INC.
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREGJ@MBARCONLINE.COM
LIC # 869960
B AND C51
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

COVER SHEET

DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-1

1 OF 13 SHEETS

ABBREVIATIONS

&	AND
@	AT
℄	CENTER LINE
A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
BLDG	BUILDING
BLK'G	BLOCKING
BM	BEAM
BOTT. OR (B)	BOTTOM
CBC	CALIFORNIA BUILDING CODE
CCD	CONSTRUCTION CHANGE DOCUMENT (DSA)
CCR	CALIFORNIA CODE OF REGULATIONS
CFS	COLD FORMED STEEL
C.J.	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CS	CFS C SECTION WITH FLANGE STIFFENING LIPS
DIA., ø	DIAMETER
DPGRC	DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE
DSA	DIVISION OF THE STATE ARCHITECT
DWG	DRAWING
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
EXT.	EXTERIOR
FDN	FOUNDATION
FIN.	FINISH
FLR	FLOOR
FLS	FIRE LIFE SAFETY (DSA)
F.O.C.	FACE OF CONCRETE
F.S.	FAR SIDE
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
H.S.B.	HIGH STRENGTH BOLT (ASTM A325 U.N.O.)
HORIZ.	HORIZONTAL
HT.	HEIGHT
IAMPO	INTERNATIONAL ASSOCIATION OF MECHANICAL AND PLUMBING OFFICIALS
ICC	INTERNATIONAL CODE COUNCIL
INT.	INTERIOR
IOR	INSPECTOR OF RECORD
IR	INTERPRETATION OF REGULATIONS (DSA)
JT	JOINT
LG.	LONG
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M.B.	MACHINE BOLT (ASTM A307 U.N.O.)
MAX.	MAXIMUM
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
(N)	NEW
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NOM.	NOMINAL
N.S.	NEAR SIDE
NTS	NOT TO SCALE
O.C.	ON CENTER
OTC	OVER THE COUNTER (DSA)
O.H.	OPPOSITE HAND
℗ OR PL	PLATE
PJP	PARTIAL JOINT PENETRATION
PC	PRE-CHECK (DSA)
PT	PRESSURE TREATED
PV	PHOTOVOLTAIC
REINFT.	REINFORCEMENT
REQ'D	REQUIRED
SC	SLIP-CRITICAL JOINT PER ASTM SPECS
SCHED.	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SHT'G	SHEATHING
SIM.	SIMILAR
S.M.S.	SHEET METAL SCREW
SQ.	SQUARE
SS	STAINLESS STEEL
ST	SNUG-TIGHTENED JOINT PER ASTM SPECS
STD	STANDARD
(T)	TOP
T&B	TOP AND BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/-	WITH
W/O	WITHOUT
WHS	WELDED HEADED STUD (ASTM A108 U.N.O.)
W.P.	WORK POINT
WT.	WEIGHT
WTS	WELDED THREADED STUD (ASTM A108 U.N.O.)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, 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 THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
4. A 'DSA CERTIFIED' INSPECTOR WITH CLASS 2 CERTIFICATION IS REQUIRED FOR THIS PROJECT.
5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE SCHOOL BOARD SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
7. IF THE PROJECT IS DIVIDED INTO INCREMENTS: THE SCOPE OF WORK FOR EACH INCREMENT MUST BE CLEARLY SPECIFIED ON THE TITLE SHEET OF ALL INCREMENTS SUBMITTED.

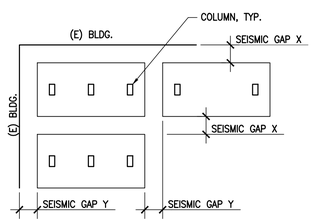
CONSTRUCTION OPTIONS

* ALL CONSTRUCTION OPTIONS INCLUDE OPTIONS FOR CONCRETE DRILLED PIERS AND/OR SPREAD FOOTINGS.

1. 14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW
2. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-9" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
3. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
4. ~~14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-5" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
5. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-6" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
6. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-9" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~

SEISMIC GAPS

OPTION	MAX COLUMN HEIGHT	GAP X	GAP Y
VC14	17'-0"	2½"	7"
VC18	17'-9"	3½"	9½"
VC20	17'-0"	2½"	7"
VC140	17'-5"	3½"	9"
VC180	16'-6"	3"	8½"
VC200	16'-9"	3"	8"



NOTE
1. SEISMIC GAPS LISTED ARE THE MINIMUM GAPS BETWEEN ANY TWO STRUCTURES (I.E. CANOPIES, BUILDINGS) AND DO NOT NEED TO BE COMBINED OR DOUBLED.
2. DIMENSIONS, QUANTITIES, AND LOCATIONS OF STRUCTURES AND COLUMNS SHOWN ABOVE ARE FOR ILLUSTRATIVE PURPOSES ONLY. SEE SITE-SPECIFIC SHEETS FOR LAYOUTS AND QUANTITIES.

STRUCTURAL DATA

LATERAL RESISTING SYSTEM..... STEEL ORDINARY CANTILEVER COLUMN
FOUNDATION ..... CONCRETE DRILLED PIERS AND SPREAD FOOTINGS
TESTING AND INSPECTION LIST..... SEE SHEETS S-3 & S-4

DESIGN PARAMETERS

RISK CATEGORY II

ROOF LIVE LOAD (L_R):
- DECK ONLY ..... 20 psf
- POINT LOAD ..... 300 lb

SNOW LOAD :
- MAX. DRIFT SNOW LOAD..... 0 psf, 20 psf (SEE CONSTRUCTION OPTIONS)

MAXIMUM DEAD LOAD:
- ROOF DECK..... 0.89 psf

WIND: ASCE 7-10 METHOD 2 - ANALYTICAL PROCEDURE
- BASIC WIND SPEED..... 110 mph[1]
- WIND EXPOSURE ..... C[1]
- INTERNAL PRESSURE ..... N/A (OPEN STRUCTURE)
- WIND DIRECTIONALITY FACTOR ..... K_d = 0.85
- VELOCITY PRESSURE COEFFICIENT..... K_z = 0.90
- TOPOGRAPHIC FACTOR ..... K_{zt} = 1.00

SEISMIC: ASCE 7-10
- SEISMIC IMPORTANCE FACTOR ..... I = 1.0
- RESPONSE MODIFICATION FACTOR..... R = 1.25
- MAPPED SPECTRAL RESPONSE ACCELERATION ..... S_S = 3.20[2], S_1 = 1.39
- SITE CLASS ..... D
- DESIGN SPECTRAL RESPONSE ..... S_{DS} = 2.133, S_{D1} = 1.390
- SEISMIC DESIGN CATEGORY ..... D (E WITH GROUND MOTION ANALYSIS)
- SEISMIC FORCE RESISTING SYSTEM ..... STEEL ORDINARY CANTILEVER COLUMN
- SEISMIC RESPONSE COEFFICIENT ..... C_S = 1.707
- ANALYSIS PROCEDURE ..... EQUIVALENT LATERAL FORCE

NOTES:

1. THE PC COMPONENTS & CLADDING AND MAIN WIND FORCE RESISTING SYSTEM DESIGN WIND PRESSURE q_h = 23.7 psf DETERMINED FROM THE CRITERIA LISTED ABOVE. (EXPOSURE C, K_z=0.960, K_{zt}=1.0 , K_d = 0.85).

   THE PC MAY BE USED FOR RISK CATEGORY II TYPE STRUCTURES IN ANY WIND ZONE WHERE $q_h \leq$ 23.7 psf.

   EXAMPLE:
   SITE BASIC WIND SPEED, V =120 mph
   RISK CATEGORY II
   WIND: EXPOSURE B
   K_d = 0.85
   K_z = 0.701
   K_{zt} = 1.00
   q_h = 22.0 psf < 23.7 psf

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

2. THE PC SEISMIC FORCE RESISTING SYSTEM IS GOVERNED BY C_S = 1.707 FROM THE CRITERIA LISTED ABOVE. (R = 1.25, S_S = 3.2, I_E = 1.00).

   THE PC MAY BE USED FOR RISK CATEGORY II STRUCTURES AT ANY SITE WHERE THE SITE SPECIFIC SEISMIC PARAMETER S_S AND R = 1.25 RESULT IN A VALUE $C_S \leq$ 1.707.

   EXAMPLE:
   RISK CATEGORY II
   SOIL: SITE CLASS A
   S_S = 3.4
   S_1 = 1.8
   R = 1.25
   I = 1.00
   S_{DS} = 1.813
   C_S = 1.451 < 1.707

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

BUILDING DATA

TYPE OF CONSTRUCTION..... IIB
OCCUPANCY..... VARIES - SEE EXAMPLES
NUMBER OF STORIES..... 1
BUILDING AREAS..... VARY DUE TO OCCUPANCY - SEE EXAMPLES
MODULE SIZES..... VARY WITH OPTIONS
BUILDING LENGTH:
- ALL WIDTHS..... MAX. 500'-0" LENGTH

NOTE: NO SEISMIC AND/OR THERMAL EXPANSION JOINTS REQUIRED ALONG THE LENGTH OF THE STRUCTURES. (ALL JOINTS ARE INTERNAL)

OCCUPANCY AND BUILDING AREA EXAMPLES:
ALL STRUCTURES SHALL BE BASED ON RISK CATEGORY II STRUCTURE.

A OCCUPANCY:

EXAMPLE 1:
STRUCTURES LOCATED OVER LUNCH AREA WITHOUT FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 15 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 4,500 sq ft

EXAMPLE 2:
STRUCTURES LOCATED OVER LUNCH AREA WITH FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 18"/person ALONG LINEAR BENCH - MAX 300 FOR RISK II
MAX SQ FT: 5,400 LINEAR INCHES OF FIXED SEATING UNDER THE STRUCTURE

EXAMPLE 3:
STRUCTURES LOCATED OVER AN AREA DESIGNATED FOR ASSEMBLY (TYPICALLY AMPHITHEATER, OR OTHER SPACE WITH FIXED SEATING OR DESIGNATED AS A STANDING ASSEMBLY AREA)
OCCUPANCY: A
OCCUPANCY LOAD: 7 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 2,100 sq ft

SHADE STRUCTURE

EXAMPLE 1:
STRUCTURES LOCATED OVER A FIELD, BLACKTOP, PLAYGROUND EQUIPMENT,OR OTHER NON DESIGNATED USE SPACES
OCCUPANCY: E
OCCUPANCY LOAD: 20 sf/person - MAX 250 FOR RISK II
MAX SQ FT: 5,000 sq ft

PARKING

EXAMPLE 1:
STRUCTURES LOCATED OVER PARKING
OCCUPANCY: S-2
OCCUPANCY LOAD: 200 sf/person
MAX SQ FT: UNLIMITED PER CBC 406.5.4 AND 406.5.5

CODES

TITLE 24, CCR CODES:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE (CAC) ..... (PART 1, TITLE 24, CCR)
2. 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2..... (PART 2, TITLE 24, CCR) (2015 INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS)
3. 2016 CALIFORNIA ELECTRICAL CODE ..... (PART 3, TITLE 24, CCR) (2014 NATIONAL ELECTRICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
4. 2016 CALIFORNIA MECHANICAL CODE (CMC) ..... (PART 4, TITLE 24, CCR) (2015 UNIFORM MECHANICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
5. 2016 CALIFORNIA PLUMBING CODE (CPC) ..... (PART 5, TITLE 24, CCR) (2015 UNIFORM PLUMBING CODE WITH 2016 CALIFORNIA AMENDMENTS)
6. 2016 CALIFORNIA ENERGY CODE ..... (PART 6, TITLE 24, CCR) (2016 EDITION CALIFORNIA ENERGY COMMISSION BUILDING ENERGY EFFICIENCY STANDARDS)
7. 2016 CALIFORNIA FIRE CODE (CFC) ..... (PART 9, TITLE 24, CCR) (2015 INTERNATIONAL FIRE CODE WITH 2016 CALIFORNIA AMENDMENTS)
8. 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE ..... (PART 11, TITLE 24, CCR)
9. 2016 CALIFORNIA REFERENCED STANDARDS CODE ..... (PART 12, TITLE 24, CCR)
   NFPA 13 - 2016
   NFPA 72 - 2016

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2016 CBC, CHAPTER 35
2016 CFC, CHAPTER 80

FIRE LIFE SAFETY

AUTOMATIC FIRE SPRINKLERS REQUIRED? (Y/N)..... N

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

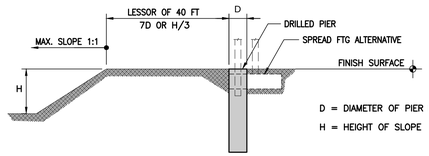
VERSA CANOPY
GENERAL DATA

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-2
2 OF 13 SHEETS

SOILS NOTES

1. IF NO GEOTECHNICAL REPORT IS SUPPLIED AT THE TIME OF DSA REVIEW ADDRESSING SITE-SPECIFIC PARAMETERS, FOUNDATION SELECTIONS SHALL BE BASED ON CLASS W SOILS (SOIL CLASS 5 OF CBC TABLE 1806A.2 WITH DOUBLING OF LATERAL BEARING PRESSURE FOR STRUCTURES NOT ADVERSELY AFFECTED BY ½" MOTION AT GROUND SURFACE) IN THE SOIL CLASS TABLE BELOW.
2. WHEN A GEOTECHNICAL REPORT IS SUPPLIED THE GEOTECHNICAL ENGINEER SHALL REVIEW THE SITE CONDITIONS, TESTING RESULTS, AND ALL ALLOWABLE INCREASES AND SUPPLY THE FINAL SOIL CLASS TO BE USED FROM THE BELOW TABLE. THE GEOTECHNICAL ENGINEER SHALL PROVIDE IN THE GEOTECHNICAL REPORT THE FOLLOWING BASE VALUES WITHOUT INCREASE FOR 24" DIAMETER PIERS: THE ALLOWABLE VERTICAL END BEARING, ALLOWABLE LATERAL BEARING, ALLOWABLE DOWNWARD SKIN FRICTION, ALLOWABLE SKIN FRICTION TO RESIST UPLIFT. THE GEOTECHNICAL ENGINEER SHALL ALSO PROVIDE ANY ALLOWABLE INCREASES TO THE BASE VALUES. ALLOWABLE INCREASES ARE TYPICALLY DUE TO BUT NOT EXCLUSIVE TO: DOUBLE VALUES DUE TO ISOLATED FOUNDATIONS, DOUBLE VALUES DUE TO THE STRUCTURE NOT BEING ADVERSELY AFFECTED BY 1/2" DEFLECTION AT THE SURFACE, A 4/3 INCREASE DUE TO SHORT TERM LOADING, AND ANY OTHER ALLOWABLE INCREASES. THE GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION OF THE SOIL CLASS TO BE USED AFTER ALL INCREASES HAVE BEEN APPLIED. ALL FOUNDATIONS HAVE BEEN DESIGN BASED ON THE VALUES PRESENTED IN THE BELOW TABLE. THE GEOTECHNICAL REPORT SHALL ADDRESS IF THE USE OF STEEL CASING THAT IS TWISTED INTO PLACE AND LEFT INSTALLED AFFECTS ANY ALLOWABLE VALUES.
3. THE GEOTECHNICAL ENGINEER MAY SPECIFY DIFFERENT SOILS CLASSES TO BE USED FOR THE DIFFERENT STRUCTURE TYPES (VC14 OR VC20), DIFFERENT AREAS OF THE SITE (I.E. NORTH LOT OR WEST LOT), OR THE ENGINEER MAY SPECIFY ONE SOILS CLASS TO BE USED FOR THE ENTIRE SITE.
4. THE GEOTECHNICAL ENGINEER SHALL ADDRESS IN THE REPORT ANY CONCRETE DURABILITY REQUIREMENTS IN ACCORDANCE WITH ACI 318-11 CHAPTER 4.
5. THE GEOTECHNICAL REPORT SHALL BE SPECIFIC TO THE LOCATION OF THE STRUCTURES. BORING(S) SHALL BE DONE AT THE SPECIFIC LOCATION(S) WHERE THE STRUCTURES ARE TO OCCUR. THE GEOTECHNICAL REPORT SHALL CONFORM TO 2016 CBC SECTION 1803A.
6. A COPY OF THE GEOTECHNICAL REPORT SHALL BE PROVIDED AT THE TIME OF PLAN REVIEW.
7. AT THE TIME OF PLAN REVIEW, THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE SHALL SELECT A SOILS CLASS ON THE SITE-SPECIFIC PLANS BASED ON THE GEOTECHNICAL REPORT (OR NOTE 1 ABOVE).

   HOLES MAY BE LEFT OPEN FOR ANY AMOUNT OF TIME AS LONG AS THEY ARE PROPERLY COVERED FOR OSHA STANDARDS.
8. FOUNDATIONS ADJACENT TO SLOPED GROUND SURFACES SHALL BE SET BACK PER THE FOLLOWING FIGURE UNLESS OTHERWISE RECOMMENDED BY A SITE SPECIFIC GEOTECHNICAL REPORT.



DESIGN SOIL VERTICAL AND LATERAL BEARING VALUES

SOIL CLASS	VERTICAL BEARING PRESSURE (psf)	LATERAL BEARING PRESSURE (psf/ft)	MAXIMUM LATERAL BEARING (psf)	MIN. DOWNWARD SKIN FRICTION (psf)	MIN. UPWARD SKIN FRICTION (psf)
CLASS V	1,500	133	2,000	175	50
CLASS W	1,500	267	4,000	225	50
CLASS X	2,000	400	6,000	250	75
CLASS Y	2,000	533	8,000	275	75
CLASS Z	3,000	800	12,000	325	100

SPECIAL INSPECTION

1. SOILS:
   - VERIFY THE SITE HAS BEEN PREPARED PROPERLY PRIOR TO PLACEMENT OF CONTROLLED FILL AND/OR EXCAVATIONS FOR FOUNDATIONS.
   - VERIFY THAT THE FOUNDATION EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
   - VERIFY THAT MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
2. PIER FOUNDATIONS:
   - INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER.
   - VERIFY LOCATIONS OF PIERS.
3. CONCRETE:
   - VERIFY USE OF REQUIRED DESIGN MIX, DETERMINE THE TEMPERATURE OF THE CONCRETE, AND (WHERE REQUIRED) PERFORM AIR CONTENT TEST.
   - TEST CONCRETE (COMPRESSION TEST).
   - INSPECT PLACEMENT OF FORMWORK, REINFORCING STEEL, EMBEDDED ITEMS, AND CONCRETE. INSPECT CURING AND FORM REMOVAL.
   - SLUMP TEST SHALL BE PERFORMED PER SITE SPECIFIC DSA-103.
4. STEEL:
   - VERIFY THAT ALL MATERIALS ARE APPROPRIATELY MARKED AND THAT:
     - MILL CERTIFICATES INDICATE MATERIAL PROPERTIES THAT COMPLY WITH REQUIREMENTS.
     - MATERIAL SIZES, TYPES AND GRADES COMPLY WITH REQUIREMENTS.
   - TEST UNIDENTIFIED MATERIALS.
   - VERIFY MEMBER LOCATIONS, BRACING AND ALL DETAILS CONSTRUCTED IN THE FIELD.
   - VERIFY STIFFENER LOCATIONS, CONNECTION TAB LOCATIONS, AND ALL CONSTRUCTION DETAILS FABRICATED IN THE SHOP.
   - HIGH STRENGTH SLIP CRITICAL BOLTING.
5. SHOP FABRICATION:
   - VERIFY FABRICATOR'S FABRICATION AND QUALITY CONTROL PROCEDURES.
   - VERIFY ALL ASPECTS OF SHOP FABRICATION INCLUDING MEMBER LOCATIONS, DIMENSIONAL LAYOUT OF ALL PARTS AND PIECES, BOLTING, ETC.
6. SEE DSA APPROVED 103 FOR ADDITIONAL REQUIREMENTS.

GENERAL NOTES

1. DESIGN PER 2016 C.B.C. AND ITS PRESCRIBED LOADING AND MATERIAL SPECIFICATIONS:
   - ASCE 7-10
   - 14TH EDITION AISC STEEL CONSTRUCTION MANUAL
   - 2012 AISI COLD FORMED STEEL STANDARD
   - ACI 318-14
2. THESE STRUCTURES ARE NOT DESIGNED TO BE, NOR SHALL THEY BE, ENCLOSED.
3. ALL DIMENSIONS, CONDITIONS, AND ELEVATIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY DISCREPANCIES ARE FOUND OR IF ANY CONDITION EXISTS NOT AS SHOWN ON THE DRAWINGS THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY.
4. IF THE SNOW LOAD OPTION IS USED THEN THE SITE-SPECIFIC MAX GROUND SNOW LOADING INCLUDING DRIFT MUST BE LESS THAN OR EQUAL TO 20 PSF.
5. ALL SCREWS TO BE ITW BUILDEX TEK SCREWS PER ICC ESR-1976 OR ELCO DRILL SCREW PER ICC ESR-3294.
6. OWNER TO SIGN AUTHORIZATION TO PROCEED PRIOR TO DRILLING.

   SEE SAMPLE BELOW:

MBarC CONSTRUCTION
THE STRENGTH BETWEEN SUN AND SHADE™

674 Rancheros Drive
San Marcos, CA 92069
PH: 760.744.4131
FAX: 760.744.4449
CA LIC #869960

Authorization to Proceed

Project Name: _____ Foreman: _____

Site Name: _____ Contractor: _____

As an authorized representative of Contractor listed above, I,_____ agree to the following statements below:

_____(initial) **LAYOUT:** The onsite layout for installation of structural steel for carports and canopies has been inspected and is approved as is.

_____(initial) **ARRAY ORIENTATION/CONCRETE POUR:** The tilt and direction of the canopies have been verified and are approved as is.

ARRAYS:

_____

_____

_____

_____

_____

_____

It is understood that additional costs will apply due to the following delays: re-layout not due to M Bar C, underground site conflicts (unmarked utility lines, including but not limited to water, sewer, fire, irrigation, electrical; encountered underground water; change in soils condition, including but not limited to hard drilling, caving soils, obstructions).

BY: _____ DATE: _____
(signature)

www.mbarconline.com

STEEL NOTES

1. COLD FORMED STEEL SIZES ARE BASED ON BARE STEEL THICKNESS.
2. STRUCTURAL PURLIN, BEAM & COLUMN MEMBERS SHALL HAVE MINIMUM STEEL YIELD STRENGTHS AS INDICATED.
3. STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153, CLASS D) OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION.
4. ALL EXPOSED STEEL FASTENERS, INCLUDING CAST IN PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION-PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT COMPLY WITH THE 1000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUIK GUARD BY SIMPSON, KWIK-COTE BY HILTI, STALGARD BY ELCO, VISTACORR BY SFS INTEC, ETC.)
5. STEEL FABRICATION SHALL COMPLY WITH LATEST AISC SPECIFICATIONS.
6. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE ASTM A1085 GR. 50 U.N.O. ASTM A1085 STEEL HAS THE SAME OR BETTER PROPERTIES AND WELDABILITY THAN ASTM A500 GR. B.
7. COLD FORMED STEEL (CFS) MEMMBERS SHALL BE ASTM A653 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi) OR ASTM A1011 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi).
8. ZINC COATING OF STRUCTURAL STEEL SHALL CONFORM WITH G90 STANDARD OR BETTER. COLD FORMED STEEL (CFS) MEMBERS TO BE GALVANIZED IN ACCORDANCE ASTM A653 G90 STANDARD. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS NOTED OTHERWISE.
9. ALL STEEL MEMBERS TO BE GALVANIZED OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT AND FINISH COAT OR EQUIVALENT PAINT SYSTEM. CONTRACT DOCUMENTS SHALL SPECIFY THE TYPE OF SSPC CORROSION RESISTING SYSTEM TO BE UTILIZED AND THE SSPC GRADE FOR CLEANING, MINIMUM SSPC GRADE SP2.
10. BOLTS SHALL CONFORM TO THE ASTM A307 SPECIFICATIONS UNLESS NOTED OTHERWISE. INSPECTION OF A307 BOLTING IS NOT REQUIRED.
11. ASTM A307 BOLTS MAY BE SUBSTITUTED WITH THE SAME NUMBER AND SIZE OF SAE J429 GRADE 2 BOLTS.
12. BOLTS SHALL BE TIGHTENED TO SNUG-TIGHT CONDITION UNLESS NOTED OTHERWISE EXCEPT FOR A325-SC HIGH STRENGTH BOLTS USED IN THE BEAM TO COLUMN CONNECTION.
13. A325-SC BOLTS SHALL BE PRE-TENSIONED PER AISC SPECIFICATIONS USING APPROVED LOAD INDICATOR METHODS INCLUDING BUT NOT LIMITED TO TURN-OF-THE NUT WITH MATCH MARKING, TWIST OFF TENSION CONTROL OR DIRECT TENSION INDICATOR BOLT, NUT AND WASHER ASSEMBLIES.
14. ASTM A307 BOLTS SHALL HAVE STANDARD WASHERS UNDER THE NUT & BOLT HEAD (F436 WASHERS ARE NOT REQUIRED). STANDARD WASHERS DO NOT REQUIRE HARDNESS TEST.
15. BOLT HOLES FOR ½"ø BOLTS SHALL BE AS FOLLOWS: STANDARD HOLES: 9/16"ø

CONCRETE NOTES

1. CONCRETE MIN. 4,500 PSI AT 28 DAYS UNLESS A SOILS REPORT IS PROVIDED THAT ALLOWS FOR A LOWER STRENGTH (3,000 PSI MIN.). BATCH PLANT INSPECTION NOT REQUIRED.
2. CONRETE SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS BASED ON EXPOSURE CLASS IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.2.1 WHEN DETERMINED BY A SITE-SPECIFIC GEOTECHNICAL REPORT.

REQUIREMENTS FOR CONCRETE BASED ON EXPOSURE CLASS

EXPOSURE CLASS ACI TABLE 19.3.2.1	MINIMUM CONCRETE STRENGTH F'_c	CEMENT TYPE ASTM C150	MAX. WATER/CEMENT RATIO W/M
NOT DETERMINED	4,500 PSI	TYPE V	0.45
F0, S0, P0, C0, C1	3,000 PSI	TYPE II	N/A
S1, P1	4,000 PSI	TYPE II	0.50
ALL OTHER	4,500 PSI	TYPE V	0.45

3. CONCRETE EXPOSED TO THAW AND FREEZE CYCLE SHALL BE AIR ENTRAINED PER ACI 318-14 TABLE 19.3.1.1.
4. CONCRETE TO ATTAIN 1000 PSI PRIOR TO REMOVAL OF SHORING AND/OR INSTALLATION OF BEAMS AND PURLINS. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 1000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
5. CONCRETE TO REACH 3000 PSI PRIOR TO INSTALLATION OF ROOF DECK. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 3000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
6. REINFORCEMENT BARS SHALL BE ASTM A615, GR60 TYPICAL, U.N.O.
7. MINIMUM CONCRETE COVER SHALL BE 2½" TO EARTH (DRILLED PIER FOUNDATIONS ONLY), 3" TO EARTH ALL OTHER CONCRETE, 2" TO EXPOSED SURFACES PER CBC TABLE 1808A.8.2
8. ALL REINFORCING STEEL AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED PRIOR TO THE POURING OF CONCRETE.
9. ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 & 318 STANDARDS.
10. AGGREGATE GRADATION AND QUALITY SHALL BE IN ACCORDANCE WITH ACI 302-1R.
11. COLD JOINTS SHALL HAVE A ROUGHENED SURFACE. BONDING AGENT SHALL COMPLY WITH ASTM C1059. A SUBMITTAL FOR CONCRETE BONDING AGENT SHALL BE APPROVED BY DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO INSTALLATION. DSA INSPECTOR OF RECORD TO PERIODICALLY INSPECT INSTALLATION OF BONDING AGENT.
12. BATCH PLANT INSPECTION NOT REQUIRED PER CBC 1705A3.3.2. SUBJECT TO:
    - A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.
    - BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD, AND TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.
11. CONCRETE MAY BE PUMPED, POURED, TAILGATED, OR OTHER SUCH METHODS INTO PLACE. CONCRETE SHALL BE ALLOWED TO FREE FALL THE ENTIRE DEPTH OF THE FOUNDATION. PLACEMENT OF ANY FREE-FALL CONCRETE SHALL BE SUCH THAT THE CONCRETE DOES NOT ALTER THE EMBEDMENT DEPTH OR THE CLEARANCE OF THE REINFORCING BAR CAGE OR OTHER EMBEDDED MATERIALS.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

GENERAL NOTES

DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-3
3 OF 13 SHEETS

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Spread footings without post installed anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic		**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*).
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
+	**WOOD**			
+	**OTHER**			

3 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY SPREAD FOOTINGS**

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier and Pad Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

1 / - **SAMPLE DSA 103 - STRUCTURES WITH PIER & SPREAD FOOTINGS**

THE EXAMPLE FORM DSA-103'S SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT-SPECIFIC FORM DSA-103'S. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE FORM DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

2 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY PIER FOOTINGS**

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER — DUSTIN K. ROSEBRAK — S 5885 — STRUCTURAL — STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 865960 B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM | (775) 787-8845
GREG JONES

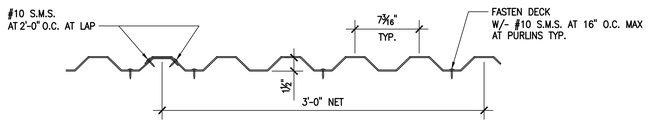
4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

SAMPLE DSA-103 FORMS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-4
4 OF 13 SHEETS

ROOF DECK SPECIFICATIONS						
SECTION PROPERTIES			TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
GA	F_y (ksi)	WEIGHT (psf)	I_+ (in.^{4}/ft.)	S_+ (in.^{3}/ft.)	I_- (in.^{4}/ft.)	S_- (in.^{3}/ft.)
26	80	0.89	0.0840	0.0762	0.0817	0.0623

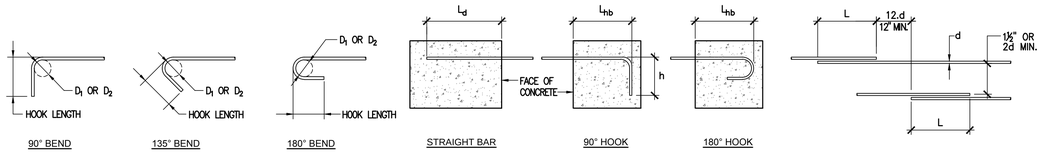


NOTES:

1. MATERIAL AND SECTION PROPERTIES LISTED ABOVE ARE MINIMUM REQUIRED VALUES FOR METAL DECK BASED ON AEP HR-36 26 GA.
2. METAL ROOF DECK SHALL BE CLASS A PER CBC CHAPTERS 7A AND 15.

3 - DECK DETAIL

N.T.S.



90° BEND | 135° BEND | 180° BEND | STRAIGHT BAR | 90° HOOK | 180° HOOK

FINISHED BEND DIAMETERS		
BAR SIZE	D_1	D_2
#3	1½"	2¼"
#4	2"	3"
#5	2½"	3¾"
#6, #7, #8	6d	6d

'D_1' - FINISHED BEND DIA. FOR STIRRUP & TIE HOOKS.
'D_2' - BEND DIA. FOR STD HOOKS.
'd' - BAR DIAMETER

STANDARD HOOK LENGTHS				
BAR SIZE	MAIN REINFT.		STIRRUP & TIE HOOKS	
	90°	180°	90°	180°
#3	6"	4"	3½"	4¼"
#4	8"	4½"	4½"	4½"
#5	10"	5"	5"	6"
#6	12"	6"	12"	7½"
#7	14"	7"	14"	9"
#8	16"	8"	16"	10"

A STANDARD HOOKS

REINFORCEMENT DEVELOPMENT LENGTHS				
CONCRETE STRENGTH		F'_C = 3,000 PSI		
NOMINAL BAR SIZE	h	L_d		L_{hb}
		TOP BARS	OTHER BARS	
#3	6"	1'-10"	1'-5"	9"
#4	8"	2'-5"	1'-10"	11"
#5	10"	3'-0"	2'-4"	1'-2"
#6	12"	3'-7"	2'-9"	1'-5"
#7	14"	5'-3"	4'-0"	1'-7"
#8	16"	6'-0"	4'-7"	1'-10"

NOTES:

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW.

B DEVELOPMENT LENGTHS

REINFORCEMENT LAP SPLICE LENGTH 'L'		
CONCRETE STRENGTH	F'_C=3,000 PSI	
NOMINAL BAR SIZE	TOP BARS	OTHER BARS
#3	2'-4"	1'-10"
#4	3'-2"	2'-5"
#5	3'-11"	3'-0"
#6	4'-8"	3'-7"
#7	6'-9"	5'-3"
#8	7'-9"	6'-0"

NOTES:

1. LAP SPLICE SHALL BE INCREASED 50% WHERE CLEAR SPACE BETWEEN BARS IS LESS THAN 2 BAR DIAMETERS AND/OR THE CLEAR COVER IS LESS THAN ONE BAR DIAMETER.

C OFFSETS AND LAP SPLICES

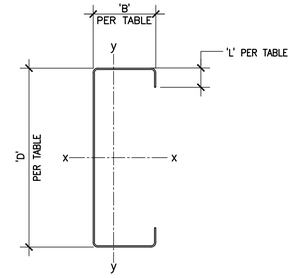
4 - TYPICAL REINFORCEMENT BAR BENDS AND LAPS

N.T.S.

SECTION NAME	D (in)	B (in)	L (in)	GA	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
							I_x (in^4)	S_w (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
CS12 x 4 x 0.102 (12 GA)	12	4.0	1.0	12	7.35	2.16	46.87	6.76	4.66	4.38	1.53	1.42
CS12 x 4 x 0.124 (10 GA)	12	4.0	1.0	10	8.91	2.62	56.37	8.59	4.64	5.20	1.82	1.41
CS14 x 4 x 0.102 (12 GA)	14	4.0	1.0	12	8.04	2.36	67.42	8.22	5.34	4.57	1.55	1.39

NOTES:

1. ALL PURLIN SECTIONS ARE ASTM A653, GR 55, F_y=55 ksi
2. ALL LIGHT GAGE STEEL DESIGNED USING 2012 AISI COLD-FORMED STEEL DESIGN MANUAL.
3. PROPERTIES PER AEP STANDARD SIZES.
4. ACTUAL MANUFACTURER'S PROPERTIES MUST MEET OR EXCEED AEP STANDARD PROPERTIES.



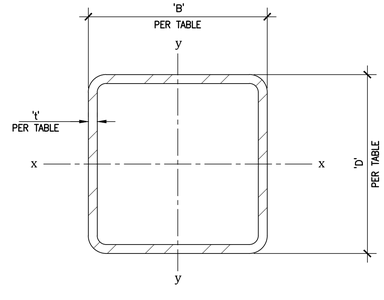
1 - PURLIN & BEAM COLD FORMED C-SECTION

N.T.S.

SECTION NAME	D (in)	B (in)	t (in)	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
						I_x (in^4)	S_x (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
HSS 12 x 6 x $^1/_4$	12	6	1/4	29.23	8.59	161.00	26.80	4.33	55.20	18.40	2.53

NOTES:

1. ALL COLUMNS SHALL BE ASTM A1085 GR. 50 (F_y=50 ksi)



2 - HSS COLUMN

N.T.S.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

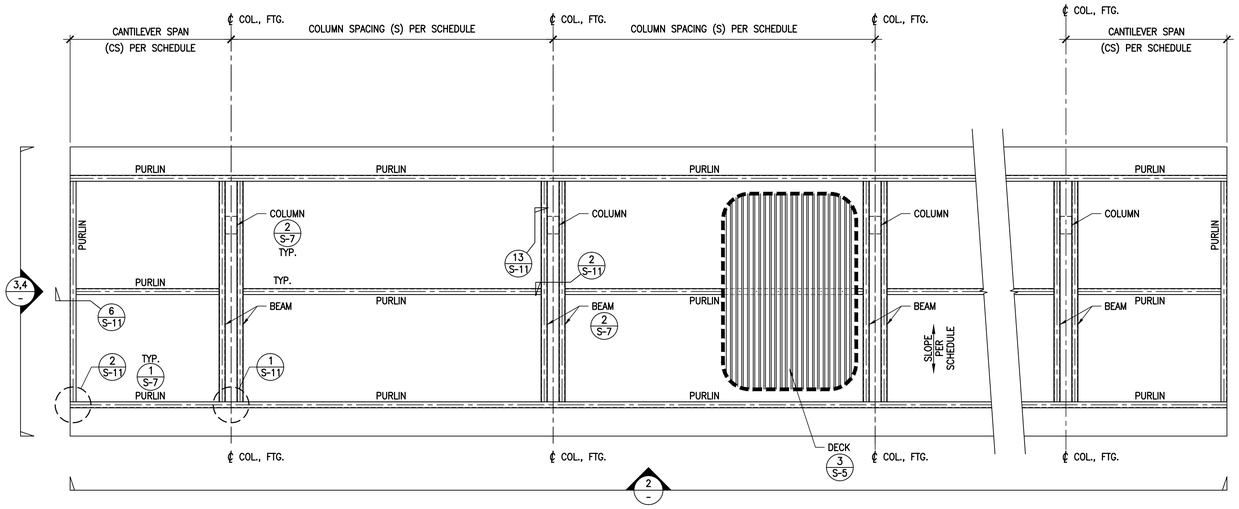
MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

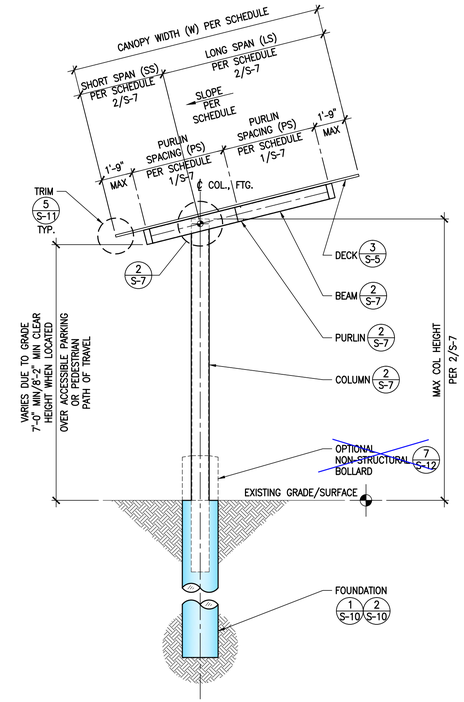
VERSA CANOPY

SECTION PROPERTIES & REBAR DETAILS

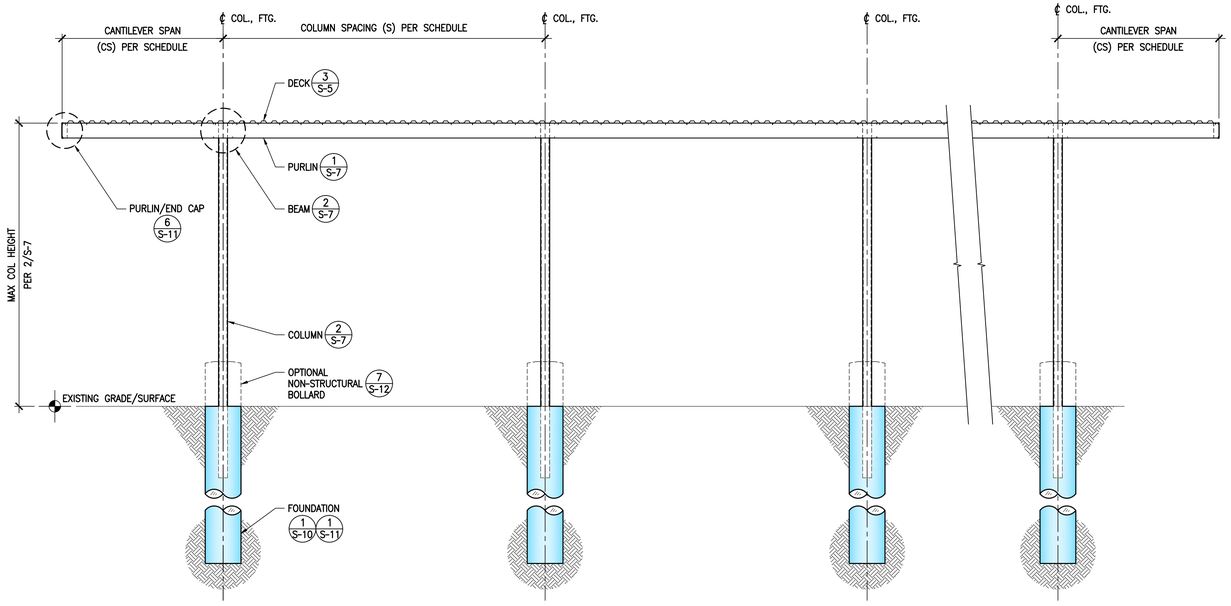
DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-5
5 OF 13 SHEETS



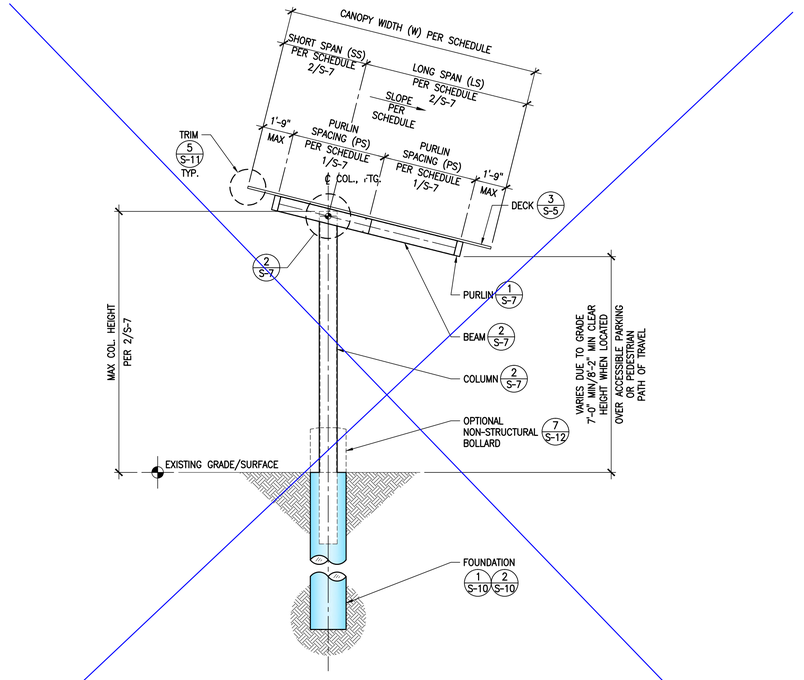
1 - VC14, ~~VC18 & VC20~~ TYPICAL PLAN VIEW 1/4"=1'-0"



3 - VC14, ~~VC18 & VC20~~ TYPICAL SIDE ELEVATION 1 1/4"=1'-0"



2 - VC14, ~~VC18 & VC20~~ TYPICAL FRONT ELEVATION 1/4"=1'-0"



4 - VC14, VC18 & VC20 TYPICAL SIDE ELEVATION 2 1/4"=1'-0"

ENGINEER'S APPROVAL

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GREG JONES GREGJ@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200 MISSION VIEJO, CA 92691
PHONE: (949) 305-1150 FAX: (949) 305-1420

VERSA CANOPY
VC14, ~~VC18 & VC20~~
FRAMING PLAN & ELEVATIONS

DRAWN GM
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4STEL JOB NO. MC03-01
SHEET S-6
6 OF 13 SHEETS

VC14, VC18 & VC20 PURLIN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX PURLIN SPACING (PS)	MAX COLUMN SPACING (S)	MAX CANTILEVER SPAN (CS)	PURLIN	
					SECTION	DETAIL
VC14	0 psf	63"	27'-0"	10'-0"	CS12 x 4 x 0.102 (12 GA)	1/S-5
~~VC18~~	~~0 psf~~	~~87"~~	~~27'-0"~~	~~10'-0"~~	~~CS12 x 4 x 0.124 (10 GA)~~	1/S-5
~~VC20~~	~~0 psf~~	~~99"~~	~~19'-0"~~	~~8'-0"~~	~~CS14 x 4 x 0.102 (12 GA)~~	1/S-5

NOTES:
1. REFER TO SHEET 'S-2' FOR CONSTRUCTION OPTIONS.
2. REFER TO DETAIL '4/S-12' FOR ALLOWABLE PURLIN PENETRATIONS.
3. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
4. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID'S ROW ONLY.

1 - VC14, VC18 & VC20 TYPICAL PURLIN SCHEDULE

VC14, VC18 & VC20 BEAM/COLUMN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX WIDTH (W)	BEAM SHORT SPAN MIN (SS)	BEAM LONG SPAN MAX (LS)	MAX COLUMN SPACING (S)	ROOF SLOPE	BEAM		BEAM TO COLUMN DETAIL	COLUMN		MAX COLUMN HEIGHT
							SECTION	DETAIL		SECTION	DETAIL	
VC14	0 psf	14'-0"	4'-3"	9'-9"	27'-0"	3:12 MAX	CS12 x 4 x 0.102 (12 GA)	1/S-5	13/S-11	HSS 12 x 6 x 1/4	2/S-5	17'-0"
~~VC18~~	~~0 psf~~	~~18'-0"~~	~~7'-9"~~	~~10'-3"~~	~~27'-0"~~	~~3:12 MAX~~	~~CS12 x 4 x 0.102 (12 GA)~~	~~1/S-5~~	~~13/S-11~~	~~HSS 12 x 6 x 1/4~~	~~2/S-5~~	~~17'-9"~~
~~VC20~~	~~0 psf~~	~~20'-0"~~	~~5'-9"~~	~~14'-3"~~	~~19'-0"~~	~~3:12 MAX~~	~~CS14 x 4 x 0.124 (10 GA)~~	~~1/S-5~~	~~13/S-11~~	~~HSS 12 x 6 x 1/4~~	~~2/S-5~~	~~17'-0"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. THE SHORT SPAN AND LONG SPANS MAY BE ADJUSTED WITH THE FOLLOWING REQUIREMENT:
   THE OVERALL CANOPY WIDTH IS NOT EXCEEDED, NEITHER SPAN IS LESS THAN THE MIN SHORT SPAN & NEITHER SPAN EXCEEDS THE MAX LONG SPAN.

2 - VC14, VC18 & VC20 TYPICAL BEAM/COLUMN SCHEDULE

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MISSION VIEJO, CA 92691
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FAX: (949) 305-1420

VERSA CANOPY
VC14, ~~VC18 & VC20~~
FRAMING SCHEDULES

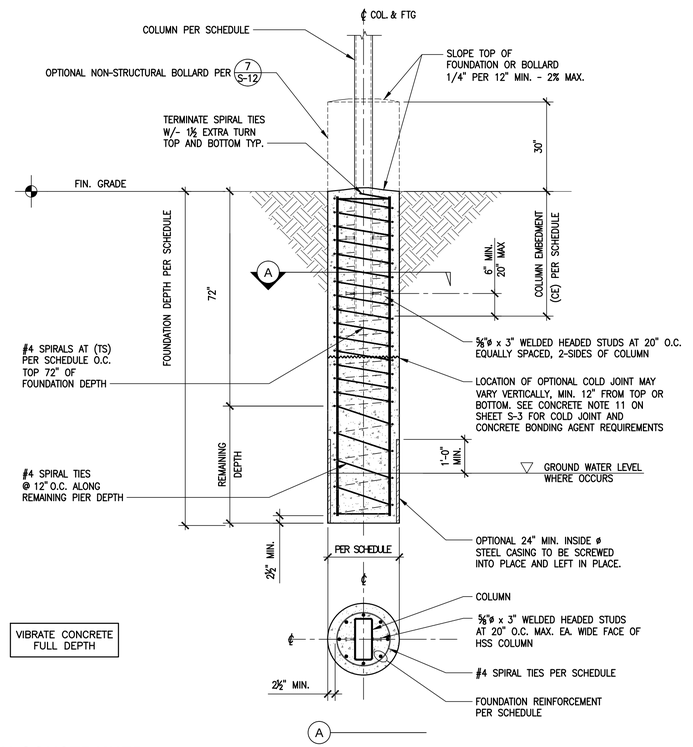
DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-7
7 OF 13 SHEETS

NON-CONSTRAINED PIER FOUNDATION SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	FOUNDATION LONGITUDINAL REINFORCEMENT	FOUNDATION DIAMETER (D)	MIN COLUMN EMBEDMENT (CE)	MAX TIE SPACING AT TOP (TS)	FOUNDATION DETAIL	PIER FOUNDATION MINIMUM DEPTH (SEE SOIL NOTES ON S-3)				
							~~SOIL CLASS V~~	SOIL CLASS W	~~SOIL CLASS X~~	~~SOIL CLASS Y~~	~~SOIL CLASS Z~~
VC14	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~14'-0"~~	11'-0"	~~9'-6"~~	~~8'-9"~~	~~7'-6"~~
VC18	0 psf	4- #8	2'-0"	3'-6"	6"	3/-	~~14'-9"~~	~~11'-6"~~	~~10'-0"~~	~~9'-0"~~	~~8'-0"~~
VC20	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~15'-0"~~	~~11'-9"~~	~~10'-3"~~	~~9'-3"~~	~~8'-0"~~
VC140	20 psf	4 - #8	2'-0"	3'-6"	6"	3/-	15'-0"	11'-6"	9'-9"	~~8'-9"~~	7'-6"
VC180	20 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~15'-3"~~	11'-9"	10'-0"	9'-0"	7'-9"
VC200	~~20 psf~~	4 - #8	2'-0"	3'-6"	6"	3/-	15'-3"	12'-0"	10'-3"	9'-3"	~~8'-3"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.
4. FOR SITUATIONS WHERE WATER MITIGATION IS NECESSARY, OR FOR OTHER CONDITIONS REQUIRING MITIGATION, REFER TO DETAIL 2/- FOR SLEEVED FOUNDATION OPTION.

1/- PIER FOUNDATION SCHEDULE



3/- NON-CONSTRAINED PIER FOUNDATION

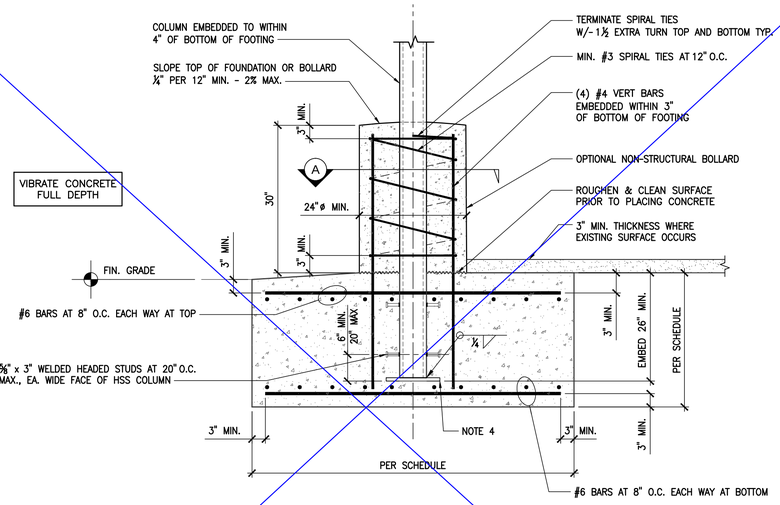
1/2"=1'-0"

SPREAD FOOTING SCHEDULE

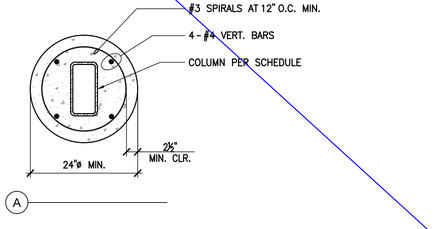
I.D. #	MAX GROUND SNOW LOAD	FOUNDATION DETAIL	SPREAD FOOTING MINIMUM DIMENSIONS FOR SOIL CLASS V (SOILS NOTES S-3)
VC14	0 psf	4/-	9'-6" (SQ.) x 2'-6" DEEP
VC18	0 psf	4/-	10'-3" (SQ.) x 2'-6" DEEP
VC20	0 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC140	20 psf	4/-	9'-3" (SQ.) x 2'-6" DEEP
VC180	20 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC200	20 psf	4/-	9'-9" (SQ.) x 2'-6" DEEP

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.

2/- SPREAD FOOTING SCHEDULE



NOTES:
1. CONCRETE BOLLARDS TO BE POURED IN A SECOND POUR AFTER THE FOUNDATION BELOW GRADE IS POURED. DSA INSPECTOR TO PERIODICALLY INSPECT THE INSTALLATION OF BONDING AGENT WHEN USED.
2. BOLLARD REBAR CAGE SHALL BE CONSTRUCTED INDEPENDENTLY FROM THE FOUNDATION USING 4-#4 VERTICAL BARS. BOLLARD VERTICAL BARS MAY BE TIED TO FOUNDATION BARS PRIOR TO CONCRETE POUR OR WET SET PER NOTE 3.
3. VERTICAL BARS IN THE NONSTRUCTURAL BOLLARD ARE PERMITTED TO BE WET SET INTO THE STRUCTURAL FOUNDATION, PROVIDED THE FOUNDATION IS SUFFICIENTLY WORKABLE SO AS NOT TO REQUIRE HAMMERING IN OR ANY OTHER SUCH METHOD. WET SET SHALL BE PERFORMED USING #4 BARS WITH MINIMUM 20" EMBEDMENT.
4. 1" THICK A36 STEEL PLATE. PLATE TO EXTEND PAST ALL SIDES OF COLUMN BY 4" MIN.



4/- SPREAD FOOTING

3/4"=1'-0"

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VERSA CANOPY

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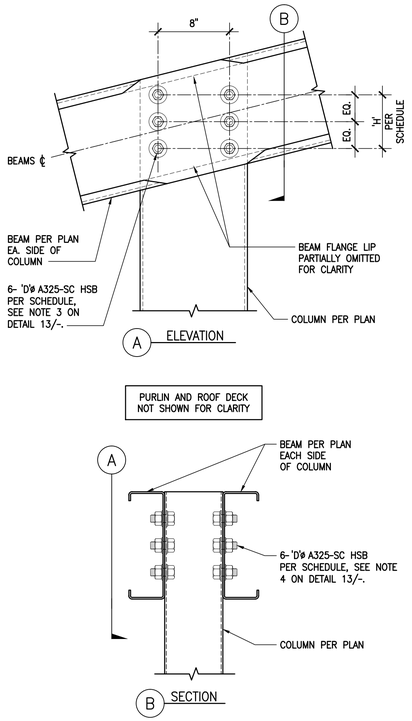
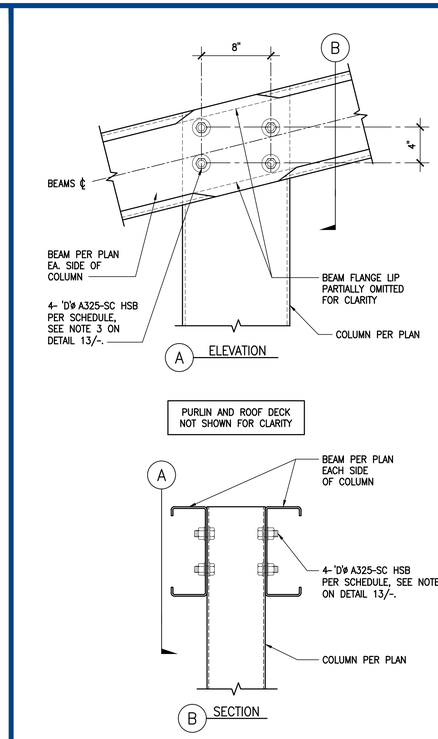
10 OF 13 SHEETS

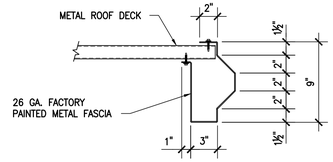


12 BEAM TO COLUMN - 6 BOLT



11 BEAM TO COLUMN - 4 BOLT

1-1/2"=1'-0"

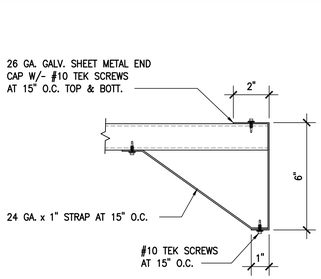


NOTES:

1. #10 TEK SCREWS W/- WATER PROOF WASHER TOP & BOTT. AT 3'-0" O.C. +/-.
2. PROVIDE ⅜"ø WEEP HOLES AT 1'-6" O.C.

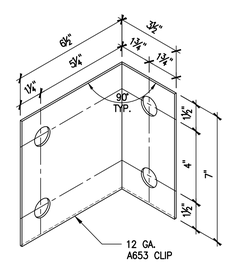
7 ROOF DECK TRIM DETAIL (OPTIONAL)

3"=1'-0"



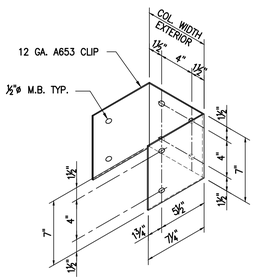
8 ROOF DECK TRIM DETAIL (OPTIONAL)

1-1/2"=1'-0"



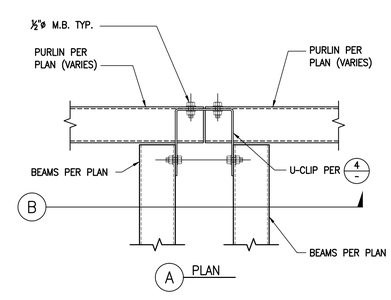
3 L-CLIP INTERIOR PURLIN TO BEAM

3"=1'-0"



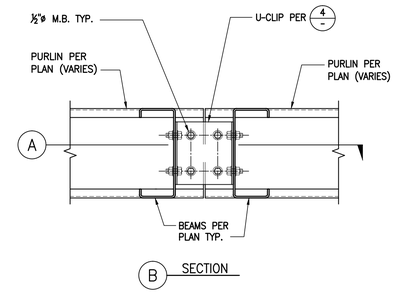
4 U-CLIP EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.
2. PURLINS AT CANTILEVER SHALL BE CONTINUOUS.



1 EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

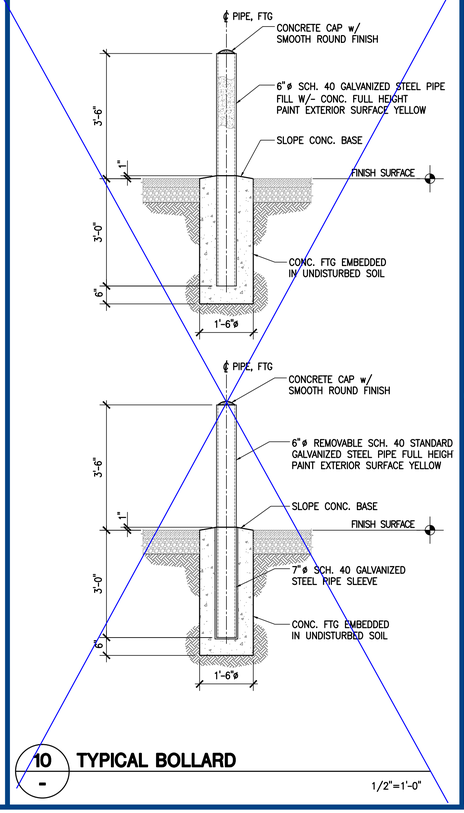
I.D. #	MAX GROUND SNOW LOAD	# OF BOLTS (n)	BOLTED CONNECTION DETAIL	BOLT DIAMETER (D) ASTM A325-SC	BOLT PATTERN (B x H)
VC14	0 psf	4	11/-	1"	8" x 6"
VC18	0 psf	6	12/-	⅞"	8" x 6"
VC20	0 psf	6	12/-	⅞"	8" x 8"
VC140	20 psf	4	11/-	1"	8" x 6"
VC180	20 psf	6	12/-	¾"	8" x 8"
VC200	20 psf	6	12/-	⅞"	8" x 8"

NOTES:

1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. BOLTS SHALL BE PRETENSIONED A325-SC (SLIP-CRTICAL) TYPE N (THREADS NOT EXCLUDED FROM SHEAR PLANE) CLASS A FAYING SURFACE WITH STANDARD NUTS PER ASTM A563 AND WASHERS PER ASTM F436 TYPICAL U.N.O.
4. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

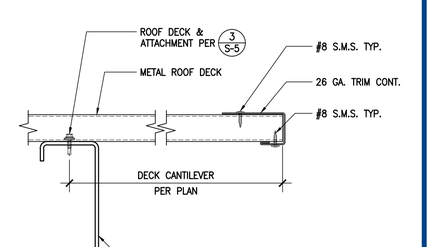
13 BEAM TO COLUMN SCHEDULE

N.T.S.



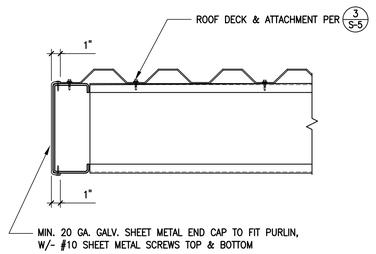
10 TYPICAL BOLLARD

1/2"=1'-0"



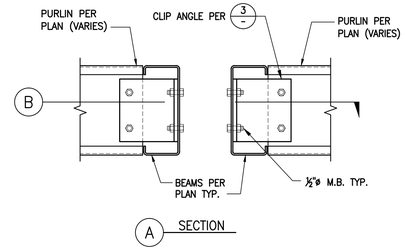
5 ROOF DECK TRIM DETAIL

3"=1'-0"



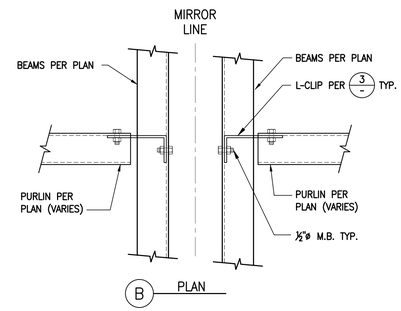
6 END ENCLOSURE DETAIL

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.



2 INTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

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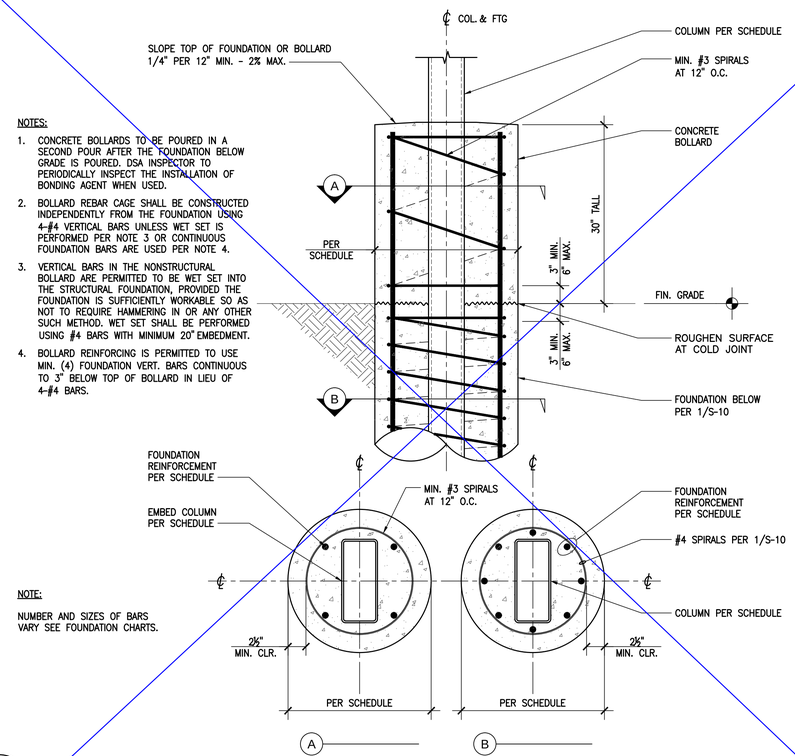
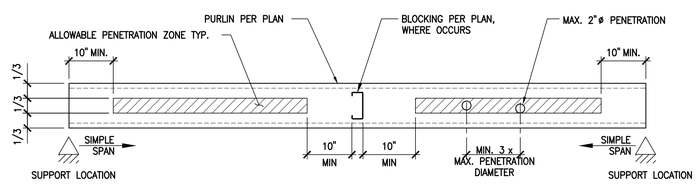
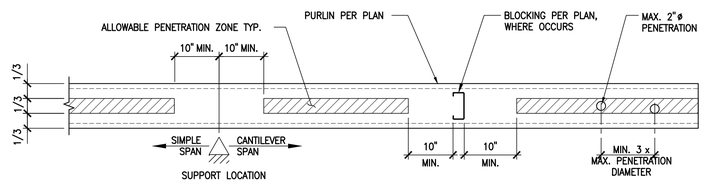


7 - OPTIONAL CONCRETE BOLLARD

1"=1'-0"



SIMPLE SUPPORT SPAN

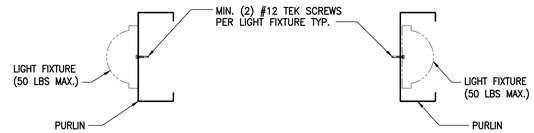


CANTILEVER SPAN

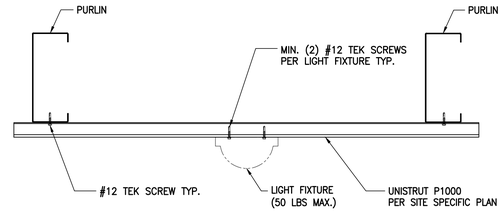
NOTE:
IF MORE THAN 5 PENETRATIONS PER SPAN ARE NEEDED, CONTRACTOR TO SUBMIT AN RFI TO DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO ENSURE REQUIREMENTS OF THIS DETAIL ARE MET AND TO JUSTIFY THE QUANTITY OF PENETRATIONS NEEDED.

4 - ALLOWABLE PURLIN PENETRATIONS

3/4"=1'-0"

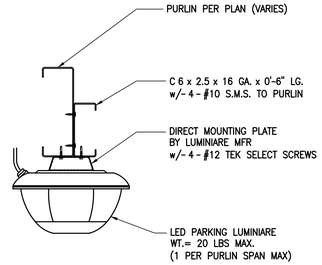


NOTE:
ALL STRUCTURAL CONNECTION POINTS REQUIRED BY MANUFACTURER TO MAINTAIN WARRANTY TO BE FILLED. THIS MAY EXCEED THE MINIMUM NUMBER OF SCREWS.



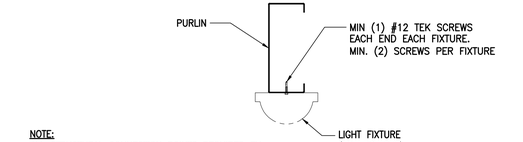
1 - LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"

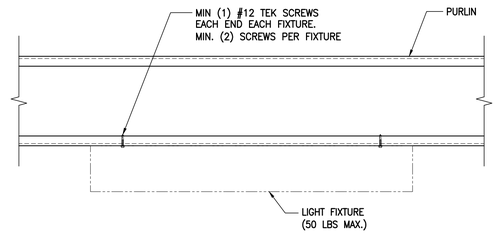


5 - TYPICAL PARKING LUMINAIRE AT PURLIN

1 1/2"=1'-0"

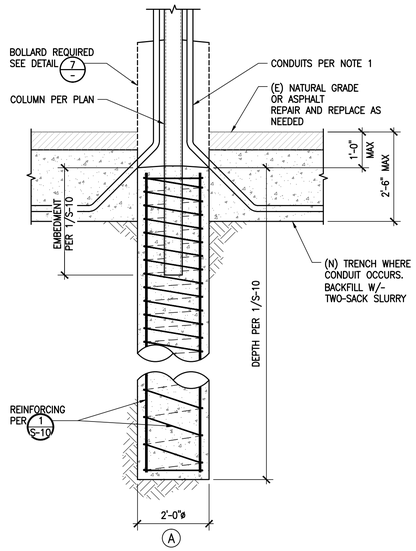


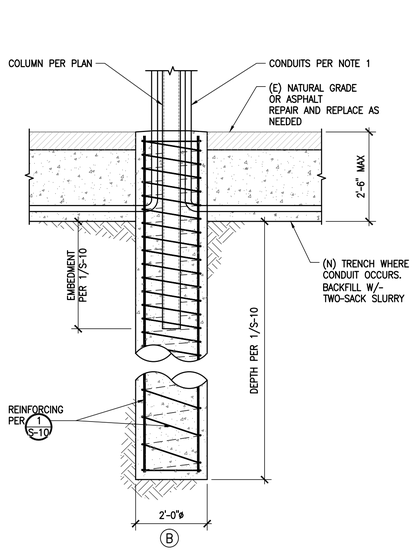
NOTE:
ALL STRUCTURAL CONNECTION POINTS REQUIRED BY MANUFACTURER TO MAINTAIN WARRANTY TO BE FILLED. THIS MAY EXCEED THE MINIMUM NUMBER OF SCREWS.



2 - ALTERNATE LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"

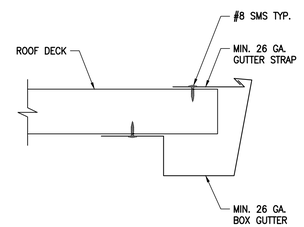




NOTE:
1. CONDUIT IN FOUNDATION SHALL NOT EXCEED (1) 2" MAX ø CONDUIT OR (2) 1½" MAX ø CONDUIT. WHEN (2) CONDUIT ARE USED IN THE SAME FOUNDATION, THE CONDUIT MAY ENTER THE FOUNDATION FROM EITHER SIDE.
2. CONDUIT TRENCH SHALL BE FILLED WITH MIN 2-SACK SLURRY.

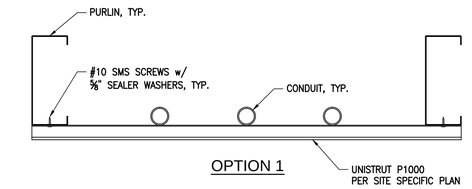
8 - CONDUIT AT DRILLED PIER

1"=1'-0"

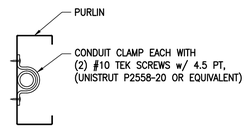


6 - GUTTER DETAIL

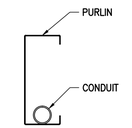
3"=1'-0"



OPTION 1



OPTION 2



OPTION 3

3 - CONDUIT SUPPORT/ LOCATION OPTIONS

1-1/2"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
GREG JONES

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

STANDARD DETAILS 2

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-12
12 OF 13 SHEETS

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING CODES LISTED IN "APPLICABLE CODES" AND ALL GOVERNING LOCAL CODES AND REGULATIONS.
2. THE OWNER / ARCHITECT HAVE OBTAINED APPROVAL OF THE PRIMARY AUTHORITY HAVING JURISDICTION (DSA, OSHPD, CITY BUILDING PERMIT). CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, SPECIAL INSPECTION IS REQUIRED FOR SHOP AND FIELD STRUCTURAL WELDING.
4. WHERE INCORPORATED IN THE CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF OSHPD OR DSA PRE-APPROVALS FOR PRE-APPROVED ITEMS OR SYSTEMS INCORPORATED INTO THE CONSTRUCTION AND DISTRIBUTE TO OWNER'S REPRESENTATIVE, ARCHITECT AND INSPECTOR.
5. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH AND AND INSTALL ALL MATERIALS AND WORK DESCRIBED, DEPICTED OR DETAILED WITHIN THESE DOCUMENTS REGARDLESS OF THE LOCATION OF THAT MATERIAL OR WORK WITHIN THE DOCUMENTS OR OMISSION (WHETHER DELIBERATE OR ACCIDENTAL) OF THAT MATERIAL OR WORK BY A SUBCONTRACTOR ON HIS/HER BID.
6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONSIDER THESE DOCUMENTS IN THEIR ENTIRETY. DISCREPANCIES OR CONTRADICTIONS BETWEEN PORTIONS OF THESE DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT LEAST 72 HOURS PRIOR TO BID OPENING FOR CLARIFICATION. OTHERWISE, THE MOST RESTRICTIVE REQUIREMENT SHALL BE IN FORCE AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. CONTRACTOR ESTABLISH PROCEDURES TO ASSURE ALL PERSONS ENTERING A POSSIBLY HAZARDOUS AREA, INCLUDING WORKERS, SUBCONTRACTORS, OTHER CONTRACTORS, VISTORS, AND OTHERS ARE AWARE OF APPROPRIATE / REQUIRED SAFETY PROCEDURES. COMPLY WITH LOCAL, STATE, AND FEDERAL SAFETY STANDARDS, INCLUDING OSHA REQUIREMENTS AND WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY FENCING AND GATES, SIGNAGE, SECURITY LIGHTING OR OTHER SECURITY AND CONTROL MEASURES NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC AND FACILITY USERS UNTIL THE COMPLETION OF THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE TO FOR PROTECTION OF ADJACENT PROPERTY AND SHALL REPAIR AND / OR REPLACE ALL PROPERTY DAMAGED DURING THE COURSE ON THE WORK.
10. THE CONTRACTOR SHALL LIMIT HIS / HER ACTIVITY TO THE AREA DESCRIBED WITHIN THE DOCUMENTS UNLESS OTHERWISE PERMITTED BY THE OWNER'S REPRESENTATIVE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY ITEMS DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK. INSTALLATION SHALL MATCH EXISTING IN KIND, QUALITY, AND PERFORMANCE.
12. WHERE EXISTING CONSTRUCTION AND FINISHES ARE CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, PERFORMANCE CHARACTERISTICS, AND APPEARANCE.
13. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLR" MEAN CLEAR DIMENSION TO FACE OF FINISH. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND.
14. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND. VERIFY DIMENSIONS OF ALL OWNER-FURNISHED ITEMS, INCLUDING FURNITURE AND EQUIPMENT, TO ENSURE PROPER COORDINATION WITH CONSTRUCTION.
15. ALL ITEMS IN THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
16. ALL UTILITIES REQUIRED FOR THE CONTINUOUS OPERATION OF ALL OCCUPIED EXISTING FACILITIES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES. ANY SHUT DOWNS FOR NEW CONNECTIONS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE TWO WEEKS PRIOR TO THE REQUESTED SHUT DOWN.
17. COORDINATION WITH OTHER CONTRACTS: IF ANY PART OF THIS CONTRACTOR'S WORK DEPENDS UPON THE WORK OF A SEPARATE CONTRACTOR, THIS CONTRACTOR SHALL INSPECT SUCH OTHER WORK AND PROMPTLY REPORT IN WRITING TO THE OWNER'S REPRESENTATIVE ANY DEFECTS IN SUCH OTHER WORK THAT RENDER IT UNSUITABLE TO RECEIVE THE WORK OF THIS CONTRACTOR. FAILURE OF THIS CONTRACTOR TO SO INSPECT AND REPORT SHALL CONSTITUTE AN ACCEPTANCE OF THE OTHER CONTRACTOR'S WORK, EXCEPT AS TO DEFECTS WHICH MAY DEVELOP IN OTHER CONTRACTOR'S WORK AFTER EXECUTION OF THIS CONTRACTOR'S WORK.
18. COORDINATION OF SCHEDULE: PORTIONS OF THIS WORK MAY BE REQUIRED TO BE COMPLETED ON SCHEDULE IN ORDER TO AVOID DELAY TO OTHER CONTRACTORS OR OWNERS OPERATIONS. CONTRACTOR SHALL STRICTLY ADHER TO ESTABLISHED COMPLETION DATES AS DESIGNATED IN THE SPECIFICATIONS AND COORDINATE WORK SCHEDULE WITH THE OWNER'S REPRESENTATIVE AND OTHER CONTRACTORS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND LIQUIDATED DAMAGES.
19. SCHEDULE ALL WORK WITH THE OWNER'S REPRESENTATIVE, INCLUDING CONSTRUCTION ACCESS AND STORAGE, AND WORK OUTSIDE THE "EXTENT OF WORK" SET FORTH IN THESE DOCUMENTS. THE CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
20. CONSTRUCTION PROCEDURES SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
21. DEMOLITION IS NOT NECESSARILY LIMITED TO ONLY WHAT IS SHOWN ON THIS OR OTHER DRAWINGS OR AS OUTLINED IN THE SPECIFICATIONS. THE INTENT IS TO INDICATE GENERAL SCOPE OF DEMOLITION REQUIRED. CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS DEMOLITON, CUTTING AND PATCHING REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
22. ALL ITEMS IDENTIFIED TO BE SALVAGED SHALL BE DELIVERED IN GOOD CONDITION TO A PLACE OF STORAGE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL OTHER ITEMS MUST BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
23. ARCHITECT IS NOT RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. TO THE EXTENT THESE DOCUMENTS RELATE TO SUCH ISSUES, ARCHITECT'S PARTICIPATION IS SOLELY ADMINISTRATIVE WITHOUT ANY RESPONSIBILITY FOR THE CONTENT OR EXECUTION OF SUCH DOCUMENTS.
24. DETAIL DRAWINGS WITH REFERENCES TO FIRE-RATED ASSEMBLIES OR CONSTRUCTION WHICH HAVE BEEN TESTED BY UNDERWRITERS LABORATORIES, THE CALIFORNIA BUILDING CODE OR ANY OTHER APPROVED TESTING AGENCY, SHALL BE CONSTRUED TO INCLUDE ALL WORK AND PROCEDURES CONTAINED IN THE REFERENCED ASSEMBLY DESCRIPTION..
25. ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE FIRE STOPPED AND SEALED TO MAINTAIN THE REQUIRED RATING.
26. CONTRACTOR TO MAINTAIN CONTEMPORANEOUSLY RECORDED "AS-BUILT" INFORMATION OF ALL WORK, WHICH SHALL BE MARKED IN COLOR ON THE DRAWINGS AND SPECIFICATIONS. A SCANNED PDF OF THE "AS-BUILT" DRAWINGS AND SPECIFICATIONS SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE PRIOR TO FINAL APPLICATION FOR PAYMENT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
27. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION AND DUST COVERS ADJACENT TO OCCUPIED AREAS AS REQUIRED TO CONTAIN DUST AND DEBRIS WITHIN CONSTRUCTION AREA. BROOM CLEAN ALL AREAS, INLCUDING SIDEWALKS AND DRIVEWAYS EACH DAY. KEEP DIRT AND DUST TO A MINIMUM.
28. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
29. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.

ADMINISTRATIVE NOTES

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO INSTALL STEEL SHADE STRUCTURES IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS SUCH THAT THE FINISHED WORK WILL NOT COMPLY WITH THE SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, CONSTRUCTION CHANGE DOCUMENTS DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
2. A COPY OF PARTS 1 TO 5, TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONSTRUCTION CHANGE DOCUMENT AND ADDENDA TO BE SIGNED BY THE ARCHITECT AND THE OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS ARE NOT VALID UNTIL APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24.
4. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24.
5. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RE-TEST MAY BE BACK CHARGED TO THE CONTRACTOR.
6. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF CONCRETE PER SECTION 4-331, PART 1, TITLE 24.
7. THIS PROJECT REQUIRES A DSA CERTIFIED PROJECT INSPECTOR. INSPECTOR SHALL BE APPROVED BY DSA. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(B). THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
8. SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.
9. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (FORM DSA-6 IN ACCORDANCE WITH SECTION 4-336 AND 4-343, PART 1, TITLE 24.
10. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTION 4-333(A) AND 4-341, PART 1, TITLE 24.
11. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.

Statement of General Conformance

STATEMENT FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS) PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (FOR PERFORMANCE SPECIFICATION ITEMS)

(Application No. _____ File No. _____)

☒ The drawings or sheets listed on the cover or index sheet
☐ This drawing, page of specifications/calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for"

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and

2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Section 4-336, 4-341, and 4-344" of Title 24, Part 1. (*Title 24, Part 1, Section 4-317 (b)*)

I certify that: ☒ All drawings or Sheets listed ont he cover or indext sheet ☐ This drawing or page

☒ is/are in general conformance and ☒ have been coordinated	☐ is/are in general conformance and ☐ have been coordinated
_____ Signature _____ Date	_____ Signature _____ Date
Architect of Engineer designated to be in responsible charge	Architect of Engineer designated to be in responsible charge
MARCUS HIBSER Print Name	_____ Print Name
_____ License No. _____ Expiration Date	_____ License No. _____ Expiration Date

APPLICABLE CODES

ALL WORK PERFORMED UNDER THIS CONTRACT IS TO CONFORM TO THE FOLLOWING CODES AND REGULATIONS:

2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, CCR BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, CCR BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 CCR (2018 IEB CODE AND CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING CODE (CALGreen), PART 11, TITLE 24, CCR

2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS - 2019 CBC CHAPTER 35 AND 2019 CFC CHAPTER 45

THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

ABBREVIATIONS

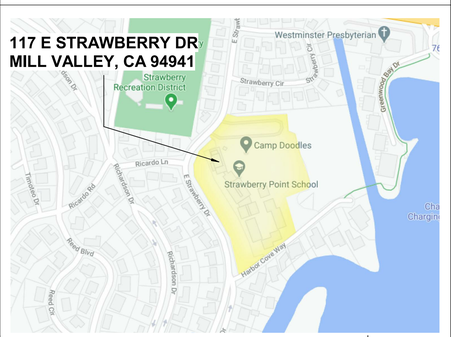
&	AND
@	AT
℄	CENTERLINE
Ø	DIAMETER
#	POUND OR NUMBER
A/C	AIR CONDITIONING
AC	ASPHALTIC CONCRETE
ACOUS	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
ADD	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINIUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BITUM	BITUMINOUS
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CT	CERAMIC TILE
CUST	CUSTODIAN
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DI	DRAIN OR DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DN	DOWN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EVA	EMERGENCY VEHICLE ACCESS
EWC	ELECTRICAL WATER COOLER
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH
FLR	FLOOR
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GSM	GALVANIZED WHEET METAL
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LT	LIGHT
MAX	MAXIMUM
MB	MACHINE BOLT
MDF	MEDIUM DENSITY FIREBOARD
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MUL	MULLION
(N)	NEW
N/A	NOT APPLICABLE
N	NORTH
NIC	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPP	OPPOSITE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
(R)	RELOCATE
RB	RESILIENT OR RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
REQ	REQUIRED
RF	RESILIENT FLOORING
RM	ROOM
RO	ROUGH OPENING
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SD	SOAP DISPENSER
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DRAWINGS
SHT	SHEET
SIM	SIMILAR
SLD	SEE LANDSCAPE DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREW
SND	SANITARY NAPKIN DISPENSER
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPEND
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK
T.O.	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TV	TELEVISION
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WEST
w/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER

DEFERRED APPROVALS

1. NONE

VICINITY MAP

NO SCALE



OWNER

MILL VALLEY SCHOOL DISTRICT
411 SYCAMORE AVE
MILL VALLEY, CA 94941
CONTACT: JULIO ARROYO
TEL. (415) 389-7700
FAX. (415) 389-7773

CONSULTANTS

ARCHITECT
HIBSER YAMAUCHI ARCHITECTS, INC.
300 27TH STREET, 2ND FLOOR
OAKLAND, CA 94612
CONTACT: ERNIE PALEO
TEL. (510) 446-2222
FAX (510) 446-2211

EXISTING CONDITIONS

SCOPE OF WORK

INSTALLATION OF FIVE STEEL SHADE STRUCTURES IN TWO DIFFERENT LOCATIONS. APPROXIMATELY 475 SF OF AREA TO BE SHADED BY ONE STRUCTURE AND 2,800 SF SHADED BY THE OTHER FOUR.

INDEX OF DRAWINGS TOTAL # OF SHEETS: 17

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title
TITLE SHEET

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
A0.01

Sheet 1 of 17

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GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

CODE SUMMARY ANALYSIS

BUILDING A - MULTI /ADMIN
CONSTRUCTION TYPE: V-A, FULLY SPRINKLERED
OCCUPANCY TYPE: A-3
AREA: 5,886 SF
ALLOWABLE: 10,500 SF (1999 CBC TABLE 5-B)

BUILDING B - CLASSROOM
CONSTRUCTION TYPE: V-B (NON-RATED), FULLY SPRINKLERED
OCCUPANCY TYPE: E
AREA: 15,720 SFO
ALLOWABLE: 10,500 SF (1999 CBC TABLE 5-B)
AUTO FIRE SPRINKLERED INCREASE: X3
(SECTION 506.3) 27,300 SF

MODULAR BUILDING C - CLASSROOM
CONSTRUCTION TYPE: V-B (NON-RATED)
OCCUPANCY TYPE: E
AREA: 13,920 SF
ALLOWABLE: 9,100 SF (1999 CBC TABLE 503)
3-SIDE YARD SEPARATION INCREASE: 14,105 SF

MODULAR BUILDING D - CLASSROOM
CONSTRUCTION TYPE: V-B (NON-RATED)
OCCUPANCY TYPE: E
AREA: 1,920 SF
ALLOWABLE: 9,500 SF(1999 CBC TABLE 503)

EXTERIOR SHADE STRUCTURES (EXISTING)
CONSTRUCTION TYPE: V-B (NON-RATED)

COVERED WALKWAY STRUCTURES
CONSTRUCTION TYPE: V-B (NON-RATED)

EXTERIOR SHADE STRUCTURE #1 (NEW, THIS PROJECT)
CONSTRUCTION TYPE: II-B, NOT SPRINKLERED
OCCUPANCY TYPE: A-2
AREA: 463 SF
ALLOWABLE AREA: 9,500 SF
BUILDING HEIGHT / STORIES: 11'-9" / 1
ALLOWABLE HEIGHT / STORIES: 55 / 2

EXTERIOR SHADE STRUCTURE #2 (NEW, THIS PROJECT)
CONSTRUCTION TYPE: II-B, NOT SPRINKLERED
OCCUPANCY TYPE: A-2
AREA: 2,797 SF
ALLOWABLE AREA: 9,500 SF
BUILDING HEIGHT / STORIES: 11'-9" / 1
ALLOWABLE HEIGHT / STORIES: 55 / 2

KEYNOTES

02.01	(E) FIRE HYDRANT
02.06	(E) STORAGE CONTAINER
02.22	(E) FDC, CHECK VALVE
02.24	(E) FIRE SPRINKLER RISER & CONTROL VAVLES
02.34	(E) CURB RAMP; PER MARIN COUNTY STANDARDS, CURB RAMPS SHALL COMPLY WITH CALTRANS A88A AND A88B

LEGEND

- ACCESSIBLE PATH OF TRAVL AS INDICATED ON PLAN IS A BARRIER - FREE ACCES ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX, AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP REISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTION TO 80" MIN., AND FREE OF PROTRUDING OBJECTS GREATER THAN 4" PROJECTED FROM WALL LOCATED ABOVE 27" AND LESS THAN 80".
- (E) ACCESSIBLE TOILET ROOM FACILITY
- (E) ELEVATOR OR VERTICAL LIFT
- DF (E) ACCESSIBLE DRINKING FOUNTAINS, SEE A1.01
- L (E) ACCESSIBLE STAIR LIFT
- GT (E) ACCESSIBLE GATE
- RP (E) ACCESSIBLE RAMP
- PA (E) PLANTING AREA
- (E) FENCE

30 FIRE LIFE SAFETY, CODE ANALYSIS & ACCESSIBILITY SITE PLAN
1" = 30'-0"

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION	
School District/Owner	Mill Valley School District
Project Name/School	Shade Structures at Strawberry Elementary School
Project Address	117 E Strawberry Dr, Mill Valley 94941

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐		No ☑
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☐		No ☑
	Refer to the following website for FHSZ locations: http://osfm.fire.ca.gov/FHSZ	Moderate ☐	High ☐	Very High ☐
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☐

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

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Architect/Engineer Of Record: _____

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title
FIRE LIFE SAFETY, CODE ANALYSIS & ACCESSIBILITY SITE PLAN

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
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Sheet 2 of 17

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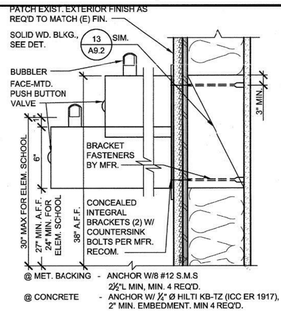
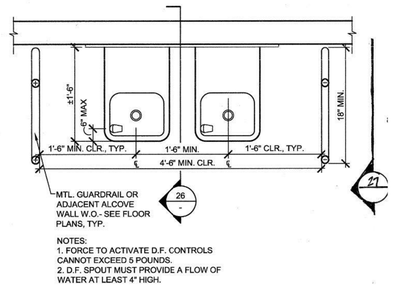


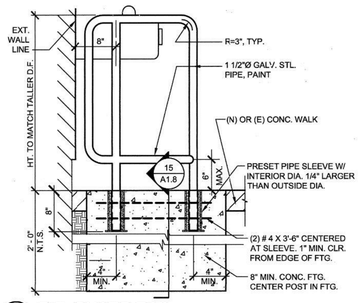
26 DRINKING FTN. SECTION

SCALE: 1 1/2" = 1'-0" 10_DFSEC.dwg



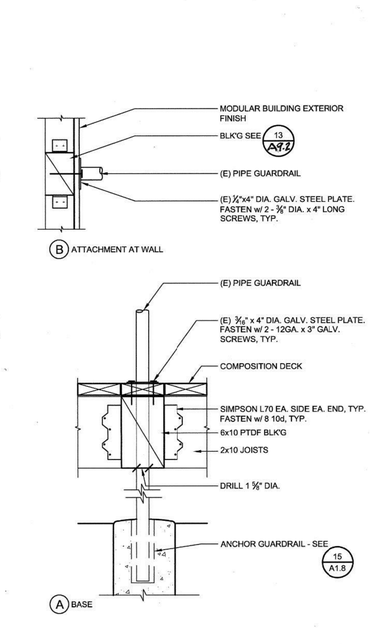
21 DRINKING FOUNTAIN CLEARANCES

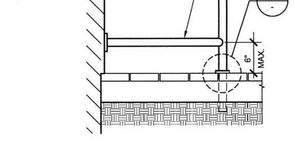
SCALE: 1" = 1'-0" 9_DRINKFOUNT.dwg



27 D.F. GUARD RAIL

SCALE: 1" = 1'-0" 8_DFRAIL.dwg





28 D.F. GUARD RAIL

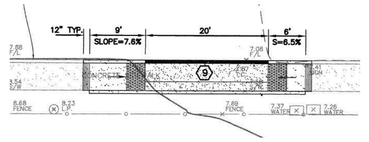
SCALE: 1" = 1'-0" DFRAIL_WALL.dwg

23 PIPE GUARDRAIL

SCALE: 1 1/2" = 1'-0" PIPE GUARDRAIL.dwg

28 (E) DRINKING FOUNTAINS

1" = 1'-0"



9. SAWCUT AND REMOVEEXISTING CONCRETE CURB & SIDEWALK. INSTALL NEW 5' WIDE CONCRETE PEDESTRIAN RAMP & 6" WIDE RETAINING CURB TO MARIN COUNTY STANDARDS. SEE CIVIL WORK LEGEND NOTE 7 FOR DOWEL INFO. MATCH EXISTING CONCRETE & AC ELEVATIONS.

6 ENLARGED PLAN - ACC DROP OFF

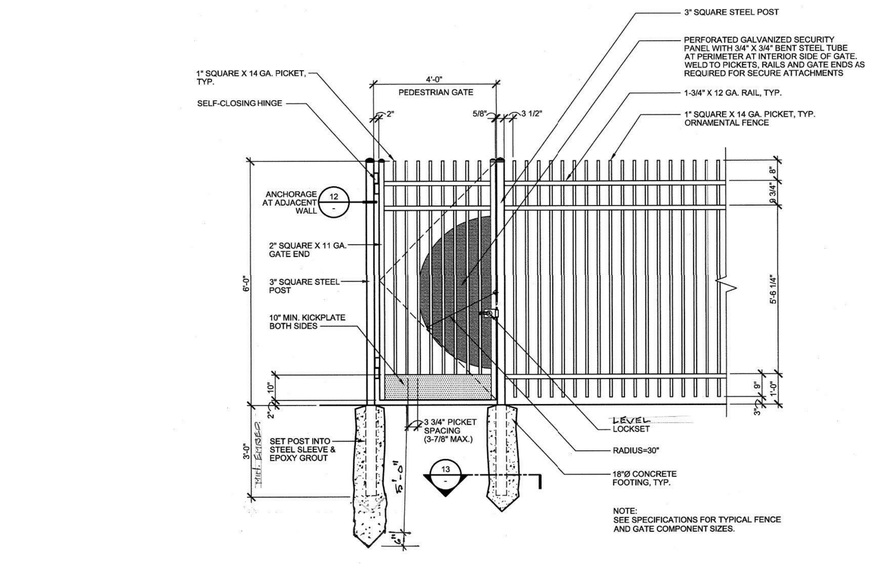
1" = 10'-0"

SHEET NOTES

ALL NOTES REFER TO NEW WORK UNLESS OTHERWISE NOTED:

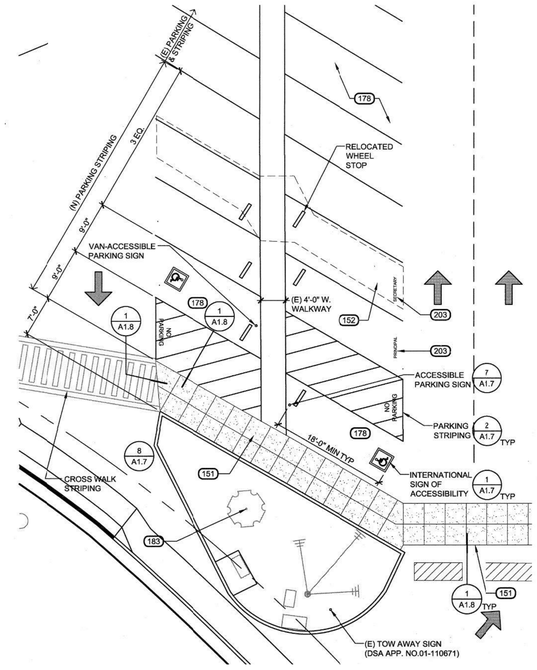
THE FOLLOWING NOTES ARE THE STANDARD SHEET NOTE LIST FOR SITE PLAN DRAWINGS. NOT ALL SHEET NOTES INDICATED ON THIS DRAWING ARE APPLICABLE TO THIS DRAWING.

151 CONCRETE PAVING OR WALKWAY.
152 ASPHALT CEMENT PAVING - **S.C.D.** - (N) SLURRY SEAL.
153 CHAIN LINK FENCING AND/OR GATES, 4 FEET HIGH. - **SEE DET 11/A1.8**
154 CHAIN LINK FENCING AND/OR GATES, 6 FEET HIGH - **SEE DET 11/A1.8**
155 RE-STRIPE ASPHALT PAVING FOR NEW PLAY GAMES. - **S.L.D.**
156 ORNAMENTAL FENCING AND/OR GATES, 6 FEET HIGH - **SEE DET ~~10/A1.7~~** 13/A1.6
157 PATCH EXISTING ASPHALT PAVING AND PROVIDE SLURRY SEAL. - **S.C.D.**
158 VEHICULAR STRIPING AND ARROWS AT PARKING LOT. - **SEE DET 25/A1.7**
159 CONCRETE CURB RAMP WITH TACTILE DONES. - **S.C.D.**
160 CONCRETE DRIVEWAY WITH TACTILE DONES. - **S.C.D.**
161 CONCRETE SIDEWALK AND CURB INFILL TO MATCH ADJACENT SIDEWALK CURB. - **S.C.D.**
162 LANDSCAPE / PLANTER AREA WITH IRRIGATION. - **S.L.D.**
163 PREPARE PLANTER AREA FOR FUTURE GARDEN / LANDSCAPING. - **S.L.D.**
164 CHAIN LINK FENCING AND/OR GATES, 4 FEET HIGH, VINYL (PVC) COATED WITH 1 INCH FABRIC MESH. - **SEE DET 11/A1.8**
165 PAINTED DIAGONAL STRIPING AT 3'-0" O.C. - **SEE DET 2/A1.7**
166 REMOVABLE BOLLARD. - **SEE DET 18/A1.8**
167 PAVERS & HEADERBOARD - **S.L.D.**
168 CONCRETE RAMP, LANDING, & HANDRAILS.
169 BOLLARDS, SPACED 4'-0" (+/-) O.C. - **SEE DET 17/A1.8**
170 INTEGRAL COLOR CONCRETE PAVING (MATCH ADJACENT PAVING. W.O.)
171 SMALL SHADE STRUCTURE - **SEE DET 11&12/A1.6**
172 TRELLIS SHADE STRUCTURE - **SEE DET 15/A1.6**
173 PREFABRICATED STEEL COVERED WALKWAY STRUCTURE. - INCREMENT 2
174 MODIFY AND REPLACE DRAIN INLET COVER AT WALKWAY OR PLAYGROUND AREAS. - **S.C.D.**
175 CONCRETE LANDING WITH 2 PERCENT MAXIMUM CROSS SLOPE AT DOORWAY - **SEE DET 26/A1.8**
176 EXIST. CONC. PAVING OR WALKWAY.
177 CONCRETE PLANTER WALL - **SEE DET 16/A1.7**
178 EXIST ASPHALT PAVING. (N) SLURRY SEAL.
179 REPLACE OR REINSTALL EXISTING COMPOSITION BOARD PLANK DECKING FOR ACCESSIBLE DOOR LANDING. WORK MAY REQUIRE MODIFICATION OF EXISTING SUPPORT FRAMING AND ADJACENT CONCRETE CURB.
180 CUT FLAGPOLE FOR NEW LOWER ACCESS HOLE AND COVERPLATE AT 48" MAX ABOVE FINISH GRADE. PROVIDE BLANK COVER PLATE AT FORMER ACCESS HOLE. PRIME AND PAINT FLAGPOLE ASSEMBLY.
181 INSTALL SALVAGED BENCHES IN NEW LOCATION.
182 EXIST. PLAY EQUIPMENT - **S.L.D.**
183 PRUNE / REMOVE LOWER TREE LIMBS - **S.L.D.**
184 REMOVE AND REPLACE EXISTING CHAIN LINK FABRIC WITH 1 INCH VINYL (PVC) COATED FABRIC MESH. PAINT REMAINING EXISTING POSTS, RAILS, GATE FRAME AND ASSOCIATED HARDWARE TO MATCH NEW FABRIC MESH.
185 RAISED 8 INCH PLANTER CURB WITH 2 X 4 INCH BLOCK-OUTS FOR DRAINAGE EQUALLY SPACED 3 FEET ON CENTER, MAX. - EXTEND EXIST. RWL AND SLEEVE THROUGH CURB W.O.
186 PROVIDE CONTINUOUS TREE ROOT BARRIER ALONG ROW OF EXISTING TREES - **S.L.D.**
187 EXIST. C.L. FENCE AND/OR GATES.
188 MODIFY OR REPLACE EXIST COMPOSITE DECKING AS REQ'D BY NEW WORK TO MATCH (E) DECKING - **SEE DETAILS A1.7**
189 CONC. CONTROL JOINT - **SEE DET 8C/A1.8**
190 EXIST. PLANTER AREA.
191 3" W. DIAGONAL STRIPING @ 3'-0" O.C. FOR FIRE LANE. INCLUDE THE FOLLOWING 12" HIGH TEXT: FIRE LANE - KEEP CLEAR.
192 8'-0" H. C.L. FENCE AND/OR GATES w/ PRIVACY SLATS. MATCH ADJACENT (E) FENCE HEIGHT AND COLOR - **SEE DET 11/A1.8**
193 ASPHALT PAVING TO MATCH (E) AT AREA TO RECEIVE COVERED WALKWAY STRUCTURE. (WALKWAY STRUCTURE IS PART OF INCREMENT 2) MATCH ADJACENT GRADE.
194 SPEED HUMP - **S.C.D.**
195 EXTERIOR LIGHT POLE AND BASE - **S.E.D.**
196 ACCESSIBLE PASSENGER LOADING ZONE SIGN - **SEE DET 30/A1.7**
197 HANDRAIL AT RAMP - **SEE DET 9/A1.8**
198 RE-INSTALL METAL BENCHES.
199 RE-INSTALL SCHOOL SIGN.
200 PAINT (E) BALL WALL AND BACKBOARD
201 TIME CAPSULE - BURY BEFORE PAVERS ARE LAID.
202 ENGRAVE PAVER ABOVE TIME CAPSULE "TIME CAPSULE 2012"
203 **6" LETTERS - "PRINCIPAL" , "SECRETARY"**



20 ORNAMENTAL PED GATE - FOR REF ONLY

1/2" = 1'-0"



5 ENLARGED PLAN - ACC PARKING

1" = 10'-0"

4 KEYNOTES FOR REFERENCE DRAWING 5/-

1" = 10'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions			
Delta	Date	Revisions	By

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility

MILL VALLEY SCHOOL DISTRICT

Project

SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title

ENLARGED SITE PLANS FOR REFERENCE ONLY DSA #01-112404

Client Project Number:

Scale: As indicated	Sheet
Drawn By: NI	**A1.01**
Checked By: NI	
Issue Date:	
Revit Version: 2019	Sheet 3 of 17

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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GENERAL NOTES

1. NOTIFY ARCHITECT OF ANY IN THE FIELD DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
2. ALL DIMENSIONS SHALL BE FACE OF STUD. UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
3. PATCH & REPAIR (E) A/C PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES

DRAWING NOTE

30 SITE PLAN
1" = 20'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

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300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title
SITE PLAN

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
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Sheet 4 of 17

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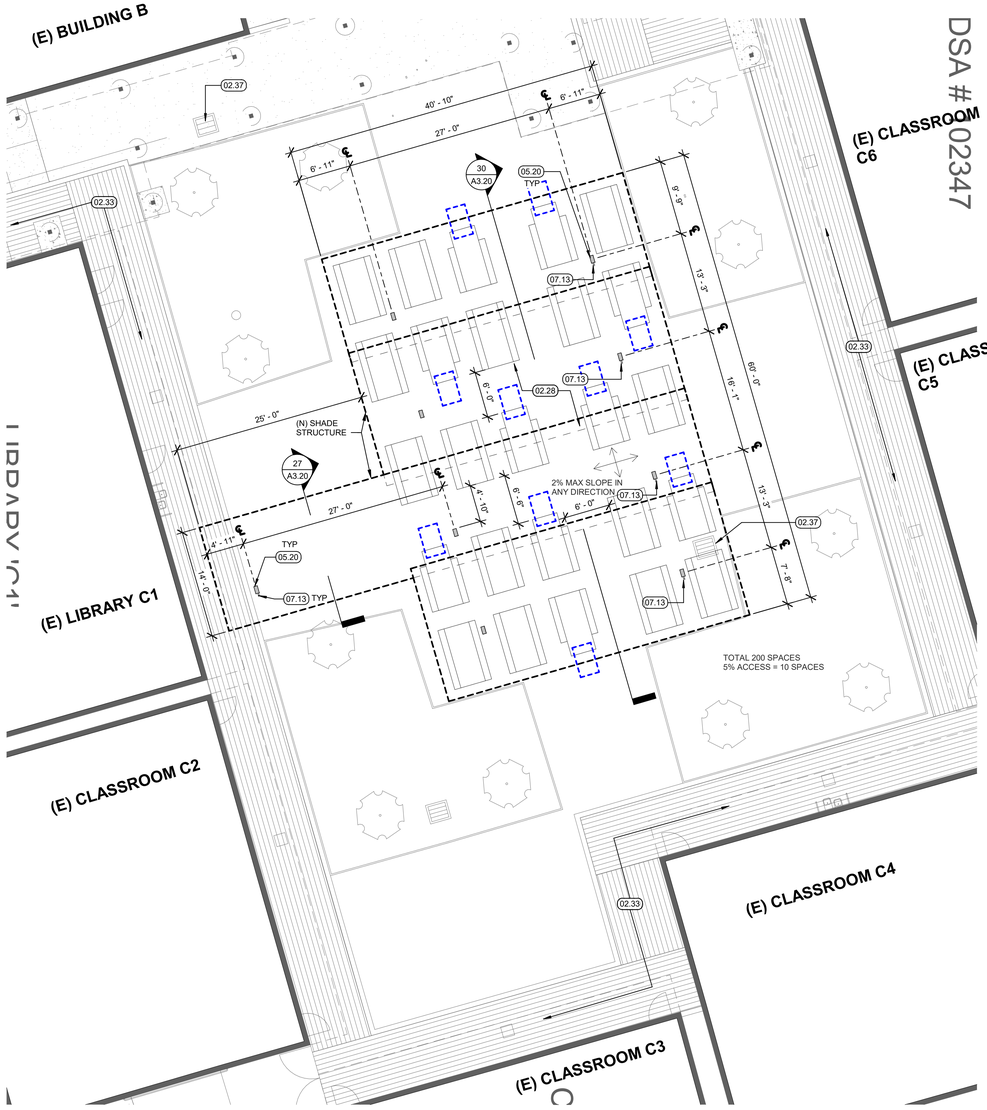
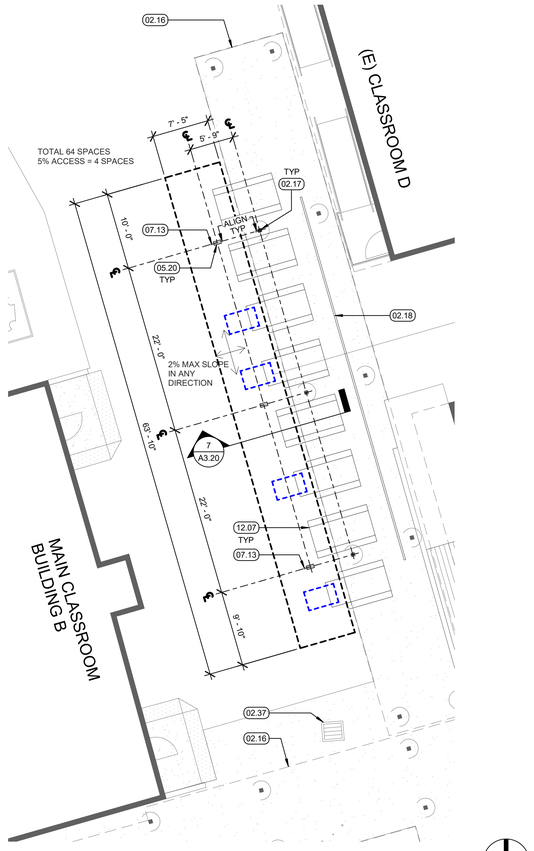


30 ENLARGED SITE PLAN - SOUTH
1/8" = 1'-0"



10 ENLARGED SITE PLAN - NORTH
1/8" = 1'-0"

GENERAL NOTES

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2. ALL DIMENSIONS SHALL BE FACE OF STUD. UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
3. PATCH & REPAIR (E) A/C PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES

KEYNOTES

02.16	(E) COVERED WALKWAY
02.17	(E) STL POST
02.18	(E) WOOD RAIL
02.28	(E) A/C PAVEMENT
02.33	(E) WALKWAY TO REMAIN
02.37	(E) AREA DRAIN- ELONGATED OPENINGS TO BE PERPENDICULAR TO THE DIRECTION OF TRAVEL AND NO GREATER THAN 1/2" WIDE
05.20	HSS COLUMN, SEE STEEL SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01
12.07	LUNCH TABLE BY OTHERS

DSA #02347

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
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Architect/Engineer Of Record:_____

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300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title
PARTIAL SITE PLAN

Client Project Number:

Scale:	As indicated
Drawn By:	AL
Checked By:	EP
Issue Date:	
Revit Version:	2019

Sheet
A1.03

Sheet 5 of 17

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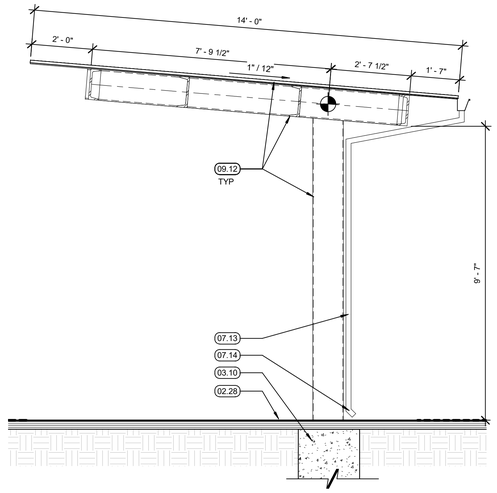
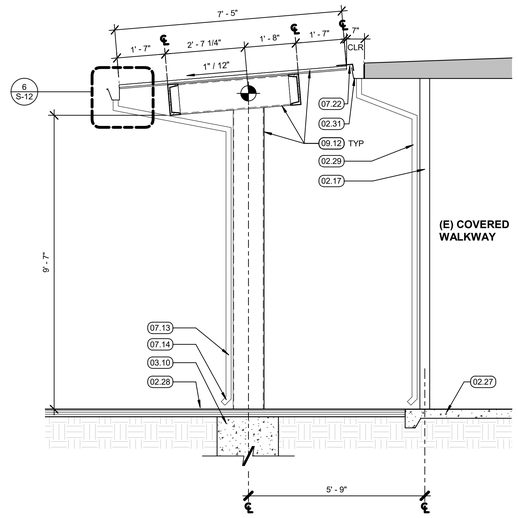


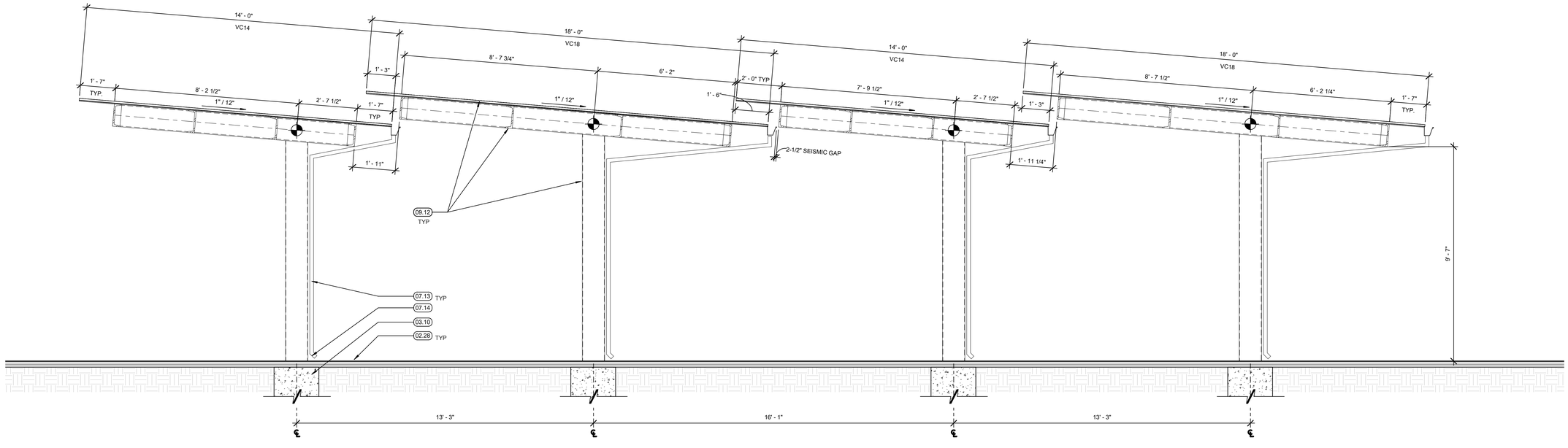
27 SECTION - STRAWBERRY SOUTH B - VC14

1/2" = 1'-0"



7 SECTION - STRAWBERRY NORTH - VC14

1/2" = 1'-0"



30 SECTION - STRAWBERRY SOUTH A

1/2" = 1'-0"

GENERAL NOTES

1. NOTIFY ARCHITECT OF ANY IN THE FIELD DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
2. ALL DIMENSIONS SHALL BE FACE OF STUD. UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
3. PATCH & REPAIR (E) A/C PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES

KEYNOTES

02.17	(E) STL POST
02.27	(E) CONC. PAVEMENT
02.28	(E) A/C PAVEMENT
02.29	(E) DOWNSPOUT BEYOND
02.31	(E) GUTTER
03.10	PIER FOOTING, SEE SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01
07.14	RAINWATER LEADER W/ ANGLED BOTTOM - DRAIN TO GRADE. TERMINATE 3" ABOVE GRADE
07.22	METAL FLASHING, SEE 2/A8.01
09.12	PAINT, COLOR TO BE SELECTED BY ARCHITECT

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility

MILL VALLEY SCHOOL DISTRICT

Project

SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title

SHADE STRUCTURE SECTIONS

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet **A3.20**

Sheet 6 of 17

SECTION 07 71 23
DOWNSPOUTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Galvanized steel downspouts.

1.2 REFERENCES

Contractor's work shall comply with the following standards as applicable. Manufactured items are to be fabricated to these same standards.

The following standards (and publications) are applicable to the extent referenced in the text. The most recent of these standards is implied, unless otherwise stated.

A. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc-Coated Welded and Seamless.

B. ASTM A653 - Steel Sheet, Zinc Coated, (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process.

C. ASTM A755 - Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

D. ASTM A924 - General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

E. SMACNA - Architectural Sheet Metal Manual.

1.3 SUBMITTALS

A. Submit Shop Drawings of metal items indicating profiles, jointing, terminations, and installation details. Indicate type and spacing of fasteners.

B. Submittal of specific plates from the SMACNA Architectural Sheet Metal Manual constitutes acceptable documentation of installation details.

C. Submit Product Data for pre-coated galvanized steel.

1.4 QUALITY ASSURANCE

A. Applicator: Company specializing in sheet metal Work with five years minimum experience.

B. Perform Work in accordance with SMACNA standard details and requirements.

1.5 STORAGE AND HANDLING

A. Stack preformed material to prevent twisting, bending, or abrasion and to provide ventilation.

B. Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.6 WARRANTY

A. Provide manufacturer's 20-year warranty against defective materials and finish.

B. Provide installer's 2-year warranty coverage for water tightness and integrity of seals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Galvanized Steel: ASTM A653, Grade 33, G90 zinc-coating in accordance with ASTM A924; thickness as specified.

B. Steel Pipe: ASTM A53, Grade B, Schedule 40 steel pipe, standard weight, Type S, one piece without joints, galvanized according to ASTM A53; 1.8 ounces per square foot.

2.2 COMPONENTS

A. Steel Pipe Downspouts: Fabricate from Schedule 40 steel pipe, and other steel stock as indicated, all full penetration welded into one assembly, then hot-dip galvanized. Strainers: Basket-type constructed of 12 gauge stainless steel wire, size to fit correctly into the leader. Provide stainless steel strap tie-downs to clamp to the downspout outlet as indicated.

2.3 ACCESSORIES

A. Anchorage Devices: Meet SMACNA requirements.

B. End Caps, Downspout Outlets, Straps, Support Brackets, Joint Fasteners. Profiled to suit gutters and downspouts.

2.4 FABRICATION

A. Form gutters and downspouts of profiles and sizes indicated.

B. Field measure site conditions prior to fabricating Work.

C. Fabricate with required connection pieces.

D. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance.

E. Hem exposed edges of metal.

F. Seal metal joints.

G. Fabricate gutter and downspout accessories; seal watertight.

H. Form splash pans to size as detailed with rolled edges.

2.5 SHOP FINISHING

A. Shop prepare and prime exposed ferrous metal surfaces.

B. Site paint exposed to view metal surfaces as specified in Section 09 91 00.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive Work. Contractor to correct deficiencies in the surfaces at own expense.

B. Beginning of installation means acceptance of existing conditions.

3.2 INSTALLATION

A. Coordinate layout of downspouts with site conditions and features on the building not shown in the building elevations.

B. Install downspouts, and accessories in accordance with SMACNA requirements.

C. Coordinate installation of sheet metal gutters with steel pipe downspouts.

D. Join lengths with seams sealed watertight. Flash and seal gutters to downspouts and accessories.

E. Seal metal joints watertight.

END OF SECTION

SECTION 09 91 00
PAINTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Surface preparation.

B. Products and application.

C. Surface finish schedule.

1.2 REFERENCES

A. ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.

B. ASTM D2016 - Test Method for Moisture Content of Wood.

1.3 SYSTEM DESCRIPTION

A. Preparation of all surfaces to receive final finish.

B. Painting and finishing Work of this Section using coating systems of materials including primers, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

C. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.

D. Painting and finishing all exterior surfaces of materials.

1.4 DEFINITIONS

A. Conform to ASTM D16 for interpretation of terms used in this Section.

1.5 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

B. Applicator: Company specializing in commercial painting and finishing with five years documented experience.

C. Regulatory Requirements: Comply with applicable codes and regulations of governmental agencies having jurisdiction including those having jurisdiction over airborne emissions and industrial waste disposal. Where those requirements conflict with this specification, comply with the more stringent provisions. Comply

with the current applicable regulations of the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA).

D. Coats: The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as are necessary to produce the required finish.

E. Employ coats and undercoats for all types of finishes in strict accordance with the recommendations of the paint manufacturer.

F. Provide primers and undercoat paint produced by the same manufacturer as the finish coat.

1.6 SUBMITTALS

A. Provide manufacturer's technical information and instructions for application of each material proposed for use by catalog number.

B. List each material by catalog number and cross-reference specific coating with specified finish system.

C. Provide manufacturer's certification that products proposed meet or exceed specified materials.

D. Submit two 8-1/2 inch x 11 inch Samples of each paint color and texture applied to cardboard. Resubmit Samples until acceptable color, sheen and texture is obtained.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.

B. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing. Paint containers not displaying product identification will not be acceptable.

C. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.

D. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.

B. Minimum Application Temperatures for Latex Paints: 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

1.9 EXTRA STOCK

A. Provide a ten gallon container of each finish paint color and sheen to Owner for touchup.

1.10 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Unless specifically identified otherwise, product designations are those of the Dunn-Edwards Corporation, (800) 537-4098 and shall serve as the standard for kind, quality, and function.

B. Subject to compliance with requirements, other manufacturers offering equivalent products are:

1. Benjamin Moore Paints, (213) 722-3484.
2. Frazee Paint (McCloskey, Ameron), (213) 727-2861.
3. Kelly-Moore Paint Company, (650) 592-8337.
4. Pittsburgh Paints, (888) 774-2001.
5. Sherwin Williams, (310) 404-7422.
6. Spectra-Tone Paint Corp., (909) 478-3485.
7. Tnemec Company, Inc., (310) 643-5191.
8. Vista Paint Corporation, (714) 680-3800.

2.2 MATERIALS

A. Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.

B. Good flow and brushing properties; capable of drying or curing free of streaks or sags.

C. Accessory Materials: Linseed oil, shella, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.3 FINISHES

A. Refer to schedule at end of Section for surface finish schedule.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.

B. Examine surfaces to be finished prior to commencement of Work. Report any condition that may potentially affect proper application.

C. Beginning of installation means acceptance of existing surfaces.

3.2 SURFACE PREPARATION

A. Correct minor defects and clean surfaces which affect Work of this Section.

B. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Pretreat with phosphoric acid etch or vinyl wash. Apply coat of etching primer the same day as pretreatment is applied.

C. Shop Primed Steel: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

3.3 PROTECTION OF ADJACENT WORK

A. Protect elements surrounding the Work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by Work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.4 APPLICATION

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to uniform finish.

D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.

E. Sand lightly between coats to achieve required finish.

F. Allow applied coat to dry before next coat is applied.

G. The number of coats specified is the minimum that shall be applied. Apply additional coats when undercoats, stains or other conditions show through final paint coat, until paint film is of uniform finish, color and appearance.

H. Cloudiness, spotting, lap marks, brush marks, runs, sags, spikes and other surface imperfections will not be acceptable.

I. Where spray application is used, apply each coat of the required thickness. Do not double back to build up film thickness of two coats in one pass.

J. Where roller application is used, roll and redistribute paint to an even and fine texture. Leave no evidence of roller laps, irregularity of texture, skid marks, or other surface imperfections.

3.5 CLEANING

A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.

B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.6 PROTECTION OF COMPLETED WORK

A. Protect finished installation.

B. Erect barriers and post warning signs. Maintain in place until coatings are fully dry.

C. Confirm that no dust generating activities will occur following application of coatings.

3.7 COLOR SCHEDULE

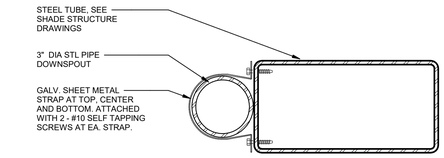
A. Paint and finish colors shall be custom color, mixed and formulated per paint schedule.

3.8 SCHEDULE - EXTERIOR SURFACES

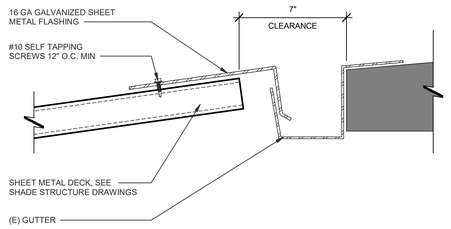
A. The following paint systems shall be used:

1. Steel-Primed or Unprimed (Semi-Gloss Acrylic)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: EVSH50 Evershield
   - 3rd coat: EVSH50 Evershield
2. Steel-Primed or Unprimed (Gloss-Alkyd)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: 10 Syn-Lustro
   - 3rd coat: 10 Syn-Lustro
3. Steel-Galvanized (Semi-Gloss - Acrylic)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: EVSH50 Evershield
   - 4th coat: EVSH50 Evershield
4. Steel-Galvanized (Gloss - Alkyd)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: 10 Syn-Lustro
   - 4th coat: 10 Syn-Lustro

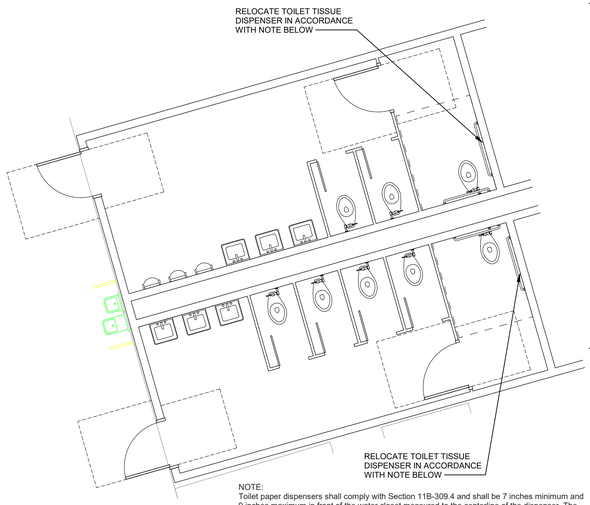
END OF SECTION



1 DOWNSPOUT AT STEEL COLUMN
3" = 1'-0"

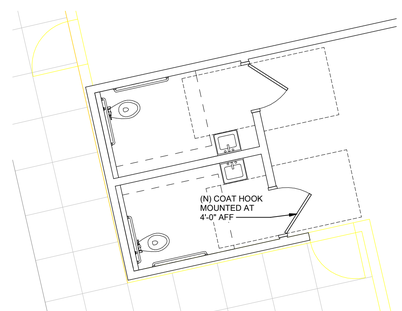


2 SHEET METAL FLASHING AT (E) GUTTER
3" = 1'-0"



NOTE:
Toilet paper dispensers shall comply with Section 11B-309.4 and shall be 7 inches minimum and 9 inches maximum in front of the water closet measured to the centerline of the dispenser. The outlet of the dispenser shall be 14 inches minimum and 19 inches maximum above the finish floor. There shall be a clearance of 11/2 inches minimum below the grab bar. Dispensers shall not be of a type that controls delivery or that does not allow continuous paper flow.

4 ENLARGED PLAN - ACC GANG RESTROOMS - DSA 01-112404
1/4" = 1'-0"



5 ENLARGED PLAN - STAFF RR - DSA 01-112404
1/4" = 1'-0"

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURE AT STRAWBERRY POINT ELEMENTARY SCHOOL

Sheet Title
MISC. DETAILS

Client Project Number:

Scale: As indicated
Drawn By: AL
Checked By: EP
Issue Date:
Revit Version: 2019

Sheet
A8.01
Sheet 7 of 17

M BAR C VERSA-CANOPY

PC OWNERSHIP - STRUCTURAL STEEL CONTRACTOR

M BAR C CONSTRUCTION INC.

674 RANCHEROS DR
SAN MARCOS, CA. 92069

PHONE: (760) 744-4131
FAX: (760) 744-4449

LIC # 869960
B AND C51

POINT OF CONTACT: GREG JONES
GREGJ@MBARCONLINE.COM
(775) 787-8845

LEGAL INFORMATION

- USE OF THE PC WITHOUT WRITTEN CONSENT FROM M BAR C CONSTRUCTION, INC. IS STRICTLY PROHIBITED.
- ALL INFORMATION HEREIN IS PROPRIETARY INFORMATION AND UNDER THE OWNERSHIP OF M BAR C CONSTRUCTION, INC.

STANDARD NOTES FOR PC USE

- 4 S.T.E.L. ENGINEERING, INC. IS AVAILABLE TO BID THE GENERATION OF THE FULL DSA SUBMITTAL PACKAGE ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE (DPGRC) OR TO SUPPORT THE DPGRC AS THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD (SEOR).
  CONTACT DUSTIN ROSEPINK AT 4 S.T.E.L. ENGINEERING, INC FOR A PROPOSAL FOR SERVICES AT (949) 305-1150, DKRPINK@4STELENG.COM
- FOR CONSTRUCTION COST INFORMATION, CONTACT M BAR C CONSTRUCTION, INC.
- CUSTOM SIZES AND LOADING REQUIRE SUPPLEMENTARY SHOP DRAWINGS AND CALCULATIONS.

DSA OTC PLAN REVIEWER AND DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE NOTES

1. THE PC STRUCTURAL MEMBERS ARE DESIGNED TO THE FOLLOWING ASCE 7-10 SEISMIC CRITERIA: S_S = 3.2, S_1 = 1.39, R = 1.25.
2. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO VERIFY SITE SPECIFIC DESIGN PARAMETERS COMPLY WITH DESIGN PARAMETERS FOR THE PC SHOWN ON SHEET S-2.
3. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE IS RESPONSIBLE FOR VERIFYING SITE-SPECIFIC WIND PARAMETERS AT ANY AND ALL SITES WHERE THIS PC IS USED. THIS PC DESIGN IS BASED ON WIND SPEED 110 MPH FOR RISK CATEGORY II TYPE STRUCTURES UTILIZING EXPOSURE TYPE C PER ASCE 7-10. SEE DESIGN PARAMETER NOTE 1 ON SHEET S-2.
4. A SITE SPECIFIC GEOTECHNICAL REPORT SHALL BE SUBMITTED JUSTIFYING SOILS VALUES SELECTED IF GREATER THAN 100 PCF FOR LATERAL BEARING AND/OR 1,500 PSF FOR VERTICAL BEARING.
   SEE FOUNDATION NOTES ON SHEET S-3.
5. SITE SPECIFIC DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO SELECT SOILS CLASS FOR SITE SPECIFIC USE.
6. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.
7. DUSTIN ROSEPINK IS NOT ACTING AS SITE SPECIFIC SEOR UNLESS HE IS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR A SIGNED LETTER HAS BEEN SUBMITTED WITH DSA-1 FORM STATING HE ACCEPTS THE RESPONSIBILITY AS THE SEOR FOR THE SITE. REFER TO DSA IR A-18.
8. DUSTIN ROSEPINK WILL NOT SIGN ANY DSA FORMS (e.g. DSA-5, DSA-6, etc.), REVIEW OR APPROVE ANY SUBMITTALS (e.g. CONCRETE MIX DESIGNS, SHOP DRAWINGS, etc.) FOR THE SITE SPECIFIC PROJECT UNLESS HE IS ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD. REFER TO DSA IR A-18.
9. CUSTOM SIZES & LOADINGS REQUIRE SUPPLEMENTARY SHOP DRAWINGS & CALCULATIONS.

DESIGN PARAMETER CHECK LIST

1. VERIFY THE MAXIMUM WIND SPEED AT THE SITE DOES NOT EXCEED 110 MPH EXPOSURE C.
2. VERIFY THE MAXIMUM SEISMIC S_s AT THE SITE DOES NOT EXCEED S_s = 3.2.
3. VERIFY THE SITE SPECIFIC SNOW LOAD AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET OR EXCEED THE SITE SPECIFIC SNOW LOAD. THIS PC HAS OPTIONS FOR NO SNOW AND 20 PSF SNOW LOAD. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS PROVIDED THE PROPER SITE SPECIFIC VALUES FOR P_g, P_f, P_s, C_e, I, C_t.
4. REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET WITH THE GEOTECHNICAL REPORT REQUIREMENTS. IF NO GEOTECHNICAL REPORT IS SUPPLIED VERIFY SOILS CLASS V IS SELECTED.
   - SITES NOT LOCATED IN STATE OR LOCAL GEOHAZARD ZONES UTILIZING THIS PC WITH STRUCTURES NOT EXCEEDING 4,000 SQ FT DO NOT REQUIRE CGS APPROVAL OF THE GEOTECHNICAL REPORT. STRUCTURES MAY BE BROKEN UP INTO MULTIPLE 4,000 SQ FT STRUCTURES WITH SEISMIC BREAKS PER SEISMIC GAPS ON S-2.
5. VERIFY THE SITE SPECIFIC FOUNDATION LOCATIONS MEET WITH SOILS NOTE 8 ON S-3 FOR SET BACK FROM TOP OF SLOPES OR THAT THE GEOTECHNICAL REPORT HAS ALLOWED A SMALLER DISTANCE.
6. VERIFY THE SITE SPECIFIC PLANS PROVIDE THE APPROPRIATE OCCUPANCY AND OCCUPANCY LOAD FACTOR FOR THE SITE. SEE BUILDING DATA ON S-2 FOR SAMPLE ACCEPTABLE OCCUPANCIES AND OCCUPANCY LOAD FACTORS.
7. VERIFY THE SITE SPECIFIC PLANS UTILIZE A RISK CATEGORY II STRUCTURE. RISK CATEGORY II STRUCTURES SHALL NOT PROVIDE SHELTER FOR EMERGENCY VEHICLES OR EQUIPMENT; OR PROVIDE REQUIRED ACCESS TO, REQUIRED EGRESS FROM, OR SHARE A LIFE SAFETY COMPONENT WITH A RISK CATEGORY III OR IV STRUCTURE.
8. VERIFY SELECTION OF USE AND OCCUPANCY CLASSIFICATION PER CBC CHAPTER 3; OCCUPANT LOAD FACTOR PER CBC TABLE 1004.1.2; RISK CATEGORY PER CBC TABLE 1604A.5; TO BE COMPLETED BY DESIGN PROFESSIONAL AT TIME OF DSA OTC OR PROJECT DSA SUBMITTAL.
9. VERIFY APPROPRIATE SEISMIC SEPARATION PER SEISMIC GAPS ON S-2.
10. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS APPROPRIATELY ADDRESSED FIRE SEPARATION AND PROPERTY LINE SETBACKS.
11. VERIFY THE SITE SPECIFIC SOLAR PANEL LAYOUT IS PROVIDED WITH DIMENSIONS THAT DO NOT EXCEED THE PC MAXIMUMS. THE MAXIMUM DIMENSIONS SHALL BE TO THE OUTSIDE EDGES OF THE SOLAR PANEL OR THE STRUCTURAL STEEL, WHICH EVER IS GREATER.
12. VERIFY STEEL SELECTIONS HAVE BEEN PROPERLY COORDINATED WITH BEAM/COLUMN SCHEDULES. REFER TO 2/S-8 & 2/S-9.
13. VERIFY SITE SPECIFIC PURLIN CANTILEVERS HAVE BEEN PROPERLY COORDINATED WITH PURLIN SCHEDULES. REFER TO 1/S-8 & 1/S-9.
14. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.

SHEET INDEX

10 ~~13~~ SHEETS

BID INFORMATION

THE STEEL STRUCTURES IN THIS PC ARE PROPRIETARY TO M BAR C CONSTRUCTION, INC. THE STEEL WORK SHALL NOT GO OUT TO BID.

PRE-CHECK (PC) DOCUMENT

CODE: 2016 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

M BAR C CONSTRUCTION INC.
674 RANCHEROS DR SAN MARCOS, CA 92069 GREG JONES
PHONE: (760) 744-4131 FAX: (760) 744-4449 GREGJ@MBARCONLINE.COM
LIC # 869960 B AND C51 (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200 MISSION VIEJO, CA 92691
PHONE: (949) 305-1150 FAX: (949) 305-1420

VERSA CANOPY

COVER SHEET

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-1

1 OF 13 SHEETS

ABBREVIATIONS

&	AND
@	AT
℄	CENTER LINE
A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
BLDG	BUILDING
BLK'G	BLOCKING
BM	BEAM
BOTT. OR (B)	BOTTOM
CBC	CALIFORNIA BUILDING CODE
CCD	CONSTRUCTION CHANGE DOCUMENT (DSA)
CCR	CALIFORNIA CODE OF REGULATIONS
CFS	COLD FORMED STEEL
C.J.	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CS	CFS C SECTION WITH FLANGE STIFFENING LIPS
DIA., ø	DIAMETER
DPGRC	DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE
DSA	DIVISION OF THE STATE ARCHITECT
DWG	DRAWING
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
EXT.	EXTERIOR
FDN	FOUNDATION
FIN.	FINISH
FLR	FLOOR
FLS	FIRE LIFE SAFETY (DSA)
F.O.C.	FACE OF CONCRETE
F.S.	FAR SIDE
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
H.S.B.	HIGH STRENGTH BOLT (ASTM A325 U.N.O.)
HORIZ.	HORIZONTAL
HT.	HEIGHT
IAMPO	INTERNATIONAL ASSOCIATION OF MECHANICAL AND PLUMBING OFFICIALS
ICC	INTERNATIONAL CODE COUNCIL
INT.	INTERIOR
IOR	INSPECTOR OF RECORD
IR	INTERPRETATION OF REGULATIONS (DSA)
JT	JOINT
LG.	LONG
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M.B.	MACHINE BOLT (ASTM A307 U.N.O.)
MAX.	MAXIMUM
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
(N)	NEW
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NOM.	NOMINAL
N.S.	NEAR SIDE
NTS	NOT TO SCALE
O.C.	ON CENTER
OTC	OVER THE COUNTER (DSA)
O.H.	OPPOSITE HAND
℗ OR PL	PLATE
PJP	PARTIAL JOINT PENETRATION
PC	PRE-CHECK (DSA)
PT	PRESSURE TREATED
PV	PHOTOVOLTAIC
REINFT.	REINFORCEMENT
REQ'D	REQUIRED
SC	SLIP-CRITICAL JOINT PER ASTM SPECS
SCHED.	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SHT'G	SHEATHING
SIM.	SIMILAR
S.M.S.	SHEET METAL SCREW
SQ.	SQUARE
SS	STAINLESS STEEL
ST	SNUG-TIGHTENED JOINT PER ASTM SPECS
STD	STANDARD
(T)	TOP
T&B	TOP AND BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/-	WITH
W/O	WITHOUT
WHS	WELDED HEADED STUD (ASTM A108 U.N.O.)
W.P.	WORK POINT
WT.	WEIGHT
WTS	WELDED THREADED STUD (ASTM A108 U.N.O.)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, 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 THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
4. A 'DSA CERTIFIED' INSPECTOR WITH CLASS 2 CERTIFICATION IS REQUIRED FOR THIS PROJECT.
5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE SCHOOL BOARD SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
7. IF THE PROJECT IS DIVIDED INTO INCREMENTS: THE SCOPE OF WORK FOR EACH INCREMENT MUST BE CLEARLY SPECIFIED ON THE TITLE SHEET OF ALL INCREMENTS SUBMITTED.

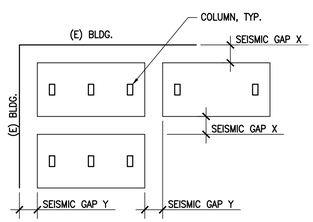
CONSTRUCTION OPTIONS

* ALL CONSTRUCTION OPTIONS INCLUDE OPTIONS FOR CONCRETE DRILLED PIERS AND/OR SPREAD FOOTINGS.

1. 14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW
2. 18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-9" MAX COLUMN HEIGHT, 0 psf GROUND SNOW
3. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
4. ~~14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-5" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
5. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-6" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
6. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-9" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~

SEISMIC GAPS

OPTION	MAX COLUMN HEIGHT	GAP X	GAP Y
VC14	17'-0"	2½"	7"
VC18	17'-9"	3½"	9½"
VC20	17'-0"	2½"	7"
VC140	17'-5"	3½"	9"
VC180	16'-6"	3"	8½"
VC200	16'-9"	3"	8"



NOTE
1. SEISMIC GAPS LISTED ARE THE MINIMUM GAPS BETWEEN ANY TWO STRUCTURES (I.E. CANOPIES, BUILDINGS) AND DO NOT NEED TO BE COMBINED OR DOUBLED.
2. DIMENSIONS, QUANTITIES, AND LOCATIONS OF STRUCTURES AND COLUMNS SHOWN ABOVE ARE FOR ILLUSTRATIVE PURPOSES ONLY. SEE SITE-SPECIFIC SHEETS FOR LAYOUTS AND QUANTITIES.

STRUCTURAL DATA

LATERAL RESISTING SYSTEM..... STEEL ORDINARY CANTILEVER COLUMN
FOUNDATION ..... CONCRETE DRILLED PIERS AND SPREAD FOOTINGS
TESTING AND INSPECTION LIST..... SEE SHEETS S-3 & S-4

DESIGN PARAMETERS

RISK CATEGORY II
ROOF LIVE LOAD (L_R):
DECK ONLY ..... 20 psf
POINT LOAD ..... 300 lb

SNOW LOAD :
MAX. DRIFT SNOW LOAD..... 0 psf, 20 psf (SEE CONSTRUCTION OPTIONS)

MAXIMUM DEAD LOAD:
ROOF DECK..... 0.89 psf

WIND: ASCE 7-10 METHOD 2 - ANALYTICAL PROCEDURE
BASIC WIND SPEED..... 110 mph[1]
WIND EXPOSURE ..... C[1]
INTERNAL PRESSURE ..... N/A (OPEN STRUCTURE)
WIND DIRECTIONALITY FACTOR ..... K_d = 0.85
VELOCITY PRESSURE COEFFICIENT..... K_z = 0.90
TOPOGRAPHIC FACTOR ..... K_{zt} = 1.00

SEISMIC: ASCE 7-10
SEISMIC IMPORTANCE FACTOR ..... I = 1.0
RESPONSE MODIFICATION FACTOR..... R = 1.25
MAPPED SPECTRAL RESPONSE ACCELERATION ..... S_S = 3.20[2], S_1 = 1.39
SITE CLASS ..... D
DESIGN SPECTRAL RESPONSE ..... S_{DS} = 2.133, S_{D1} = 1.390
SEISMIC DESIGN CATEGORY ..... D (E WITH GROUND MOTION ANALYSIS)
SEISMIC FORCE RESISTING SYSTEM ..... STEEL ORDINARY CANTILEVER COLUMN
SEISMIC RESPONSE COEFFICIENT ..... C_S = 1.707
ANALYSIS PROCEDURE ..... EQUIVALENT LATERAL FORCE

NOTES:

1. THE PC COMPONENTS & CLADDING AND MAIN WIND FORCE RESISTING SYSTEM DESIGN WIND PRESSURE q_h = 23.7 psf DETERMINED FROM THE CRITERIA LISTED ABOVE. (EXPOSURE C, K_z=0.960, K_{zt}=1.0 , K_d = 0.85).

   THE PC MAY BE USED FOR RISK CATEGORY II TYPE STRUCTURES IN ANY WIND ZONE WHERE $q_h \leq$ 23.7 psf.

   EXAMPLE:
   SITE BASIC WIND SPEED, V =120 mph
   RISK CATEGORY II
   WIND: EXPOSURE B
   K_d = 0.85
   K_z = 0.701
   K_{zt} = 1.00
   q_h = 22.0 psf < 23.7 psf

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

2. THE PC SEISMIC FORCE RESISTING SYSTEM IS GOVERNED BY C_S = 1.707 FROM THE CRITERIA LISTED ABOVE. (R = 1.25, S_S = 3.2, I_E = 1.00).

   THE PC MAY BE USED FOR RISK CATEGORY II STRUCTURES AT ANY SITE WHERE THE SITE SPECIFIC SEISMIC PARAMETER S_S AND R = 1.25 RESULT IN A VALUE $C_S \leq$ 1.707.

   EXAMPLE:
   RISK CATEGORY II
   SOIL: SITE CLASS A
   S_S = 3.4
   S_1 = 1.8
   R = 1.25
   I = 1.00
   S_{DS} = 1.813
   C_S = 1.451 < 1.707

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

BUILDING DATA

TYPE OF CONSTRUCTION..... IIB
OCCUPANCY..... VARIES - SEE EXAMPLES
NUMBER OF STORIES..... 1
BUILDING AREAS..... VARY DUE TO OCCUPANCY - SEE EXAMPLES
MODULE SIZES..... VARY WITH OPTIONS
BUILDING LENGTH:
ALL WIDTHS..... MAX. 500'-0" LENGTH

NOTE: NO SEISMIC AND/OR THERMAL EXPANSION JOINTS REQUIRED ALONG THE LENGTH OF THE STRUCTURES. (ALL JOINTS ARE INTERNAL)

OCCUPANCY AND BUILDING AREA EXAMPLES:
ALL STRUCTURES SHALL BE BASED ON RISK CATEGORY II STRUCTURE.

A OCCUPANCY:

EXAMPLE 1:
STRUCTURES LOCATED OVER LUNCH AREA WITHOUT FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 15 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 4,500 sq ft

EXAMPLE 2:
STRUCTURES LOCATED OVER LUNCH AREA WITH FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 18"/person ALONG LINEAR BENCH - MAX 300 FOR RISK II
MAX SQ FT: 5,400 LINEAR INCHES OF FIXED SEATING UNDER THE STRUCTURE

EXAMPLE 3:
STRUCTURES LOCATED OVER AN AREA DESIGNATED FOR ASSEMBLY (TYPICALLY AMPHITHEATER, OR OTHER SPACE WITH FIXED SEATING OR DESIGNATED AS A STANDING ASSEMBLY AREA)
OCCUPANCY: A
OCCUPANCY LOAD: 7 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 2,100 sq ft

SHADE STRUCTURE

EXAMPLE 1:
STRUCTURES LOCATED OVER A FIELD, BLACKTOP, PLAYGROUND EQUIPMENT,OR OTHER NON DESIGNATED USE SPACES
OCCUPANCY: E
OCCUPANCY LOAD: 20 sf/person - MAX 250 FOR RISK II
MAX SQ FT: 5,000 sq ft

PARKING

EXAMPLE 1:
STRUCTURES LOCATED OVER PARKING
OCCUPANCY: S-2
OCCUPANCY LOAD: 200 sf/person
MAX SQ FT: UNLIMITED PER CBC 406.5.4 AND 406.5.5

CODES

TITLE 24, CCR CODES:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE (CAC) ..... (PART 1, TITLE 24, CCR)
2. 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2..... (PART 2, TITLE 24, CCR) (2015 INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS)
3. 2016 CALIFORNIA ELECTRICAL CODE ..... (PART 3, TITLE 24, CCR) (2014 NATIONAL ELECTRICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
4. 2016 CALIFORNIA MECHANICAL CODE (CMC) ..... (PART 4, TITLE 24, CCR) (2015 UNIFORM MECHANICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
5. 2016 CALIFORNIA PLUMBING CODE (CPC) ..... (PART 5, TITLE 24, CCR) (2015 UNIFORM PLUMBING CODE WITH 2016 CALIFORNIA AMENDMENTS)
6. 2016 CALIFORNIA ENERGY CODE ..... (PART 6, TITLE 24, CCR) (2016 EDITION CALIFORNIA ENERGY COMMISSION BUILDING ENERGY EFFICIENCY STANDARDS)
7. 2016 CALIFORNIA FIRE CODE (CFC) ..... (PART 9, TITLE 24, CCR) (2015 INTERNATIONAL FIRE CODE WITH 2016 CALIFORNIA AMENDMENTS)
8. 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE ..... (PART 11, TITLE 24, CCR)
9. 2016 CALIFORNIA REFERENCED STANDARDS CODE ..... (PART 12, TITLE 24, CCR)
   NFPA 13 - 2016
   NFPA 72 - 2016

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2016 CBC, CHAPTER 35
2016 CFC, CHAPTER 80

FIRE LIFE SAFETY

AUTOMATIC FIRE SPRINKLERS REQUIRED? (Y/N)..... N

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 865960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM | (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

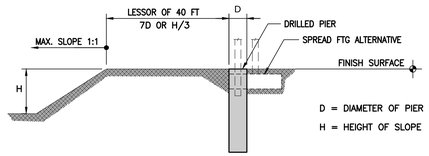
VERSA CANOPY
GENERAL DATA

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-2
2 OF 13 SHEETS

SOILS NOTES

1. IF NO GEOTECHNICAL REPORT IS SUPPLIED AT THE TIME OF DSA REVIEW ADDRESSING SITE-SPECIFIC PARAMETERS, FOUNDATION SELECTIONS SHALL BE BASED ON CLASS W SOILS (SOIL CLASS 5 OF CBC TABLE 1806A.2 WITH DOUBLING OF LATERAL BEARING PRESSURE FOR STRUCTURES NOT ADVERSELY AFFECTED BY ½" MOTION AT GROUND SURFACE) IN THE SOIL CLASS TABLE BELOW.
2. WHEN A GEOTECHNICAL REPORT IS SUPPLIED THE GEOTECHNICAL ENGINEER SHALL REVIEW THE SITE CONDITIONS, TESTING RESULTS, AND ALL ALLOWABLE INCREASES AND SUPPLY THE FINAL SOIL CLASS TO BE USED FROM THE BELOW TABLE. THE GEOTECHNICAL ENGINEER SHALL PROVIDE IN THE GEOTECHNICAL REPORT THE FOLLOWING BASE VALUES WITHOUT INCREASE FOR 24" DIAMETER PIERS: THE ALLOWABLE VERTICAL END BEARING, ALLOWABLE LATERAL BEARING, ALLOWABLE DOWNWARD SKIN FRICTION, ALLOWABLE SKIN FRICTION TO RESIST UPLIFT. THE GEOTECHNICAL ENGINEER SHALL ALSO PROVIDE ANY ALLOWABLE INCREASES TO THE BASE VALUES. ALLOWABLE INCREASES ARE TYPICALLY DUE TO BUT NOT EXCLUSIVE TO: DOUBLE VALUES DUE TO ISOLATED FOUNDATIONS, DOUBLE VALUES DUE TO THE STRUCTURE NOT BEING ADVERSELY AFFECTED BY 1/2" DEFLECTION AT THE SURFACE, A 4/3 INCREASE DUE TO SHORT TERM LOADING, AND ANY OTHER ALLOWABLE INCREASES. THE GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION OF THE SOIL CLASS TO BE USED AFTER ALL INCREASES HAVE BEEN APPLIED. ALL FOUNDATIONS HAVE BEEN DESIGN BASED ON THE VALUES PRESENTED IN THE BELOW TABLE. THE GEOTECHNICAL REPORT SHALL ADDRESS IF THE USE OF STEEL CASING THAT IS TWISTED INTO PLACE AND LEFT INSTALLED AFFECTS ANY ALLOWABLE VALUES.
3. THE GEOTECHNICAL ENGINEER MAY SPECIFY DIFFERENT SOILS CLASSES TO BE USED FOR THE DIFFERENT STRUCTURE TYPES (VC14 OR VC20), DIFFERENT AREAS OF THE SITE (I.E. NORTH LOT OR WEST LOT), OR THE ENGINEER MAY SPECIFY ONE SOILS CLASS TO BE USED FOR THE ENTIRE SITE.
4. THE GEOTECHNICAL ENGINEER SHALL ADDRESS IN THE REPORT ANY CONCRETE DURABILITY REQUIREMENTS IN ACCORDANCE WITH ACI 318-11 CHAPTER 4.
5. THE GEOTECHNICAL REPORT SHALL BE SPECIFIC TO THE LOCATION OF THE STRUCTURES. BORING(S) SHALL BE DONE AT THE SPECIFIC LOCATION(S) WHERE THE STRUCTURES ARE TO OCCUR. THE GEOTECHNICAL REPORT SHALL CONFORM TO 2016 CBC SECTION 1803A.
6. A COPY OF THE GEOTECHNICAL REPORT SHALL BE PROVIDED AT THE TIME OF PLAN REVIEW.
7. AT THE TIME OF PLAN REVIEW, THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE SHALL SELECT A SOILS CLASS ON THE SITE-SPECIFIC PLANS BASED ON THE GEOTECHNICAL REPORT (OR NOTE 1 ABOVE).

   HOLES MAY BE LEFT OPEN FOR ANY AMOUNT OF TIME AS LONG AS THEY ARE PROPERLY COVERED FOR OSHA STANDARDS.
8. FOUNDATIONS ADJACENT TO SLOPED GROUND SURFACES SHALL BE SET BACK PER THE FOLLOWING FIGURE UNLESS OTHERWISE RECOMMENDED BY A SITE SPECIFIC GEOTECHNICAL REPORT.



DESIGN SOIL VERTICAL AND LATERAL BEARING VALUES

SOIL CLASS	VERTICAL BEARING PRESSURE (psf)	LATERAL BEARING PRESSURE (psf/ft)	MAXIMUM LATERAL BEARING (psf)	MIN. DOWNWARD SKIN FRICTION (psf)	MIN. UPWARD SKIN FRICTION (psf)
CLASS V	1,500	133	2,000	175	50
CLASS W	1,500	267	4,000	225	50
CLASS X	2,000	400	6,000	250	75
CLASS Y	2,000	533	8,000	275	75
CLASS Z	3,000	800	12,000	325	100

SPECIAL INSPECTION

1. SOILS:
   - VERIFY THE SITE HAS BEEN PREPARED PROPERLY PRIOR TO PLACEMENT OF CONTROLLED FILL AND/OR EXCAVATIONS FOR FOUNDATIONS.
   - VERIFY THAT THE FOUNDATION EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
   - VERIFY THAT MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
2. PIER FOUNDATIONS:
   - INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER.
   - VERIFY LOCATIONS OF PIERS.
3. CONCRETE:
   - VERIFY USE OF REQUIRED DESIGN MIX, DETERMINE THE TEMPERATURE OF THE CONCRETE, AND (WHERE REQUIRED) PERFORM AIR CONTENT TEST.
   - TEST CONCRETE (COMPRESSION TEST).
   - INSPECT PLACEMENT OF FORMWORK, REINFORCING STEEL, EMBEDDED ITEMS, AND CONCRETE. INSPECT CURING AND FORM REMOVAL.
   - SLUMP TEST SHALL BE PERFORMED PER SITE SPECIFIC DSA-103.
4. STEEL:
   - VERIFY THAT ALL MATERIALS ARE APPROPRIATELY MARKED AND THAT:
     - MILL CERTIFICATES INDICATE MATERIAL PROPERTIES THAT COMPLY WITH REQUIREMENTS.
     - MATERIAL SIZES, TYPES AND GRADES COMPLY WITH REQUIREMENTS.
   - TEST UNIDENTIFIED MATERIALS.
   - VERIFY MEMBER LOCATIONS, BRACING AND ALL DETAILS CONSTRUCTED IN THE FIELD.
   - VERIFY STIFFENER LOCATIONS, CONNECTION TAB LOCATIONS, AND ALL CONSTRUCTION DETAILS FABRICATED IN THE SHOP.
   - HIGH STRENGTH SLIP CRITICAL BOLTING.
5. SHOP FABRICATION:
   - VERIFY FABRICATOR'S FABRICATION AND QUALITY CONTROL PROCEDURES.
   - VERIFY ALL ASPECTS OF SHOP FABRICATION INCLUDING MEMBER LOCATIONS, DIMENSIONAL LAYOUT OF ALL PARTS AND PIECES, BOLTING, ETC.
6. SEE DSA APPROVED 103 FOR ADDITIONAL REQUIREMENTS.

GENERAL NOTES

1. DESIGN PER 2016 C.B.C. AND ITS PRESCRIBED LOADING AND MATERIAL SPECIFICATIONS:
   - ASCE 7-10
   - 14TH EDITION AISC STEEL CONSTRUCTION MANUAL
   - 2012 AISI COLD FORMED STEEL STANDARD
   - ACI 318-14
2. THESE STRUCTURES ARE NOT DESIGNED TO BE, NOR SHALL THEY BE, ENCLOSED.
3. ALL DIMENSIONS, CONDITIONS, AND ELEVATIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY DISCREPANCIES ARE FOUND OR IF ANY CONDITION EXISTS NOT AS SHOWN ON THE DRAWINGS THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY.
4. IF THE SNOW LOAD OPTION IS USED THEN THE SITE-SPECIFIC MAX GROUND SNOW LOADING INCLUDING DRIFT MUST BE LESS THAN OR EQUAL TO 20 PSF.
5. ALL SCREWS TO BE ITW BUILDEX TEK SCREWS PER ICC ESR-1976 OR ELCO DRILL SCREW PER ICC ESR-3294.
6. OWNER TO SIGN AUTHORIZATION TO PROCEED PRIOR TO DRILLING.

   SEE SAMPLE BELOW:

MBarC CONSTRUCTION
THE STRENGTH BETWEEN SUN AND SHADE™

674 Rancheros Drive
San Marcos, CA 92069
PH: 760.744.4131
FAX: 760.744.4449
CA LIC #869960

Authorization to Proceed

Project Name: _____ Foreman: _____

Site Name: _____ Contractor: _____

As an authorized representative of Contractor listed above, I,_____ agree to the following statements below:

_____(initial) **LAYOUT:** The onsite layout for installation of structural steel for carports and canopies has been inspected and is approved as is.

_____(initial) **ARRAY ORIENTATION/CONCRETE POUR:** The tilt and direction of the canopies have been verified and are approved as is.

ARRAYS:

_____

_____

_____

_____

_____

_____

It is understood that additional costs will apply due to the following delays: re-layout not due to M Bar C, underground site conflicts (unmarked utility lines, including but not limited to water, sewer, fire, irrigation, electrical; encountered underground water; change in soils condition, including but not limited to hard drilling, caving soils, obstructions).

BY: _____ DATE: _____
(signature)

www.mbarconline.com

STEEL NOTES

1. COLD FORMED STEEL SIZES ARE BASED ON BARE STEEL THICKNESS.
2. STRUCTURAL PURLIN, BEAM & COLUMN MEMBERS SHALL HAVE MINIMUM STEEL YIELD STRENGTHS AS INDICATED.
3. STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153, CLASS D) OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION.
4. ALL EXPOSED STEEL FASTENERS, INCLUDING CAST IN PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION-PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT COMPLY WITH THE 1000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUIK GUARD BY SIMPSON, KWIK-COTE BY HILTI, STALGARD BY ELCO, VISTACORR BY SFS INTEC, ETC.)
5. STEEL FABRICATION SHALL COMPLY WITH LATEST AISC SPECIFICATIONS.
6. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE ASTM A1085 GR. 50 U.N.O. ASTM A1085 STEEL HAS THE SAME OR BETTER PROPERTIES AND WELDABILITY THAN ASTM A500 GR. B.
7. COLD FORMED STEEL (CFS) MEMMBERS SHALL BE ASTM A653 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi) OR ASTM A1011 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi).
8. ZINC COATING OF STRUCTURAL STEEL SHALL CONFORM WITH G90 STANDARD OR BETTER. COLD FORMED STEEL (CFS) MEMBERS TO BE GALVANIZED IN ACCORDANCE ASTM A653 G90 STANDARD. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS NOTED OTHERWISE.
9. ALL STEEL MEMBERS TO BE GALVANIZED OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT AND FINISH COAT OR EQUIVALENT PAINT SYSTEM. CONTRACT DOCUMENTS SHALL SPECIFY THE TYPE OF SSPC CORROSION RESISTING SYSTEM TO BE UTILIZED AND THE SSPC GRADE FOR CLEANING, MINIMUM SSPC GRADE SP2.
10. BOLTS SHALL CONFORM TO THE ASTM A307 SPECIFICATIONS UNLESS NOTED OTHERWISE. INSPECTION OF A307 BOLTING IS NOT REQUIRED.
11. ASTM A307 BOLTS MAY BE SUBSTITUTED WITH THE SAME NUMBER AND SIZE OF SAE J429 GRADE 2 BOLTS.
12. BOLTS SHALL BE TIGHTENED TO SNUG-TIGHT CONDITION UNLESS NOTED OTHERWISE EXCEPT FOR A325-SC HIGH STRENGTH BOLTS USED IN THE BEAM TO COLUMN CONNECTION.
13. A325-SC BOLTS SHALL BE PRE-TENSIONED PER AISC SPECIFICATIONS USING APPROVED LOAD INDICATOR METHODS INCLUDING BUT NOT LIMITED TO TURN-OF-THE NUT WITH MATCH MARKING, TWIST OFF TENSION CONTROL OR DIRECT TENSION INDICATOR BOLT, NUT AND WASHER ASSEMBLIES.
14. ASTM A307 BOLTS SHALL HAVE STANDARD WASHERS UNDER THE NUT & BOLT HEAD (F436 WASHERS ARE NOT REQUIRED). STANDARD WASHERS DO NOT REQUIRE HARDNESS TEST.
15. BOLT HOLES FOR ½"ø BOLTS SHALL BE AS FOLLOWS: STANDARD HOLES: 9/16"ø

CONCRETE NOTES

1. CONCRETE MIN. 4,500 PSI AT 28 DAYS UNLESS A SOILS REPORT IS PROVIDED THAT ALLOWS FOR A LOWER STRENGTH (3,000 PSI MIN.). BATCH PLANT INSPECTION NOT REQUIRED.
2. CONRETE SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS BASED ON EXPOSURE CLASS IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.2.1 WHEN DETERMINED BY A SITE-SPECIFIC GEOTECHNICAL REPORT.

REQUIREMENTS FOR CONCRETE BASED ON EXPOSURE CLASS

EXPOSURE CLASS ACI TABLE 19.3.2.1	MINIMUM CONCRETE STRENGTH F'_c	CEMENT TYPE ASTM C150	MAX. WATER/CEMENT RATIO W/M
NOT DETERMINED	4,500 PSI	TYPE V	0.45
F0, S0, P0, C0, C1	3,000 PSI	TYPE II	N/A
S1, P1	4,000 PSI	TYPE II	0.50
ALL OTHER	4,500 PSI	TYPE V	0.45

3. CONCRETE EXPOSED TO THAW AND FREEZE CYCLE SHALL BE AIR ENTRAINED PER ACI 318-14 TABLE 19.3.1.1.
4. CONCRETE TO ATTAIN 1000 PSI PRIOR TO REMOVAL OF SHORING AND/OR INSTALLATION OF BEAMS AND PURLINS. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 1000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
5. CONCRETE TO REACH 3000 PSI PRIOR TO INSTALLATION OF ROOF DECK. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 3000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
6. REINFORCEMENT BARS SHALL BE ASTM A615, GR60 TYPICAL, U.N.O.
7. MINIMUM CONCRETE COVER SHALL BE 2½" TO EARTH (DRILLED PIER FOUNDATIONS ONLY), 3" TO EARTH ALL OTHER CONCRETE, 2" TO EXPOSED SURFACES PER CBC TABLE 1808A.8.2
8. ALL REINFORCING STEEL AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED PRIOR TO THE POURING OF CONCRETE.
9. ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 & 318 STANDARDS.
10. AGGREGATE GRADATION AND QUALITY SHALL BE IN ACCORDANCE WITH ACI 302-1R.
11. COLD JOINTS SHALL HAVE A ROUGHENED SURFACE. BONDING AGENT SHALL COMPLY WITH ASTM C1059. A SUBMITTAL FOR CONCRETE BONDING AGENT SHALL BE APPROVED BY DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO INSTALLATION. DSA INSPECTOR OF RECORD TO PERIODICALLY INSPECT INSTALLATION OF BONDING AGENT.
12. BATCH PLANT INSPECTION NOT REQUIRED PER CBC 1705A3.3.2. SUBJECT TO:
    - A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.
    - BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD, AND TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.
11. CONCRETE MAY BE PUMPED, POURED, TAILGATED, OR OTHER SUCH METHODS INTO PLACE. CONCRETE SHALL BE ALLOWED TO FREE FALL THE ENTIRE DEPTH OF THE FOUNDATION. PLACEMENT OF ANY FREE-FALL CONCRETE SHALL BE SUCH THAT THE CONCRETE DOES NOT ALTER THE EMBEDMENT DEPTH OR THE CLEARANCE OF THE REINFORCING BAR CAGE OR OTHER EMBEDDED MATERIALS.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

GENERAL NOTES

DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-3
3 OF 13 SHEETS

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Spread footings without post installed anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic		**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*).
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
+	**WOOD**			
+	**OTHER**			

3 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY SPREAD FOOTINGS**

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier and Pad Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

1 / - **SAMPLE DSA 103 - STRUCTURES WITH PIER & SPREAD FOOTINGS**

THE EXAMPLE FORM DSA-103'S SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT-SPECIFIC FORM DSA-103'S. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE FORM DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

2 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY PIER FOOTINGS**

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER — DUSTIN K. ROSEBRAK — S 5885 — STRUCTURAL — STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 865960 B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM | (775) 787-8845
GREG JONES

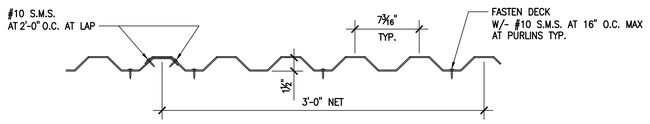
4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

SAMPLE DSA-103 FORMS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-4
4 OF 13 SHEETS

ROOF DECK SPECIFICATIONS						
SECTION PROPERTIES			TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
GA	F_y (ksi)	WEIGHT (psf)	I_+ (in.^{4}/ft.)	S_+ (in.^{3}/ft.)	I_- (in.^{4}/ft.)	S_- (in.^{3}/ft.)
26	80	0.89	0.0840	0.0762	0.0817	0.0623

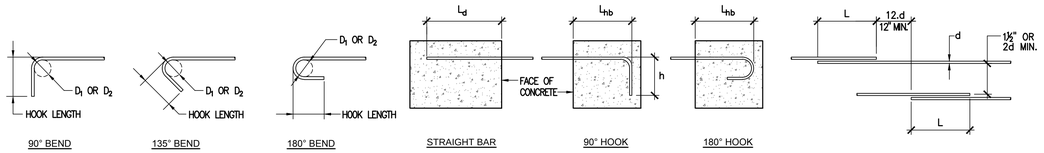


NOTES:

1. MATERIAL AND SECTION PROPERTIES LISTED ABOVE ARE MINIMUM REQUIRED VALUES FOR METAL DECK BASED ON AEP HR-36 26 GA.
2. METAL ROOF DECK SHALL BE CLASS A PER CBC CHAPTERS 7A AND 15.

3 - DECK DETAIL

N.T.S.



90° BEND | 135° BEND | 180° BEND | STRAIGHT BAR | 90° HOOK | 180° HOOK

FINISHED BEND DIAMETERS		
BAR SIZE	D_1	D_2
#3	1½"	2¼"
#4	2"	3"
#5	2½"	3¾"
#6, #7, #8	6d	6d

'D_1' - FINISHED BEND DIA. FOR STIRRUP & TIE HOOKS.
'D_2' - BEND DIA. FOR STD HOOKS.
'd' - BAR DIAMETER

STANDARD HOOK LENGTHS				
BAR SIZE	MAIN REINFT.		STIRRUP & TIE HOOKS	
	90°	180°	90°	180°
#3	6"	4"	3½"	4¼"
#4	8"	4½"	4½"	4½"
#5	10"	5"	5"	6"
#6	12"	6"	12"	7½"
#7	14"	7"	14"	9"
#8	16"	8"	16"	10"

A STANDARD HOOKS

REINFORCEMENT DEVELOPMENT LENGTHS				
CONCRETE STRENGTH		F'_C = 3,000 PSI		
NOMINAL BAR SIZE	h	L_d		L_{hb}
		TOP BARS	OTHER BARS	
#3	6"	1'-10"	1'-5"	9"
#4	8"	2'-5"	1'-10"	11"
#5	10"	3'-0"	2'-4"	1'-2"
#6	12"	3'-7"	2'-9"	1'-5"
#7	14"	5'-3"	4'-0"	1'-7"
#8	16"	6'-0"	4'-7"	1'-10"

NOTES:

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW.

B DEVELOPMENT LENGTHS

REINFORCEMENT LAP SPLICE LENGTH 'L'		
CONCRETE STRENGTH	F'_C=3,000 PSI	
NOMINAL BAR SIZE	TOP BARS	OTHER BARS
#3	2'-4"	1'-10"
#4	3'-2"	2'-5"
#5	3'-11"	3'-0"
#6	4'-8"	3'-7"
#7	6'-9"	5'-3"
#8	7'-9"	6'-0"

NOTES:

1. LAP SPLICE SHALL BE INCREASED 50% WHERE CLEAR SPACE BETWEEN BARS IS LESS THAN 2 BAR DIAMETERS AND/OR THE CLEAR COVER IS LESS THAN ONE BAR DIAMETER.

C OFFSETS AND LAP SPLICES

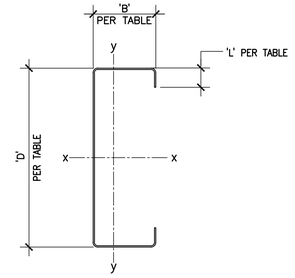
4 - TYPICAL REINFORCEMENT BAR BENDS AND LAPS

N.T.S.

SECTION NAME	D (in)	B (in)	L (in)	GA	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
							I_x (in^4)	S_w (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
CS12 x 4 x 0.102 (12 GA)	12	4.0	1.0	12	7.35	2.16	46.87	6.76	4.66	4.38	1.53	1.42
CS12 x 4 x 0.124 (10 GA)	12	4.0	1.0	10	8.91	2.62	56.37	8.59	4.64	5.20	1.82	1.41
CS14 x 4 x 0.102 (12 GA)	14	4.0	1.0	12	8.04	2.36	67.42	8.22	5.34	4.57	1.55	1.39

NOTES:

1. ALL PURLIN SECTIONS ARE ASTM A653, GR 55, F_y=55 ksi
2. ALL LIGHT GAGE STEEL DESIGNED USING 2012 AISI COLD-FORMED STEEL DESIGN MANUAL.
3. PROPERTIES PER AEP STANDARD SIZES.
4. ACTUAL MANUFACTURER'S PROPERTIES MUST MEET OR EXCEED AEP STANDARD PROPERTIES.



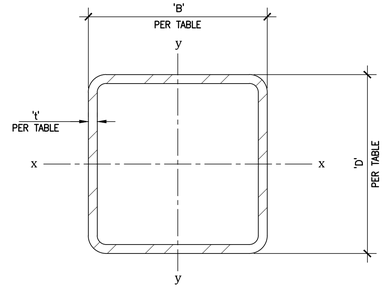
1 - PURLIN & BEAM COLD FORMED C-SECTION

N.T.S.

SECTION NAME	D (in)	B (in)	t (in)	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
						I_x (in^4)	S_x (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
HSS 12 x 6 x $^1/_4$	12	6	1/4	29.23	8.59	161.00	26.80	4.33	55.20	18.40	2.53

NOTES:

1. ALL COLUMNS SHALL BE ASTM A1085 GR. 50 (F_y=50 ksi)



2 - HSS COLUMN

N.T.S.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

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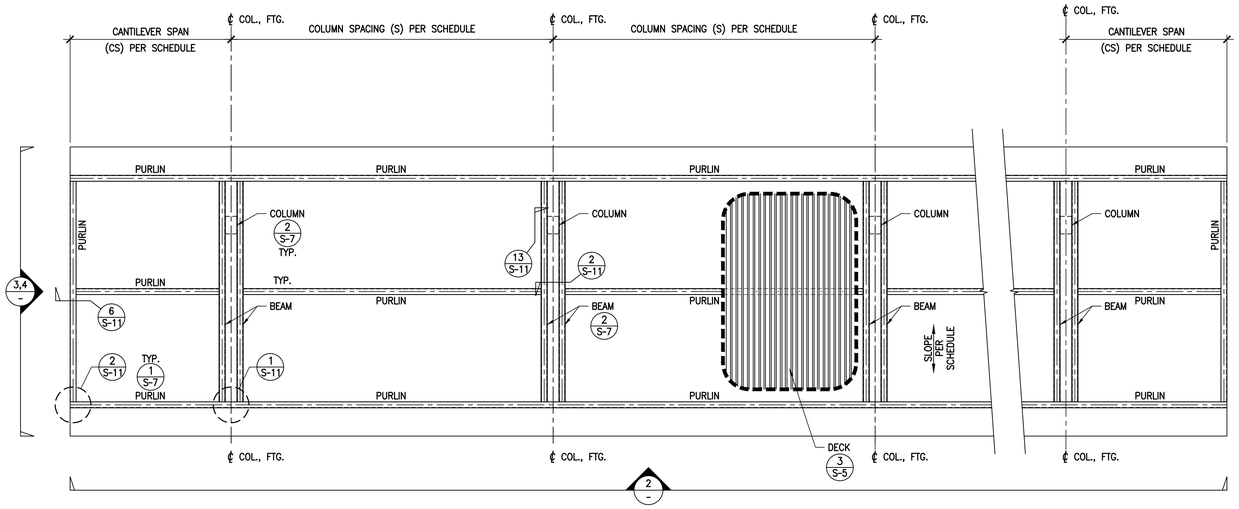
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

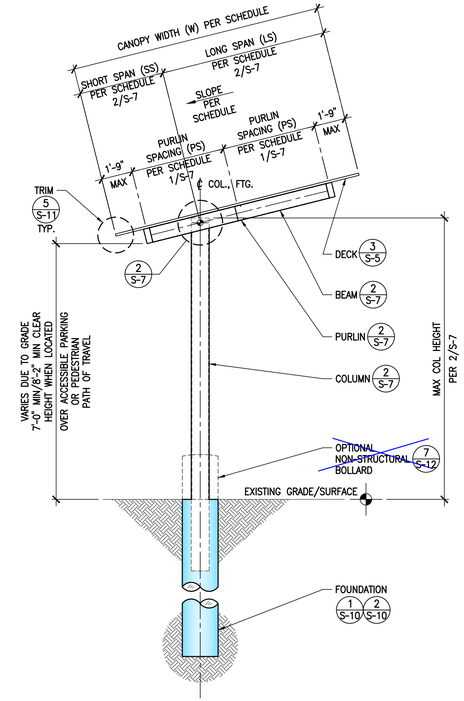
VERSA CANOPY

SECTION PROPERTIES & REBAR DETAILS

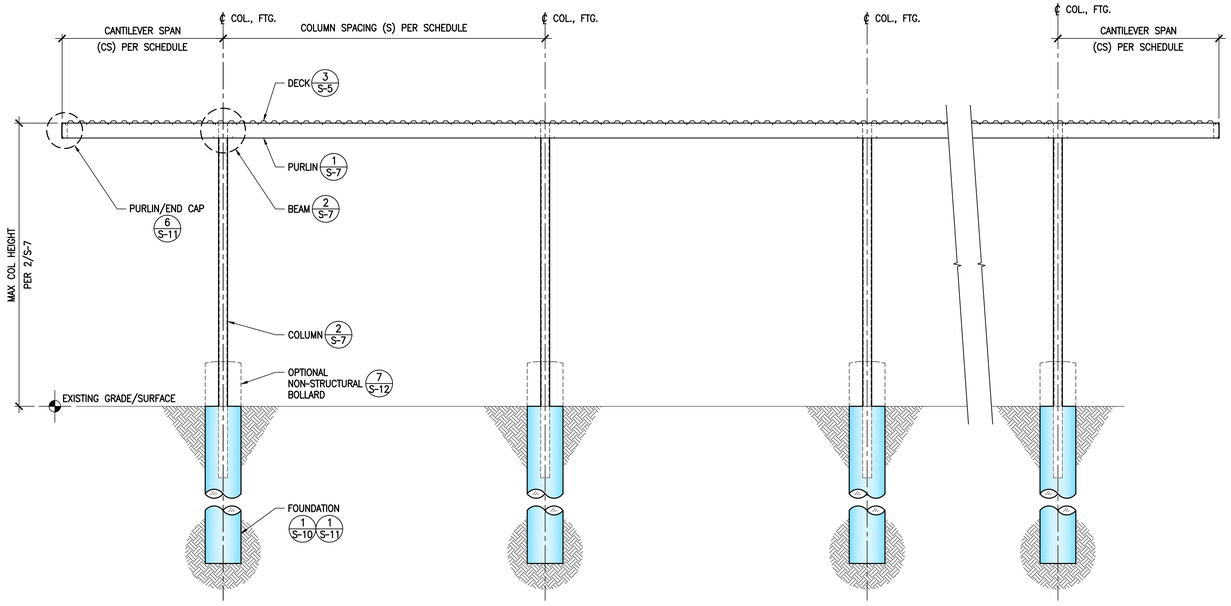
DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-5
5 OF 13 SHEETS



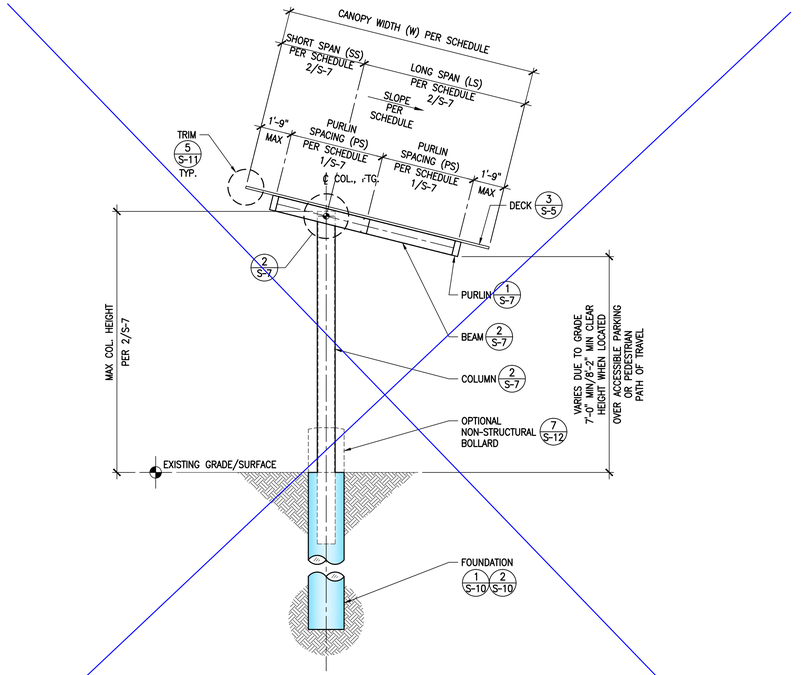
1 - VC14, ~~VC18 & VC20~~ TYPICAL PLAN VIEW 1/4"=1'-0"



3 - VC14, ~~VC18 & VC20~~ TYPICAL SIDE ELEVATION 1 1/4"=1'-0"



2 - VC14, ~~VC18 & VC20~~ TYPICAL FRONT ELEVATION 1/4"=1'-0"



4 - VC14, VC18 & VC20 TYPICAL SIDE ELEVATION 2 1/4"=1'-0"

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FAX: (760) 744-4449
GREGJ@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY
VC14, VC18 ~~& VC20~~
FRAMING PLAN & ELEVATIONS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-6
6 OF 13 SHEETS

VC14, VC18 & VC20 PURLIN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX PURLIN SPACING (PS)	MAX COLUMN SPACING (S)	MAX CANTILEVER SPAN (CS)	PURLIN	
					SECTION	DETAIL
VC14	0 psf	63"	27'-0"	10'-0"	CS12 x 4 x 0.102 (12 GA)	1/S-5
VC18	0 psf	87"	27'-0"	10'-0"	CS12 x 4 x 0.124 (10 GA)	1/S-5
~~VC20~~	~~0 psf~~	~~99"~~	~~19'-0"~~	~~8'-0"~~	~~CS14 x 4 x 0.102 (12 GA)~~	1/S-5

NOTES:
1. REFER TO SHEET 'S-2' FOR CONSTRUCTION OPTIONS.
2. REFER TO DETAIL '4/S-12' FOR ALLOWABLE PURLIN PENETRATIONS.
3. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
4. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID'S ROW ONLY.

1 - VC14, VC18 & VC20 TYPICAL PURLIN SCHEDULE

VC14, VC18 & VC20 BEAM/COLUMN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX WIDTH (W)	BEAM SHORT SPAN MIN (SS)	BEAM LONG SPAN MAX (LS)	MAX COLUMN SPACING (S)	ROOF SLOPE	BEAM		BEAM TO COLUMN DETAIL	COLUMN		MAX COLUMN HEIGHT
							SECTION	DETAIL		SECTION	DETAIL	
VC14	0 psf	14'-0"	4'-3"	9'-9"	27'-0"	3:12 MAX	CS12 x 4 x 0.102 (12 GA)	1/S-5	13/S-11	HSS 12 x 6 x 1/4	2/S-5	17'-0"
VC18	0 psf	18'-0"	7'-9"	10'-3"	27'-0"	3:12 MAX	CS12 x 4 x 0.102 (12 GA)	1/S-5	13/S-11	HSS 12 x 6 x 1/4	2/S-5	17'-9"
~~VC20~~	~~0 psf~~	~~20'-0"~~	~~5'-9"~~	~~14'-3"~~	~~19'-0"~~	~~3:12 MAX~~	~~CS14 x 4 x 0.124 (10 GA)~~	1/S-5	13/S-11	~~HSS 12 x 6 x 1/4~~	2/S-5	~~17'-0"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. THE SHORT SPAN AND LONG SPANS MAY BE ADJUSTED WITH THE FOLLOWING REQUIREMENT:
   THE OVERALL CANOPY WIDTH IS NOT EXCEEDED, NEITHER SPAN IS LESS THAN THE MIN SHORT SPAN & NEITHER SPAN EXCEEDS THE MAX LONG SPAN.

2 - VC14, VC18 & VC20 TYPICAL BEAM/COLUMN SCHEDULE

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VERSA CANOPY
VC14, VC18 ~~& VC20~~
FRAMING SCHEDULES

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DATE 11/28/2018
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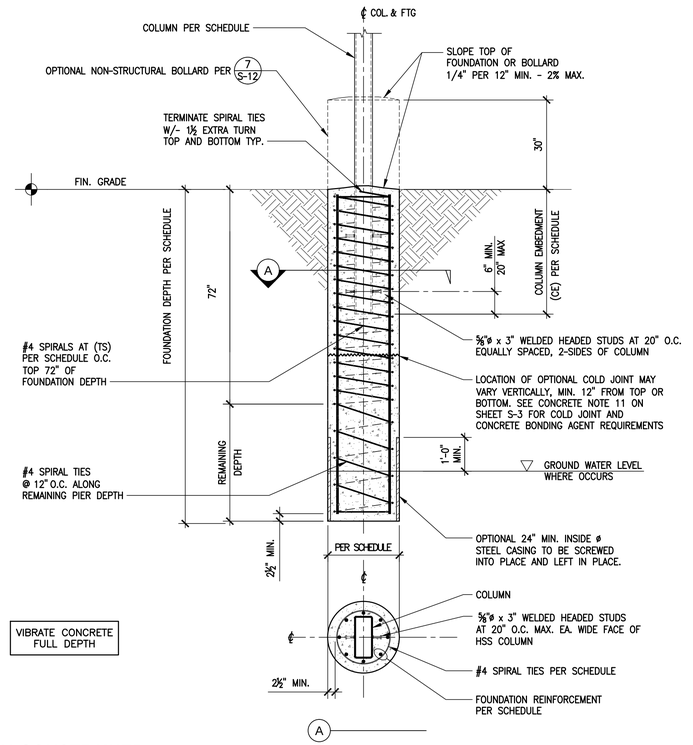
SHEET S-7
7 OF 13 SHEETS

NON-CONSTRAINED PIER FOUNDATION SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	FOUNDATION LONGITUDINAL REINFORCEMENT	FOUNDATION DIAMETER (D)	MIN COLUMN EMBEDMENT (CE)	MAX TIE SPACING AT TOP (TS)	FOUNDATION DETAIL	PIER FOUNDATION MINIMUM DEPTH (SEE SOIL NOTES ON S-3)				
							~~SOIL CLASS V~~	SOIL CLASS W	~~SOIL CLASS X~~	~~SOIL CLASS Y~~	~~SOIL CLASS Z~~
VC14	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~14'-0"~~	11'-0"	~~9'-6"~~	~~8'-9"~~	~~7'-6"~~
VC18	0 psf	4- #8	2'-0"	3'-6"	6"	3/-	~~14'-9"~~	11'-6"	~~10'-0"~~	~~9'-0"~~	~~8'-0"~~
VC20	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~15'-0"~~	~~11'-9"~~	~~10'-3"~~	~~9'-3"~~	~~8'-0"~~
VC140	20 psf	4 - #8	2'-0"	3'-6"	6"	3/-	15'-0"	11'-6"	9'-9"	~~8'-9"~~	7'-6"
VC180	20 psf	4 - #8	2'-0"	3'-6"	~~6"~~	3/-	~~15'-3"~~	11'-9"	10'-0"	9'-0"	7'-9"
VC200	~~20 psf~~	4 - #8	2'-0"	3'-6"	6"	3/-	15'-3"	12'-0"	10'-3"	9'-3"	~~8'-3"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.
4. FOR SITUATIONS WHERE WATER MITIGATION IS NECESSARY, OR FOR OTHER CONDITIONS REQUIRING MITIGATION, REFER TO DETAIL 2/- FOR SLEEVED FOUNDATION OPTION.

1 - PIER FOUNDATION SCHEDULE



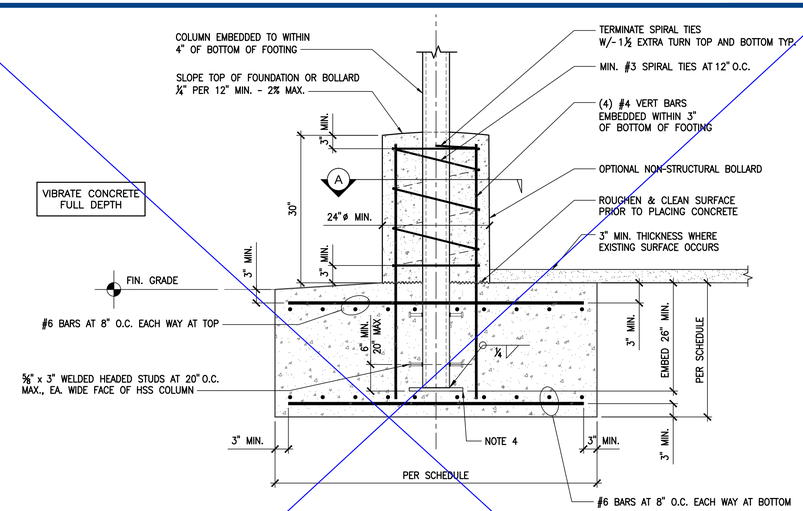
3 - NON-CONSTRAINED PIER FOUNDATION
1/2"=1'-0"

SPREAD FOOTING SCHEDULE

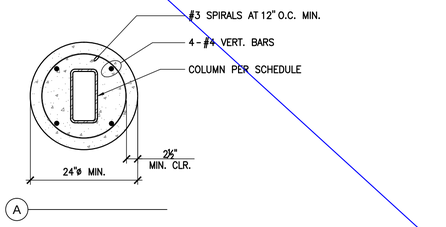
I.D. #	MAX GROUND SNOW LOAD	FOUNDATION DETAIL	SPREAD FOOTING MINIMUM DIMENSIONS FOR SOIL CLASS V (SOILS NOTES S-3)
VC14	0 psf	4/-	9'-6" (SQ.) x 2'-6" DEEP
VC18	0 psf	4/-	10'-3" (SQ.) x 2'-6" DEEP
VC20	0 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC140	20 psf	4/-	9'-3" (SQ.) x 2'-6" DEEP
VC180	20 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC200	20 psf	4/-	9'-9" (SQ.) x 2'-6" DEEP

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.

2 - SPREAD FOOTING SCHEDULE



NOTES:
1. CONCRETE BOLLARDS TO BE POURED IN A SECOND POUR AFTER THE FOUNDATION BELOW GRADE IS POURED. DSA INSPECTOR TO PERIODICALLY INSPECT THE INSTALLATION OF BONDING AGENT WHEN USED.
2. BOLLARD REBAR CAGE SHALL BE CONSTRUCTED INDEPENDENTLY FROM THE FOUNDATION USING 4-#4 VERTICAL BARS. BOLLARD VERTICAL BARS MAY BE TIED TO FOUNDATION BARS PRIOR TO CONCRETE POUR OR WET SET PER NOTE 3.
3. VERTICAL BARS IN THE NONSTRUCTURAL BOLLARD ARE PERMITTED TO BE WET SET INTO THE STRUCTURAL FOUNDATION, PROVIDED THE FOUNDATION IS SUFFICIENTLY WORKABLE SO AS NOT TO REQUIRE HAMMERING IN OR ANY OTHER SUCH METHOD. WET SET SHALL BE PERFORMED USING #4 BARS WITH MINIMUM 20" EMBEDMENT.
4. 1" THICK A36 STEEL PLATE. PLATE TO EXTEND PAST ALL SIDES OF COLUMN BY 4" MIN.



4 - SPREAD FOOTING
3/4"=1'-0"

ENGINEER'S APPROVAL

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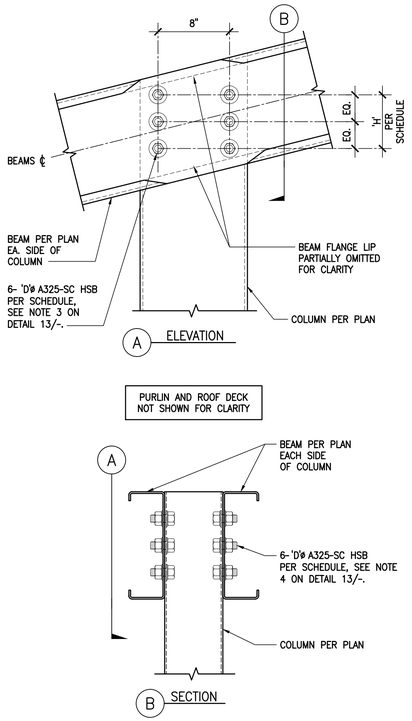
4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200 MISSION VIEJO, CA 92691
PHONE: (949) 305-1150 FAX: (949) 305-1420

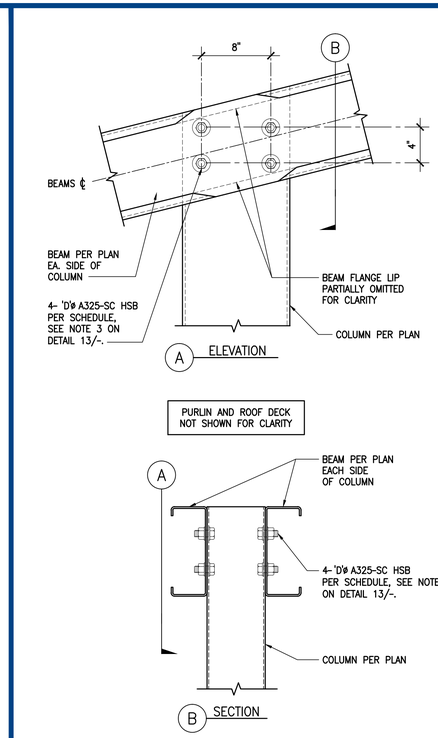
VERSA CANOPY

FOUNDATION SCHEDULES

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-10
10 OF 13 SHEETS

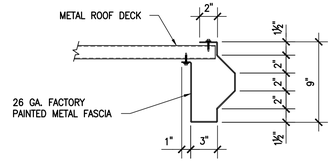


12 BEAM TO COLUMN - 6 BOLT



11 BEAM TO COLUMN - 4 BOLT

1-1/2"=1'-0"

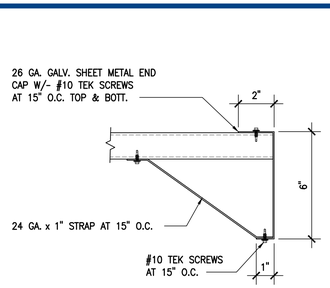


NOTES:

1. #10 TEK SCREWS W/- WATER PROOF WASHER TOP & BOTT. AT 3'-0" O.C. +/-.
2. PROVIDE ⅜"ø WEEP HOLES AT 1'-6" O.C.

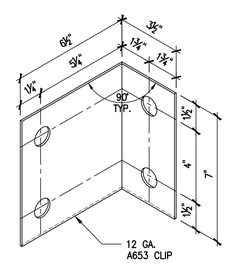
7 ROOF DECK TRIM DETAIL (OPTIONAL)

3"=1'-0"



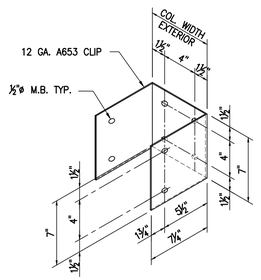
8 ROOF DECK TRIM DETAIL (OPTIONAL)

1-1/2"=1'-0"



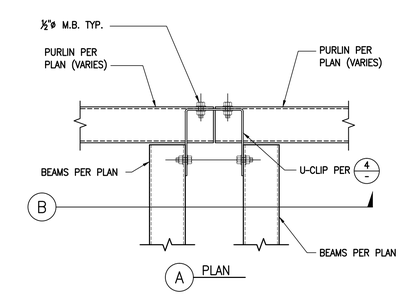
3 L-CLIP INTERIOR PURLIN TO BEAM

3"=1'-0"



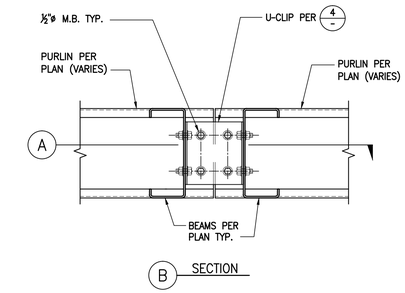
4 U-CLIP EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.
2. PURLINS AT CANTILEVER SHALL BE CONTINUOUS.



1 EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

BEAM TO COLUMN CONNECTION SCHEDULE

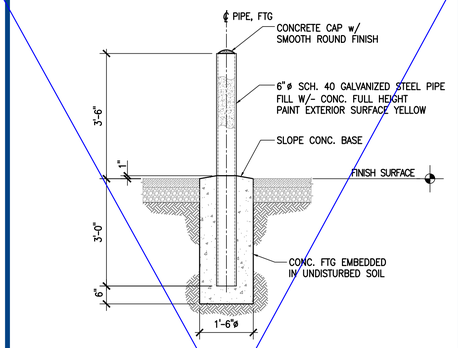
I.D. #	MAX GROUND SNOW LOAD	# OF BOLTS (n)	BOLTED CONNECTION DETAIL	BOLT DIAMETER (D) ASTM A325-SC	BOLT PATTERN (B x H)
VC14	0 psf	4	11/-	1"	8" x 6"
VC18	0 psf	6	12/-	⅞"	8" x 6"
VC20	0 psf	6	12/-	⅞"	8" x 8"
VC140	20 psf	4	11/-	1"	8" x 6"
VC180	20 psf	6	12/-	¾"	8" x 8"
VC200	20 psf	6	12/-	⅞"	8" x 8"

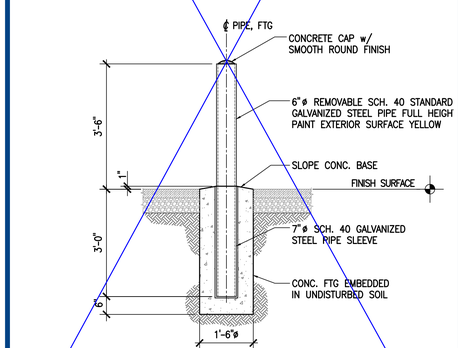
NOTES:

1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. BOLTS SHALL BE PRETENSIONED A325-SC (SLIP-CRTICAL) TYPE N (THREADS NOT EXCLUDED FROM SHEAR PLANE) CLASS A FAYING SURFACE WITH STANDARD NUTS PER ASTM A563 AND WASHERS PER ASTM F436 TYPICAL U.N.O.
4. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

13 BEAM TO COLUMN SCHEDULE

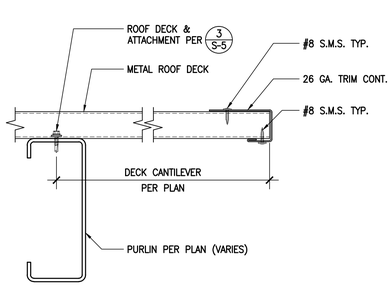
N.T.S.





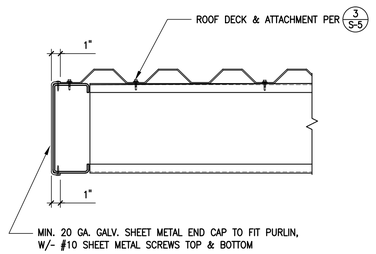
10 TYPICAL BOLLARD

1/2"=1'-0"



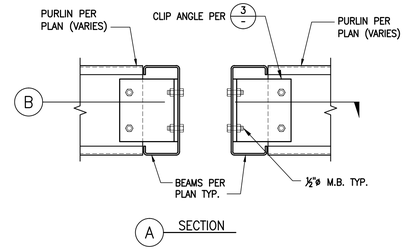
5 ROOF DECK TRIM DETAIL

3"=1'-0"



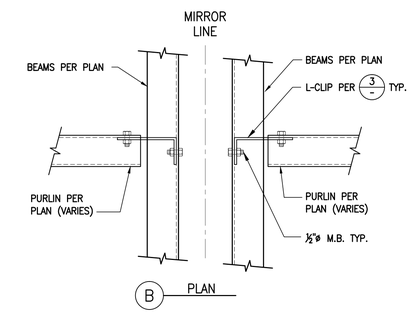
6 END ENCLOSURE DETAIL

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.



2 INTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

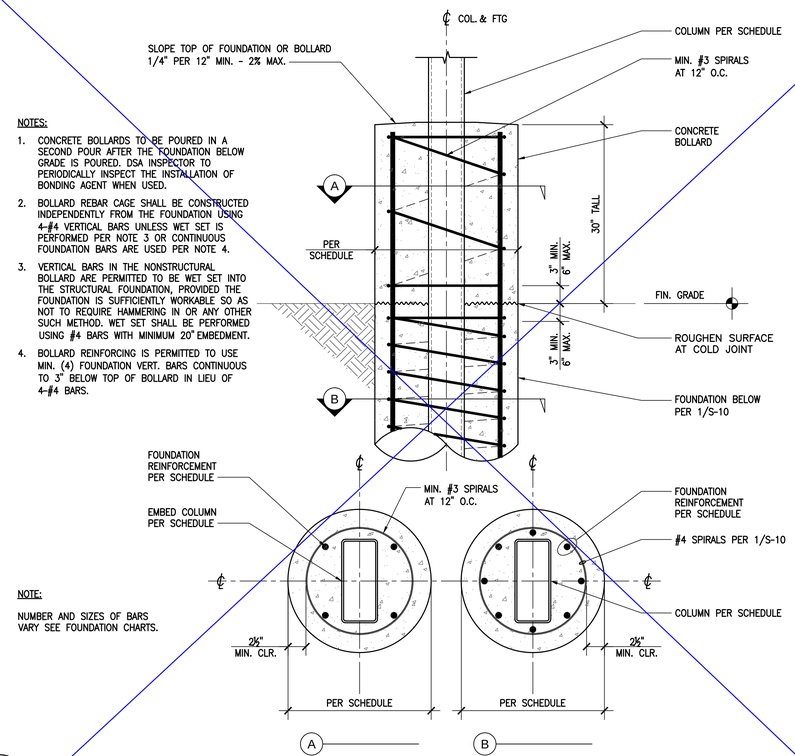
MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

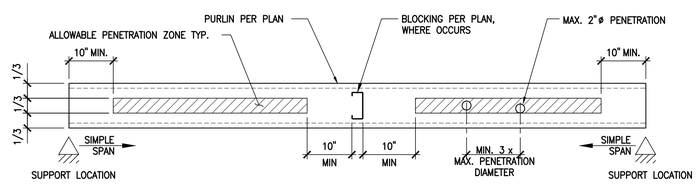
STANDARD DETAILS 1

DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-11
11 OF 13 SHEETS

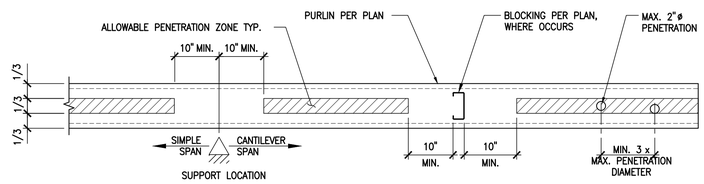


7 - OPTIONAL CONCRETE BOLLARD

1"=1'-0"



SIMPLE SUPPORT SPAN

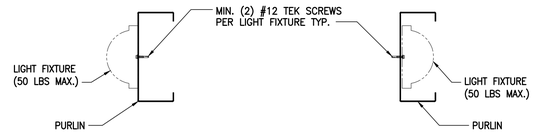


CANTILEVER SPAN

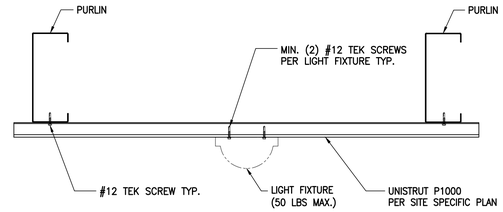
NOTE:
IF MORE THAN 5 PENETRATIONS PER SPAN ARE NEEDED, CONTRACTOR TO SUBMIT AN RFI TO DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO ENSURE REQUIREMENTS OF THIS DETAIL ARE MET AND TO JUSTIFY THE QUANTITY OF PENETRATIONS NEEDED.

4 - ALLOWABLE PURLIN PENETRATIONS

3/4"=1'-0"

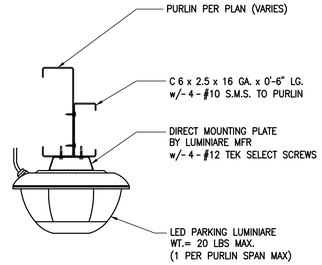


NOTE:
ALL STRUCTURAL CONNECTION POINTS REQUIRED BY MANUFACTURER TO MAINTAIN WARRANTY TO BE FILLED. THIS MAY EXCEED THE MINIMUM NUMBER OF SCREWS.



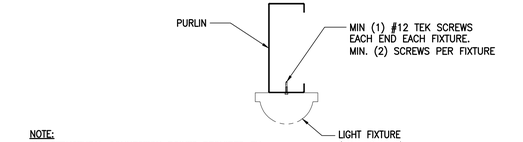
1 - LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"



5 - TYPICAL PARKING LUMINAIRE AT PURLIN

1 1/2"=1'-0"



NOTE:
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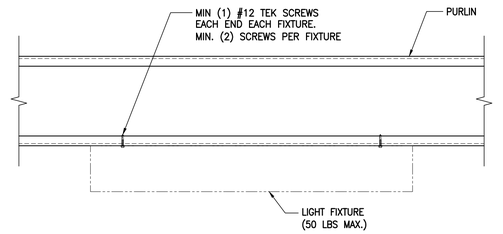
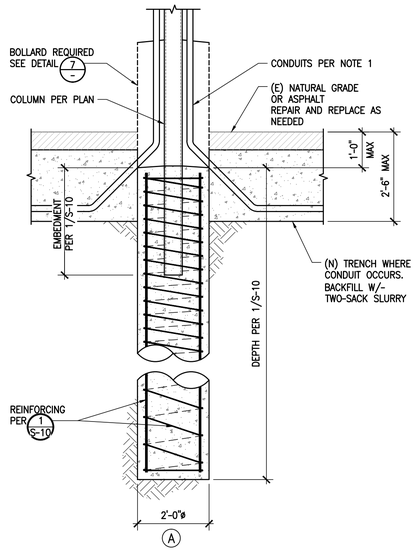
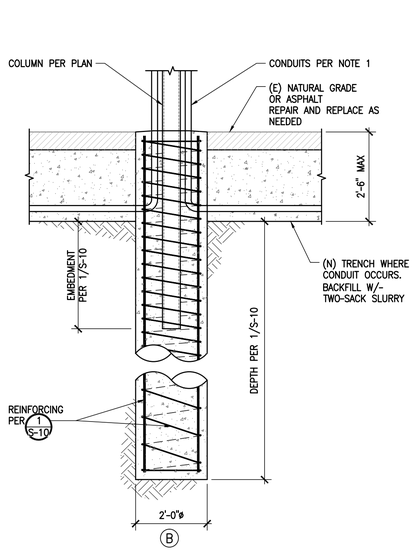


2 - ALTERNATE LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"

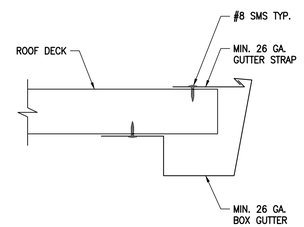




NOTE:
1. CONDUIT IN FOUNDATION SHALL NOT EXCEED (1) 2" MAX ø CONDUIT OR (2) 1½" MAX ø CONDUIT. WHEN (2) CONDUIT ARE USED IN THE SAME FOUNDATION, THE CONDUIT MAY ENTER THE FOUNDATION FROM EITHER SIDE.
2. CONDUIT TRENCH SHALL BE FILLED WITH MIN 2-SACK SLURRY.

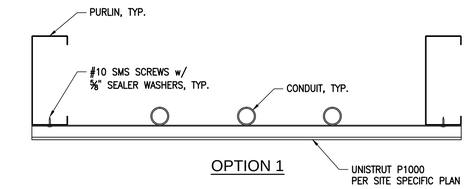
8 - CONDUIT AT DRILLED PIER

1"=1'-0"

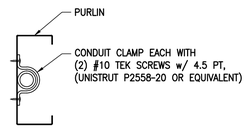


6 - GUTTER DETAIL

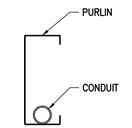
3"=1'-0"



OPTION 1



OPTION 2



OPTION 3

3 - CONDUIT SUPPORT/ LOCATION OPTIONS

1-1/2"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

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MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
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PHONE: (760) 744-4131
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26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

STANDARD DETAILS 2

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-12
12 OF 13 SHEETS

GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

MILL VALLEY SCHOOL DISTRICT

SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

FILE: 21-25

APPL: 01-119414

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH REQUIREMENTS OF GOVERNING CODES LISTED IN "APPLICABLE CODES" AND ALL GOVERNING LOCAL CODES AND REGULATIONS.
2. THE OWNER / ARCHITECT HAVE OBTAINED APPROVAL OF THE PRIMARY AUTHORITY HAVING JURISDICTION (DSA, OSHPD, CITY BUILDING PERMIT). CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL OTHER REQUIRED PERMITS PRIOR TO COMMENCEMENT OF CONSTRUCTION.
3. UNLESS STATED OTHERWISE IN THE SPECIFICATIONS, SPECIAL INSPECTION IS REQUIRED FOR SHOP AND FIELD STRUCTURAL WELDING.
4. WHERE INCORPORATED IN THE CONSTRUCTION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN COPIES OF OSHPD OR DSA PRE-APPROVALS FOR PRE-APPROVED ITEMS OR SYSTEMS INCORPORATED INTO THE CONSTRUCTION AND DISTRIBUTE TO OWNER'S REPRESENTATIVE, ARCHITECT AND INSPECTOR.
5. IT IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO FURNISH AND AND INSTALL ALL MATERIALS AND WORK DESCRIBED, DEPICTED OR DETAILED WITHIN THESE DOCUMENTS REGARDLESS OF THE LOCATION OF THAT MATERIAL OR WORK WITHIN THE DOCUMENTS OR OMISSION (WHETHER DELIBERATE OR ACCIDENTAL) OF THAT MATERIAL OR WORK BY A SUBCONTRACTOR ON HIS/HER BID.
6. THE GENERAL CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONSIDER THESE DOCUMENTS IN THEIR ENTIRETY. DISCREPANCIES OR CONTRADICTIONS BETWEEN PORTIONS OF THESE DOCUMENTS MUST BE BROUGHT TO THE ATTENTION OF THE ARCHITECT AT LEAST 72 HOURS PRIOR TO BID OPENING FOR CLARIFICATION. OTHERWISE, THE MOST RESTRICTIVE REQUIREMENT SHALL BE IN FORCE AT NO ADDITIONAL COST TO THE OWNER.
7. THE CONTRACTOR SHALL ASSUME SOLE RESPONSIBILITY FOR THE SAFETY OF ALL PERSONS ON OR ABOUT THE CONSTRUCTION SITE, IN ACCORDANCE WITH APPLICABLE LAWS AND CODES. CONTRACTOR ESTABLISH PROCEDURES TO ASSURE ALL PERSONS ENTERING A POSSIBLY HAZARDOUS AREA, INCLUDING WORKERS, SUBCONTRACTORS, OTHER CONTRACTORS, VISTORS, AND OTHERS ARE AWARE OF APPROPRIATE / REQUIRED SAFETY PROCEDURES. COMPLY WITH LOCAL, STATE, AND FEDERAL SAFETY STANDARDS, INCLUDING OSHA REQUIREMENTS AND WITH THE SAFETY PROVISIONS OF THE LATEST MANUAL OF ACCIDENT PREVENTION PUBLISHED BY THE ASSOCIATED GENERAL CONTRACTORS OF AMERICA.
8. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING AND MAINTAINING TEMPORARY FENCING AND GATES, SIGNAGE, SECURITY LIGHTING OR OTHER SECURITY AND CONTROL MEASURES NECESSARY TO PROVIDE FOR THE SAFETY OF THE PUBLIC AND FACILITY USERS UNTIL THE COMPLETION OF THE WORK.
9. THE CONTRACTOR IS RESPONSIBLE TO FOR PROTECTION OF ADJACENT PROPERTY AND SHALL REPAIR AND / OR REPLACE ALL PROPERTY DAMAGED DURING THE COURSE ON THE WORK.
10. THE CONTRACTOR SHALL LIMIT HIS / HER ACTIVITY TO THE AREA DESCRIBED WITHIN THE DOCUMENTS UNLESS OTHERWISE PERMITTED BY THE OWNER'S REPRESENTATIVE.
11. THE CONTRACTOR IS RESPONSIBLE FOR THE REPAIR OR REPLACEMENT OF ANY ITEMS DAMAGED OR DISTURBED DURING THE COURSE OF THE WORK. INSTALLATION SHALL MATCH EXISTING IN KIND, QUALITY, AND PERFORMANCE.
12. WHERE EXISTING CONSTRUCTION AND FINISHES ARE CUT, DAMAGED, OR REMODELED, PATCH WITH MATERIALS TO MATCH IN KIND, QUALITY, PERFORMANCE CHARACTERISTICS, AND APPEARANCE.
13. ALL DIMENSIONS ARE TO FACE OF STUD, UNLESS OTHERWISE NOTED. DIMENSIONS NOTED AS "CLR" MEAN CLEAR DIMENSION TO FACE OF FINISH. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS AND NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND.
14. VERIFY ALL EXISTING DIMENSIONS AND CONDITIONS. NOTIFY ARCHITECT OF ANY DISCREPANCIES FOUND. VERIFY DIMENSIONS OF ALL OWNER-FURNISHED ITEMS, INCLUDING FURNITURE AND EQUIPMENT, TO ENSURE PROPER COORDINATION WITH CONSTRUCTION.
15. ALL ITEMS IN THESE DRAWINGS ARE NEW UNLESS OTHERWISE NOTED.
16. ALL UTILITIES REQUIRED FOR THE CONTINUOUS OPERATION OF ALL OCCUPIED EXISTING FACILITIES SHALL BE MAINTAINED IN SERVICE AT ALL TIMES. ANY SHUT DOWNS FOR NEW CONNECTIONS MUST BE COORDINATED WITH THE OWNER'S REPRESENTATIVE TWO WEEKS PRIOR TO THE REQUESTED SHUT DOWN.
17. COORDINATION WITH OTHER CONTRACTS: IF ANY PART OF THIS CONTRACTOR'S WORK DEPENDS UPON THE WORK OF A SEPARATE CONTRACTOR, THIS CONTRACTOR SHALL INSPECT SUCH OTHER WORK AND PROMPTLY REPORT IN WRITING TO THE OWNER'S REPRESENTATIVE ANY DEFECTS IN SUCH OTHER WORK THAT RENDER IT UNSUITABLE TO RECEIVE THE WORK OF THIS CONTRACTOR. FAILURE OF THIS CONTRACTOR TO SO INSPECT AND REPORT SHALL CONSTITUTE AN ACCEPTANCE OF THE OTHER CONTRACTOR'S WORK, EXCEPT AS TO DEFECTS WHICH MAY DEVELOP IN OTHER CONTRACTOR'S WORK AFTER EXECUTION OF THIS CONTRACTOR'S WORK.
18. COORDINATION OF SCHEDULE: PORTIONS OF THIS WORK MAY BE REQUIRED TO BE COMPLETED ON SCHEDULE IN ORDER TO AVOID DELAY TO OTHER CONTRACTORS OR OWNERS OPERATIONS. CONTRACTOR SHALL STRICTLY ADHER TO ESTABLISHED COMPLETION DATES AS DESIGNATED IN THE SPECIFICATIONS AND COORDINATE WORK SCHEDULE WITH THE OWNER'S REPRESENTATIVE AND OTHER CONTRACTORS. SEE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS AND LIQUIDATED DAMAGES.
19. SCHEDULE ALL WORK WITH THE OWNER'S REPRESENTATIVE, INCLUDING CONSTRUCTION ACCESS AND STORAGE, AND WORK OUTSIDE THE "EXTENT OF WORK" SET FORTH IN THESE DOCUMENTS. THE CONSTRUCTION SCHEDULE SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
20. CONSTRUCTION PROCEDURES SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE PRIOR TO THE START OF CONSTRUCTION.
21. DEMOLITION IS NOT NECESSARILY LIMITED TO ONLY WHAT IS SHOWN ON THIS OR OTHER DRAWINGS OR AS OUTLINED IN THE SPECIFICATIONS. THE INTENT IS TO INDICATE GENERAL SCOPE OF DEMOLITION REQUIRED. CONTRACTOR SHALL INCLUDE ALL MISCELLANEOUS DEMOLITON, CUTTING AND PATCHING REQUIRED TO COMPLETE THE PROJECT IN ACCORDANCE WITH THE CONSTRUCTION DOCUMENTS.
22. ALL ITEMS IDENTIFIED TO BE SALVAGED SHALL BE DELIVERED IN GOOD CONDITION TO A PLACE OF STORAGE AS DIRECTED BY THE OWNER'S REPRESENTATIVE. ALL OTHER ITEMS MUST BE DISPOSED OF OFF-SITE IN A LEGAL MANNER.
23. ARCHITECT IS NOT RESPONSIBLE FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL OR DISPOSAL OF, OR EXPOSURE OF PERSONS TO, HAZARDOUS MATERIALS OR TOXIC SUBSTANCES IN ANY FORM AT THE PROJECT SITE. TO THE EXTENT THESE DOCUMENTS RELATE TO SUCH ISSUES, ARCHITECT'S PARTICIPATION IS SOLELY ADMINISTRATIVE WITHOUT ANY RESPONSIBILITY FOR THE CONTENT OR EXECUTION OF SUCH DOCUMENTS.
24. DETAIL DRAWINGS WITH REFERENCES TO FIRE-RATED ASSEMBLIES OR CONSTRUCTION WHICH HAVE BEEN TESTED BY UNDERWRITERS LABORATORIES, THE CALIFORNIA BUILDING CODE OR ANY OTHER APPROVED TESTING AGENCY, SHALL BE CONSTRUED TO INCLUDE ALL WORK AND PROCEDURES CONTAINED IN THE REFERENCED ASSEMBLY DESCRIPTION..
25. ALL PIPE AND DUCT PENETRATIONS THROUGH FIRE RATED CONSTRUCTION SHALL BE FIRE STOPPED AND SEALED TO MAINTAIN THE REQUIRED RATING.
26. CONTRACTOR TO MAINTAIN CONTEMPORANEOUSLY RECORDED "AS-BUILT" INFORMATION OF ALL WORK, WHICH SHALL BE MARKED IN COLOR ON THE DRAWINGS AND SPECIFICATIONS. A SCANNED PDF OF THE "AS-BUILT" DRAWINGS AND SPECIFICATIONS SHALL BE TURNED OVER TO THE OWNER'S REPRESENTATIVE PRIOR TO FINAL APPLICATION FOR PAYMENT. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
27. CONTRACTOR SHALL PROVIDE TEMPORARY PROTECTION AND DUST COVERS ADJACENT TO OCCUPIED AREAS AS REQUIRED TO CONTAIN DUST AND DEBRIS WITHIN CONSTRUCTION AREA. BROOM CLEAN ALL AREAS, INLCUDING SIDEWALKS AND DRIVEWAYS EACH DAY. KEEP DIRT AND DUST TO A MINIMUM.
28. WORK SHALL BE EXECUTED IN A CAREFUL AND ORDERLY MANNER WITH THE LEAST POSSIBLE DISTURBANCE TO PUBLIC AND TO OCCUPANTS OF EXISTING BUILDING.
29. CLEAN ALL EXPOSED SURFACES AND NEW EQUIPMENT AFTER COMPLETION.

ADMINISTRATIVE NOTES

1. THE INTENT OF THE DRAWINGS AND SPECIFICATIONS IS TO **INSTALL STEEL SHADE STRUCTURES** IN ACCORDANCE WITH TITLE 24, CALIFORNIA CODE OF REGULATIONS. SHOULD ANY CONDITIONS DEVELOP NOT COVERED BY THE CONTRACT DOCUMENTS SUCH THAT THE FINISHED WORK WILL NOT COMPLY WITH THE SAID TITLE 24, CALIFORNIA CODE OF REGULATIONS, CONSTRUCTION CHANGE DOCUMENTS DETAILING AND SPECIFYING THE REQUIRED WORK SHALL BE SUBMITTED TO AND APPROVED BY DSA BEFORE PROCEEDING WITH THE WORK.
2. A COPY OF PARTS 1 AND 2, TITLE 24 C.C.R. SHALL BE KEPT ON THE JOB SITE AT ALL TIMES DURING CONSTRUCTION.
3. ALL CONSTRUCTION CHANGE DOCUMENT AND ADDENDA TO BE SIGNED BY THE ARCHITECT AND THE OWNER AND APPROVED BY DSA. CONSTRUCTION CHANGE DOCUMENTS ARE NOT VALID UNTIL APPROVED BY DSA PER SECTION 4-338, PART 1, TITLE 24.
4. ALL TESTS TO CONFORM TO THE REQUIREMENTS OF SECTION 4-335, PART 1, TITLE 24.
5. TESTS OF MATERIALS AND TESTING LABORATORY SHALL BE IN ACCORDANCE WITH SECTION 4-335 OF PART 1, TITLE 24 AND THE DISTRICT SHALL EMPLOY AND PAY THE LABORATORY. COSTS OF RE-TEST MAY BE BACK CHARGED TO THE CONTRACTOR.
6. DSA SHALL BE NOTIFIED AT THE START OF CONSTRUCTION AND PRIOR TO THE PLACEMENT OF CONCRETE PER SECTION 4-331, PART 1, TITLE 24.
7. THIS PROJECT REQUIRES A DSA CERTIFIED PROJECT INSPECTOR. INSPECTOR SHALL BE APPROVED BY DSA. INSPECTION SHALL BE IN ACCORDANCE WITH SECTION 4-333(B), THE DUTY OF THE INSPECTOR SHALL BE IN ACCORDANCE WITH SECTION 4-342, PART 1, TITLE 24.
8. SUPERVISION OF CONSTRUCTION BY DSA SHALL BE IN ACCORDANCE WITH SECTION 4-334, PART 1, TITLE 24.
9. CONTRACTOR, INSPECTOR, ARCHITECT, AND ENGINEERS SHALL SUBMIT VERIFIED REPORTS (FORM DSA-6 IN ACCORDANCE WITH SECTION 4-336 AND 4-343, PART 1, TITLE 24.
10. THE ARCHITECT AND THE STRUCTURAL ENGINEER SHALL PERFORM THEIR DUTIES IN ACCORDANCE WITH SECTION 4-333(A) AND 4-341, PART 1, TITLE 24.
11. THE CONTRACTOR SHALL PERFORM HIS DUTIES IN ACCORDANCE WITH SECTION 4-343, PART 1, TITLE 24.

Statement of General Conformance

STATEMENT FOR ARCHITECTS / ENGINEERS WHO UTILIZE PLANS INCLUDING BUT NOT LIMITED TO SHOP DRAWINGS) PREPARED BY OTHER LICENSED DESIGN PROFESSIONALS AND/OR CONSULTANTS (FOR PERFORMANCE SPECIFICATION ITEMS)

(Application No. 01-119414 **File No.** 21-25 **)**

☒ The drawings or sheets listed on the cover or index sheet and marked by an asterisk (*)
☐ This drawing, page of specifications/calculations

have been prepared by other design professionals or consultants who are licensed and/or authorized to prepare such drawings in this state. It has been examined by me for"

1) design intent and appears to meet the appropriate requirements of Title 24, California Code of Regulations and the project specifications prepared by me, and

2) coordination with my plans and specifications and is acceptable for incorporation into the construction of this project.

The Statement of General Conformance "shall not be construed as relieving me of my rights, duties, and responsibilities under Sections 17302 and 81138 of the Education Code and Section 4-336, 4-341, and 4-344" of Title 24, Part 1. *(Title 24, Part 1, Section 4-317 (b))*

I certify that: ☒ All drawings or Sheets listed ont he cover or indext sheet & marked by an asterisk (*)
☐ This drawing or page

☒ is/are in general conformance and ☒ have been coordinated	☐ is/are in general conformance and ☐ have been coordinated
Signature Date	Signature Date
Architect of Engineer designated to be in responsible charge	Architect of Engineer designated to be in responsible charge
MARCUS HIBSER Print Name	Print Name
C 27362 1/31/2023 License No. Expiration Date	License No. Expiration Date

APPLICABLE CODES

ALL WORK PERFORMED UNDER THIS CONTRACT IS TO CONFORM TO THE FOLLOWING CODES AND REGULATIONS:

2019 CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE, PART 1, TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)

2019 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL BUILDING CODE (IBC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24, CCR BASED ON THE 2020 NATIONAL ELECTRICAL CODE (NEC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA MECHANICAL CODE (CMC), PART 4, TITLE 24, CCR BASED ON THE 2018 UNIFORM MECHANICAL CODE (UMC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24, CCR BASED ON THE 2018 UNIFORM PLUMBING CODE (UPC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA ENERGY CODE, PART 6, TITLE 24 CCR

2019 CALIFORNIA FIRE CODE (CFC), PART 9, TITLE 24, CCR BASED ON THE 2018 INTERNATIONAL FIRE CODE (IFC) WITH 2019 CALIFORNIA AMENDMENTS)

2019 CALIFORNIA EXISTING BUILDING CODE, PART 10, TITLE 24 CCR (2018 IEB CODE AND CALIFORNIA AMENDMENTS)

2019 CALIFORNIA GREEN BUILDING CODE (CALGreen), PART 11, TITLE 24, CCR

2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 CCR

TITLE 19 CCR, PUBLIC SAFETY, STATE FIRE MARSHAL REGULATIONS

2010 ADA STANDARDS FOR ACCESSIBLE DESIGN

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS - 2019 CBC CHAPTER 35 AND 2019 CFC CHAPTER 45

THE ABOVE CODES AND REGULATIONS REFER TO THE LATEST EDITION OR REVISION IN FORCE ON THE DATE OF THE CONTRACT, UNLESS OTHERWISE STATED. NOTHING ON THE DRAWINGS IS TO BE CONSTRUED AS REQUIRING OR PERMITTING WORK THAT IS CONTRARY TO THE LISTED CODES AND REGULATIONS, OR OTHER LOCAL, STATE OR FEDERAL CODES OR REGULATIONS WHICH MAY BE APPLICABLE.

COMPLIANCE WITH CFC CHAPTER 33, FIRE SAFETY DURING CONSTRUCTION AND DEMOLITION, AND CBC CHAPTER 33, SAFETY DURING CONSTRUCTION WILL BE ENFORCED.

ABBREVIATIONS

&	AND
@	AT
℄	CENTERLINE
Ø	DIAMETER
#	POUND OR NUMBER
A/C	AIR CONDITIONING
AC	ASPHALTIC CONCRETE
ACOUS	ACOUSTICAL
ACT	ACOUSTIC CEILING TILE
ADD	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISHED FLOOR
ALT	ALTERNATE
ALUM	ALUMINIUM
ANOD	ANODIZED
APPROX	APPROXIMATE
ARCH	ARCHITECTURAL
BITUM	BITUMINOUS
BD	BOARD
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BTWN	BETWEEN
BUR	BUILT-UP ROOFING
CAB	CABINET
CB	CATCH BASIN
CFCI	CONTRACTOR FURNISHED CONTRACTOR INSTALLED
CG	CORNER GUARD
CJ	CONTROL JOINT
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONST	CONSTRUCTION
CONT	CONTINUOUS
CORR	CORRIDOR
CT	CERAMIC TILE
CUST	CUSTODIAN
DBL	DOUBLE
DEMO	DEMOLITION
DEPT	DEPARTMENT
DF	DRINKING FOUNTAIN
DI	DRAIN OR DROP INLET
DIA	DIAMETER
DIAG	DIAGONAL
DIM	DIMENSION
DISP	DISPENSER
DIV	DIVISION
DN	DOWN
DS	DOWNSPOUT
DTL	DETAIL
DW	DISHWASHER
DWG	DRAWING
(E)	EXISTING
E	EAST
EA	EACH
EF	EXHAUST FAN
EJ	EXPANSION JOINT
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENCL	ENCLOSURE
EQ	EQUAL
EQUIP	EQUIPMENT
EVA	EMERGENCY VEHICLE ACCESS
EWC	ELECTRICAL WATER COOLER
EXP	EXPANSION
EXT	EXTERIOR
FA	FIRE ALARM
FD	FLOOR DRAIN
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER CABINET
FF	FINISH FLOOR
FIN	FINISH
FLR	FLOOR
FO	FACE OF
FOC	FACE OF CONCRETE
FOF	FACE OF FINISH
FOS	FACE OF STUD
FRP	FIBERGLASS REINFORCED PANEL
FT	FOOT OR FEET
FTG	FOOTING
GA	GAUGE
GALV	GALVANIZED
GB	GRAB BAR
GSM	GALVANIZED WHEET METAL
GYP	GYPSUM
HB	HOSE BIB
HC	HOLLOW CORE
HD	HEAD
HDWR	HARDWARE
HM	HOLLOW METAL
HORIZ	HORIZONTAL
HR	HOUR
HT	HEIGHT
INFO	INFORMATION
INSUL	INSULATION
INT	INTERIOR
JAN	JANITOR
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LBS	POUNDS
LT	LIGHT
MAX	MAXIMUM
MB	MACHINE BOLT
MDF	MEDIUM DENSITY FIREBOARD
MECH	MECHANICAL
MFR	MANUFACTURER
MH	MANHOLE
MIN	MINIMUM
MISC	MISCELLANEOUS
MOD	MODULAR
MTD	MOUNTED
MTG	MOUNTING
MTL	METAL
MUL	MULLION
(N)	NEW
N/A	NOT APPLICABLE
N	NORTH
NIC	NOT IN CONTRACT
NO or #	NUMBER
NOM	NOMINAL
NTS	NOT TO SCALE
O/	OVER
OC	ON CENTER
OFCI	OWNER FURNISHED CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED OWNER INSTALLED
OPP	OPPOSITE
PL	PLATE
PLAM	PLASTIC LAMINATE
PLAS	PLASTER
PLYWD	PLYWOOD
PR	PAIR
PTD	PAPER TOWEL DISPENSER
PVC	POLYVINYL CHLORIDE
(R)	RELOCATE
RB	RESILIENT OR RUBBER BASE
RCP	REFLECTED CEILING PLAN
RD	ROOF DRAIN
REF	REFERENCE
REFR	REFRIGERATOR
REINF	REINFORCED
REQ	REQUIRED
RF	RESILIENT FLOORING
RM	ROOM
RO	ROUGH OPENING
RWL	RAIN WATER LEADER
S	SOUTH
SC	SOLID CORE
SCD	SEE CIVIL DRAWINGS
SCHED	SCHEDULE
SD	SOAP DISPENSER
SED	SEE ELECTRICAL DRAWINGS
SF	SQUARE FEET
SFPD	SEE FIRE PROTECTION DRAWINGS
SHT	SHEET
SIM	SIMILAR
SLD	SEE LANDSCAPE DRAWINGS
SMD	SEE MECHANICAL DRAWINGS
SMS	SHEET METAL SCREW
SND	SANITARY NAPKIN DISPENSER
SPD	SEE PLUMBING DRAWINGS
SPEC	SPECIFICATION
SQ	SQUARE
SS	STAINLESS STEEL
SSD	SEE STRUCTURAL DRAWINGS
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURAL
SUSP	SUSPEND
TEL	TELEPHONE
TEMP	TEMPORARY
THK	THICK
T.O.	TOP OF
TOC	TOP OF CURB
TOP	TOP OF PARAPET
TOS	TOP OF SLAB
TOW	TOP OF WALL
TPD	TOILET PAPER DISPENSER
TV	TELEVISION
TYP	TYPICAL
UON	UNLESS OTHERWISE NOTED
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VEST	VESTIBULE
VIF	VERIFY IN FIELD
W	WEST
w/	WITH
W/O	WITHOUT
WC	WATER CLOSET
WD	WOOD
WH	WATER HEATER

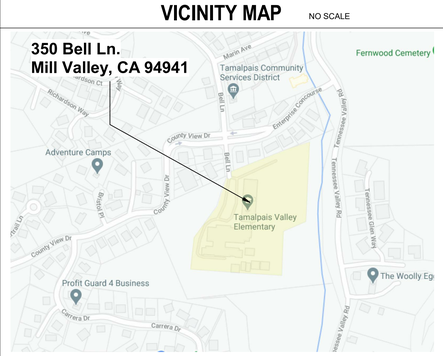
DEFERRED APPROVALS

1. NONE

VICINITY MAP

NO SCALE

350 Bell Ln.
Mill Valley, CA 94941



OWNER

MILL VALLEY SCHOOL DISTRICT

411 SYCAMORE AVE
MILL VALLEY, CA 94941 TEL. (415) 389-7700
CONTACT: JULIO ARROYO FAX. (415) 389-7773

CONSULTANTS

ARCHITECT

HIBSER YAMAUCHI ARCHITECTS, INC.
300 27TH STREET, 2ND FLOOR
OAKLAND, CA 94612 TEL. (510) 446-2222
CONTACT: ERNIE PALEO FAX (510) 446-2211

CIVIL

KISTER, SAVIO & REI, INC.
825 SAN PABLO AVE. TEL. (510) 222-4020
PINOLE, CA 94564 FAX (510) 222-3718

EXISTING CONDITIONS

SCOPE OF WORK

1. INSTALLATION OF STEEL SHADE STRUCTURES

INDEX OF DRAWINGS

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

Architect/Engineer Of Record: _____

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
TITLE SHEET

Client Project Number:

Scale:	As indicated
Drawn By:	AL
Checked By:	EP
Issue Date:	
Revit Version:	2019

Sheet **A0.01**

Sheet 1 of 19

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GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

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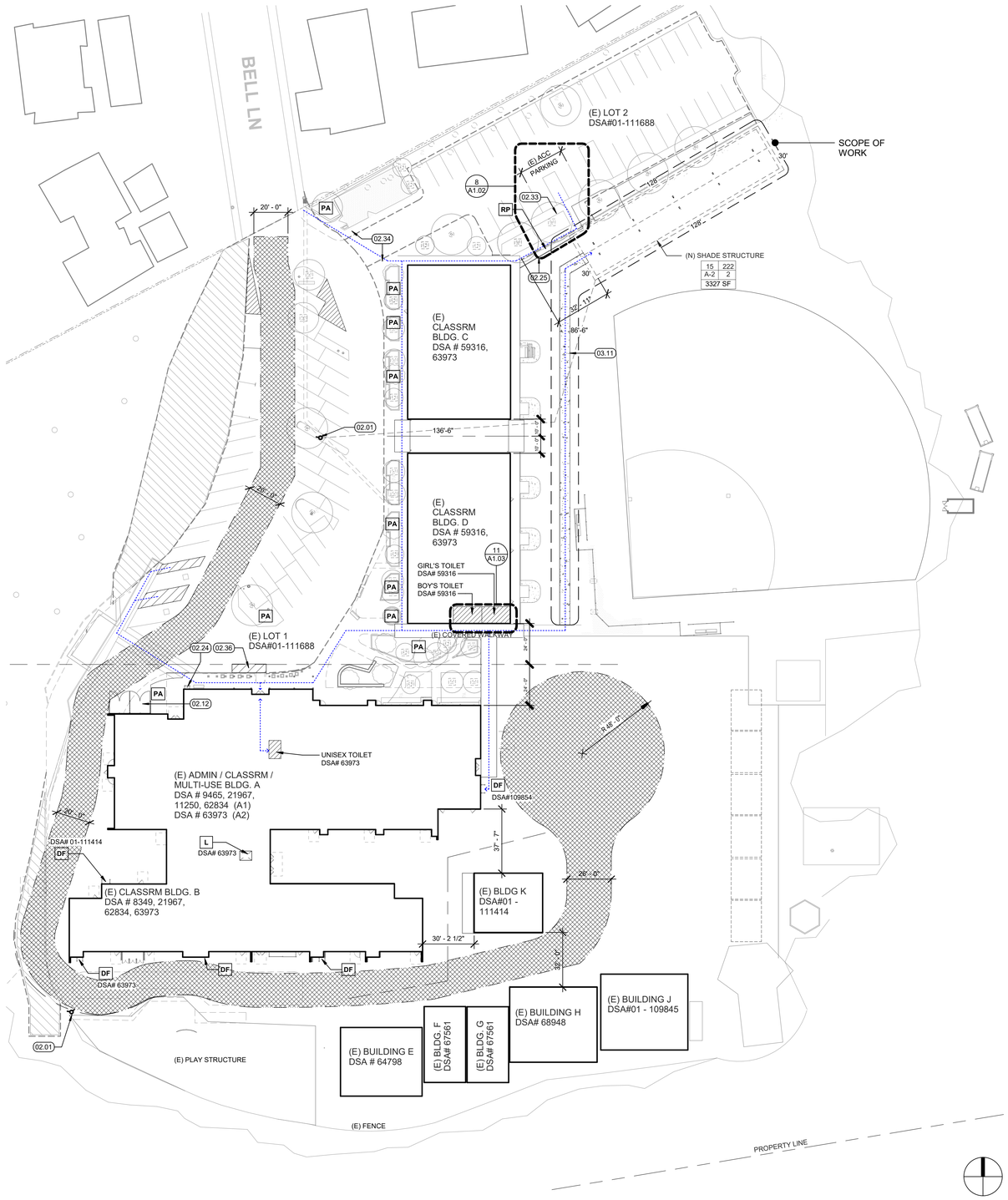

30 SITE PLAN - CODE ANALYSIS
1" = 30'-0"

CODE ANALYSIS SUMMARY

BUILDING A1 - CLASSROOM
CONSTRUCTION TYPE: V-B, FULLY SPRINKLERED
OCCUPANCY TYPE: E1
AREA: 2,052 SF

BUILDING A2 - ADMIN/CLASSROOMS/ASSEMBLY
- CLASSROOMS, ADMIN
CONSTRUCTION TYPE: V-B, FULLY SPRINKLERED
OCCUPANCY TYPE: E1
AREA: 11,825 SF

-ASEMBLY,MULTI-PURPOSE ROOM
CONSTRUCTION TYPE: V-B, FULLY SPRINKLERED
OCCUPANCY TYPE: A-2
AREA: 3,830 SF

BUILDING B1 - SW CLASSROOM WING
CONSTRUCTION TYPE: V-B, FULLY SPRINKLERED
OCCUPANCY TYPE: E1
AREA: 4,046 SF

BUILDING B2 - SE CLASSROOM WING
CONSTRUCTION TYPE: V-B, FULLY SPRINKLERED
OCCUPANCY TYPE: E1
AREA: 3,747 SF

BUILDING C - NE MODULAR - CLASSROOM/LIBRARY
CONSTRUCTION TYPE: V-B
OCCUPANCY TYPE: E1
AREA: 5,385 SF
ALLOWABLE AREA: 9,500 SF

BUILDING D - NE MODULAR CLASSROOM/STAFF ROOM
CONSTRUCTION TYPE: V-B
OCCUPANCY TYPE: E1
TOTAL AREA: 5,080 SF
ALLOWABLE AREA: 9,500 SF

PORTABLE BUILDINGS E,F,G,H,J - CLASSROOMS
CONSTRUCTION TYPE: V-B
OCCUPANCY TYPE: E1
AREA: E,H,J = 2,172 SF EACH
F = 960 SF
G = 960 SF
TOTAL AREA: 8,436 SF
ALLOWABLE AREA: 9,500 SF

PORTABLE BUILDING K - CLASSROOM
CONSTRUCTION TYPE: V-B
OCCUPANCY TYPE: E1
AREA: 2,380 SF
ALLOWABLE: 9,500 SF

MAIN BUILDING AREA JUSTIFICATION

OCCUPANCY	ACTUAL AREA	ALLOWABLE	SPRINKLERED 3X ALLOWABLE	BUILDING AREA
A-2	3,830 SF	6,000 SF	18,000 SF	OK
E	21,643 SF	9,500 SF	28,500 SF	OK

TOTAL BUILDING: 25,473 SF

SHADE STRUCTURE
CONSTRUCTION TYPE: II-B, NO SPRINKLERS
OCCUPANCY TYPE: A2
AREA: 3,327 SF
ALLOWABLE: 8,500 SF
HEIGHT: 12 FT
ALLOWABLE: 55 FT

PARKING ANALYSIS

*NO NET CHANGES TO PARKING COUNT

LOT 1
OVERALL SPACES: 41
ACCESSIBLE SPACES: 1
VAN ACCESSIBLE SPACES: 1
REQUIRED PER TABLE 11B-208.2: 2

LOT 2
OVERALL SPACES: 37
ACCESSIBLE SPACES: 1
VAN ACCESSIBLE SPACES: 1
REQUIRED PER TABLE 11B-208.2: 2

10 (E) DRINKING FOUNTAIN - FOR REFERENCE ONLY
3/4" = 1'-0"

DSA 810

FIRE & LIFE SAFETY SITE CONDITIONS SUBMITTAL

Division of the State Architect (DSA) documents referenced within this publication are available on the DSA Forms or DSA Publications webpages.

To facilitate the Division of the State Architect's (DSA) fire and life safety plan review of project site conditions, DSA requires the design professional to provide the following information at time of project submittal for projects consisting of construction of a new campus, construction of new building(s), additions to existing buildings, and for site alternate design means for fire department emergency vehicle access, and fire suppression water supply.

Information associated with compliance items 1 through 3 below is to be provided for all project types indicated above. Information associated with items 4 through 7 is to be completed when an alternate means is utilized. Acknowledgement by the school district and signature from the Local Fire Authority (LFA) is only required when an alternate design means is being requested.

The Project Information and Fire & Life Safety Information sections are to be completed for all projects and imaged onto the fire access site plan. When an alternate design/means is proposed, all sections on pages 1 and 2 are to be completed and imaged on the fire access site plan.

For additional information refer to the instructions at the end of this form and DSA Policy *PL 09-01: Fire Flow for Buildings*.

PROJECT INFORMATION	
School District/Owner:	Mill Valley School District
Project Name/School:	Shade Structures at Tamalpais Valley Elementary School
Project Address:	350 Bell Ln, Mill Valley 94941

FIRE & LIFE SAFETY INFORMATION				
1.	Has a fire hydrant flow test been performed within the past 12 months? *(If yes, provide a copy of the test data.)*	Yes ☐		No ☑
2.	Was the fire hydrant water flow test performed as part of this LFA review?	Yes ☐		No ☑
3.	Is the project located within a designated fire hazard severity zone (FHSZ) as established by Cal-Fire? *(If yes, indicate FHSZ classification below.)*	Yes ☑		No ☐
	Refer to the following website for FHSZ locations: http://egis.fire.ca.gov/FHSZ/	Moderate ☐	High ☐	Very High ☑
	Wildland Interface Area (WIFA) *(If any designations are checked, project design must meet the requirements of CBC Chapter 7A.)*			WIFA ☑

KEYNOTES

02.01	(E) FIRE HYDRANT
02.12	(E) TRASH ENCLOSURE
02.24	(E) FIRE SPRINKLER RISER & CONTROL VAVLES
02.25	(E) STL HANDRAIL
02.33	(E) WALKWAY TO REMAIN
02.34	(E) CURB RAMP: PER MARIN COUNTY STANDARDS, CURB RAMPS SHALL COMPLY WITH CALTRANS A88A AND A88B
02.36	(E) ACCESSIBLE DROP-OFF PER DSA #01-111688
03.11	(N) CONCRETE PAVEMENT, SCD

LEGEND

ACCESSIBLE PATH OF TRAVL AS INDICATED ON PLAN IS A BARRIER - FREE ACCES ROUTE WITHOUT ANY ABRUPT LEVEL CHANGES EXCEEDING 1/2" IF BEVELED AT 1:2 MAX SLOPE, OR VERTICAL LEVEL CHANGES NOT EXCEEDING 1/4" MAX. AND AT LEAST 48" IN WIDTH. SURFACE IS STABLE, FIRM, AND SLIP REISTANT. CROSS SLOPE DOES NOT EXCEED 2% AND SLOPE IN THE DIRECTION OF TRAVEL IS LESS THAN 5%, UNLESS OTHERWISE INDICATED. ACCESSIBLE PATH OF TRAVEL SHALL BE MAINTAINED FREE OF OVERHANGING OBSTRUCTION TO 80" MIN., AND FREE OF PROTRUDING OBJECTS GREATER THAN 4" PROJECTED FROM WALL LOCATED ABOVE 27" AND LESS THAN 80".

PROPERTY LINE (REAL OR IMAGINARY)

(N) CONCRETE SIDEWALK, SEE CIVIL DRAWINGS

(E) ACCESSIBLE TOILET ROOM FACILITY

EMERGENCY VEHICLE ACCESS

DF (E) ACCESSIBLE DRINKING FOUNTAINS

L (E) ACCESSIBLE STAIR LIFT

RP (E) ACCESSIBLE RAMP

PA (E) PLANTING AREA

OCCUPANT LOAD FACTOR → 15 | 222 | A-2 | 2 | 3327 SF ← FUNCTION
15 → # OF OCCUPANTS
222 → # OF EXITS
3327 SF → AREA

DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE STATEMENT

THE POT IDENTIFIED IN THESE CONSTRUCTION DOCUMENTS MEETS THE REQUIREMENTS OF THE CURRENT APPLICABLE CAIFORNIA BUILDING CODE (CBC) ACCESSIBILITY PROVISIONS FOR PATH OF TRAVEL REQUIREMENTS FOR ALTERATIONS, ADDITIONS AND STRUCTURAL REPAIRS. AS PART OF THE DESIGN FOR THIS PROJECT, THE POT WAS EXAMINED AND ANY ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WERE DETERMINED TO BE NON-COMPLIANT WITH THE CBC HAVE BEEN IDENTIFIED AND THE CORRECTIVE WORK NECESSARY TO BRING THEM INTO COMPLAINCE HAS BEEN INCLUDED WITHIN THE SCOPE OF THIS PROJECT'S WORK THROUGH DETAILS, DRAWINGS AND SPECIFICATIONS INCORPORATED INTO THESE CONSTRUCTION DOCUMENTS. ANY NONCOMPLIANT ELEMENTS, COMPONENTS OR PORTIONS OF THE POT THAT WILL NOT BE CORRECTED BY THIS PROJECT BASED ON VALUATION THRESHOLD LIMITATIONS OR A FINDING OF UNREASONBLE HARDSHIP ARE INDICATED IN THESE CONSTRUCTION DOCUMENTS.

DURING CONSTRUCTION, IF POT ITEMS WITHIN THE SCOPE OF THE PROJECT REPRESENTED AS CBC COMPLIANT ARE FOUND TO BE NONCOMFORMING BEYOND REASONABLE CONSTRUCTION TOLERANCES, THE ITEMS SHALL BE BROUGHT INTO COMPLAINCE WITH THE CBC AS PART OF THIS PROJECT BY MEANS OF A CONSTRUCTION CHANGE DOCUMENT.

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

Architect/Engineer Of Record:_____

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
FIRE LIFE SAFETY, CODE ANALYSIS & ACCESSIBLITY SITE PLAN

Client Project Number:

Scale: As indicated
Drawn By: Author
Checked By: Checker
Issue Date:
Revit Version: 2019

Sheet
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Sheet 2 of 19

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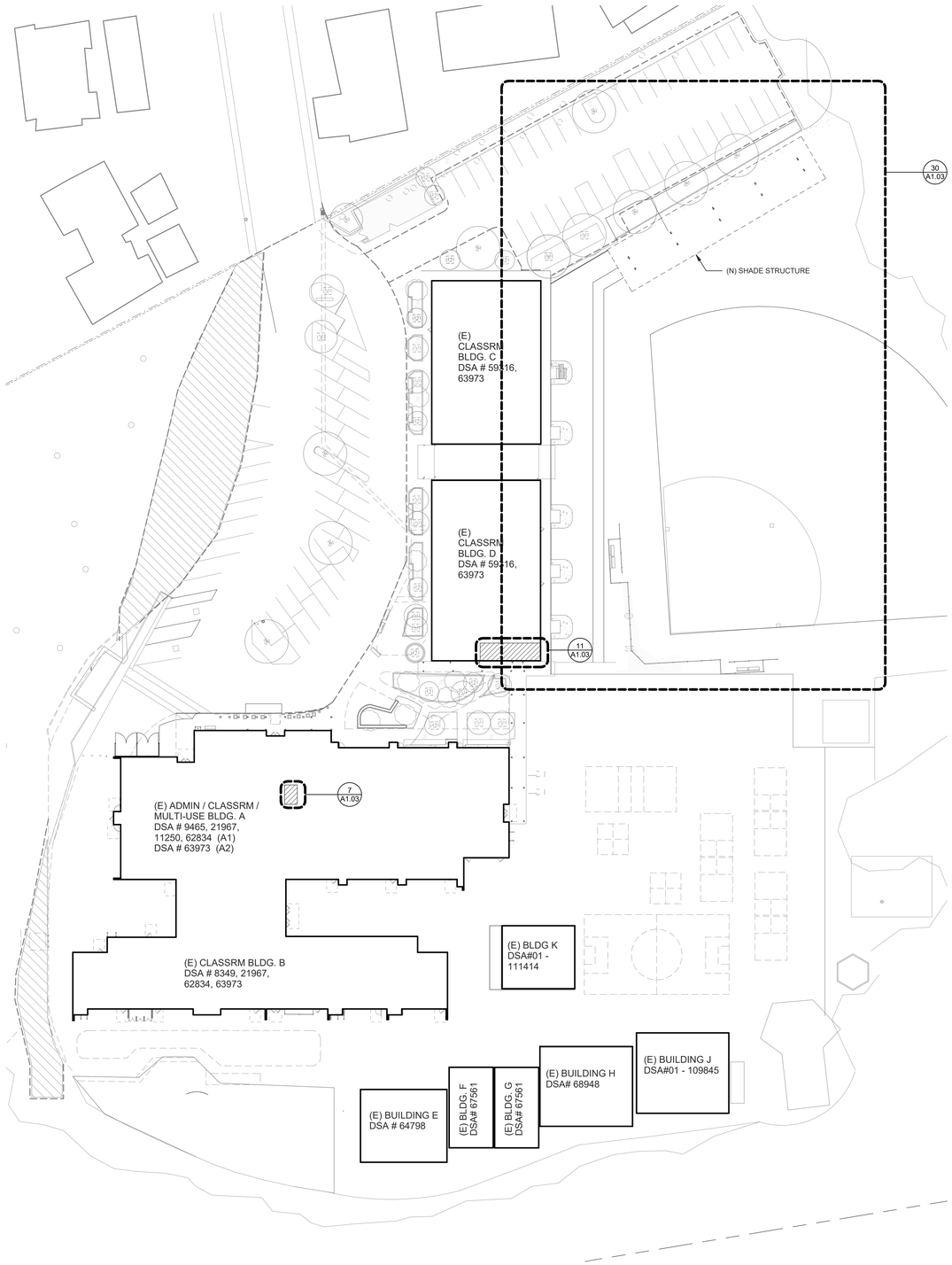
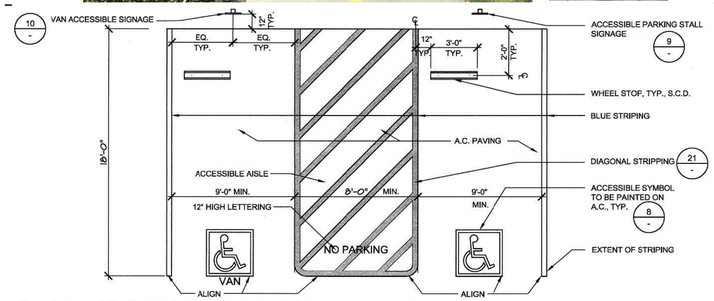


30 SITE PLAN
1" = 30'-0"



27 TYP. ACC. STRIPING @PARKING STALLS
SCALE: 1 1/2" = 1'-0"

8 (E) ACC PARKING - LOT 2 - FOR REFERENCE ONLY
3/4" = 1'-0"

411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
SITE PLAN

Client Project Number:

Scale: As indicated
Drawn By: AN LE
Checked By: ERNIE PALEO
Issue Date:
Revit Version: 2019

Sheet
A1.02
Sheet 3 of 19

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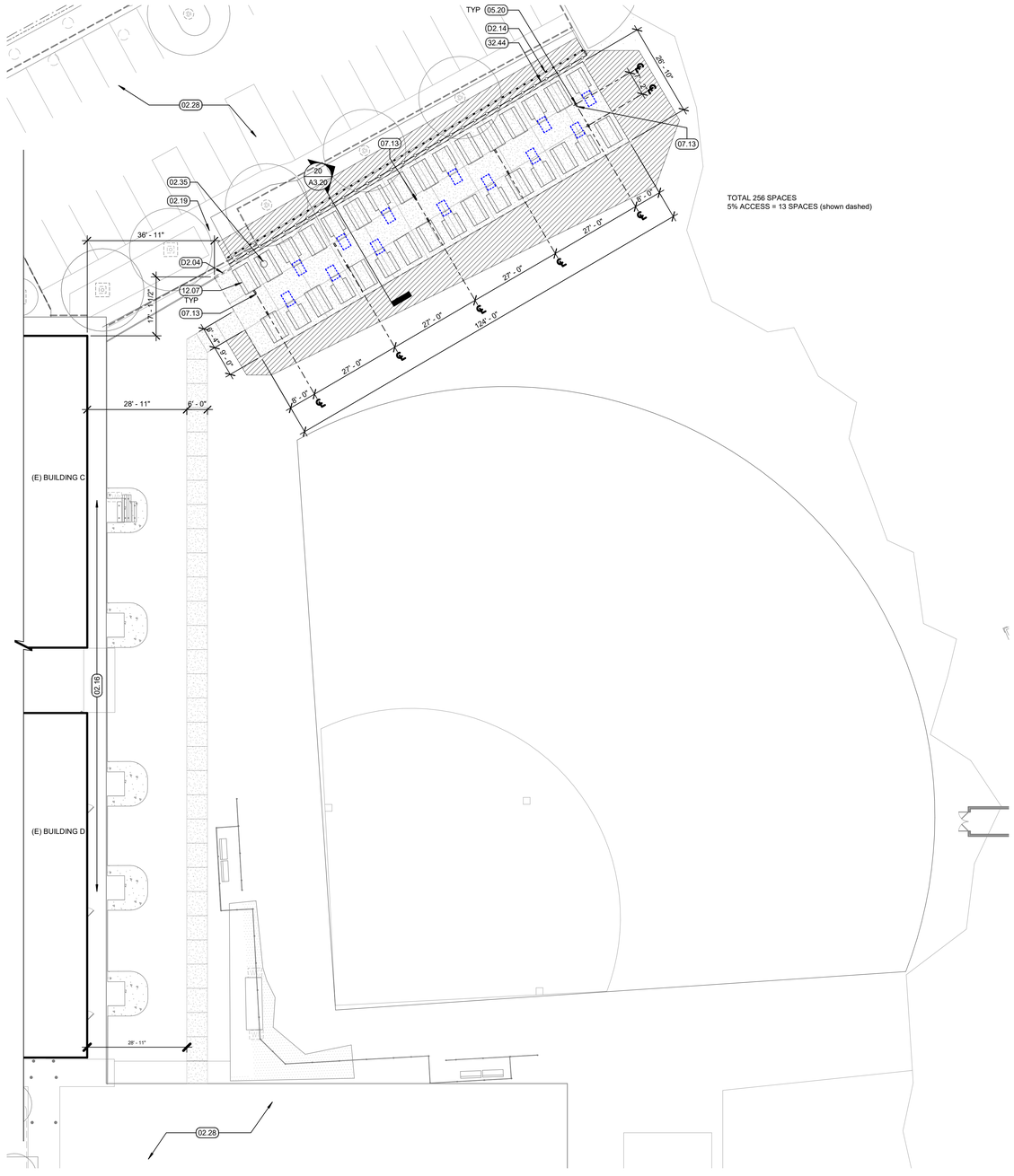
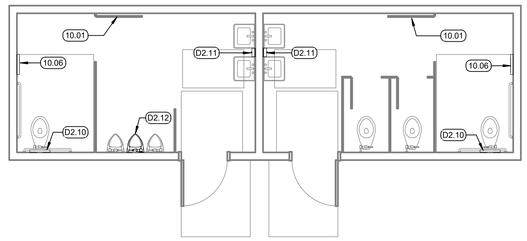
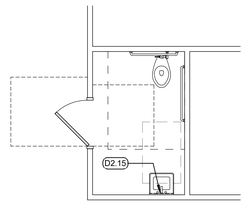


30 ENLARGED SITE PLAN
1/16" = 1'-0"



11 ENLARGED PLAN - BOYS/GIRLS RESTROOMS
1/4" = 1'-0"



7 ENLARGED PLAN - STAFF RESTROOM
1/4" = 1'-0"

GENERAL NOTES

1. NOTIFY ARCHITECT OF ANY IN THE FIELD DISCREPANCIES PRIOR TO START OF CONSTRUCTION.
2. ALL DIMENSIONS SHALL BE FACE OF STUD, UON. DIMENSIONS NOTED AS "CLR" REFER TO CLEAR DIMENSION FROM FACE OF FINISH.
3. PATCH & REPAIR (E) A/C & CONCRETE PAVEMENT IMPACTED BY THE INSTALLATION OF THE NEW SHADE STRUCTURES.
4. PROJECT IS LOCATED IN FLOOD HAZARD ZONE X - AREA OF MINIMUM FLOOD HAZARD.

LEGEND

(N) CONCRETE PAVEMENT, SCD

RE-GRADE, SCD

KEYNOTES

02.16	(E) COVERED WALKWAY
02.19	(E) ACCESSIBLE WALKWAY
02.28	(E) A/C PAVEMENT
02.35	(E) SANITARY SEWER MANHOLE TO BE RELOCATED, FLUSH WITH (N) CONC PAVEMENT, SCD
05.20	HSS COLUMN, SEE STEEL SHADE STRUCTURE DRAWINGS
07.13	DOWNSPOUT, SEE 1/A8.01
10.01	COAT HOOK MOUNTED ON TOILET PARTITION DOOR AT 4'-0" AFF
10.06	TOILET SEAT COVER DISPENSER MOUNTED AT 40" AFF TO OPERABLE PART
12.07	LUNCH TABLE BY OTHERS
32.44	4' CHAINLINK FENCE, SEE 7/A8.01
D2.04	DEMO (E) PARTIAL CHAINLINK FENCE. TERMINATE (E) CHAINLINK FABRIC TO REMAIN AT THE NEAREST POLE
D2.10	RELOCATE (E) SEAT COVER DISPENSER ADJACENT TO SIDE GRAB BAR, FILL SCREW HOLES / PATCH TILE AS REQUIRED
D2.11	RELOCATE (E) SOAP DISPENSER TO 40" AFF TO OPERABLE PART
D2.12	REMOVE (E) URINAL AND CAP. REPAIR TILE AS NEEDED.
D2.14	REMOVE (E) CHAINLINK FENCE & FOOTINGS
D2.15	RELOCATE MIRROR TO 40" AFF BOTTOM OF REFLECTIVE SURFACE

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
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Facility

MILL VALLEY SCHOOL DISTRICT

Project

SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title

PARTIAL SITE PLAN & ENLARGED RESTROOM PLANS

Client Project Number:

Scale:	As indicated
Drawn By:	AL
Checked By:	EP
Issue Date:	
Revit Version: 2019	

Sheet

A1.03

Sheet 4 of 19

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0 5' 50'
GRAPHIC SCALES: 1/16" = 1'-0"

0 5' 25'
1/8" = 1'-0"

0 1' 12'
1/4" = 1'-0"

0 1' 6'
1/2" = 1'-0"

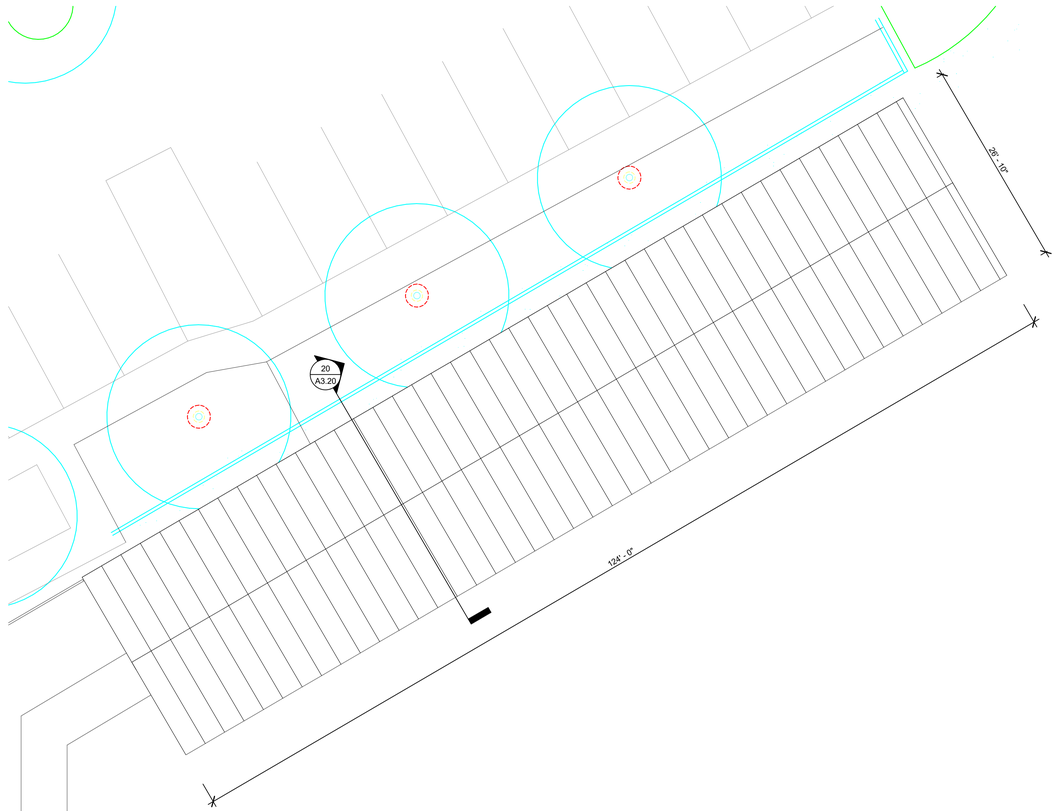
0 4'
3/4" = 1'-0"

0 1' 3'
1" = 1'-0"

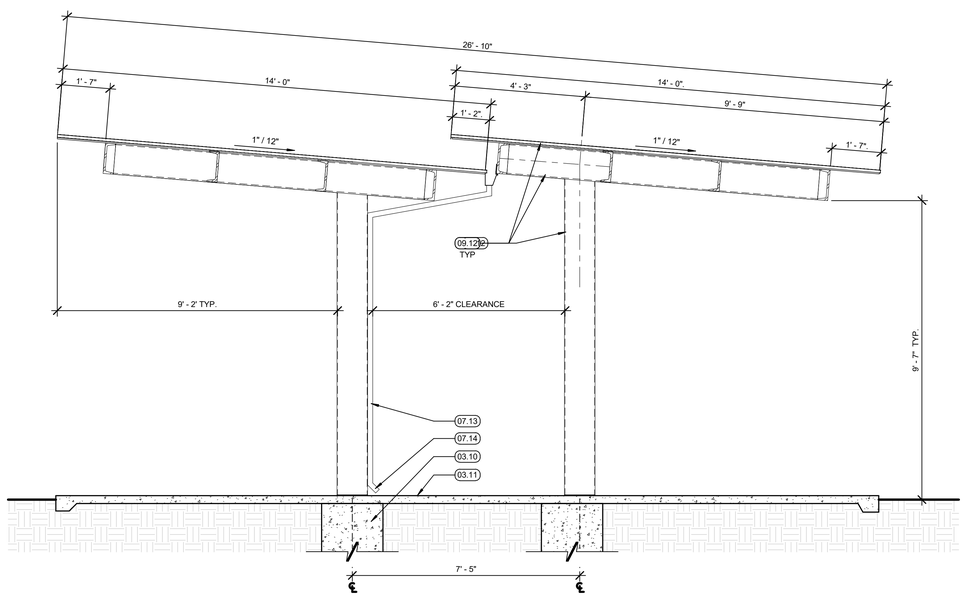
0 2'
1 1/2" = 1'-0"

0 1'
3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS
A REDUCED PRINT SCALE ACCORDINGLY



18 ROOF PLAN
1/8" = 1'-0"



20 SECTION - TAMALPAIS SHADE STRUCTURE
1/2" = 1'-0"

KEYNOTES

03.10	PIER FOOTING, SEE SHADE STRUCTURE DRAWINGS
03.11	(N) CONCRETE PAVEMENT, SCD
07.13	DOWNSPOUT, SEE 1/A8.01
07.14	RAIN/WATER LEADER W/ ANGLED BOTTOM - DRAIN TO GRADE. TERMINATE 3" ABOVE GRADE
09.12	PAINT, COLOR TO BE SELECTED BY ARCHITECT

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

Architect/Engineer Of Record:

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
SHADE STRUCTURE SECTIONS

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Sheet
A3.20
Sheet 5 of 19

SECTION 07 71 23 DOWNSPOUTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Galvanized steel downspouts.

1.2 REFERENCES

Contractor's work shall comply with the following standards as applicable. Manufactured items are to be fabricated to these same standards.

The following standards (and publications) are applicable to the extent referenced in the text. The most recent of these standards is implied, unless otherwise stated.

A. ASTM A53 - Pipe, Steel, Black and Hot-Dipped Zinc-Coated Welded and Seamless.

B. ASTM A653 - Steel Sheet, Zinc Coated, (Galvanized) or Zinc-Iron Alloy-Coated (Galvanneale) by the Hot-Dip Process.

C. ASTM A755 - Steel Sheet, Metallic Coated by the Hot-Dip Process and Prepainted by the Coil-Coating Process for Exterior Exposed Building Products.

D. ASTM A924 - General Requirements for Steel Sheet, Zinc-Coated (Galvanized) by the Hot-Dip Process.

E. SMACNA - Architectural Sheet Metal Manual.

1.3 SUBMITTALS

A. Submit Shop Drawings of metal items indicating profiles, jointing, terminations, and installation details. Indicate type and spacing of fasteners.

B. Submittal of specific plates from the SMACNA Architectural Sheet Metal Manual constitutes acceptable documentation of installation details.

C. Submit Product Data for pre-coated galvanized steel.

1.4 QUALITY ASSURANCE

A. Applicator: Company specializing in sheet metal Work with five years minimum experience.

B. Perform Work in accordance with SMACNA standard details and requirements.

1.5 STORAGE AND HANDLING

A. Stack preformed material to prevent twisting, bending, or abrasion and to provide ventilation.

B. Prevent contact with materials during storage which may cause discoloration, staining or damage.

1.6 WARRANTY

A. Provide manufacturer's 20-year warranty against defective materials and finish.

B. Provide installer's 2-year warranty coverage for water tightness and integrity of seals.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Galvanized Steel: ASTM A653, Grade 33, G90 zinc-coating in accordance with ASTM A924; thickness as specified.

B. Steel Pipe: ASTM A53, Grade B, Schedule 40 steel pipe, standard weight, Type S, one piece without joints, galvanized according to ASTM A53; 1.8 ounces per square foot.

2.2 COMPONENTS

A. Steel Pipe Downspouts: Fabricate from Schedule 40 steel pipe, and other steel stock as indicated, all full penetration welded into one assembly, then hot-dip galvanized. Strainers: Basket-type constructed of 12 gauge stainless steel wire, size to fit correctly into the leader. Provide stainless steel strap tie-downs to clamp to the downspout outlet as indicated.

2.3 ACCESSORIES

A. Anchorage Devices: Meet SMACNA requirements.

B. End Caps, Downspout Outlets, Straps, Support Brackets, Joint Fasteners. Profiled to suit gutters and downspouts.

2.4 FABRICATION

A. Form gutters and downspouts of profiles and sizes indicated.

B. Field measure site conditions prior to fabricating Work.

C. Fabricate with required connection pieces.

D. Form sections square, true, and accurate in size, in maximum possible lengths and free of distortion or defects detrimental to appearance or performance.

E. Hem exposed edges of metal.

F. Seal metal joints.

G. Fabricate gutter and downspout accessories; seal watertight.

H. Form splash pans to size as detailed with rolled edges.

2.5 SHOP FINISHING

A. Shop prepare and prime exposed ferrous metal surfaces.

B. Site paint exposed to view metal surfaces as specified in Section 09 91 00.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces are ready to receive Work. Contractor to correct deficiencies in the surfaces at own expense.

B. Beginning of installation means acceptance of existing conditions.

3.2 INSTALLATION

A. Coordinate layout of downspouts with site conditions and features on the building not shown in the building elevations.

B. Install downspouts, and accessories in accordance with SMACNA requirements.

C. Coordinate installation of sheet metal gutters with steel pipe downspouts.

D. Join lengths with seams sealed watertight. Flash and seal gutters to downspouts and accessories.

E. Seal metal joints watertight.

END OF SECTION

SECTION 09 91 00 PAINTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Surface preparation.

B. Products and application.

C. Surface finish schedule.

1.2 REFERENCES

A. ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products.

B. ASTM D2016 - Test Method for Moisture Content of Wood.

1.3 SYSTEM DESCRIPTION

A. Preparation of all surfaces to receive final finish.

B. Painting and finishing Work of this Section using coating systems of materials including primers, sealers, fillers, and other applied materials whether used as prime, intermediate, or finish coats.

C. Surface preparation, priming, and finish coats specified in this Section are in addition to shop-priming and surface treatment specified under other Sections.

D. Painting and finishing all exterior surfaces of materials.

1.4 DEFINITIONS

A. Conform to ASTM D16 for interpretation of terms used in this Section.

1.5 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

B. Applicator: Company specializing in commercial painting and finishing with five years documented experience.

C. Regulatory Requirements: Comply with applicable codes and regulations of governmental agencies having jurisdiction including those having jurisdiction over airborne emissions and industrial waste disposal. Where those requirements conflict with this specification, comply with the more stringent provisions. Comply

with the current applicable regulations of the California Air Resources Board (CARB) and the Environmental Protection Agency (EPA).

D. Coats: The number of coats specified is the minimum number acceptable. If full coverage is not obtained with the specified number of coats, apply such additional coats as are necessary to produce the required finish.

E. Employ coats and undercoats for all types of finishes in strict accordance with the recommendations of the paint manufacturer.

F. Provide primers and undercoat paint produced by the same manufacturer as the finish coat.

1.6 SUBMITTALS

A. Provide manufacturer's technical information and instructions for application of each material proposed for use by catalog number.

B. List each material by catalog number and cross-reference specific coating with specified finish system.

C. Provide manufacturer's certification that products proposed meet or exceed specified materials.

D. Submit two 8-1/2 inch x 11 inch Samples of each paint color and texture applied to cardboard. Resubmit Samples until acceptable color, sheen and texture is obtained.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Deliver products to site in sealed and labeled containers; inspect to verify acceptance.

B. Container labeling to include manufacturer's name, type of paint, brand name, brand code, coverage, surface preparation, drying time, cleanup, color designation, and instructions for mixing and reducing. Paint containers not displaying product identification will not be acceptable.

C. Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area, unless required otherwise by manufacturer's instructions.

D. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.8 ENVIRONMENTAL REQUIREMENTS

A. Do not apply exterior coatings during rain or snow, or when relative humidity is above 50 percent, unless required otherwise by manufacturer's instructions.

B. Minimum Application Temperatures for Latex Paints: 50 degrees F for exterior; unless required otherwise by manufacturer's instructions.

1.9 EXTRA STOCK

A. Provide a ten gallon container of each finish paint color and sheen to Owner for touchup.

1.10 QUALITY ASSURANCE

A. Product Manufacturer: Company specializing in manufacturing quality paint and finish products with five years' experience.

PART 2 - PRODUCTS

2.1 ACCEPTABLE MANUFACTURERS

A. Unless specifically identified otherwise, product designations are those of the Dunn-Edwards Corporation, (800) 537-4098 and shall serve as the standard for kind, quality, and function.

B. Subject to compliance with requirements, other manufacturers offering equivalent products are:

1. Benjamin Moore Paints, (213) 722-3484.
2. Frazee Paint (McCloskey, Ameron), (213) 727-2861.
3. Kelly-Moore Paint Company, (650) 592-8337.
4. Pittsburgh Paints, (888) 774-2001.
5. Sherwin Williams, (310) 404-7422.
6. Spectra-Tone Paint Corp., (909) 478-3485.
7. Tnemec Company, Inc., (310) 643-5191.
8. Vista Paint Corporation, (714) 680-3800.

2.2 MATERIALS

A. Ready mixed, except field catalyzed coatings. Process pigments to a soft paste consistency, capable of being readily and uniformly dispersed to a homogeneous coating.

B. Good flow and brushing properties; capable of drying or curing free of streaks or sags.

C. Accessory Materials: Linseed oil, shella, turpentine, paint thinners and other materials not specifically indicated but required to achieve the finishes specified, of commercial quality.

2.3 FINISHES

A. Refer to schedule at end of Section for surface finish schedule.

PART 3 - EXECUTION

3.1 INSPECTION

A. Verify that surfaces are ready to receive Work as instructed by the product manufacturer.

B. Examine surfaces to be finished prior to commencement of Work. Report any condition that may potentially affect proper application.

C. Beginning of installation means acceptance of existing surfaces.

3.2 SURFACE PREPARATION

A. Correct minor defects and clean surfaces which affect Work of this Section.

B. Galvanized Surfaces: Remove surface contamination and oils and wash with solvent. Pretreat with phosphoric acid etch or vinyl wash. Apply coat of etching primer the same day as pretreatment is applied.

C. Shop Primed Steel: Sand and scrape to remove loose primer and rust. Feather edges to make touch-up patches inconspicuous. Clean surfaces with solvent. Prime bare steel surfaces.

3.3 PROTECTION OF ADJACENT WORK

A. Protect elements surrounding the Work of this Section from damage or disfiguration.

B. Repair damage to other surfaces caused by Work of this Section.

C. Furnish drop cloths, shields, and protective methods to prevent spray or droppings from disfiguring other surfaces.

D. Remove empty paint containers from site.

3.4 APPLICATION

A. Apply products in accordance with manufacturer's instructions.

B. Do not apply finishes to surfaces that are not dry.

C. Apply each coat to uniform finish.

D. Apply each coat of paint slightly darker than preceding coat unless otherwise approved.

E. Sand lightly between coats to achieve required finish.

F. Allow applied coat to dry before next coat is applied.

G. The number of coats specified is the minimum that shall be applied. Apply additional coats when undercoats, stains or other conditions show through final paint coat, until paint film is of uniform finish, color and appearance.

H. Cloudiness, spotting, lap marks, brush marks, runs, sags, spikes and other surface imperfections will not be acceptable.

I. Where spray application is used, apply each coat of the required thickness. Do not double back to build up film thickness of two coats in one pass.

J. Where roller application is used, roll and redistribute paint to an even and fine texture. Leave no evidence of roller laps, irregularity of texture, skid marks, or other surface imperfections.

3.5 CLEANING

A. As Work proceeds, promptly remove paint where spilled, splashed, or spattered.

B. During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris.

C. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site.

3.6 PROTECTION OF COMPLETED WORK

A. Protect finished installation.

B. Erect barriers and post warning signs. Maintain in place until coatings are fully dry.

C. Confirm that no dust generating activities will occur following application of coatings.

3.7 COLOR SCHEDULE

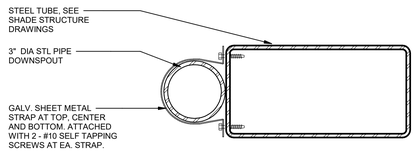
A. Paint and finish colors shall be custom color, mixed and formulated per paint schedule.

3.8 SCHEDULE - EXTERIOR SURFACES

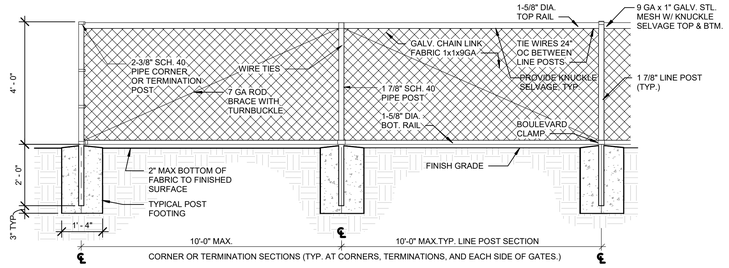
A. The following paint systems shall be used:

1. Steel-Primed or Unprimed (Semi-Gloss Acrylic)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: EVSH50 Evershield
   - 3rd coat: EVSH50 Evershield
2. Steel-Primed or Unprimed (Gloss-Alkyd)
   - 1st coat: 43-5 Corrobar
   - 2nd coat: 10 Syn-Lustro
   - 3rd coat: 10 Syn-Lustro
3. Steel-Galvanized (Semi-Gloss - Acrylic)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: EVSH50 Evershield
   - 4th coat: EVSH50 Evershield
4. Steel-Galvanized (Gloss - Alkyd)
   - 1st coat: GE 123 Galva Etch, Etching Liquid
   - 2nd coat: 43-7 Galv-Alum
   - 3rd coat: 10 Syn-Lustro
   - 4th coat 10 Syn-Lustro

END OF SECTION



1 DOWNSPOUT AT STEEL COLUMNS
3" = 1'-0"



7 TYP. CHAINLINK FENCE
1/2" = 1'-0"

SECTION 32 31 13 CHAIN LINK FENCES

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Fence framework, fabric, and accessories.

B. Excavation for post bases.

C. Concrete anchorage for posts

1.2 REFERENCES

A. ASTM A90 - Standards Test Method for Weight of Coating on Zinc-Coated (Galvanized) Iron or Steel Articles.

B. ASTM A392 - Zinc-Coated Steel Chain Link Fence Fabric.

C. ASTM A428 - Weight of Coating on Aluminum-coated Iron or Steel Articles.

D. ASTM A569 - Standard Specification for Steel, Carbon, Hot-Rolled Sheet and Strip Commercial Quality.

E. ASTM F567 - Installation of Chain Link Fence.

F. ASTM F900 - Standard Specification for Industrial and Commercial Swing Gates.

G. ASTM F1083 - Pipe, Steel, Hot-dipped Zinc-coated (Galvanized) Welded for Fence Structures.

H. ASTM F1234 - Protective Coatings on Steel Framework for Fences.

I. Chain Link Fence Manufacturers Institute - Chain Link Fence Wind Load Guide for Selection of Line Post and Line Post Spacing.

1.3 QUALITY ASSURANCE

A. Manufacturer: Company specializing in commercial quality chain link fencing with three years documented experience.

B. Installation: Comply with ASTM F567.

1.4 SUBMITTALS

A. Submit transmittal page with the following content:
   1. Identify Project and Architect's project number, Contractor, subcontractor or supplier; pertinent Drawing sheet and detail number(s), and Specification Section number, as appropriate.

2. Apply Contractor's stamp, signed or initialed certifying that review, verification of products required, field dimensions, adjacent construction Work, and coordination of information is in accordance with the requirements of the Work and Contract Documents. Submittals without Contractor's stamp and signature will be returned without review. Incomplete submittals will be returned without review.
3. Provide space for Architect review stamp.

B. Shop Drawings: Include plan layout, grid, spacing of components, accessories, fittings, hardware, anchorages, and schedule of components.

C. Submit manufacturer's installation instructions.

D. Submit two samples 12 x 12 inches in size, illustrating fence fabric finish.

E. Submit project record documents in digital format. Record information in contrasting color. Accurately record actual locations of property perimeter posts relative to property lines and easements. Submit documents to Architect for final Application for Payment. Inadequate or incomplete Record Documents may be used as cause for withholding payment.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Framework: ASTM F1083; Schedule 40 steel pipe, standard weight, one piece without joints, finish same as fabric.

B. Acceptable Equivalent: ASTM A569; Class 1A pipe with minimum yield strength of 50,000 pounds per square inch as manufactured by Allied Tube and Conduit Fence Division, (800) 882-5543, or approved equal.

C. Fabric: ASTM A392, Class 1, zinc coated wire fabric.

2.2 CONCRETE MIX

A. Concrete: As specified in Section 32 13 00.

2.3 COMPONENTS

A. Line and terminal posts and footing size and depth shall be sized and spaced according to Table 1, set forth below. Component sizes for fences with requirements not shown in Table 1 shall be calculated using the Chain Link Fence Manufacturers Institute - Chain Link Fence Wind Load Guide for Selection of Line Post and Line Post Spacing or by using the Wind Load Calculator at www.wheatland.com.

TABLE 1 (Assumes Wind Speed MPH = 85)

Fence Height (Ft.)	End Post	Line Post	Post Spacing	Footing Diameter End Post	Footing Diameter Line Post	Footing Depth
1" Fabric - 9 Gauge						
0-4	2-3/8"	1-7/8"	10'	12"	12"	24"

B. Top and Brace Rail: 1-5/8 inch NPS, plain end, sleeve coupled steel pipe.

C. Fabric: 1 inch diamond mesh steel wire, interwoven, 9 gage thick, top and bottom selvage knuckle end closed.

D. Caps: Cast steel or malleable iron, galvanized; sized to post dimension, set screw retained.

E. Fittings: Galvanized steel sleeves, bands, clips, rail ends, tension bars, fasteners and fittings.

F. Tension Wire: 7 gage thick steel, single strand.

2.4 FINISHES

A. Galvanized: ASTM F1234; 1.8 oz/sq ft coating for Schedule 40 pipe. ASTM A90; 1.0 oz/sq ft coating for Class 1A pipe. Vinyl coating, 7 mils thick. Color to be selected by Architect from manufacturer's standard colors.

B. Accessories: Same finish as framing.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install framework, fabric, accessories and gates in accordance with ASTM F567.

B. Provide fence of height indicated.

C. Space line posts at intervals according to Table 1.

D. Provide top rail through line post tops and splice with 7 inch long rail sleeves.

E. Stretch fabric between terminal posts or at intervals of 100 feet maximum whichever is less.

F. Do not stretch fabric until concrete has cured 28 days.

G. Position bottom of fabric 2 inches above finished grade.

H. Fasten fabric to top rail, line posts, braces, and bottom tension wire with wire ties maximum 15 inches on centers.

I. Attach fabric to end, corner, and gate posts with tension bars and tension bar clips.

J. Install bottom tension wire stretched taut between terminal posts.

3.2 ERECTION TOLERANCES

A. Maximum Variation from Plumb: 1/4 inch.

B. Maximum Offset from True Position: 1 inch.

C. Components shall not infringe adjacent property lines.

END OF SECTION

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue Mill Valley 94941
Tel: 415/389-7700 Fax: 415/389-7773

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HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number: 5482

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
MISC. DETAILS

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Sheet 6 of 19

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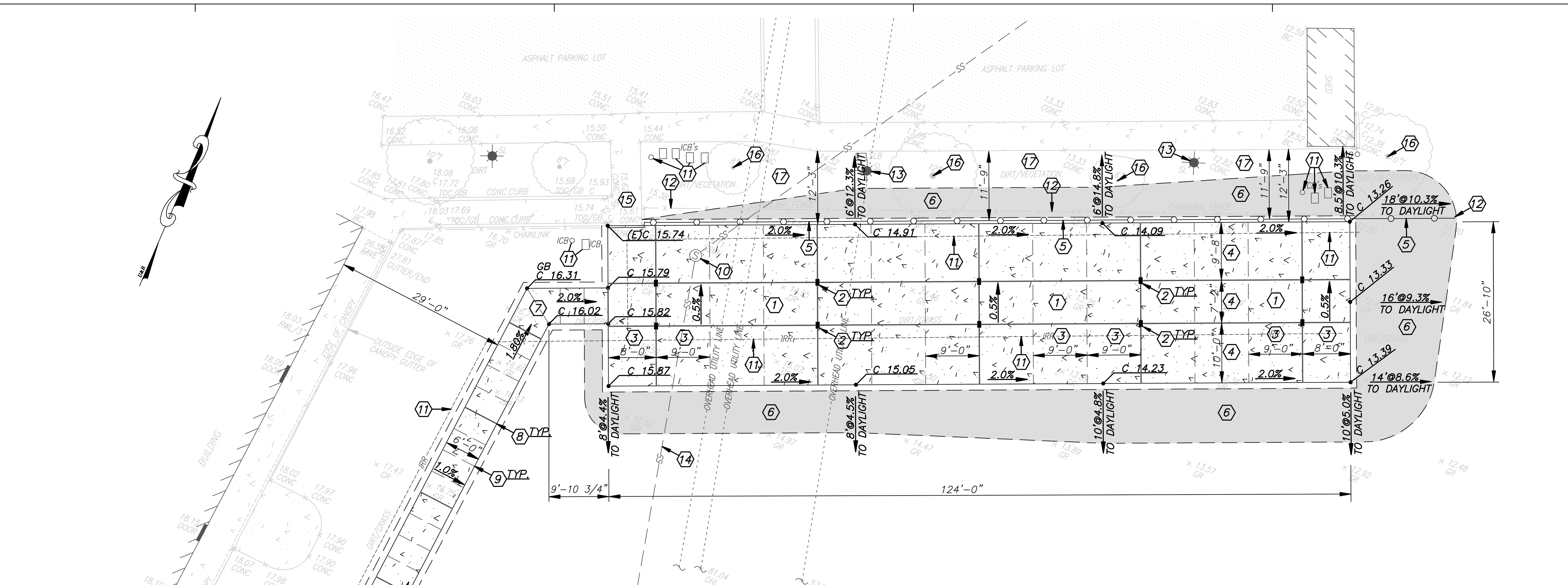

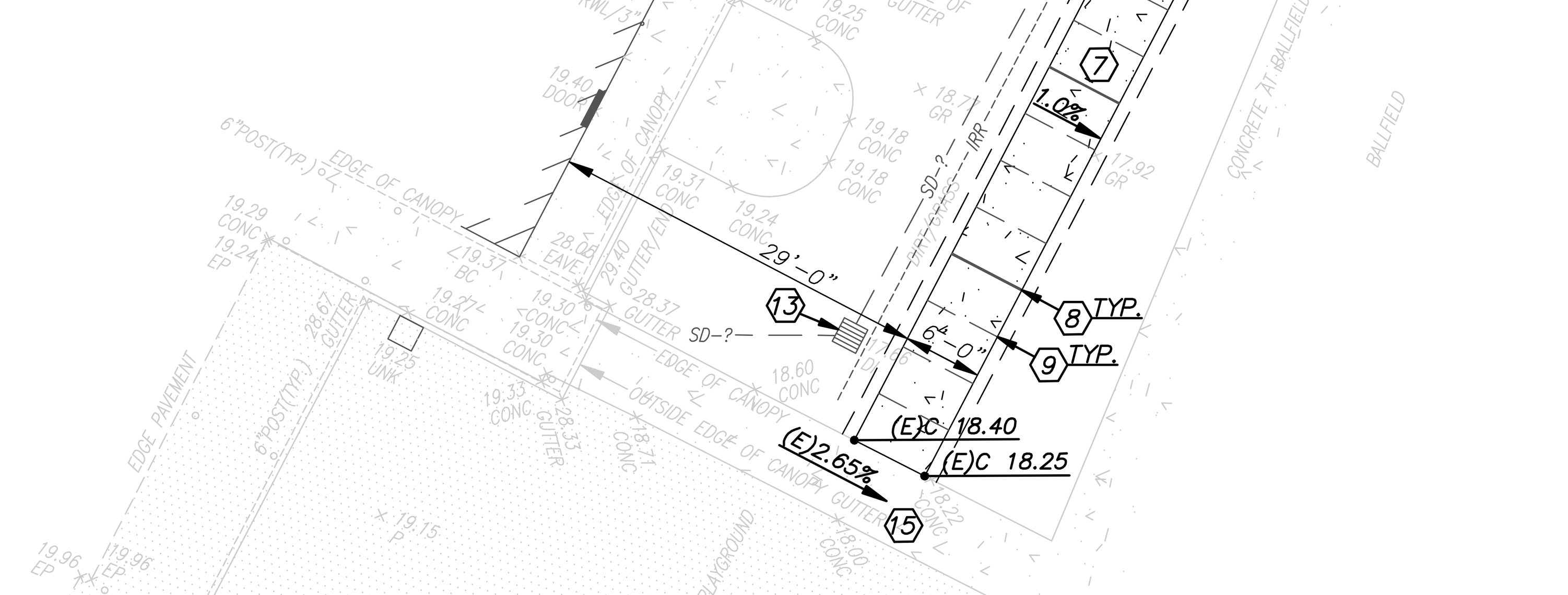

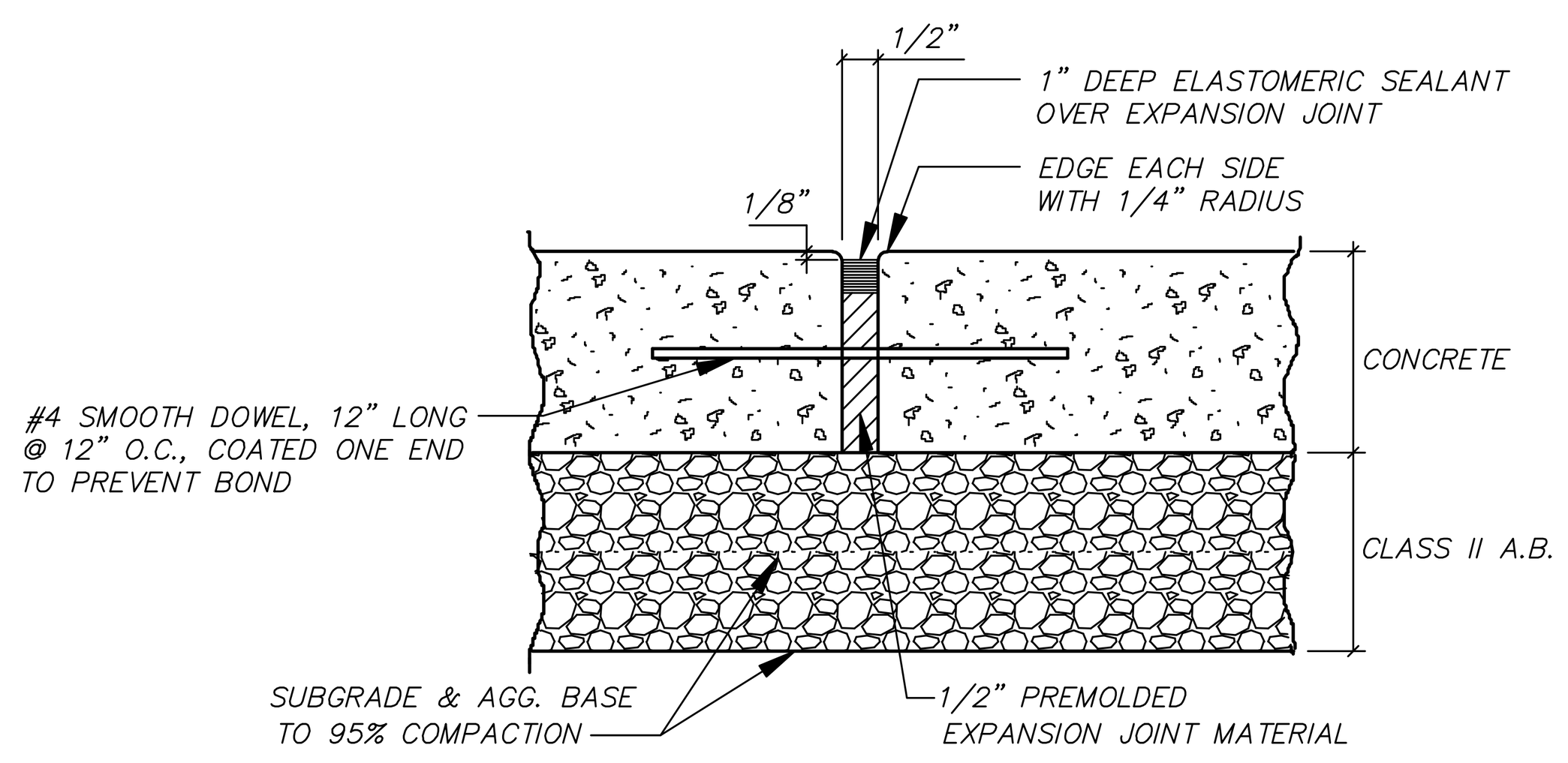

CONCRETE EXPANSION JOINT DETAIL

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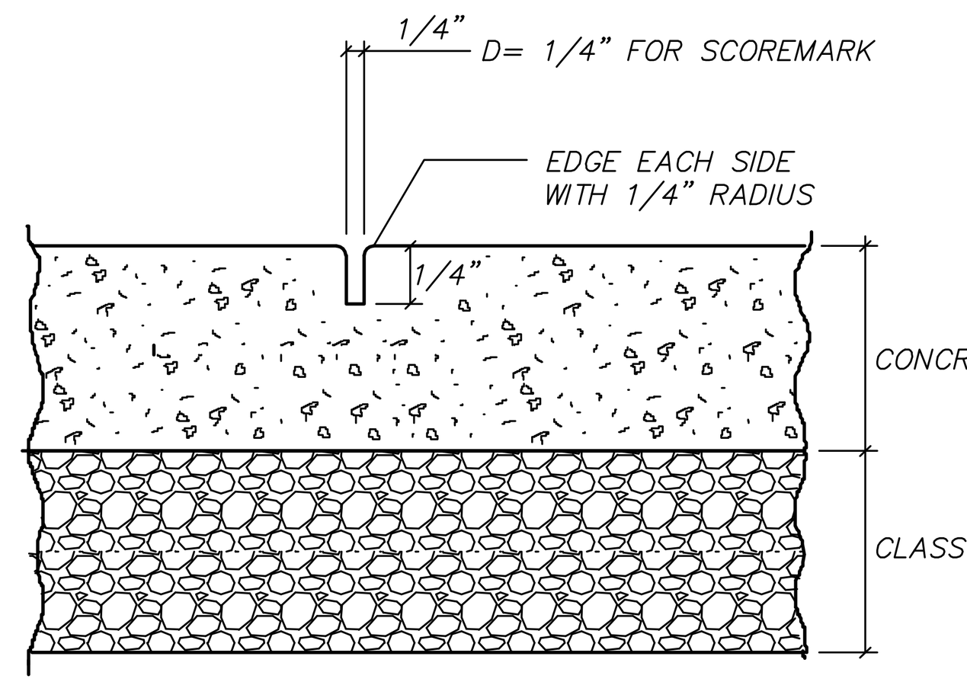
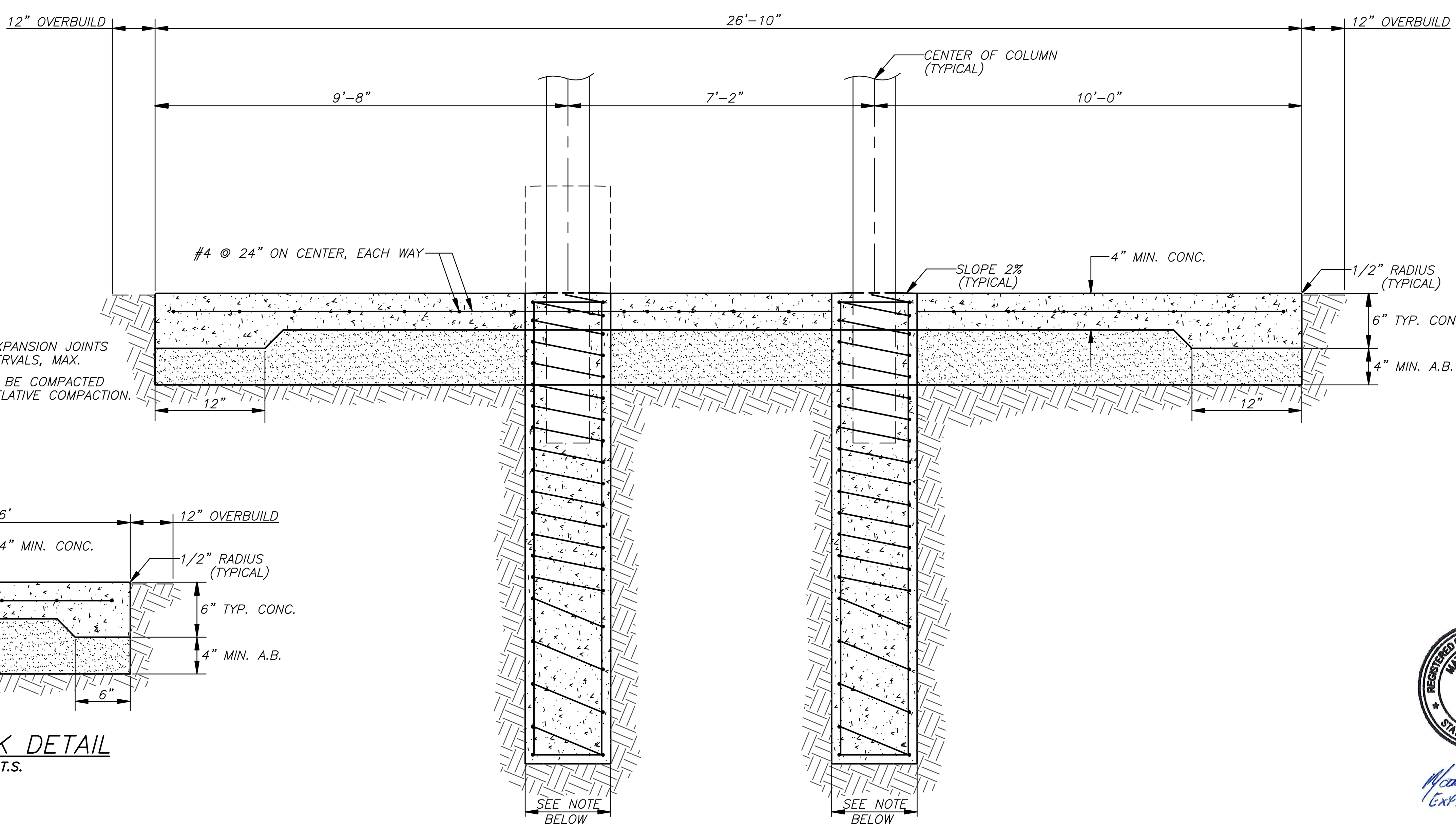


CONCRETE SCORE JOINT DETAIL

N.T.S.

NEW CIVIL WORK LEGEND

1. INSTALL NEW 4" THICK CONCRETE SLAB (26'-10" x 124'-0"), PER DETAIL HEREON. SEE STRUCTURAL PLANS FOR SPECIFIC COLUMN DETAILS AND CONSTRUCTION SPECIFICATIONS.
2. SEE ARCHITECT PLANS FOR LAYOUT OF STRUCTURE COLUMNS, AND SEE STRUCTURAL PLANS FOR DETAILS.
3. CONSTRUCT VERTICAL CONCRETE SCORE LINES AND EXPANSION JOINTS WHERE SHOWN AS SHOWN ON THESE PLANS, USING THE TYPICAL DIMENSIONS SHOWN. SEE DETAILS HEREON FOR CONSTRUCTION DETAILS.
4. CONSTRUCT HORIZONTAL CONCRETE EXPANSION JOINTS WHERE SHOWN ON THESE PLANS, USING TYPICAL DIMENSIONS SHOWN. SEE DETAIL HEREON FOR CONSTRUCTION DETAILS.
5. REINSTALL EXISTING 4' HIGH CHAINLINK FENCE APPROXIMATELY 6" OFF OF NEW CONCRETE SLAB, AS SHOWN.
6. LIMITS OF GROUND DISTURBANCE AND NEW GRADING. CONTRACTOR TO LOCATE EXISTING IRRIGATION LINES PRIOR TO EXCAVATION.
7. INSTALL NEW 4" THICK CONCRETE WALKWAY AS SHOWN. SEE DETAIL HEREON. SEE CONFORM DETAIL HEREON FOR ADJOINING NEW WALKWAY TO EXISTING CONCRETE.
8. CONSTRUCT NEW SCORE LINES AT 4' INTERVALS, AND AS SHOWN AT THE ANGLE POINT. SEE DETAIL HEREON.
9. CONSTRUCT NEW EXPANSION JOINTS AT 16' INTERVALS, AS SHOWN. SEE DETAIL HEREON.
10. CONTRACTOR TO ADJUST RIM OF SANITARY SEWER MANHOLE AS NECESSARY TO BE FLUSH WITH CONCRETE SLAB SURFACE ELEVATION.
11. CONTRACTOR TO LOCATE ALL OF THE EXISTING IRRIGATION LINES PRIOR TO DEMOLITION OR EXCAVATION, AND REALIGN ALL IRRIGATION IMPACTED BY NEW CONSTRUCTION. CONTRACTOR TO VERIFY THE LOCATION OF ALL EXISTING IRRIGATION IMPROVEMENTS PRIOR TO CONSTRUCTION.
12. CONTRACTOR TO REMOVE A PORTION OF THE EXISTING 4' HIGH CHAINLINK FENCE AND RELOCATE AS SHOWN. SEE NOTE 5. SEE LANDSCAPE OR ARCHITECT PLANS FOR FENCE AND GATE DETAILS AS NEEDED.
13. CONTRACTOR TO PROTECT ALL EXISTING IMPROVEMENTS AND UTILITIES WITHIN THE VICINITY OF NEW CONSTRUCTION. ALL DAMAGED EXISTING IMPROVEMENTS OR UTILITIES SHALL BE REPLACED BY THE CONTRACTOR.
14. EXISTING SANITARY SEWER ALIGNMENT SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO DRILLING FOR COLUMN CONSTRUCTION NEAR THE EXISTING SEWER LINE.
15. CONTRACTOR SHALL PROTECT EXISTING CONCRETE WALK ADJACENT TO NEW CONSTRUCTION.
16. CONTRACTOR TO PROTECT ALL EXISTING TREES NEAR GRADING LIMITS, AND AVOID ANY EXCAVATION UNDER THE EXISTING TREE DRIPLINES.
17. CONTRACTOR TO PROTECT ALL EXISTING LANDSCAPING AND VEGETATION ADJACENT TO GRADING LIMITS OF WORK. ALL DAMAGED EXISTING LANDSCAPING OR IRRIGATION SHAL BE REPLACED BY THE CONTRACTOR AT CONTRACTORS EXPENSE.

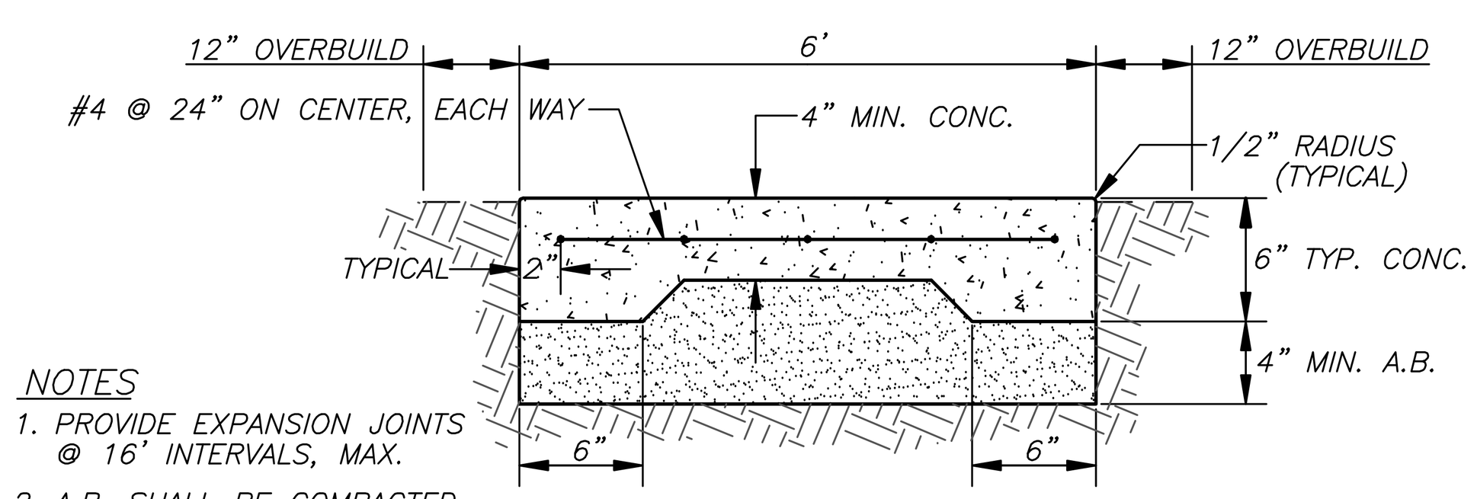


NOTES
1. PROVIDE EXPANSION JOINTS @ 24' INTERVALS, MAX.
2. A.B. SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.

CONCRETE SLAB DETAIL

N.T.S.

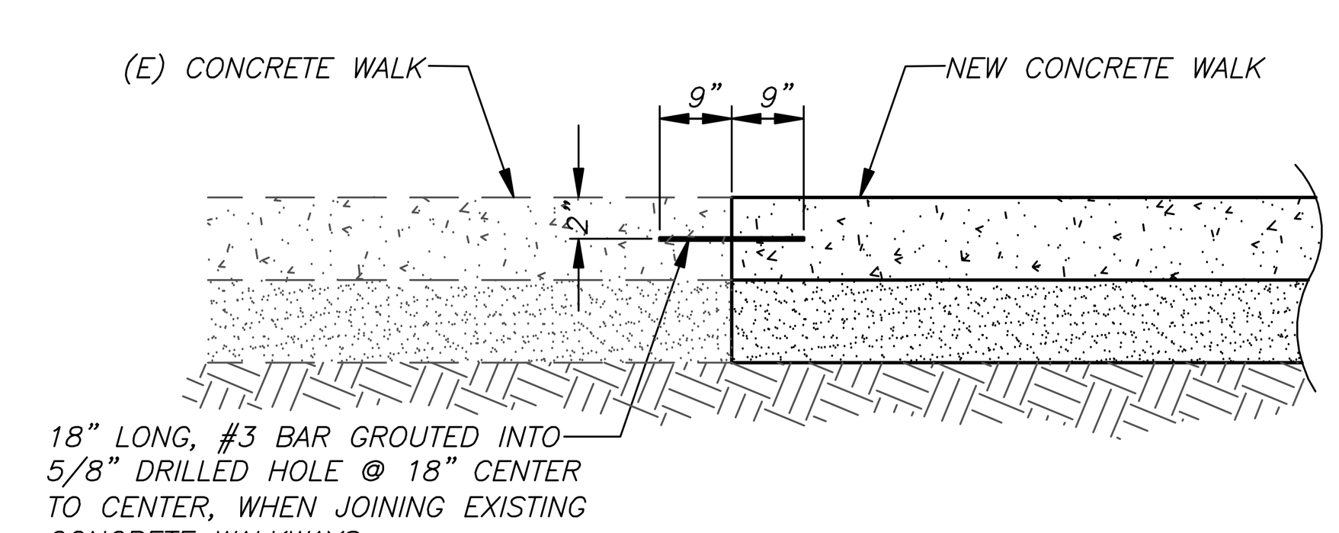
NOTE: SEE STRUCTURAL ENGINEER DESIGN FOR DETAILS AND SPECIFICATIONS FOR COLUMN AND PIER DESIGN.



NOTES
1. PROVIDE EXPANSION JOINTS @ 16' INTERVALS, MAX.
2. A.B. SHALL BE COMPACTED TO 90% RELATIVE COMPACTION.

6' WALK DETAIL

N.T.S.



WALK CONFORM TO EXISTING DETAIL

N.T.S.

REGISTERED PROFESSIONAL ENGINEER MATTHEW L. REI C39863 CIVIL STATE OF CALIFORNIA

Exp. 12/31/21

CIVIL ABBREVIATIONS & LEGEND

C	CONCRETE ELEVATION
CONC.	EXISTING CONCRETE
(E)	EXISTING
F	EXISTING FENCE
GB	GRADE BREAK
GR	EXISTING GROUND ELEVATION
OHE	OVERHEAD ELECTRIC LINES
P	EXISTING PAVEMENT ELEVATION
SD	EXISTING STORM DRAIN
SS	EXISTING SANITARY SEWER
T	EXISTING TREE
TYP.	TYPICAL

- EXISTING CONCRETE
- NEW CONCRETE IMPROVEMENTS
- EXISTING ASPHALT PAVING
- NEW GRADING LIMITS
- EXISTING TREES
- RELOCATED 4' HIGH CHAINLINK FENCE
- GRADE BREAK & DAYLIGHT LIMITS

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue, Mill Valley, 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

KISTER, SAVIO & REI, INC.
LAND SURVEYORS & CIVIL ENGINEERS
825 SAN PABLO AVENUE, PINOLE, CA 94564
PHONE: 510-222-4020 FAX: 510-222-3718
EMAIL: INFO@KSRINC.NET
JOB # 20173 DWG. # 0-1458
DATE: 3/4/21

AGENCY APPROVAL

Architect/Engineer Of Record:

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel ¦ 510.446.2211 fax

HY Architects Project number:

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
GRADING & DRAINAGE PLAN

Client Project Number:

Scale:	1" = 10'-0"
Drawn By:	RBJr
Checked By:	M.R.
Issue Date:	2-3-2021
Revit Version:	2019

Sheet
C1.1
Sheet of

SECTION 31 20 00

EARTHWORK

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes (but Is Not Necessarily Limited to):
1. Excavations, fill, and finish grading.
2. Removal and legal disposal off the site of all debris, rubbish, and other materials resulting from earthwork operations.
3. Compaction of fill.
4. Graded Rock Base.

1.2 SYSTEM DESCRIPTION

A. Design Requirements:
1. Grades and elevations are established with reference to benchmarks referenced on the Drawings.
2. Maintain engineering markers such as monuments, benchmarks, and location stakes.

B. Performance Requirements:
1. Excavations and finished grades shall not exceed 1/10-foot variation from dimensions and elevations shown or noted, unless otherwise approved by Owner's Representative.
2. Grading under pavements shall be graded within tolerance of 0 to -1/10 foot.

1.3 DEFINITIONS

A. Native Material: That obtained from required on site excavation.

B. Import Material: Hauled in from off-site borrow areas.

C. Relative Compaction: In-place dry density of soil expressed as percentage of maximum dry density of same material, as determined by laboratory test procedure ASTM D-1557.

1.4 QUALITY ASSURANCE

A. The following reference is hereby made part of this Specification and all work of this Section shall conform to the requirements therein, except as herein modified.
1. "Standard Specifications," State of California, Department of Transportation (CALTRANS), current edition; hereinafter called Standard Specifications. Delete all references to statistical testing and measurement and payment.
2. In case of conflict between Standard Specifications and this Specification, this Specification governs.

B. California Code of Regulations (C.C.R.), Title 24.

C. Work shall comply with rules and regulations of local and state agencies having jurisdiction.

D. State and local code requirements shall control disposal of debris.

E. Geotechnical Report: GEOTECHNICAL EVALUATION AND GEOLOGIC HAZARD ASSESSMENT, Proposed Shade Structures, Tamalpais Valley Elementary School, 350 Bell Lane, Mill Valley, California, dated January 8, 2021, performed by Ninyo & Moore.
1. The accuracy, sufficiency, and competency of the Geotechnical Study are not ratified by the Architect and remain the sole responsibility of the Geotechnical Engineer.
2. This report is available at the offices of the Architect.
3. Unless otherwise specified or indicated on the drawings, it is the intent that all work shall be done in accordance with the applicable provisions of this report.

1.5 PROJECT CONDITIONS

A. Environmental Requirements:
1. When precipitation necessitates interrupting filling and grading operations, prepare areas by compaction of surface and grading to avoid collection of water.
2. Provide adequate temporary drainage and other acceptable measures to prevent erosion.
3. After interruption, reestablish compaction specified in last layer before resuming work.

B. Locate active utilities traversing site, and protect them from damage.

C. Tree Protection:
1. Contractor shall exercise the utmost caution in working near existing trees & vegetation to remain, so as not to damage them.

PART 2 - PRODUCTS

2.1 GENERAL

A. Fill materials shall be reviewed and found acceptable by the Owner's Representative.

2.2 AGGREGATE BASE MATERIALS

A. Aggregate Base: Crushed aggregate, R-78 minimum, 3/4 inch maximum, conforming to Caltrans Standard Specification Section 26-1.02A, Class 2; free from vegetable matter and other deleterious substances, and shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base.

2.3 FILL

A. Utilize native soil material excavated from the site. Remove all debris, sticks, trash, vegetative matter and rocks greater than 8-inches in diameter before placement.

B. Engineered Fill Materials
1. Import fill or on-site fill that satisfies these requirements shall be a granular soil or soil-rock mixture which is free of organic matter (less than 2% by weight) or other deleterious substances. Fill shall meet the following requirements: Not contain rocks or lumps over 3" in greatest dimension, and should not contain more than 15 percent by weight larger than 2-1/2" and have a Plasticity Index of less than 20 and a Liquid Limit of less than 40. All Engineered Fill Materials shall be approved by the Owner's Representative.
2. 3/4-inch crushed stone.

2.4 WATER

A. Clean and free from deleterious amounts of acids, alkalis, salts, and organic matter.

PART 3 - EXECUTION

3.1 GENERAL

A. Prior to commencement of earthwork, become thoroughly familiar with site conditions.

B. When discrepancies are found, immediately notify the Owner's Representative with a follow-up in writing, indicating the nature and extent of differing conditions.

C. Whenever acceptance of the Owner's Representative is required by these Specifications, notify the Owner's Representative at least twenty-four hours prior to commencing any phase of earthwork.
1. No phase of work shall proceed until prior phase has been accepted by the Owner's Representative.
2. Work shall not be covered up or continued until acceptance of the Owner's Representative has been obtained.

D. Field Tests:
1. Location and frequency of field density tests shall be determined by the Owner's Representative.
2. Results of test and compliance with these Specifications shall be basis for determining satisfactory completion of work.

E. Compacting:
1. Compact by power tamping, rolling, or combinations thereof as accepted by the Owner's Representative.
a. Where impractical to use rollers in close proximity to adjacent construction, trees, etc., compact by mechanical tamping.

b. Scarify and recompact any layer not attaining compaction until required density is obtained.
2. Compaction by flooding, ponding, or jetting will not be permitted.

3.2 SITE PREPARATION

A. Cleaning:
1. Remove from area of designated project earthwork all obstructions, concrete and other matter determined to be deleterious.
2. Removed material shall become property of the Contractor and shall be removed from site.
3. Existing trees and shrubs to remain: trees, shrubs and vegetation damaged during construction shall be replaced without additional expense to the owner.

B. Stripping:
1. Where vegetation exists, the site shall be stripped to a depth of 1 to 3 inches or to such greater depth as the Owner's Representative in the field may consider as being advisable to remove all surface vegetation and organic-laden topsoil.
2. Stripped topsoil shall be stockpiled clear of construction area for use in landscaped areas at a location as designated by the Owner's Representative.
a. Take reasonable care to prevent topsoil from being mixed with subsoil.

3.3 SITE EXCAVATION

A. Perform all excavations to lines and grades and within the tolerance specified on the Drawings or as directed in the field as required to accomplish the work.

B. Remove and replace subgrade materials designated by the Owner's Representative.

3.4 PREPARATION OF SUBGRADE

A. Following excavation, exposed subgrade shall be scarified to depth of at least 12-inches, moisture conditioned, and recompacted to at least 90 percent relative compaction.

B. In pavement areas exposed subgrade shall be scarified to depth of at least 12-inches, moisture conditioned, and recompacted to at least 95 percent relative compaction.

3.5 FILL AND COMPACTION

A. General Requirements:
1. Do not place fill or backfill until rubbish and deleterious materials have been removed and areas have been approved by the Owner's Representative.

B. Place and compact materials in continuous layers not exceeding 8-inches compacted depth, and shall be compacted per Table 3, Page 14, of the Project

Geotechnical Report, except as otherwise recommended by the District's Representative.

3.6 TRENCHING

A. Trenches of open vertical construction shall have sufficient width to provide free working space at both sides of pipe as required for caulking, joining, backfilling, and compacting.

B. Where invert elevations are not shown, trench to sufficient depth to give minimum of 18 inches of fill above top of exterior pipe measured from adjoining finish grade.

C. Where trench excavation is inadvertently carried below proper elevations, backfill with specified sand or gravel and compact to provide a firm and unyielding subgrade and/or foundation to approval of Owner's Representative and at no additional cost to the Owner.

3.7 FOUNDATION FOR PIPES

A. Grade trench bottom to provide smooth, firm, and stable foundation at every point throughout length of pipe.

B. Place pipe barrel on minimum of 6 inches of well graded sand.

C. Remove soft, unstable materials encountered at surface where cohesionless material is to be placed, and replace with material approve by the Geotechnical Engineer/Owner's Representative.
1. Excavate to sufficient depth to develop firm foundation for pipe.
2. If in need for such over excavation has been occasioned by act or failure to act on part of the Contractor, make replacements at no additional cost to the Owner.

D. Recess bottom of bedding at pipe joints as required to relieve bell of pipe of all load and to ensure continuous bearing of pipe barrel on firm foundation.

E. Accurately shape subgrade and fit bottom of pipe to excavation.
1. Use drag template conforming to outer surface of pipe if other methods do not produce satisfactory results.

3.8 BEDDING FOR PIPES

A. Place cohesionless material specified above in trench simultaneously on each side of pipe for full width of trench.
1. Densify bedding material after placing by thoroughly saturating with water and vibrating it with bedding equipment and concrete-vibrator stinger at maximum intervals of 2 feet along both sides of pipe to provide firm bedding support on underside of pipe and fittings for full length of pipe.
2. Place additional lifts as required to extend bedding material 12 inches above top of outside diameter of pipe barrel.

B. Other bedding procedures and materials may be used if prior written approval has been obtained from the Owner's Representative.

3.9 BACKFILL FOR PIPES

A. After pipe has been bedded and covered, spread earth fill in uniform lifts of not more than 8 inches in uncompacted thickness; and then compact as specified below.

B. Repeat spreading and compacting procedure until adjacent grade level is attained.

C. Do not compact by ponding or jetting.

D. After pipe has been properly bedded and covered, fill remaining portion of trench with cohesionless material or other material approved by the District's Representative and densify to 90 percent relative compaction.

E. Backfill for trenches in pavement areas should consist of non-expansive granular fill.

3.10 GRADING

A. Finish-grade building pad to elevations indicated on the Drawings or otherwise required for proper completion of the Work.

B. Grade to at least a tolerance of +/-0.05 foot.

3.11 FIELD QUALITY CONTROL

A. Soil Compaction Tests:
1. Maximum dry-density determination shall conform with ASTM D-1557.
2. Field density testing shall conform with ASTM D-556 (sand-cone method) or ASTM D-2922 (nuclear-gauge method).

B. Number and location of tests shall be at option of the District's Representative.

3.12 CLEANING

A. Remove debris and surplus materials from site upon completion of the Work, and dispose of in legal manner.

END OF SECTION

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue, Mill Valley, 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

KISTER, SAVIO & REI, INC.
LAND SURVEYORS & CIVIL ENGINEERS
825 SAN PABLO AVENUE, PINOLE, CA 94564
PHONE: 510-222-4020 FAX: 510-222-3718
EMAIL: INFO@KSRINC.NET
JOB # 20173 DWG. # 0-1458
DATE: 3/4/21

AGENCY APPROVAL

Architect/Engineer Of Record:_____

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number:

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
SPECIFICATIONS EARTHWORK

REGISTERED PROFESSIONAL ENGINEER MATTHEW L. REI C 39863 CIVIL STATE OF CALIFORNIA
EXP. 12/31/21

Client Project Number:

Scale:	1" = 10'-0"
Drawn By:	RBJr
Checked By:	M.R.
Issue Date:	2-3-2021
Revit Version:	2019

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GRAPHIC SCALES: 1/16" = 1'-0" | 1/8" = 1'-0" | 1/4" = 1'-0" | 1/2" = 1'-0" | 3/4" = 1'-0" | 1" = 1'-0" | 1 1/2" = 1'-0" | 3" = 1'-0"

IF THIS SHEET IS NOT 30"x42" , IT IS A REDUCED PRINT SCALE ACCORDINGLY

SECTION 32 13 00

SITE CONCRETE

PART 1 - GENERAL

1.1 SUMMARY

A. Provide concrete work as shown and specified on the Civil Drawings. The work includes:

1. Final subgrade preparation and paving base.
2. Concrete walks, paving and curbing.

1.2 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General Sections, apply to this Section.

1.3 RELATED WORK

A. Section 31 20 00 - Earthwork

1.4 REFERENCES AND STANDARDS

A. Reference Standards apply to this Section and shall be the most current edition of the following:
1. American Concrete Institute (ACI) 211.1 "Recommended Practice for Selecting Proportions for Normal Concrete."
2. ACI 301 "Specifications for Structural Concrete for Buildings."
3. ACI 302.1R "Guide for Concrete Floor and Slab Construction."
4. ACI 304 "Recommended Practice for Measuring, Mixing and Placing Concrete."
5. ACI 305 "Recommended Practice for Hot Weather Concreting."
6. ACI 306 "Recommended Practice for Cold Weather Concreting."
7. ACI 308 "Recommended Practice for Curing Concrete."
8. ACI Committee 309 "Recommended Practice for Consolidation of Concrete."
9. ACI 318 "Building Code Requirements for Reinforced Concrete."
10. American Society for Testing and Materials (ASTM) C94 "Specifications for Ready Mix Concrete."
11. ASTM Specifications referenced for materials specified herein.
12. Cellular Concrete Association Guide Specification.

1.5 QUALITY ASSURANCE

A. All site concrete work shall comply with these specifications and all applicable sections of the above named References and Standards.

B. Design Criteria:

1. Concrete: ACI 301, Chapter 3.
2. Formwork Design: The contractor shall assume all responsibility for the safety of the formwork and shall provide all necessary design, construction, materials and maintenance to produce the required concrete work safely.

C. Testing: Performed by a qualified independent testing laboratory selected and paid for by the Owner. The cost of re-testing rejected work shall be deducted from the amount due the Contractor for work under this section.

D. Record of Work: Maintain field records of time, date of placing, curing, and removal of forms of concrete in each portion of work. Such record shall be available to the Architect for examination at any time.

E. Sample Panels: Before installing concrete work, provide sample panels, of all specified finishes, minimum 3 feet x 3 feet, using specified materials. Show color, texture, pattern, edging, and joint treatments. Correct and rebuild sample panels until Architect's acceptance of the work. Retain panels during construction as a standard for completed concrete paving work.

F. Do not change source or brands of cement and aggregate materials during the course of the work.

1.6 SUBMITTALS

A. Mix Designs: Submit concrete mix designs for each required concrete type. Obtain the Architect's written approval before placing concrete.

B. Reinforcement Shop Drawings: Indicate bar sizes, spacing, locations and quantities of reinforcing steel and wire fabric, bending and cutting schedules and supporting and spacing devices.

C. Product data:

1. Submit complete materials list of items proposed for the work. Identify materials source.
2. Submit admixture, curing compound, retarder, and accessory item product data.
3. Submit material certificates for aggregates, reinforcing, joint fillers and sealants.

D. Submit concrete delivery tickets. Show the following:

1. Batch number.
2. Mix by class or sack content with maximum size aggregate.
3. Admixtures.
4. Air content.
5. Slump.
6. Time of loading.

E. Submit concrete test reports.

F. Sealants: Submit samples and test data demonstrating that the proposed sealants will adhere to the surfaces to which they will be applied.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Reinforcing: Unload and store on timber skids and keep free of mud.

B. Concrete

1. Hauling Time: Discharge all concrete transmitted in a truck mixer, agitator or other transportation device within 1 ½ hours, or 300 revolutions of the drum after mixing water has been added, whichever is greater.

C. Deliver curing materials, admixtures, and retarders in manufacturer's standard unopened containers with labels legible and intact. Store and protect from freezing and damage.

1.8 PROJECT CONDITIONS

A. Work notification: Notify Architect at least 24 hours prior to installation of concrete.

B. Establish and maintain required lines and grade elevations. Refer to notes on the grading plans and Section 31 20 00 Earthwork.

C. Environmental Requirements

1. Cold Weather Placement: When depositing concrete when the mean daily temperatures are below 40 degrees F., comply with recommendations in ACI 306. Maintain concrete temperature at a minimum of 55 degrees F. for sections having a minimum dimension of less than 12 inches, or 50 degrees F. for sections having a minimum dimension of 12 inches or greater, for not less than 72 hours after depositing. The specified non-chloride accelerator or high early strength Type III cement may be used when approved by the Architect. Do not place concrete on days when the temperature at 9:00 a.m. is below 30 degrees F.
2. Hot Weather Placement: When depositing concrete in hot weather, follow the recommendations in ACI 305. The temperature of concrete at time of placement shall not exceed 90 degrees F. Protect to prevent rapid drying.

D. Do not install concrete work over wet, saturated, muddy, or frozen subgrade.

E. Protect adjacent work.

F. Provide temporary barricades and warning lights as required for protection of project work and public safety.

1.9 GEOTECHNICAL ENGINEER

A. The Engineer/Owner's Representative will inspect subgrade and aggregate base prior to installation of concrete work.

1.10 LAYOUT OF THE WORK

A. A licensed surveyor or registered civil engineer shall lay out and establish all lines, levels, grades and positions of all parts of the work.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Portland cement: ASTM C150, Type II, natural color; ACI 301 2.1.

B. Aggregate: Provide ASTM C33 normal weight aggregates, 1" maximum size, clean, uncoated crushed stone or gravel coarse aggregate free of materials which cause staining or rust spots; fine aggregate shall be clean natural sand; ACI 301 2.4

C. Water: Clean, fresh, and potable.

D. Air-entraining admixture: ASTM C260; ACI 2.2; add as required in ACI 301 3.4.1.

E. Water-reducing admixture: ASTM C494; ACI 301 2.2; Eucon WR-75, Master Builders Pozzolith 200N, Protex PDA or equivalent.

F. The concrete shall not contain calcium chloride or admixtures containing more than 0.05% chloride ions or thiocyanates.

2.2 MIXES

A. Provide ASTM C94 ready-mixed concrete. Batch mixing at site not acceptable; ACI 301 3.8.

1. Strength:
   a. Pedestrian Concrete; ACI 301 3.2.
      1. Exposure Class S0 – 3,000 psi minimum at 28 days
      2. Exposure Class S1 – 4,000 psi minimum at 28 days
      3. Exposure Class S2/S3 – 4,500 psi minimum at 28 days
   b. Vehicular Concrete; ACI 301 3.2.
      1. Exposure Class S0 – 3,500 psi minimum at 28 days
      2. Exposure Class S1 – 4,000 psi minimum at 28 days
      3. Exposure Class S2/S3 – 4,500 psi minimum at 28 days
2. Slump range: 2" to 4" maximum; ACI 301 3.5. (3" slump for integral color concrete paving)
3. Durability: ACI 301 3.4.
4. Integral concrete colorant: Refer to Schedule of Landscape Construction Finishes on the drawings.

B. Provide an approved water-reducing admixture in all concrete.

C. Provide an air-entraining admixture in all concrete. Air content 5% to 7%.

D. Indicate water added to mix at job site on each delivery ticket. Show quantity of water added. Site water tempered mixes exceeding specified slump range will be rejected as not complying with specification requirements.

2.3 REINFORCING STEEL (ACI 301 5.2)

A. Use 60,000 psi yield strength for #5 and larger bars; 40,000 psi yield strength for #4 and smaller bars; conform to ASTM 615 plus (S1), Deformed Billet Steel Bars.

2.4 ACCESSORIES

A. Aggregate Base Course: Untreated base courses shall be installed under paving where indicated in the Drawings. Material shall be 3/4 inch maximum size broken stone or crushed gravel conforming to the requirements of Class 2 aggregate base of Section 26-1 of the State Specifications.

B. Joint Filler: ASTM D1752 Type I, premolded non-extruding neoprene sponge rubber, thickness indicated; with removable polystyrene or PVC strip mechanically attached to the top edge.

C. Expansion Joint Dowels: No. 4 smooth steel dowels; cover one end with capped cardboard dowel sleeve.

D. Curing Compound: ASTM C309, non-yellowing, non-staining liquid membrane-forming type containing a fugitive dye. Chlorinated rubber compounds not acceptable for exterior use.

E. Joint Sealants: Two-component polysulfide or polyurethane elastomeric type complying with FS TT-S-00227, self-leveling, designed for foot traffic.

F. Cleavage Membrane/Vapor Barrier: 10 mil; black, polyvinyl chloride sheet; fungus resistant.

G. Form Release Agent: Non-staining chemical form release agent free of oils, waxes, and other materials harmful to concrete.

H. Embedded Abrasive Strips: WP Spectra Safety Tread, WP1A, 3/8" thick x 3/4" wide; with sure hold anchor.

I. Prefabricated Drainage Composite: Three dimensional waffle pattern, high impact polymeric sheet with geotextile backing sheet. Compressive strength 15,000psi; Miradrain 6000 or equal.

PART 3 - EXECUTION

3.1 INSPECTION

A. Examine the substrate under which the concrete work is to be installed. Notify the Architect, in writing, of conditions detrimental to the proper and timely completion of the work. Do not proceed with the work until unsatisfactory conditions have been corrected.

B. All foundation bearing surfaces shall be inspected and approved by the Geotechnical Engineer prior to start of formwork.

C. All formwork and reinforcing shall be reviewed and approved by the Architect prior to placement of concrete.

3.2 LINES AND LEVELS

A. Finished grades shown on Plans are given in feet and decimals of feet and are to be the top of all graded or paved surfaces. Slope uniformly between given spot elevations unless otherwise indicated.

B. Surfaces shall be true to within 1/8 inch when tested in any direction with a 10 foot straightedge. There shall be no pools of water standing on the pavement after a rain.

C. Transition between changes in vertical gradient of walks and paving shall be smooth and gradual with no abrupt or sharp changes.

D. Horizontal curves and radii shall be laid out tangent to adjacent straight lines or adjacent compound curves. Curves shall be smooth and flowing.

E. Horizontal layout shall not vary more than 1 inch from dimensions indicated on the Drawings. Make minor field adjustments in the layout as necessary to make radii tangent and curves smooth and flowing as indicated on the Drawings.

3.3 PREPARATION

A. Preparation of Subgrade: specified in Section 31 20 00 - Earthwork.

B. Aggregate Base

1. Install under paving where indicated on the Drawings.
2. Do not install until subgrade has been approved by the Geotechnical Engineer/Owner's Representative.
3. Spread the aggregate base on the prepared subgrade to such a depth that when thoroughly compacted it will conform to the grades and dimensions shown on the Drawings. Spread and compact in accordance with Section 26-1 of the State Specifications. The finished surface shall be smooth, hard, and true to line and grade.

C. Remove loose material and debris from base surface before placing concrete.

3.4 FORMWORK AND REINFORCING

A. General: Conform with ACI 301, Chapter 4.

B. Install, align, and level forms. Stake and brace forms in place. Maintain following grade and alignment tolerances:

1. Top of form: Maximum 1/8" in 10'-0".
2. Vertical face: Maximum 1/4" in 10'-0".

C. Construct formwork carefully so that straight lines are perfectly tangent to radii, curves are smooth and flowing, and transitions between changes in vertical gradient of curbs, walls, walks and paving are smooth and gradual with no abrupt or sharp changes.

D. Coat form surfaces in contact with concrete with form release agent. Clean forms after each use and coat with form release agent as necessary to assure separation from concrete without damage.

E. Chamfer Strips: Where chamfered edges are indicated on the drawings, install wood chamfer strips in the forms; tooling of chamfers will not be allowed.

F. Locate, place, and support reinforcement as indicated on the Drawings.

1. Paving:
   a. Provide a single layer of welded wire fabric in all concrete slabs-on-grade, paving and walks unless otherwise indicated.
   b. Where indicated on the Drawings, provide reinforcing bars in concrete paving.
2. Provide reinforcing bars in walls, curbs, steps, and other locations indicated, adequately supported and secured to prevent displacement.

G. Install, set, and build-in work furnished under other specification sections. Provide adequate notification for installation of necessary items.

H. Install pipe sleeves for irrigation system furnished under Section 02810. Stake location of irrigation sleeves.

3.5 INSTALLATION

A. Concrete Placement: (ACI 301 5.5.3)

1. Comply with ACI 304 "Recommended Practice for Measuring, Mixing, Transporting, and Placing Concrete", and as specified.
2. Protect concrete from physical damage or reduced strength due to weather

extremes during mixing, placing, and curing. In cold weather comply with ACI 306, "Recommended Practice for Cold Weather Concreting". In hot weather comply with ACI 305, "Recommended Practice for Hot Weather Concreting."
3. Moisten base to provide a uniform dampened condition at the time concrete is placed. Verify manholes or other structures are at required finish elevation and alignment before placing concrete.
4. Place and spread concrete to the full depth of the forms. Use only square-end shovels or concrete rakes for hand-spreading and consolidating concrete. Exercise care during spreading and consolidating operations to prevent segregation of aggregate and dislocation of reinforcement.
5. Free fall shall not exceed eight (8) feet in walls and columns, or five (5) feet in other elements.
6. Place concrete in a continuous operation between expansion joints. Provide construction joints when sections cannot be placed continuously.
7. Place concrete in one course, monolithic construction, for the full width and depth of concrete work. Provide minimum 4 inch thick walks and paving, except as otherwise indicated.
8. Strike-off and bull-float concrete after consolidating. Level ridges and fill voids. Check surface with a 10'-0" straightedge. Fill depressions and refloat repaired areas. Darby the concrete surface to provide a smooth level surface ready for finishing.

3.6 JOINTS

A. Construction Joints: locate and install where indicated, or if not indicated, so as to not impair the strength and appearance of the structure.

1. Provide keyways at least 1-1/2 inch deep in joints in walls and between walls and footings.
2. Use preformed metal construction joints in paving and slabs.

B. Control Joints in retaining walls and seat walls: install vertical V-joints formed with 3/4" beveled wood chamfer strips spaced at 10 feet on center minimum, and at changes in direction. Align joints with adjacent paving joints and markings.

C. Expansion Joints: 1/2" wide max., typical

1. Scope: install expansion joints in the following locations, whether shown on the drawings or not:
   a. Concrete paving: minimum 20' O.C. and at all intersections.
   b. At vertical surfaces: install joints without dowels at all building walls and other vertical structures.
2. Hold joint filler straight, true to line and at proper level by stapling to 2X wood form; pour adjacent slabs separately.
3. Neatly tool edges of joint flush with removable strip.
4. Carefully remove the removable strip when concrete is sufficiently set.
5. Avoid spawling tooled joint edges; any damaged edges shall be repaired to

the satisfaction of the Architect.

D. Score Marks: Tool straight lines with neatly formed radius edges; conform with details shown on the Drawings.

3.7 FINISHES

A. Perform concrete finishing using mechanical or hand methods as required. Finishes shall match approved samples.

B. Upon completion of floating, and after bleed water has disappeared and concrete can sustain foot pressure with nominal indentation, cut concrete away from forms. Work edges with an edging tool. Round edges to 1/4" radius.

C. Steps: To Receive Broom Finish:

1. Neatly tool nosings as detailed on the Drawings.
2. Steel trowel to a smooth, hard finish.
3. Using a stiff broom, strike clean, crisp broom mark lengthwise along treads and risers.
4. Finish shall be uniform throughout in color and texture.
5. Finish of riser faces shall match finish of treads.

D. Paving to Receive Broom Finish:

1. For concrete slopes:
   a. </= 6% - Medium Broom Finish
   b. > 6% - Heavy Broom Finish
2. Screed and float paving to a smooth, even grade in accordance with the Drawings using overhead screeds where necessary to establish flow lines or grade breaks.
3. Steel trowel to a smooth, hard finish.
4. Using a stiff broom, strike clean, crisp broom marks across paving at right angles to the length of the ramp.
5. Finish shall be uniform throughout in color and texture.

E. Paving to Receive Light Sandblast Finish:

1. Screed and float paving to a smooth, even grade in accordance with the Drawings using overhead screeds where necessary to establish flow lines or grade breaks.
2. Steel trowel to a smooth, hard finish.
3. Lightly sandblast to remove surface laittence. Do not expose coarse aggregate.
4. Finish shall be uniform throughout in color and texture.

F. Curbing, Headers and Dividers:

1. Neatly tool edges as detailed on the Drawings.
2. Bring exposed surfaces to a hard, smooth steel trowel finish and then finish with a fine hair broom to produce a uniform crisp, light broom finish parallel to the length of headers and dividers.
3. Finish of curb faces shall match finish of tops..

G. Walls, Seatwalls and Curbwalls:

1. Lightly sandblast all exposed surfaces to remove cement latence and expose minor voids. Do not expose coarse aggregate.
2. Finish shall be uniform in texture and color.

3.8 SEALANTS

A. Work under this Section includes furnishing and installation of all sealants, backing rods, primers and associated work and materials in expansion joints in concrete work.

B. Prime joints and install per manufacturers printed instructions.

C. Hold sealant flush with paving surface.

D. Sealant shall be smooth with no voids or irregularities.

3.9 REPAIR OF SURFACE DEFECTS (ACI 301 5.3.7)

A. Patching of tie holes is required.

3.10 CURING (ACI 301 5.3.6)

A. Maintain concrete temperature as uniformly as possible, and protect from rapid atmospheric temperature changes.

B. Apply curing compound in accordance with manufacturer's printed instructions.

3.11 FIELD QUALITY CONTROL (ACI 301, Section 2.3.5)

A. Provide field quality control testing and inspection during concrete operations.

B. Contractor shall provide adequate notice, cooperate with, provide access to the work, obtain samples, and assist test agency and their representatives in execution of their function.

C. Testing:

1. Provide slump test on first load of concrete delivered each day and whenever requested due to changes in consistency or appearance of concrete.
2. Strength testing:

a. Provide 1 set of 5 test specimens for each 50 cu. yd. placed in any one day. Secure samples in accordance with ASTM C172 and mold specimens in accordance with ASTM C31.
b. Test 1 specimen at 7 days and 2 specimens at 28 days in accordance with ASTM C39.
c. Furnish copies of field records and test reports as follows:
2 copies to Architect
1 copy to Contractor
1 copy to Ready Mix Supplier

3. Record the exact location of the concrete in the work represented by each set of cylinders and show on test reports.
4. Provide an insulated moist box for protection of the test cylinders until shipped to the laboratory.

3.12 MISCELLANEOUS CONCRETE REQUIREMENTS

A. All other concrete work indicated on the drawings and/or required to complete all the work, shall be provided and installed, even though not specifically mentioned herein.

3.13 PROTECTION

A. Protect concrete work from damage due to construction and vehicular traffic until final acceptance. Exclude construction and vehicular traffic from concrete pavements for at least 14 days.

3.14 CLEANING

A. Perform cleaning during installation of the work and upon completion of the work.

B. Remove all bituminous materials, form release agents, curing compounds or other materials employed in the work which would prevent proper application of sealants, liquid water proofing or other specified treatments.

C. Remove from site all excess materials, debris, and equipment. Repair damage resulting from concrete operations.

D. Repair any damage done to adjacent work to the satisfaction of the Owner.

END OF SECTION

MILL VALLEY SCHOOL DISTRICT
411 Sycamore Avenue, Mill Valley, 94941
Tel: 415/389-7700 Fax: 415/389-7773

Revisions

Delta	Date	Revisions	By

KISTER, SAVIO & REI, INC.
LAND SURVEYORS & CIVIL ENGINEERS
825 SAN PABLO AVENUE, PINOLE, CA 94564
PHONE: 510-222-4020 FAX: 510-222-3718
EMAIL: INFO@KSRING.NET
JOB # 20173 DWG. # 0-1458
DATE: 3/4/21

AGENCY APPROVAL

HIBSER YAMAUCHI Architects, Inc.
300 – 27th Street
Oakland, CA 94612
510.446.2222 tel | 510.446.2211 fax

HY Architects Project number:

Facility
MILL VALLEY SCHOOL DISTRICT

Project
SHADE STRUCTURES AT TAMALPAIS VALLEY ELEMENTARY SCHOOL

Sheet Title
SPECIFICATIONS SITE CONCRETE

REGISTERED PROFESSIONAL ENGINEER MATTHEW L. REI C39863 CIVIL STATE OF CALIFORNIA
EXP. 12/31/21

Client Project Number:

Scale:	1" = 1'-0"	Sheet	C1.3
Drawn By:	RS.lr		
Checked By:	M.R.		
Issue Date:	2-3-2021		
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M BAR C VERSA-CANOPY

PC OWNERSHIP - STRUCTURAL STEEL CONTRACTOR

M BAR C CONSTRUCTION INC.

674 RANCHEROS DR
SAN MARCOS, CA. 92069

PHONE: (760) 744-4131
FAX: (760) 744-4449

LIC # 869960
B AND C51

POINT OF CONTACT: GREG JONES
GREGJ@MBARCONLINE.COM
(775) 787-8845

LEGAL INFORMATION

- USE OF THE PC WITHOUT WRITTEN CONSENT FROM M BAR C CONSTRUCTION, INC. IS STRICTLY PROHIBITED.
- ALL INFORMATION HEREIN IS PROPRIETARY INFORMATION AND UNDER THE OWNERSHIP OF M BAR C CONSTRUCTION, INC.

STANDARD NOTES FOR PC USE

- 4 S.T.E.L. ENGINEERING, INC. IS AVAILABLE TO BID THE GENERATION OF THE FULL DSA SUBMITTAL PACKAGE ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE (DPGRC) OR TO SUPPORT THE DPGRC AS THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD (SEOR).
  CONTACT DUSTIN ROSEPINK AT 4 S.T.E.L. ENGINEERING, INC FOR A PROPOSAL FOR SERVICES AT (949) 305-1150, DKRPINK@4STELENG.COM
- FOR CONSTRUCTION COST INFORMATION, CONTACT M BAR C CONSTRUCTION, INC.
- CUSTOM SIZES AND LOADING REQUIRE SUPPLEMENTARY SHOP DRAWINGS AND CALCULATIONS.

DSA OTC PLAN REVIEWER AND DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE NOTES

1. THE PC STRUCTURAL MEMBERS ARE DESIGNED TO THE FOLLOWING ASCE 7-10 SEISMIC CRITERIA: S_{DS} = 3.2, S_1 = 1.39, R = 1.25.
2. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO VERIFY SITE SPECIFIC DESIGN PARAMETERS COMPLY WITH DESIGN PARAMETERS FOR THE PC SHOWN ON SHEET S-2.
3. THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE IS RESPONSIBLE FOR VERIFYING SITE-SPECIFIC WIND PARAMETERS AT ANY AND ALL SITES WHERE THIS PC IS USED. THIS PC DESIGN IS BASED ON WIND SPEED 110 MPH FOR RISK CATEGORY II TYPE STRUCTURES UTILIZING EXPOSURE TYPE C PER ASCE 7-10. SEE DESIGN PARAMETER NOTE 1 ON SHEET S-2.
4. A SITE SPECIFIC GEOTECHNICAL REPORT SHALL BE SUBMITTED JUSTIFYING SOILS VALUES SELECTED IF GREATER THAN 100 PCF FOR LATERAL BEARING AND/OR 1,500 PSF FOR VERTICAL BEARING.
   SEE FOUNDATION NOTES ON SHEET S-3.
5. SITE SPECIFIC DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO SELECT SOILS CLASS FOR SITE SPECIFIC USE.
6. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.
7. DUSTIN ROSEPINK IS NOT ACTING AS SITE SPECIFIC SEOR UNLESS HE IS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR A SIGNED LETTER HAS BEEN SUBMITTED WITH DSA-1 FORM STATING HE ACCEPTS THE RESPONSIBILITY AS THE SEOR FOR THE SITE. REFER TO DSA IR A-18.
8. DUSTIN ROSEPINK WILL NOT SIGN ANY DSA FORMS (e.g. DSA-5, DSA-6, etc.), REVIEW OR APPROVE ANY SUBMITTALS (e.g. CONCRETE MIX DESIGNS, SHOP DRAWINGS, etc.) FOR THE SITE SPECIFIC PROJECT UNLESS HE IS ACTING AS THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE OR THE SITE SPECIFIC STRUCTURAL ENGINEER OF RECORD. REFER TO DSA IR A-18.
9. CUSTOM SIZES & LOADINGS REQUIRE SUPPLEMENTARY SHOP DRAWINGS & CALCULATIONS.

DESIGN PARAMETER CHECK LIST

1. VERIFY THE MAXIMUM WIND SPEED AT THE SITE DOES NOT EXCEED 110 MPH EXPOSURE C.
2. VERIFY THE MAXIMUM SEISMIC S_{DS} AT THE SITE DOES NOT EXCEED S_{DS} = 3.2.
3. VERIFY THE SITE SPECIFIC SNOW LOAD AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET OR EXCEED THE SITE SPECIFIC SNOW LOAD. THIS PC HAS OPTIONS FOR NO SNOW AND 20 PSF SNOW LOAD. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS PROVIDED THE PROPER SITE SPECIFIC VALUES FOR P_g, P_f, P_s, C_e, I, C_t.
4. REVIEW THE SITE SPECIFIC GEOTECHNICAL REPORT AND ENSURE ALL SITE SPECIFIC PC SELECTIONS MEET WITH THE GEOTECHNICAL REPORT REQUIREMENTS. IF NO GEOTECHNICAL REPORT IS SUPPLIED VERIFY SOILS CLASS V IS SELECTED.
   - SITES NOT LOCATED IN STATE OR LOCAL GEOHAZARD ZONES UTILIZING THIS PC WITH STRUCTURES NOT EXCEEDING 4,000 SQ FT DO NOT REQUIRE CGS APPROVAL OF THE GEOTECHNICAL REPORT. STRUCTURES MAY BE BROKEN UP INTO MULTIPLE 4,000 SQ FT STRUCTURES WITH SEISMIC BREAKS PER SEISMIC GAPS ON S-2.
5. VERIFY THE SITE SPECIFIC FOUNDATION LOCATIONS MEET WITH SOILS NOTE 8 ON S-3 FOR SET BACK FROM TOP OF SLOPES OR THAT THE GEOTECHNICAL REPORT HAS ALLOWED A SMALLER DISTANCE.
6. VERIFY THE SITE SPECIFIC PLANS PROVIDE THE APPROPRIATE OCCUPANCY AND OCCUPANCY LOAD FACTOR FOR THE SITE. SEE BUILDING DATA ON S-2 FOR SAMPLE ACCEPTABLE OCCUPANCIES AND OCCUPANCY LOAD FACTORS.
7. VERIFY THE SITE SPECIFIC PLANS UTILIZE A RISK CATEGORY II STRUCTURE. RISK CATEGORY II STRUCTURES SHALL NOT PROVIDE SHELTER FOR EMERGENCY VEHICLES OR EQUIPMENT; OR PROVIDE REQUIRED ACCESS TO, REQUIRED EGRESS FROM, OR SHARE A LIFE SAFETY COMPONENT WITH A RISK CATEGORY III OR IV STRUCTURE.
8. VERIFY SELECTION OF USE AND OCCUPANCY CLASSIFICATION PER CBC CHAPTER 3; OCCUPANT LOAD FACTOR PER CBC TABLE 1004.1.2; RISK CATEGORY PER CBC TABLE 1604A.5; TO BE COMPLETED BY DESIGN PROFESSIONAL AT TIME OF DSA OTC OR PROJECT DSA SUBMITTAL.
9. VERIFY APPROPRIATE SEISMIC SEPARATION PER SEISMIC GAPS ON S-2.
10. VERIFY THE SITE SPECIFIC DESIGN PROFESSIONAL HAS APPROPRIATELY ADDRESSED FIRE SEPARATION AND PROPERTY LINE SETBACKS.
11. VERIFY THE SITE SPECIFIC SOLAR PANEL LAYOUT IS PROVIDED WITH DIMENSIONS THAT DO NOT EXCEED THE PC MAXIMUMS. THE MAXIMUM DIMENSIONS SHALL BE TO THE OUTSIDE EDGES OF THE SOLAR PANEL OR THE STRUCTURAL STEEL, WHICH EVER IS GREATER.
12. VERIFY STEEL SELECTIONS HAVE BEEN PROPERLY COORDINATED WITH BEAM/COLUMN SCHEDULES. REFER TO 2/S-8 & 2/S-9.
13. VERIFY SITE SPECIFIC PURLIN CANTILEVERS HAVE BEEN PROPERLY COORDINATED WITH PURLIN SCHEDULES. REFER TO 1/S-8 & 1/S-9.
14. WET STAMPED & SIGNED COPIES OF PC PLANS ARE NOT REQUIRED FOR SITE SPECIFIC PC USE.

SHEET INDEX

10 ~~13~~ SHEETS

BID INFORMATION

THE STEEL STRUCTURES IN THIS PC ARE PROPRIETARY TO M BAR C CONSTRUCTION, INC. THE STEEL WORK SHALL NOT GO OUT TO BID.

PRE-CHECK (PC) DOCUMENT

CODE: 2016 CBC

A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

M BAR C CONSTRUCTION INC.
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREGJ@MBARCONLINE.COM
LIC # 869960
B AND C51
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

COVER SHEET

DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-1

1 OF 13 SHEETS

ABBREVIATIONS

&	AND
@	AT
℄	CENTER LINE
A.B.	ANCHOR BOLT
ACI	AMERICAN CONCRETE INSTITUTE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION
AISI	AMERICAN IRON AND STEEL INSTITUTE
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ASTM	AMERICAN SOCIETY FOR TESTING MATERIALS
AWS	AMERICAN WELDING SOCIETY
BLDG	BUILDING
BLK'G	BLOCKING
BM	BEAM
BOTT. OR (B)	BOTTOM
CBC	CALIFORNIA BUILDING CODE
CCD	CONSTRUCTION CHANGE DOCUMENT (DSA)
CCR	CALIFORNIA CODE OF REGULATIONS
CFS	COLD FORMED STEEL
C.J.	CONTROL JOINT
CJP	COMPLETE JOINT PENETRATION
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
COL.	COLUMN
CONC.	CONCRETE
CONT.	CONTINUOUS
CS	CFS C SECTION WITH FLANGE STIFFENING LIPS
DIA., ø	DIAMETER
DPGRC	DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE
DSA	DIVISION OF THE STATE ARCHITECT
DWG	DRAWING
(E)	EXISTING
EA.	EACH
E.F.	EACH FACE
E.W.	EACH WAY
EXT.	EXTERIOR
FDN	FOUNDATION
FIN.	FINISH
FLR	FLOOR
FLS	FIRE LIFE SAFETY (DSA)
F.O.C.	FACE OF CONCRETE
F.S.	FAR SIDE
FTG.	FOOTING
GA.	GAUGE
GALV.	GALVANIZED
H.S.B.	HIGH STRENGTH BOLT (ASTM A325 U.N.O.)
HORIZ.	HORIZONTAL
HT.	HEIGHT
IAMPO	INTERNATIONAL ASSOCIATION OF MECHANICAL AND PLUMBING OFFICIALS
ICC	INTERNATIONAL CODE COUNCIL
INT.	INTERIOR
IOR	INSPECTOR OF RECORD
IR	INTERPRETATION OF REGULATIONS (DSA)
JT	JOINT
LG.	LONG
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
M.B.	MACHINE BOLT (ASTM A307 U.N.O.)
MAX.	MAXIMUM
MFR.	MANUFACTURER
MIN.	MINIMUM
MISC.	MISCELLANEOUS
(N)	NEW
NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
NOM.	NOMINAL
N.S.	NEAR SIDE
NTS	NOT TO SCALE
O.C.	ON CENTER
OTC	OVER THE COUNTER (DSA)
O.H.	OPPOSITE HAND
℗ OR PL	PLATE
PJP	PARTIAL JOINT PENETRATION
PC	PRE-CHECK (DSA)
PT	PRESSURE TREATED
PV	PHOTOVOLTAIC
REINFT.	REINFORCEMENT
REQ'D	REQUIRED
SC	SLIP-CRITICAL JOINT PER ASTM SPECS
SCHED.	SCHEDULE
SEOR	STRUCTURAL ENGINEER OF RECORD
SHT'G	SHEATHING
SIM.	SIMILAR
S.M.S.	SHEET METAL SCREW
SQ.	SQUARE
SS	STAINLESS STEEL
ST	SNUG-TIGHTENED JOINT PER ASTM SPECS
STD	STANDARD
(T)	TOP
T&B	TOP AND BOTTOM
T.O.C.	TOP OF CONCRETE
T.O.S.	TOP OF STEEL
TYP.	TYPICAL
U.N.O.	UNLESS NOTED OTHERWISE
VERT.	VERTICAL
W/-	WITH
W/O	WITHOUT
WHS	WELDED HEADED STUD (ASTM A108 U.N.O.)
W.P.	WORK POINT
WT.	WEIGHT
WTS	WELDED THREADED STUD (ASTM A108 U.N.O.)

GENERAL NOTES

1. ALL WORK SHALL CONFORM TO TITLE 24, CALIFORNIA CODE OF REGULATIONS (CCR)
2. CHANGES TO THE APPROVED DRAWINGS AND SPECIFICATIONS SHALL BE MADE BY ADDENDA OR CONSTRUCTION CHANGE DOCUMENTS APPROVED BY THE DIVISION OF THE STATE ARCHITECT, 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 THE DIVISION OF THE STATE ARCHITECT SHALL PROVIDE CONTINUOUS INSPECTION OF THE WORK. THE DUTIES OF THE INSPECTOR ARE DEFINED IN SECTION 4-342, CALIFORNIA BUILDING STANDARDS ADMINISTRATIVE CODE (PART 1, TITLE 24, CCR).
4. A 'DSA CERTIFIED' INSPECTOR WITH CLASS 2 CERTIFICATION IS REQUIRED FOR THIS PROJECT.
5. A DSA ACCEPTED TESTING LABORATORY DIRECTLY EMPLOYED BY THE SCHOOL BOARD SHALL CONDUCT ALL THE REQUIRED TESTS AND INSPECTIONS FOR THE PROJECT.
6. GRADING PLANS, DRAINAGE IMPROVEMENTS, ROAD AND ACCESS REQUIREMENTS AND ENVIRONMENTAL HEALTH CONSIDERATIONS SHALL COMPLY WITH ALL LOCAL ORDINANCES.
7. IF THE PROJECT IS DIVIDED INTO INCREMENTS: THE SCOPE OF WORK FOR EACH INCREMENT MUST BE CLEARLY SPECIFIED ON THE TITLE SHEET OF ALL INCREMENTS SUBMITTED.

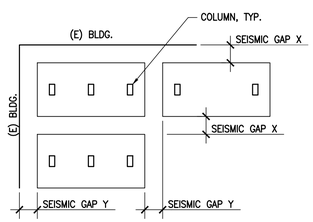
CONSTRUCTION OPTIONS

* ALL CONSTRUCTION OPTIONS INCLUDE OPTIONS FOR CONCRETE DRILLED PIERS AND/OR SPREAD FOOTINGS.

1. 14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW
2. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-9" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
3. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-0" MAX COLUMN HEIGHT, 0 psf GROUND SNOW~~
4. ~~14'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 17'-5" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
5. ~~18'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-6" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~
6. ~~20'-0" MAX WIDTH, 3:12 MAX ROOF SLOPE, 16'-9" MAX COLUMN HEIGHT, 20 psf GROUND SNOW~~

SEISMIC GAPS

OPTION	MAX COLUMN HEIGHT	GAP X	GAP Y
VC14	17'-0"	2½"	7"
VC18	17'-9"	3½"	9½"
VC20	17'-0"	2½"	7"
VC140	17'-5"	3½"	9"
VC180	16'-6"	3"	8½"
VC200	16'-9"	3"	8"



NOTE
1. SEISMIC GAPS LISTED ARE THE MINIMUM GAPS BETWEEN ANY TWO STRUCTURES (I.E. CANOPIES, BUILDINGS) AND DO NOT NEED TO BE COMBINED OR DOUBLED.
2. DIMENSIONS, QUANTITIES, AND LOCATIONS OF STRUCTURES AND COLUMNS SHOWN ABOVE ARE FOR ILLUSTRATIVE PURPOSES ONLY. SEE SITE-SPECIFIC SHEETS FOR LAYOUTS AND QUANTITIES.

STRUCTURAL DATA

LATERAL RESISTING SYSTEM..... STEEL ORDINARY CANTILEVER COLUMN
FOUNDATION ..... CONCRETE DRILLED PIERS AND SPREAD FOOTINGS
TESTING AND INSPECTION LIST..... SEE SHEETS S-3 & S-4

DESIGN PARAMETERS

RISK CATEGORY II

ROOF LIVE LOAD (L_R):
- DECK ONLY ..... 20 psf
- POINT LOAD ..... 300 lb

SNOW LOAD :
- MAX. DRIFT SNOW LOAD..... 0 psf, 20 psf (SEE CONSTRUCTION OPTIONS)

MAXIMUM DEAD LOAD:
- ROOF DECK..... 0.89 psf

WIND: ASCE 7-10 METHOD 2 - ANALYTICAL PROCEDURE
- BASIC WIND SPEED..... 110 mph[1]
- WIND EXPOSURE ..... C[1]
- INTERNAL PRESSURE ..... N/A (OPEN STRUCTURE)
- WIND DIRECTIONALITY FACTOR ..... K_d = 0.85
- VELOCITY PRESSURE COEFFICIENT..... K_z = 0.90
- TOPOGRAPHIC FACTOR ..... K_{zt} = 1.00

SEISMIC: ASCE 7-10
- SEISMIC IMPORTANCE FACTOR ..... I = 1.0
- RESPONSE MODIFICATION FACTOR..... R = 1.25
- MAPPED SPECTRAL RESPONSE ACCELERATION ..... S_S = 3.20[2], S_1 = 1.39
- SITE CLASS ..... D
- DESIGN SPECTRAL RESPONSE ..... S_{DS} = 2.133, S_{D1} = 1.390
- SEISMIC DESIGN CATEGORY ..... D (E WITH GROUND MOTION ANALYSIS)
- SEISMIC FORCE RESISTING SYSTEM ..... STEEL ORDINARY CANTILEVER COLUMN
- SEISMIC RESPONSE COEFFICIENT ..... C_S = 1.707
- ANALYSIS PROCEDURE ..... EQUIVALENT LATERAL FORCE

NOTES:

1. THE PC COMPONENTS & CLADDING AND MAIN WIND FORCE RESISTING SYSTEM DESIGN WIND PRESSURE q_h = 23.7 psf DETERMINED FROM THE CRITERIA LISTED ABOVE. (EXPOSURE C, K_z=0.960, K_{zt}=1.0 , K_d = 0.85).

   THE PC MAY BE USED FOR RISK CATEGORY II TYPE STRUCTURES IN ANY WIND ZONE WHERE $q_h \leq$ 23.7 psf.

   EXAMPLE:
   SITE BASIC WIND SPEED, V =120 mph
   RISK CATEGORY II
   WIND: EXPOSURE B
   K_d = 0.85
   K_z = 0.701
   K_{zt} = 1.00
   q_h = 22.0 psf < 23.7 psf

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

2. THE PC SEISMIC FORCE RESISTING SYSTEM IS GOVERNED BY C_S = 1.707 FROM THE CRITERIA LISTED ABOVE. (R = 1.25, S_S = 3.2, I_E = 1.00).

   THE PC MAY BE USED FOR RISK CATEGORY II STRUCTURES AT ANY SITE WHERE THE SITE SPECIFIC SEISMIC PARAMETER S_S AND R = 1.25 RESULT IN A VALUE $C_S \leq$ 1.707.

   EXAMPLE:
   RISK CATEGORY II
   SOIL: SITE CLASS A
   S_S = 3.4
   S_1 = 1.8
   R = 1.25
   I = 1.00
   S_{DS} = 1.813
   C_S = 1.451 < 1.707

   THE PC MAY BE USED AT THIS SITE, PENDING DSA SITE SPECIFIC APPROVAL.

BUILDING DATA

TYPE OF CONSTRUCTION..... IIB
OCCUPANCY..... VARIES - SEE EXAMPLES
NUMBER OF STORIES..... 1
BUILDING AREAS..... VARY DUE TO OCCUPANCY - SEE EXAMPLES
MODULE SIZES..... VARY WITH OPTIONS
BUILDING LENGTH:
- ALL WIDTHS..... MAX. 500'-0" LENGTH

NOTE: NO SEISMIC AND/OR THERMAL EXPANSION JOINTS REQUIRED ALONG THE LENGTH OF THE STRUCTURES. (ALL JOINTS ARE INTERNAL)

OCCUPANCY AND BUILDING AREA EXAMPLES:
ALL STRUCTURES SHALL BE BASED ON RISK CATEGORY II STRUCTURE.

A OCCUPANCY:

EXAMPLE 1:
STRUCTURES LOCATED OVER LUNCH AREA WITHOUT FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 15 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 4,500 sq ft

EXAMPLE 2:
STRUCTURES LOCATED OVER LUNCH AREA WITH FIXED SEATING
OCCUPANCY: A-2
OCCUPANCY LOAD: 18"/person ALONG LINEAR BENCH - MAX 300 FOR RISK II
MAX SQ FT: 5,400 LINEAR INCHES OF FIXED SEATING UNDER THE STRUCTURE

EXAMPLE 3:
STRUCTURES LOCATED OVER AN AREA DESIGNATED FOR ASSEMBLY (TYPICALLY AMPHITHEATER, OR OTHER SPACE WITH FIXED SEATING OR DESIGNATED AS A STANDING ASSEMBLY AREA)
OCCUPANCY: A
OCCUPANCY LOAD: 7 sf/person - MAX 300 FOR RISK II
MAX SQ FT: 2,100 sq ft

SHADE STRUCTURE

EXAMPLE 1:
STRUCTURES LOCATED OVER A FIELD, BLACKTOP, PLAYGROUND EQUIPMENT,OR OTHER NON DESIGNATED USE SPACES
OCCUPANCY: E
OCCUPANCY LOAD: 20 sf/person - MAX 250 FOR RISK II
MAX SQ FT: 5,000 sq ft

PARKING

EXAMPLE 1:
STRUCTURES LOCATED OVER PARKING
OCCUPANCY: S-2
OCCUPANCY LOAD: 200 sf/person
MAX SQ FT: UNLIMITED PER CBC 406.5.4 AND 406.5.5

CODES

TITLE 24, CCR CODES:

1. 2016 CALIFORNIA ADMINISTRATIVE CODE (CAC) ..... (PART 1, TITLE 24, CCR)
2. 2016 CALIFORNIA BUILDING CODE (CBC), VOLUMES 1 AND 2..... (PART 2, TITLE 24, CCR) (2015 INTERNATIONAL BUILDING CODE WITH 2016 CALIFORNIA AMENDMENTS)
3. 2016 CALIFORNIA ELECTRICAL CODE ..... (PART 3, TITLE 24, CCR) (2014 NATIONAL ELECTRICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
4. 2016 CALIFORNIA MECHANICAL CODE (CMC) ..... (PART 4, TITLE 24, CCR) (2015 UNIFORM MECHANICAL CODE WITH 2016 CALIFORNIA AMENDMENTS)
5. 2016 CALIFORNIA PLUMBING CODE (CPC) ..... (PART 5, TITLE 24, CCR) (2015 UNIFORM PLUMBING CODE WITH 2016 CALIFORNIA AMENDMENTS)
6. 2016 CALIFORNIA ENERGY CODE ..... (PART 6, TITLE 24, CCR) (2016 EDITION CALIFORNIA ENERGY COMMISSION BUILDING ENERGY EFFICIENCY STANDARDS)
7. 2016 CALIFORNIA FIRE CODE (CFC) ..... (PART 9, TITLE 24, CCR) (2015 INTERNATIONAL FIRE CODE WITH 2016 CALIFORNIA AMENDMENTS)
8. 2016 CALIFORNIA GREEN BUILDING STANDARDS CODE ..... (PART 11, TITLE 24, CCR)
9. 2016 CALIFORNIA REFERENCED STANDARDS CODE ..... (PART 12, TITLE 24, CCR)
   NFPA 13 - 2016
   NFPA 72 - 2016

REFERENCE CODE SECTIONS FOR APPLICABLE STANDARDS:
2016 CBC, CHAPTER 35
2016 CFC, CHAPTER 80

FIRE LIFE SAFETY

AUTOMATIC FIRE SPRINKLERS REQUIRED? (Y/N)..... N

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

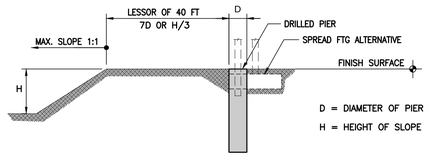
VERSA CANOPY
GENERAL DATA

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-2
2 OF 13 SHEETS

SOILS NOTES

1. IF NO GEOTECHNICAL REPORT IS SUPPLIED AT THE TIME OF DSA REVIEW ADDRESSING SITE-SPECIFIC PARAMETERS, FOUNDATION SELECTIONS SHALL BE BASED ON CLASS W SOILS (SOIL CLASS 5 OF CBC TABLE 1806A.2 WITH DOUBLING OF LATERAL BEARING PRESSURE FOR STRUCTURES NOT ADVERSELY AFFECTED BY ½" MOTION AT GROUND SURFACE) IN THE SOIL CLASS TABLE BELOW.
2. WHEN A GEOTECHNICAL REPORT IS SUPPLIED THE GEOTECHNICAL ENGINEER SHALL REVIEW THE SITE CONDITIONS, TESTING RESULTS, AND ALL ALLOWABLE INCREASES AND SUPPLY THE FINAL SOIL CLASS TO BE USED FROM THE BELOW TABLE. THE GEOTECHNICAL ENGINEER SHALL PROVIDE IN THE GEOTECHNICAL REPORT THE FOLLOWING BASE VALUES WITHOUT INCREASE FOR 24" DIAMETER PIERS: THE ALLOWABLE VERTICAL END BEARING, ALLOWABLE LATERAL BEARING, ALLOWABLE DOWNWARD SKIN FRICTION, ALLOWABLE SKIN FRICTION TO RESIST UPLIFT. THE GEOTECHNICAL ENGINEER SHALL ALSO PROVIDE ANY ALLOWABLE INCREASES TO THE BASE VALUES. ALLOWABLE INCREASES ARE TYPICALLY DUE TO BUT NOT EXCLUSIVE TO: DOUBLE VALUES DUE TO ISOLATED FOUNDATIONS, DOUBLE VALUES DUE TO THE STRUCTURE NOT BEING ADVERSELY AFFECTED BY 1/2" DEFLECTION AT THE SURFACE, A 4/3 INCREASE DUE TO SHORT TERM LOADING, AND ANY OTHER ALLOWABLE INCREASES. THE GEOTECHNICAL ENGINEER SHALL MAKE RECOMMENDATION OF THE SOIL CLASS TO BE USED AFTER ALL INCREASES HAVE BEEN APPLIED. ALL FOUNDATIONS HAVE BEEN DESIGN BASED ON THE VALUES PRESENTED IN THE BELOW TABLE. THE GEOTECHNICAL REPORT SHALL ADDRESS IF THE USE OF STEEL CASING THAT IS TWISTED INTO PLACE AND LEFT INSTALLED AFFECTS ANY ALLOWABLE VALUES.
3. THE GEOTECHNICAL ENGINEER MAY SPECIFY DIFFERENT SOILS CLASSES TO BE USED FOR THE DIFFERENT STRUCTURE TYPES (VC14 OR VC20), DIFFERENT AREAS OF THE SITE (I.E. NORTH LOT OR WEST LOT), OR THE ENGINEER MAY SPECIFY ONE SOILS CLASS TO BE USED FOR THE ENTIRE SITE.
4. THE GEOTECHNICAL ENGINEER SHALL ADDRESS IN THE REPORT ANY CONCRETE DURABILITY REQUIREMENTS IN ACCORDANCE WITH ACI 318-11 CHAPTER 4.
5. THE GEOTECHNICAL REPORT SHALL BE SPECIFIC TO THE LOCATION OF THE STRUCTURES. BORING(S) SHALL BE DONE AT THE SPECIFIC LOCATION(S) WHERE THE STRUCTURES ARE TO OCCUR. THE GEOTECHNICAL REPORT SHALL CONFORM TO 2016 CBC SECTION 1803A.
6. A COPY OF THE GEOTECHNICAL REPORT SHALL BE PROVIDED AT THE TIME OF PLAN REVIEW.
7. AT THE TIME OF PLAN REVIEW, THE DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE SHALL SELECT A SOILS CLASS ON THE SITE-SPECIFIC PLANS BASED ON THE GEOTECHNICAL REPORT (OR NOTE 1 ABOVE).

   HOLES MAY BE LEFT OPEN FOR ANY AMOUNT OF TIME AS LONG AS THEY ARE PROPERLY COVERED FOR OSHA STANDARDS.
8. FOUNDATIONS ADJACENT TO SLOPED GROUND SURFACES SHALL BE SET BACK PER THE FOLLOWING FIGURE UNLESS OTHERWISE RECOMMENDED BY A SITE SPECIFIC GEOTECHNICAL REPORT.



DESIGN SOIL VERTICAL AND LATERAL BEARING VALUES

SOIL CLASS	VERTICAL BEARING PRESSURE (psf)	LATERAL BEARING PRESSURE (psf/ft)	MAXIMUM LATERAL BEARING (psf)	MIN. DOWNWARD SKIN FRICTION (psf)	MIN. UPWARD SKIN FRICTION (psf)
CLASS V	1,500	133	2,000	175	50
CLASS W	1,500	267	4,000	225	50
CLASS X	2,000	400	6,000	250	75
CLASS Y	2,000	533	8,000	275	75
CLASS Z	3,000	800	12,000	325	100

SPECIAL INSPECTION

1. SOILS:
   - VERIFY THE SITE HAS BEEN PREPARED PROPERLY PRIOR TO PLACEMENT OF CONTROLLED FILL AND/OR EXCAVATIONS FOR FOUNDATIONS.
   - VERIFY THAT THE FOUNDATION EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.
   - VERIFY THAT MATERIALS BELOW FOOTINGS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.
2. PIER FOUNDATIONS:
   - INSPECT DRILLING OPERATIONS AND MAINTAIN COMPLETE AND ACCURATE RECORDS FOR EACH PIER.
   - VERIFY LOCATIONS OF PIERS.
3. CONCRETE:
   - VERIFY USE OF REQUIRED DESIGN MIX, DETERMINE THE TEMPERATURE OF THE CONCRETE, AND (WHERE REQUIRED) PERFORM AIR CONTENT TEST.
   - TEST CONCRETE (COMPRESSION TEST).
   - INSPECT PLACEMENT OF FORMWORK, REINFORCING STEEL, EMBEDDED ITEMS, AND CONCRETE. INSPECT CURING AND FORM REMOVAL.
   - SLUMP TEST SHALL BE PERFORMED PER SITE SPECIFIC DSA-103.
4. STEEL:
   - VERIFY THAT ALL MATERIALS ARE APPROPRIATELY MARKED AND THAT:
     - MILL CERTIFICATES INDICATE MATERIAL PROPERTIES THAT COMPLY WITH REQUIREMENTS.
     - MATERIAL SIZES, TYPES AND GRADES COMPLY WITH REQUIREMENTS.
   - TEST UNIDENTIFIED MATERIALS.
   - VERIFY MEMBER LOCATIONS, BRACING AND ALL DETAILS CONSTRUCTED IN THE FIELD.
   - VERIFY STIFFENER LOCATIONS, CONNECTION TAB LOCATIONS, AND ALL CONSTRUCTION DETAILS FABRICATED IN THE SHOP.
   - HIGH STRENGTH SLIP CRITICAL BOLTING.
5. SHOP FABRICATION:
   - VERIFY FABRICATOR'S FABRICATION AND QUALITY CONTROL PROCEDURES.
   - VERIFY ALL ASPECTS OF SHOP FABRICATION INCLUDING MEMBER LOCATIONS, DIMENSIONAL LAYOUT OF ALL PARTS AND PIECES, BOLTING, ETC.
6. SEE DSA APPROVED 103 FOR ADDITIONAL REQUIREMENTS.

GENERAL NOTES

1. DESIGN PER 2016 C.B.C. AND ITS PRESCRIBED LOADING AND MATERIAL SPECIFICATIONS:
   - ASCE 7-10
   - 14TH EDITION AISC STEEL CONSTRUCTION MANUAL
   - 2012 AISI COLD FORMED STEEL STANDARD
   - ACI 318-14
2. THESE STRUCTURES ARE NOT DESIGNED TO BE, NOR SHALL THEY BE, ENCLOSED.
3. ALL DIMENSIONS, CONDITIONS, AND ELEVATIONS ARE TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO COMMENCING WORK OR FABRICATION. IF ANY DISCREPANCIES ARE FOUND OR IF ANY CONDITION EXISTS NOT AS SHOWN ON THE DRAWINGS THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE SHALL BE NOTIFIED IMMEDIATELY.
4. IF THE SNOW LOAD OPTION IS USED THEN THE SITE-SPECIFIC MAX GROUND SNOW LOADING INCLUDING DRIFT MUST BE LESS THAN OR EQUAL TO 20 PSF.
5. ALL SCREWS TO BE ITW BUILDEX TEK SCREWS PER ICC ESR-1976 OR ELCO DRILL SCREW PER ICC ESR-3294.
6. OWNER TO SIGN AUTHORIZATION TO PROCEED PRIOR TO DRILLING.

   SEE SAMPLE BELOW:

MBarC CONSTRUCTION
THE STRENGTH BETWEEN SUN AND SHADE™

674 Rancheros Drive
San Marcos, CA 92069
PH: 760.744.4131
FAX: 760.744.4449
CA LIC #869960

Authorization to Proceed

Project Name: _____ Foreman: _____

Site Name: _____ Contractor: _____

As an authorized representative of Contractor listed above, I,_____ agree to the following statements below:

_____(initial) **LAYOUT:** The onsite layout for installation of structural steel for carports and canopies has been inspected and is approved as is.

_____(initial) **ARRAY ORIENTATION/CONCRETE POUR:** The tilt and direction of the canopies have been verified and are approved as is.

ARRAYS:

_____

_____

_____

_____

_____

_____

It is understood that additional costs will apply due to the following delays: re-layout not due to M Bar C, underground site conflicts (unmarked utility lines, including but not limited to water, sewer, fire, irrigation, electrical; encountered underground water; change in soils condition, including but not limited to hard drilling, caving soils, obstructions).

BY: _____ DATE: _____
(signature)

www.mbarconline.com

STEEL NOTES

1. COLD FORMED STEEL SIZES ARE BASED ON BARE STEEL THICKNESS.
2. STRUCTURAL PURLIN, BEAM & COLUMN MEMBERS SHALL HAVE MINIMUM STEEL YIELD STRENGTHS AS INDICATED.
3. STRUCTURAL STEEL SHALL BE HOT-DIP GALVANIZED (MINIMUM ASTM A123 OR A153, CLASS D) OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT, AND FINISH COAT; OR EQUIVALENT PAINT SYSTEM. COLD-FORMED STEEL MEMBERS SHALL BE 55% ALUMINUM-ZINC ALLOY COATED PER ASTM A792/A792M STANDARD IN ACCORDANCE TO AISI S200 TABLE A4-1, CP 90 COATING DESIGNATION.
4. ALL EXPOSED STEEL FASTENERS, INCLUDING CAST IN PLACE ANCHOR BOLTS/RODS, SHALL BE STAINLESS STEEL (TYPE 304 MINIMUM), HOT-DIP GALVANIZED (ASTM A153, CLASS D MINIMUM OR ASTM F2329), OR PROTECTED WITH CORROSION-PREVENTIVE COATING THAT DEMONSTRATED NO MORE THAN 2% OF RED RUST IN MINIMUM 1,000 HOURS OF EXPOSURE IN SALT SPRAY TEST PER ASTM B117. ZINC-PLATED FASTENERS DO NOT COMPLY WITH THIS REQUIREMENT. (EXAMPLE PROPRIETARY COATINGS THAT COMPLY WITH THE 1000 HOUR REQUIREMENT INCLUDE BUT ARE NOT NECESSARILY LIMITED TO: QUIK GUARD BY SIMPSON, KWIK-COTE BY HILTI, STALGARD BY ELCO, VISTACORR BY SFS INTEC, ETC.)
5. STEEL FABRICATION SHALL COMPLY WITH LATEST AISC SPECIFICATIONS.
6. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE ASTM A1085 GR. 50 U.N.O. ASTM A1085 STEEL HAS THE SAME OR BETTER PROPERTIES AND WELDABILITY THAN ASTM A500 GR. B.
7. COLD FORMED STEEL (CFS) MEMMBERS SHALL BE ASTM A653 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi) OR ASTM A1011 SS GR. 55 (F_y = 55 ksi, F_u = 70 ksi).
8. ZINC COATING OF STRUCTURAL STEEL SHALL CONFORM WITH G90 STANDARD OR BETTER. COLD FORMED STEEL (CFS) MEMBERS TO BE GALVANIZED IN ACCORDANCE ASTM A653 G90 STANDARD. HOLLOW STRUCTURAL STEEL (HSS) MEMBERS SHALL BE GALVANIZED IN ACCORDANCE WITH ASTM A123, UNLESS NOTED OTHERWISE.
9. ALL STEEL MEMBERS TO BE GALVANIZED OR PAINTED WITH ZINC-RICH PRIMER, UNDERCOAT AND FINISH COAT OR EQUIVALENT PAINT SYSTEM. CONTRACT DOCUMENTS SHALL SPECIFY THE TYPE OF SSPC CORROSION RESISTING SYSTEM TO BE UTILIZED AND THE SSPC GRADE FOR CLEANING, MINIMUM SSPC GRADE SP2.
10. BOLTS SHALL CONFORM TO THE ASTM A307 SPECIFICATIONS UNLESS NOTED OTHERWISE. INSPECTION OF A307 BOLTING IS NOT REQUIRED.
11. ASTM A307 BOLTS MAY BE SUBSTITUTED WITH THE SAME NUMBER AND SIZE OF SAE J429 GRADE 2 BOLTS.
12. BOLTS SHALL BE TIGHTENED TO SNUG-TIGHT CONDITION UNLESS NOTED OTHERWISE EXCEPT FOR A325-SC HIGH STRENGTH BOLTS USED IN THE BEAM TO COLUMN CONNECTION.
13. A325-SC BOLTS SHALL BE PRE-TENSIONED PER AISC SPECIFICATIONS USING APPROVED LOAD INDICATOR METHODS INCLUDING BUT NOT LIMITED TO TURN-OF-THE NUT WITH MATCH MARKING, TWIST OFF TENSION CONTROL OR DIRECT TENSION INDICATOR BOLT, NUT AND WASHER ASSEMBLIES.
14. ASTM A307 BOLTS SHALL HAVE STANDARD WASHERS UNDER THE NUT & BOLT HEAD (F436 WASHERS ARE NOT REQUIRED). STANDARD WASHERS DO NOT REQUIRE HARDNESS TEST.
15. BOLT HOLES FOR ½"ø BOLTS SHALL BE AS FOLLOWS: STANDARD HOLES: 9/16"ø

CONCRETE NOTES

1. CONCRETE MIN. 4,500 PSI AT 28 DAYS UNLESS A SOILS REPORT IS PROVIDED THAT ALLOWS FOR A LOWER STRENGTH (3,000 PSI MIN.). BATCH PLANT INSPECTION NOT REQUIRED.
2. CONRETE SHALL MEET THE FOLLOWING MINIMUM REQUIREMENTS BASED ON EXPOSURE CLASS IN ACCORDANCE WITH ACI 318-14 TABLE 19.3.2.1 WHEN DETERMINED BY A SITE-SPECIFIC GEOTECHNICAL REPORT.

REQUIREMENTS FOR CONCRETE BASED ON EXPOSURE CLASS

EXPOSURE CLASS ACI TABLE 19.3.2.1	MINIMUM CONCRETE STRENGTH F'_c	CEMENT TYPE ASTM C150	MAX. WATER/CEMENT RATIO W/M
NOT DETERMINED	4,500 PSI	TYPE V	0.45
F0, S0, P0, C0, C1	3,000 PSI	TYPE II	N/A
S1, P1	4,000 PSI	TYPE II	0.50
ALL OTHER	4,500 PSI	TYPE V	0.45

3. CONCRETE EXPOSED TO THAW AND FREEZE CYCLE SHALL BE AIR ENTRAINED PER ACI 318-14 TABLE 19.3.1.1.
4. CONCRETE TO ATTAIN 1000 PSI PRIOR TO REMOVAL OF SHORING AND/OR INSTALLATION OF BEAMS AND PURLINS. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 1000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
5. CONCRETE TO REACH 3000 PSI PRIOR TO INSTALLATION OF ROOF DECK. (NOTE: A HIGHER COMPRESSIVE CONCRETE MAY BE USED TO ACHIEVE 3000 PSI SOONER. SUBMIT CONCRETE MIX DESIGN PREPARED BY A QUALIFIED LICENSED PROFESSIONAL ENGINEER FOR APPROVAL BY THE DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO BEING PLACED.
6. REINFORCEMENT BARS SHALL BE ASTM A615, GR60 TYPICAL, U.N.O.
7. MINIMUM CONCRETE COVER SHALL BE 2½" TO EARTH (DRILLED PIER FOUNDATIONS ONLY), 3" TO EARTH ALL OTHER CONCRETE, 2" TO EXPOSED SURFACES PER CBC TABLE 1808A.8.2
8. ALL REINFORCING STEEL AND OTHER EMBEDDED ITEMS SHALL BE SECURELY POSITIONED PRIOR TO THE POURING OF CONCRETE.
9. ALL CONCRETE WORK SHALL COMPLY WITH ACI 301 & 318 STANDARDS.
10. AGGREGATE GRADATION AND QUALITY SHALL BE IN ACCORDANCE WITH ACI 302-1R.
11. COLD JOINTS SHALL HAVE A ROUGHENED SURFACE. BONDING AGENT SHALL COMPLY WITH ASTM C1059. A SUBMITTAL FOR CONCRETE BONDING AGENT SHALL BE APPROVED BY DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE PRIOR TO INSTALLATION. DSA INSPECTOR OF RECORD TO PERIODICALLY INSPECT INSTALLATION OF BONDING AGENT.
12. BATCH PLANT INSPECTION NOT REQUIRED PER CBC 1705A3.3.2. SUBJECT TO:
    - A LICENSED WEIGHMASTER SHALL POSITIVELY IDENTIFY QUANTITY OF MATERIALS AND CERTIFY EACH LOAD BY A BATCH TICKET.
    - BATCH TICKETS, INCLUDING MATERIAL QUANTITIES AND WEIGHTS SHALL ACCOMPANY THE LOAD, SHALL BE TRANSMITTED TO THE INSPECTOR OF RECORD BY THE TRUCK DRIVER WITH LOAD IDENTIFIED THEREON. THE LOAD SHALL NOT BE PLACED WITHOUT A BATCH TICKET IDENTIFYING THE MIX. THE INSPECTOR OF RECORD SHALL KEEP A DAILY RECORD OF PLACEMENTS, IDENTIFYING EACH TRUCK, ITS LOAD, AND TIME OF RECEIPT AT THE JOBSITE, AND APPROXIMATE LOCATION OF DEPOSIT IN THE STRUCTURE AND SHALL MAINTAIN A COPY OF THE DAILY RECORD AS REQUIRED BY THE ENFORCEMENT AGENCY.
11. CONCRETE MAY BE PUMPED, POURED, TAILGATED, OR OTHER SUCH METHODS INTO PLACE. CONCRETE SHALL BE ALLOWED TO FREE FALL THE ENTIRE DEPTH OF THE FOUNDATION. PLACEMENT OF ANY FREE-FALL CONCRETE SHALL BE SUCH THAT THE CONCRETE DOES NOT ALTER THE EMBEDMENT DEPTH OR THE CLEARANCE OF THE REINFORCING BAR CAGE OR OTHER EMBEDDED MATERIALS.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
(775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

GENERAL NOTES

DRAWN
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11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-3
3 OF 13 SHEETS

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Spread footings without post installed anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic		**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*).
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
+	**WOOD**			
+	**OTHER**			

3 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY SPREAD FOOTINGS**

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier and Pad Footings without Post Installed Anchors** | District:

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.
NOTE: This form is also available for projects submitted for review under the 2007, 2010, and 2013 CBC.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
For more information on use of this form, see DSA-103.INSTR.

Note: References are to the 2016 edition of the California Building Code (CBC) unless otherwise noted.

INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
X	a. Anchor Bolts and Anchor Rods	Test	LOR	IR 17-11 Sample and test anchor bolts and anchor rods not readily identifiable.
+	**WOOD**			
+	**OTHER**			

1 / - **SAMPLE DSA 103 - STRUCTURES WITH PIER & SPREAD FOOTINGS**

THE EXAMPLE FORM DSA-103'S SHOWN ON THIS SHEET ARE FOR ILLUSTRATION PURPOSES ONLY TO ASSIST IN THE COMPLETION OF FUTURE PROJECT-SPECIFIC FORM DSA-103'S. A FORM DSA-103 IS TO BE COMPLETED FOR EACH APPLICATION THAT THIS PC IS BEING INCORPORATED INTO AND ALL EXAMPLE FORM DSA-103'S ARE TO BE CROSSED OUT ON THIS DRAWING

DSA — DIVISION OF THE STATE ARCHITECT — DEPARTMENT OF GENERAL SERVICES

DSA-103 Issued 9/1/2017

List of Required Structural Tests & Special Inspections - 2016 CBC

INCREMENT # | DSA File No.: PC-119 | Application No.: 04-117117 | Date Submitted: | Revised: | Revised:

School Name: **Pier Footings without Post Installed Anchors** | District:

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.
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INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other issues. A shaded box can be clicked indicating your selection of that test. **Note:** A minus (-) on a category or subcategory heading indicates that it can be collapsed. However, any selections you may have made will be cleared. Click on the "COMPILE" button to show only the tests and inspections finally selected.
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INCLUDED	TEST OR SPECIAL INSPECTION	TYPE	PERFORMED BY	CODE REFERENCE AND NOTES
-	**SOILS**			
-	**1. GENERAL:**			**Table 1705A.6**
X	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, and • materials below footings are adequate to achieve the design bearing capacity.	Periodic	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
-	**4. CAST-IN-PLACE DEEP FOUNDATIONS (PIERS):**			**Table 1705A.8**
X	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 for exemptions.)
X	c. 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 for exemptions.)
X	d. Confirm adequate end strata bearing capacity.	Continuous	GE*	* By geotechnical engineer or his or her qualified representative. (See Appendix for exemptions.)
X	e. Concrete piers	Provide tests and inspections per CONCRETE section below.		
-	**CONCRETE**			**Table 1705A.3, ACI 318-14 Sections 26.12 & 26.13**
-	**7. CAST IN PLACE CONCRETE**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	SI*	**Table 1705A.3 Item 5, 1910A.1** (1909.2.3*), * To be performed by qualified batch-plant inspector and concrete sampling technician
X	b. Identify, sample, and test reinforcing steel.	Test	LOR	**1910A.2** (1909.2.4*), ACI 318-14 Section 26.6.1.2. DSA IR 17-10.16
X	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 318-14 Sections 26.5 & 26.12
X	d. Test concrete (f'c).	Test	LOR	**1905A.1.16** (1909.3.7*); ACI 318-14 Section 26.12.
	Inspection:			
+	**MASONRY**			**TMS 402-13/ACI 530-13/ASCE 5-13 Table 3.1.3 & TMS 602-13/ACI 530.1-13/ASCE 6-13 Table 5**
-	**STEEL, ALUMINUM**			**Table 1705A.2.1, AISC 303-10, AISC 360-10, AISC 341-10, AISC 358-10, AISI S100-07/S2-10**
-	**17. STRUCTURAL STEEL, COLD-FORMED STEEL, AND ALUMINUM USED FOR STRUCTURAL PURPOSES**			
	Material Verification:			
X	a. Verify identification of all materials and: • Mill certificates indicate material properties that comply with requirements. • Material sizes, types and grades comply with requirements.	Periodic	-	**2203A.1** (2203.1*), **Table 1705A.2.1 Item 3a-3c;** AISI S100-07/S2-10 Section A2.1 & A2.2, AISI S200-12 Section A3, AISI S220-11 Section A4. * By special inspector or qualified technician when performed off-site.
X	b. Test unidentified materials.	Test	LOR	**2203A.1** (2203.1*)
X	c. Examine seam welds of HSS shapes	Periodic	SI	DSA IR 17-3.
	Inspection:			
X	a. 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**).
-	**19. WELDING:**			**1705A.2.5, Table 1705A.2.1 Items 4 & 5;** DSA IR 17-3, 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. (See Appendix for exemptions.)
	Verification of Materials, Equipment, Welders, etc:			
X	a. Verify weld filler material identification markings per AWS designation listed on the DSA approved documents and the WPS.	Periodic	SI	DSA IR 17-3.
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	SI	DSA IR 17-3.
X	c. Verify WPS, welder qualifications and equipment.	Periodic	SI	DSA IR 17-3.
-	**19.1 SHOP WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds ≤ 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16", floor and roof deck welds	Periodic	SI	**1705A.2.2, Table 1705A.2.1 Item 5a.5 & 5a.6.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**19.2 FIELD WELDING:**			
X	a. Inspect groove welds, multi-pass fillet welds, single pass fillet welds > 5/16", plug and slot welds	Continuous	SI	**Table 1705A.2.1 Item 5a1-4.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	SI	**Table 1705A.2.1 Item 5a.5.** Per AISC 360-10 (and AISC 341-10 as applicable). DSA IR 17-3.
-	**23. ANCHOR BOLTS, ANCHOR RODS, & OTHER STEEL:**			
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+	**WOOD**			
+	**OTHER**			

2 / - **SAMPLE DSA 103 - STRUCTURES WITH ONLY PIER FOOTINGS**

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER — DUSTIN K. ROSEBRAK — S 5885 — STRUCTURAL — STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 865960 B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM | (775) 787-8845
GREG JONES

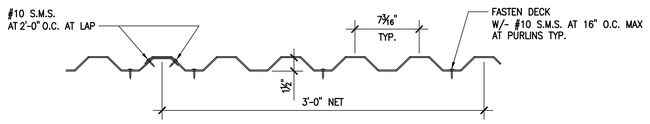
4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

SAMPLE DSA-103 FORMS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-4
4 OF 13 SHEETS

ROOF DECK SPECIFICATIONS						
SECTION PROPERTIES			TOP IN COMPRESSION		BOTTOM IN COMPRESSION	
GA	F_y (ksi)	WEIGHT (psf)	I_+ (in.^{4}/ft.)	S_+ (in.^{3}/ft.)	I_- (in.^{4}/ft.)	S_- (in.^{3}/ft.)
26	80	0.89	0.0840	0.0762	0.0817	0.0623

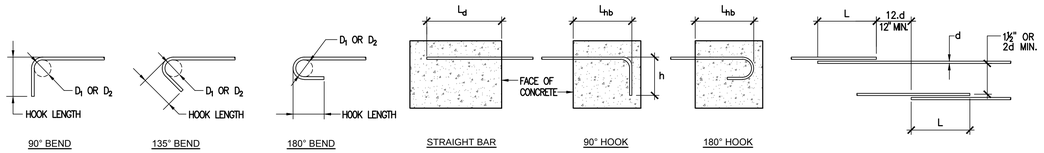


NOTES:

1. MATERIAL AND SECTION PROPERTIES LISTED ABOVE ARE MINIMUM REQUIRED VALUES FOR METAL DECK BASED ON AEP HR-36 26 GA.
2. METAL ROOF DECK SHALL BE CLASS A PER CBC CHAPTERS 7A AND 15.

3 - DECK DETAIL

N.T.S.



90° BEND | 135° BEND | 180° BEND | STRAIGHT BAR | 90° HOOK | 180° HOOK

FINISHED BEND DIAMETERS		
BAR SIZE	D_1	D_2
#3	1½"	2¼"
#4	2"	3"
#5	2½"	3¾"
#6, #7, #8	6d	6d

'D_1' - FINISHED BEND DIA. FOR STIRRUP & TIE HOOKS.
'D_2' - BEND DIA. FOR STD HOOKS.
'd' - BAR DIAMETER

STANDARD HOOK LENGTHS				
BAR SIZE	MAIN REINFT.		STIRRUP & TIE HOOKS	
	90°	180°	90°	180°
#3	6"	4"	3½"	4¼"
#4	8"	4½"	4½"	4½"
#5	10"	5"	5"	6"
#6	12"	6"	12"	7½"
#7	14"	7"	14"	9"
#8	16"	8"	16"	10"

A STANDARD HOOKS

REINFORCEMENT DEVELOPMENT LENGTHS				
CONCRETE STRENGTH		F'_C = 3,000 PSI		
NOMINAL BAR SIZE	h	L_d		L_{hb}
		TOP BARS	OTHER BARS	
#3	6"	1'-10"	1'-5"	9"
#4	8"	2'-5"	1'-10"	11"
#5	10"	3'-0"	2'-4"	1'-2"
#6	12"	3'-7"	2'-9"	1'-5"
#7	14"	5'-3"	4'-0"	1'-7"
#8	16"	6'-0"	4'-7"	1'-10"

NOTES:

1. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12 INCHES OF CONCRETE CAST BELOW.

B DEVELOPMENT LENGTHS

REINFORCEMENT LAP SPLICE LENGTH 'L'		
CONCRETE STRENGTH	F'_C=3,000 PSI	
NOMINAL BAR SIZE	TOP BARS	OTHER BARS
#3	2'-4"	1'-10"
#4	3'-2"	2'-5"
#5	3'-11"	3'-0"
#6	4'-8"	3'-7"
#7	6'-9"	5'-3"
#8	7'-9"	6'-0"

NOTES:

1. LAP SPLICE SHALL BE INCREASED 50% WHERE CLEAR SPACE BETWEEN BARS IS LESS THAN 2 BAR DIAMETERS AND/OR THE CLEAR COVER IS LESS THAN ONE BAR DIAMETER.

C OFFSETS AND LAP SPLICES

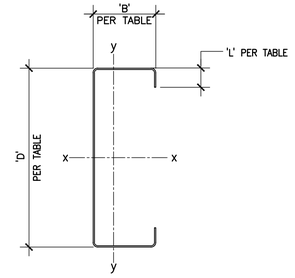
4 - TYPICAL REINFORCEMENT BAR BENDS AND LAPS

N.T.S.

SECTION NAME	D (in)	B (in)	L (in)	GA	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
							I_x (in^4)	S_w (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
CS12 x 4 x 0.102 (12 GA)	12	4.0	1.0	12	7.35	2.16	46.87	6.76	4.66	4.38	1.53	1.42
CS12 x 4 x 0.124 (10 GA)	12	4.0	1.0	10	8.91	2.62	56.37	8.59	4.64	5.20	1.82	1.41
CS14 x 4 x 0.102 (12 GA)	14	4.0	1.0	12	8.04	2.36	67.42	8.22	5.34	4.57	1.55	1.39

NOTES:

1. ALL PURLIN SECTIONS ARE ASTM A653, GR 55, F_y=55 ksi
2. ALL LIGHT GAGE STEEL DESIGNED USING 2012 AISI COLD-FORMED STEEL DESIGN MANUAL.
3. PROPERTIES PER AEP STANDARD SIZES.
4. ACTUAL MANUFACTURER'S PROPERTIES MUST MEET OR EXCEED AEP STANDARD PROPERTIES.



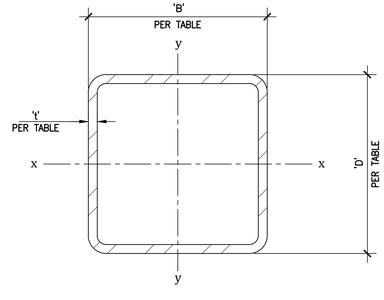
1 - PURLIN & BEAM COLD FORMED C-SECTION

N.T.S.

SECTION NAME	D (in)	B (in)	t (in)	WT (lb/ft)	A (in^2)	AXIS X-X			AXIS Y-Y		
						I_x (in^4)	S_x (in^3)	r_x (in)	I_y (in^4)	S_y (in^3)	r_y (in)
HSS 12 x 6 x $^1/_4$	12	6	1/4	29.23	8.59	161.00	26.80	4.33	55.20	18.40	2.53

NOTES:

1. ALL COLUMNS SHALL BE ASTM A1085 GR. 50 (F_y=50 ksi)



2 - HSS COLUMN

N.T.S.

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

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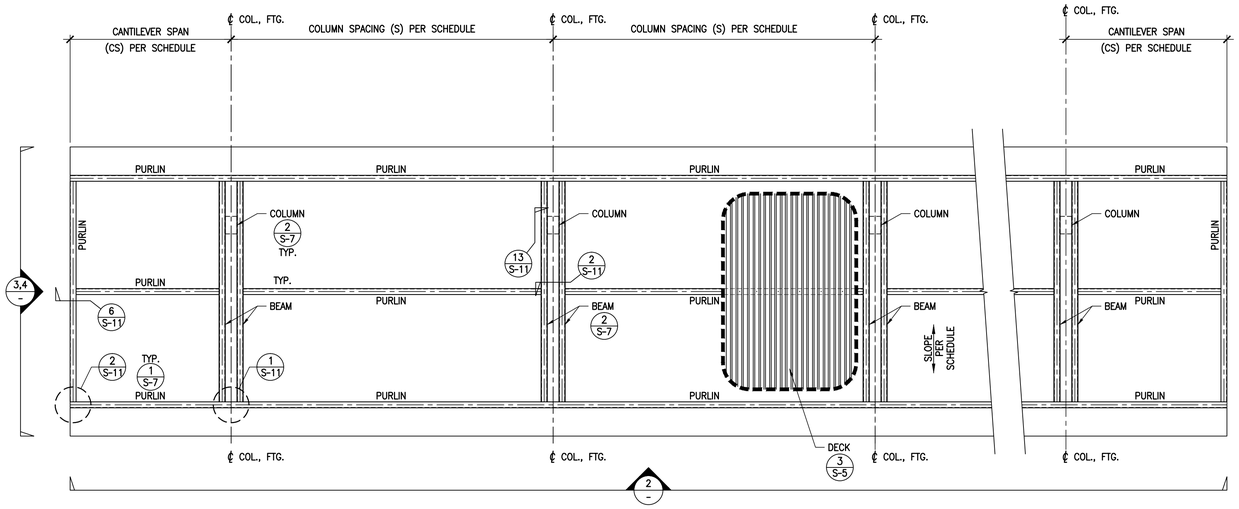
MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
GREG JONES
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

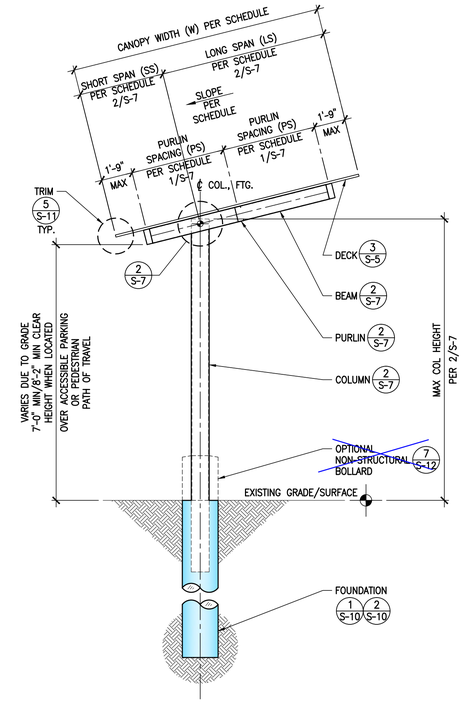
VERSA CANOPY

SECTION PROPERTIES & REBAR DETAILS

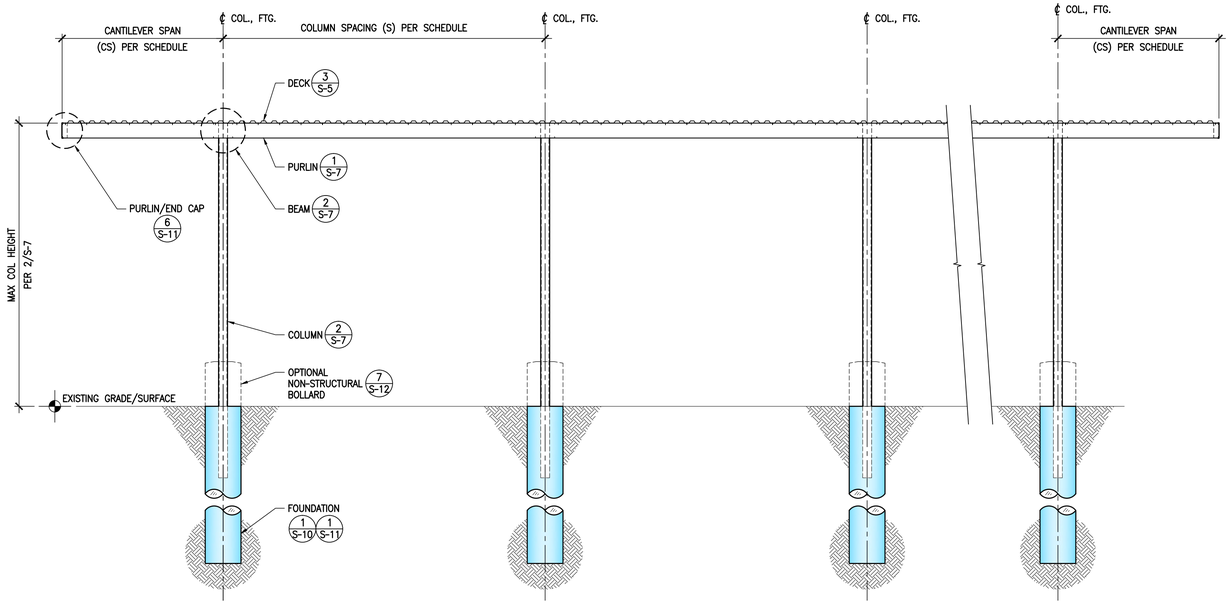
DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-5
5 OF 13 SHEETS



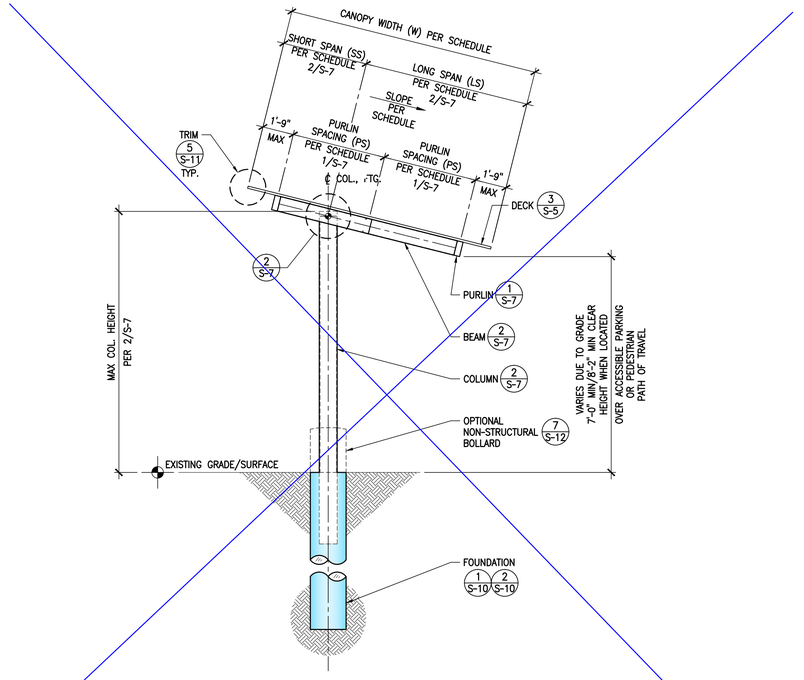
1 - VC14, ~~VC18 & VC20~~ TYPICAL PLAN VIEW 1/4"=1'-0"



3 - VC14, ~~VC18 & VC20~~ TYPICAL SIDE ELEVATION 1 1/4"=1'-0"



2 - VC14, ~~VC18 & VC20~~ TYPICAL FRONT ELEVATION 1/4"=1'-0"



4 - VC14, VC18 & VC20 TYPICAL SIDE ELEVATION 2 1/4"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED 11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
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APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960 B AND C51
674 RANCHEROS DR SAN MARCOS, CA 92069
PHONE: (760) 744-4131 FAX: (760) 744-4449
GREG JONES GREGJ@MBARCONLINE.COM (775) 787-8845

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200 MISSION VIEJO, CA 92691
PHONE: (949) 305-1150 FAX: (949) 305-1420

VERSA CANOPY
VC14, ~~VC18 & VC20~~
FRAMING PLAN & ELEVATIONS

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-6
6 OF 13 SHEETS

VC14, VC18 & VC20 PURLIN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX PURLIN SPACING (PS)	MAX COLUMN SPACING (S)	MAX CANTILEVER SPAN (CS)	PURLIN	
					SECTION	DETAIL
VC14	0 psf	63"	27'-0"	10'-0"	CS12 x 4 x 0.102 (12 GA)	1/S-5
~~VC18~~	~~0 psf~~	~~87"~~	~~27'-0"~~	~~10'-0"~~	~~CS12 x 4 x 0.124 (10 GA)~~	1/S-5
~~VC20~~	~~0 psf~~	~~99"~~	~~19'-0"~~	~~8'-0"~~	~~CS14 x 4 x 0.102 (12 GA)~~	1/S-5

NOTES:
1. REFER TO SHEET 'S-2' FOR CONSTRUCTION OPTIONS.
2. REFER TO DETAIL '4/S-12' FOR ALLOWABLE PURLIN PENETRATIONS.
3. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
4. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID'S ROW ONLY.

1 - VC14, VC18 & VC20 TYPICAL PURLIN SCHEDULE

VC14, VC18 & VC20 BEAM/COLUMN SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	MAX WIDTH (W)	BEAM SHORT SPAN MIN (SS)	BEAM LONG SPAN MAX (LS)	MAX COLUMN SPACING (S)	ROOF SLOPE	BEAM		BEAM TO COLUMN DETAIL	COLUMN		MAX COLUMN HEIGHT
							SECTION	DETAIL		SECTION	DETAIL	
VC14	0 psf	14'-0"	4'-3"	9'-9"	27'-0"	3:12 MAX	CS12 x 4 x 0.102 (12 GA)	1/S-5	13/S-11	HSS 12 x 6 x 1/4	2/S-5	17'-0"
~~VC18~~	~~0 psf~~	~~18'-0"~~	~~7'-9"~~	~~10'-3"~~	~~27'-0"~~	~~3:12 MAX~~	~~CS12 x 4 x 0.102 (12 GA)~~	~~1/S-5~~	~~13/S-11~~	~~HSS 12 x 6 x 1/4~~	~~2/S-5~~	~~17'-9"~~
~~VC20~~	~~0 psf~~	~~20'-0"~~	~~5'-9"~~	~~14'-3"~~	~~19'-0"~~	~~3:12 MAX~~	~~CS14 x 4 x 0.124 (10 GA)~~	~~1/S-5~~	~~13/S-11~~	~~HSS 12 x 6 x 1/4~~	~~2/S-5~~	~~17'-0"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. THE SHORT SPAN AND LONG SPANS MAY BE ADJUSTED WITH THE FOLLOWING REQUIREMENT:
   THE OVERALL CANOPY WIDTH IS NOT EXCEEDED, NEITHER SPAN IS LESS THAN THE MIN SHORT SPAN & NEITHER SPAN EXCEEDS THE MAX LONG SPAN.

2 - VC14, VC18 & VC20 TYPICAL BEAM/COLUMN SCHEDULE

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

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SAN MARCOS, CA
92069
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FAX: (760) 744-4449
GREG@MBARCONLINE.COM
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STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY
VC14, ~~VC18 & VC20~~
FRAMING SCHEDULES

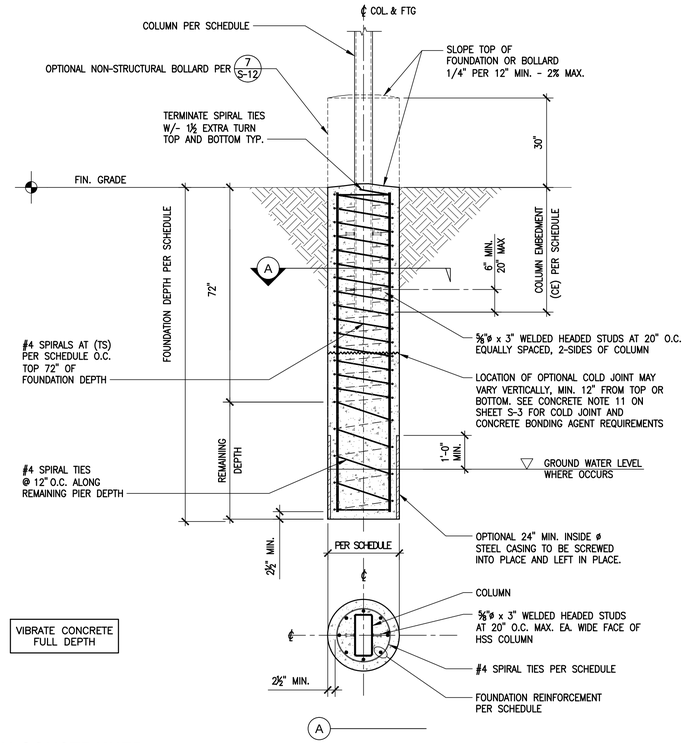
DRAWN
GM
CHECKED
KS
DATE
11/28/2018
4STEL JOB NO.
MC03-01
SHEET
S-7
7 OF 13 SHEETS

NON-CONSTRAINED PIER FOUNDATION SCHEDULE

I.D. #	MAX GROUND SNOW LOAD	FOUNDATION LONGITUDINAL REINFORCEMENT	FOUNDATION DIAMETER (D)	MIN COLUMN EMBEDMENT (CE)	MAX TIE SPACING AT TOP (TS)	FOUNDATION DETAIL	PIER FOUNDATION MINIMUM DEPTH (SEE SOIL NOTES ON S-3)				
							~~SOIL CLASS V~~	SOIL CLASS W	~~SOIL CLASS X~~	~~SOIL CLASS Y~~	~~SOIL CLASS Z~~
VC14	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~14'-0"~~	11'-0"	~~9'-6"~~	~~8'-9"~~	~~7'-6"~~
VC18	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~14'-9"~~	~~11'-6"~~	~~10'-0"~~	~~9'-0"~~	~~8'-0"~~
VC20	0 psf	4 - #8	2'-0"	3'-6"	6"	3/-	~~15'-0"~~	~~11'-9"~~	~~10'-3"~~	~~9'-3"~~	~~8'-0"~~
VC140	20 psf	4 - #8	2'-0"	3'-6"	6"	3/-	15'-0"	11'-6"	9'-9"	~~8'-9"~~	7'-6"
VC180	20 psf	4 - #8	2'-0"	3'-6"	~~6"~~	3/-	~~15'-3"~~	11'-9"	10'-0"	9'-0"	7'-9"
VC200	~~20 psf~~	4 - #8	2'-0"	3'-6"	6"	3/-	15'-3"	12'-0"	10'-3"	~~9'-3"~~	~~8'-3"~~

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.
4. FOR SITUATIONS WHERE WATER MITIGATION IS NECESSARY, OR FOR OTHER CONDITIONS REQUIRING MITIGATION, REFER TO DETAIL 2/- FOR SLEEVED FOUNDATION OPTION.

1 - PIER FOUNDATION SCHEDULE



3 - NON-CONSTRAINED PIER FOUNDATION

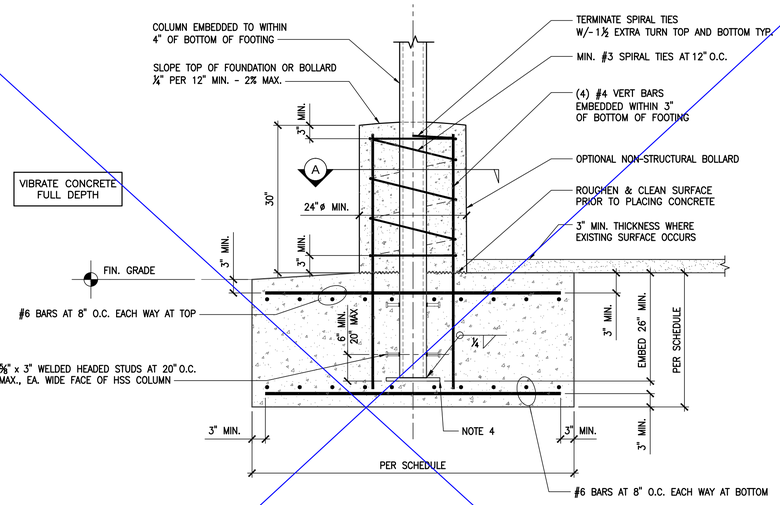
1/2"=1'-0"

SPREAD FOOTING SCHEDULE

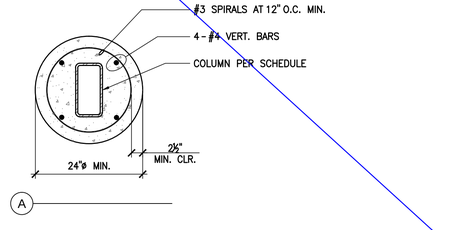
I.D. #	MAX GROUND SNOW LOAD	FOUNDATION DETAIL	SPREAD FOOTING MINIMUM DIMENSIONS FOR SOIL CLASS V (SOILS NOTES S-3)
VC14	0 psf	4/-	9'-6" (SQ.) x 2'-6" DEEP
VC18	0 psf	4/-	10'-3" (SQ.) x 2'-6" DEEP
VC20	0 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC140	20 psf	4/-	9'-3" (SQ.) x 2'-6" DEEP
VC180	20 psf	4/-	10'-0" (SQ.) x 2'-6" DEEP
VC200	20 psf	4/-	9'-9" (SQ.) x 2'-6" DEEP

NOTES:
1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. SEE SOILS NOTES ON SHEET S-3 FOR INFORMATION ON SOILS CLASS SELECTION.

2 - SPREAD FOOTING SCHEDULE



NOTES:
1. CONCRETE BOLLARDS TO BE POURED IN A SECOND POUR AFTER THE FOUNDATION BELOW GRADE IS POURED. DSA INSPECTOR TO PERIODICALLY INSPECT THE INSTALLATION OF BONDING AGENT WHEN USED.
2. BOLLARD REBAR CAGE SHALL BE CONSTRUCTED INDEPENDENTLY FROM THE FOUNDATION USING 4-#4 VERTICAL BARS. BOLLARD VERTICAL BARS MAY BE TIED TO FOUNDATION BARS PRIOR TO CONCRETE POUR OR WET SET PER NOTE 3.
3. VERTICAL BARS IN THE NONSTRUCTURAL BOLLARD ARE PERMITTED TO BE WET SET INTO THE STRUCTURAL FOUNDATION, PROVIDED THE FOUNDATION IS SUFFICIENTLY WORKABLE SO AS NOT TO REQUIRE HAMMERING IN OR ANY OTHER SUCH METHOD. WET SET SHALL BE PERFORMED USING #4 BARS WITH MINIMUM 20" EMBEDMENT.
4. 1" THICK A36 STEEL PLATE. PLATE TO EXTEND PAST ALL SIDES OF COLUMN BY 4" MIN.



4 - SPREAD FOOTING

3/4"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPARK S 5885 STRUCTURAL STATE OF CALIFORNIA

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VERSA CANOPY

FOUNDATION SCHEDULES

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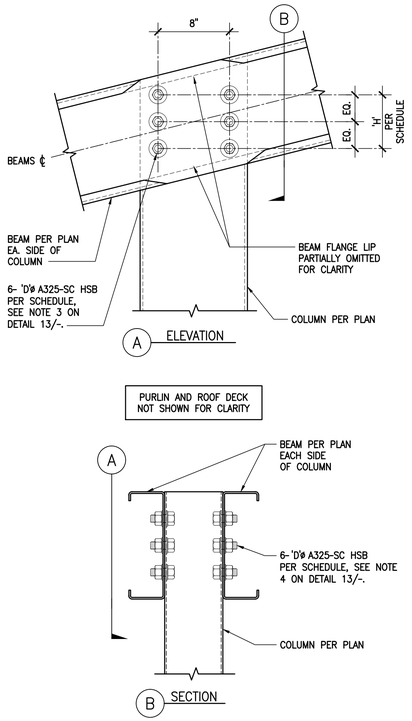
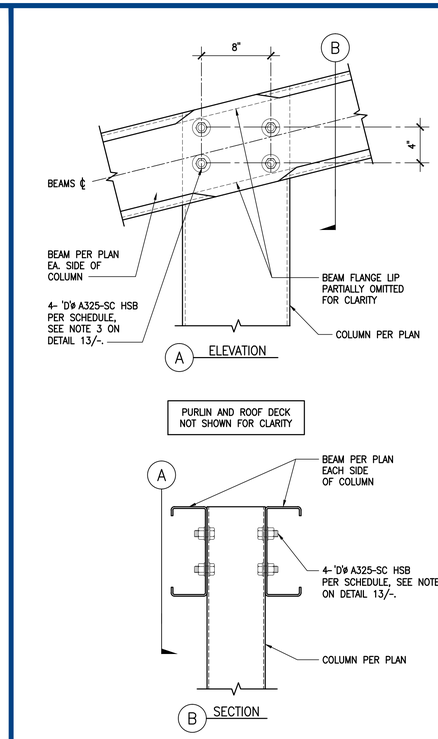
SHEET S-10
10 OF 13 SHEETS

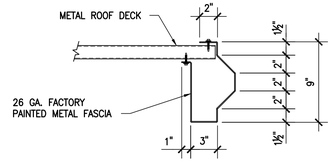


12 BEAM TO COLUMN - 6 BOLT



11 BEAM TO COLUMN - 4 BOLT

1-1/2"=1'-0"

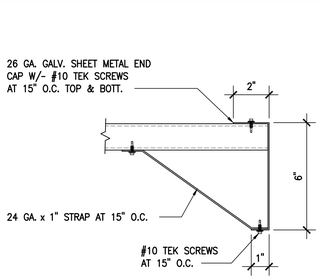


NOTES:

1. #10 TEK SCREWS W/- WATER PROOF WASHER TOP & BOTT. AT 3'-0" O.C. +/-.
2. PROVIDE ⅜"ø WEEP HOLES AT 1'-6" O.C.

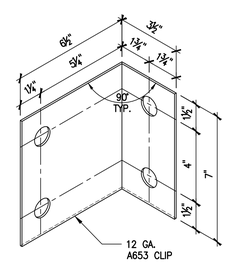
7 ROOF DECK TRIM DETAIL (OPTIONAL)

3"=1'-0"



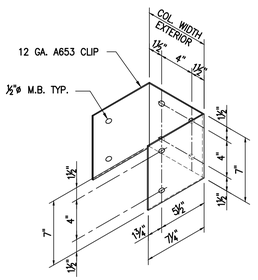
8 ROOF DECK TRIM DETAIL (OPTIONAL)

1-1/2"=1'-0"



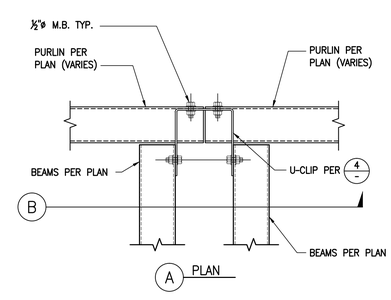
3 L-CLIP INTERIOR PURLIN TO BEAM

3"=1'-0"



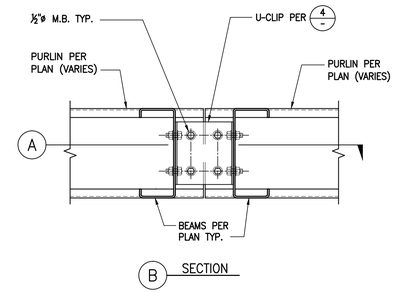
4 U-CLIP EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.
2. PURLINS AT CANTILEVER SHALL BE CONTINUOUS.



1 EXTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

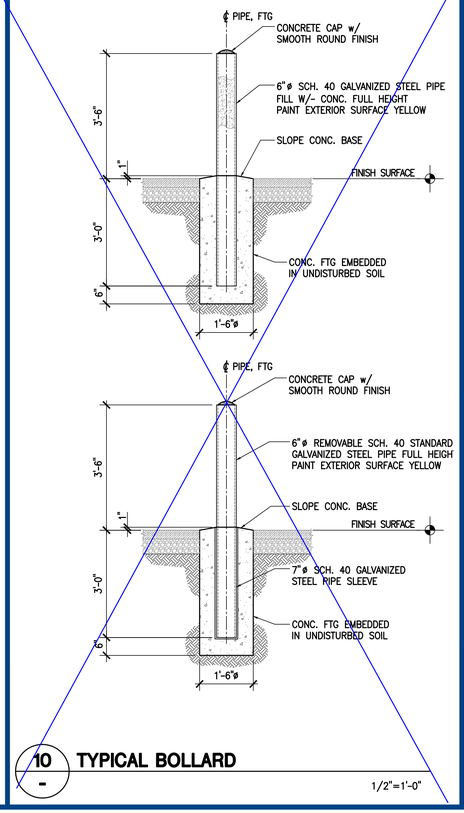
I.D. #	MAX GROUND SNOW LOAD	# OF BOLTS (n)	BOLTED CONNECTION DETAIL	BOLT DIAMETER (D) ASTM A325-SC	BOLT PATTERN (B x H)
VC14	0 psf	4	11/-	1"	8" x 6"
VC18	0 psf	6	12/-	⅞"	8" x 6"
VC20	0 psf	6	12/-	⅞"	8" x 8"
VC140	20 psf	4	11/-	1"	8" x 6"
VC180	20 psf	6	12/-	¾"	8" x 8"
VC200	20 psf	6	12/-	⅞"	8" x 8"

NOTES:

1. MULTIPLE STRUCTURE ID'S MAY BE SELECTED WITHIN THE SAME SITE.
2. WHEN UTILIZING A STRUCTURE ID READ FROM WITHIN THAT ID ROW ONLY.
3. BOLTS SHALL BE PRETENSIONED A325-SC (SLIP-CRTICAL) TYPE N (THREADS NOT EXCLUDED FROM SHEAR PLANE) CLASS A FAYING SURFACE WITH STANDARD NUTS PER ASTM A563 AND WASHERS PER ASTM F436 TYPICAL U.N.O.
4. BOLTS, NUTS AND WASHERS SHALL BE GALVANIZED.

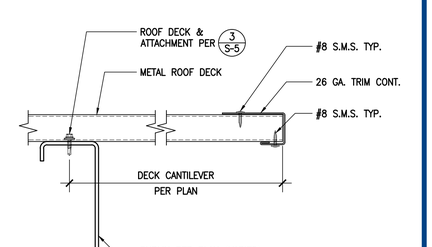
13 BEAM TO COLUMN SCHEDULE

N.T.S.



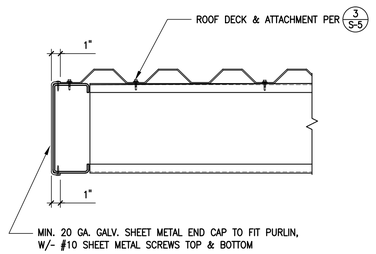
10 TYPICAL BOLLARD

1/2"=1'-0"



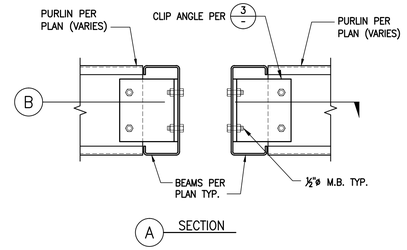
5 ROOF DECK TRIM DETAIL

3"=1'-0"



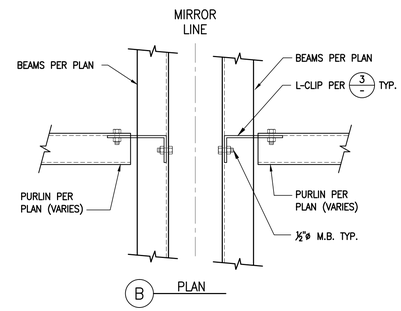
6 END ENCLOSURE DETAIL

1-1/2"=1'-0"



NOTES:

1. ROOF DECK NOT SHOWN FOR CLARITY.



2 INTERIOR PURLIN TO BEAM

1-1/2"=1'-0"

ENGINEER'S APPROVAL

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VERSA CANOPY

STANDARD DETAILS 1

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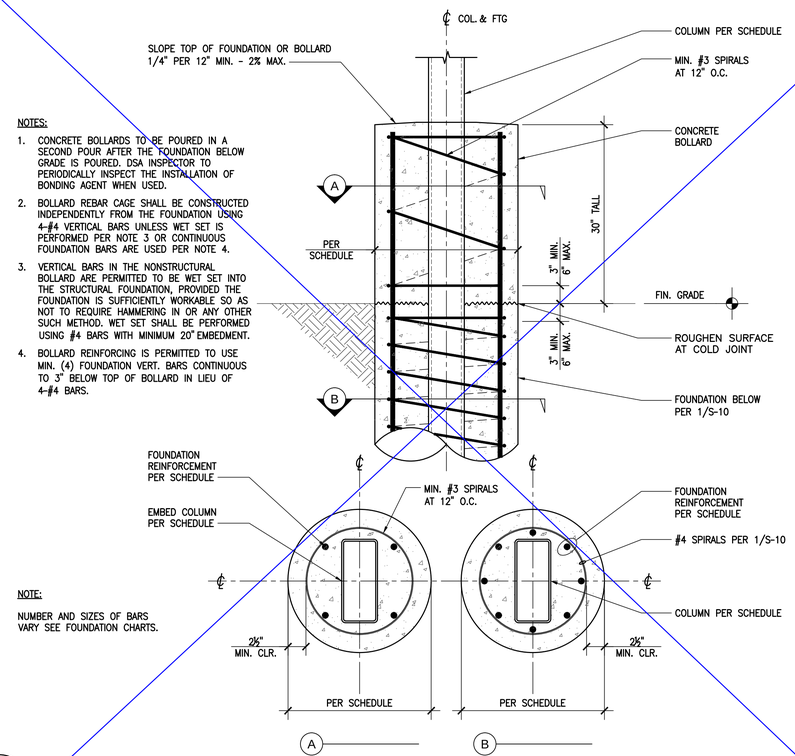
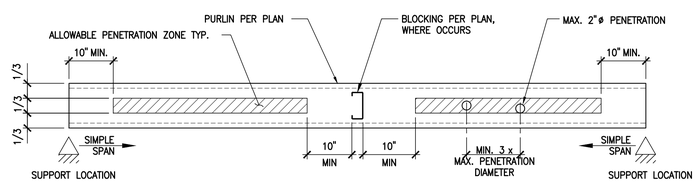
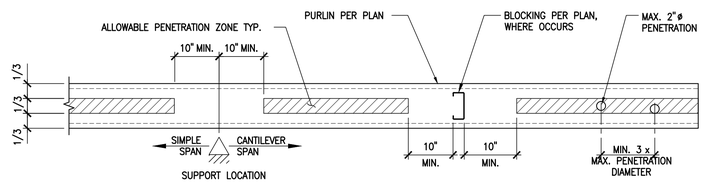


7 - OPTIONAL CONCRETE BOLLARD

1"=1'-0"



SIMPLE SUPPORT SPAN

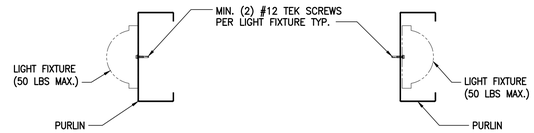


CANTILEVER SPAN

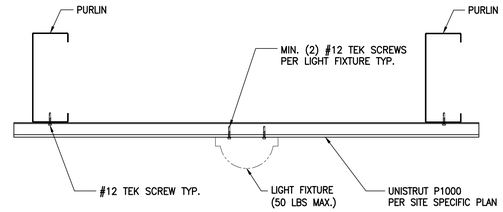
NOTE:
IF MORE THAN 5 PENETRATIONS PER SPAN ARE NEEDED, CONTRACTOR TO SUBMIT AN RFI TO DESIGN PROFESSIONAL IN GENERAL RESPONSIBLE CHARGE TO ENSURE REQUIREMENTS OF THIS DETAIL ARE MET AND TO JUSTIFY THE QUANTITY OF PENETRATIONS NEEDED.

4 - ALLOWABLE PURLIN PENETRATIONS

3/4"=1'-0"

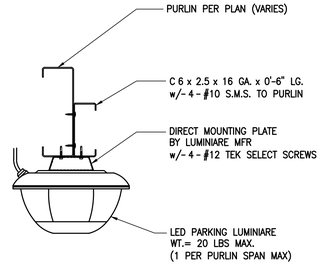


NOTE:
ALL STRUCTURAL CONNECTION POINTS REQUIRED BY MANUFACTURER TO MAINTAIN WARRANTY TO BE FILLED. THIS MAY EXCEED THE MINIMUM NUMBER OF SCREWS.



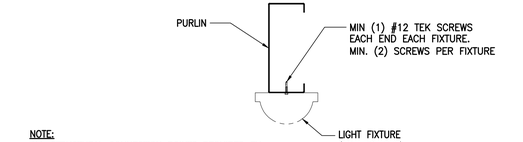
1 - LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"



5 - TYPICAL PARKING LUMINAIRE AT PURLIN

1 1/2"=1'-0"



NOTE:
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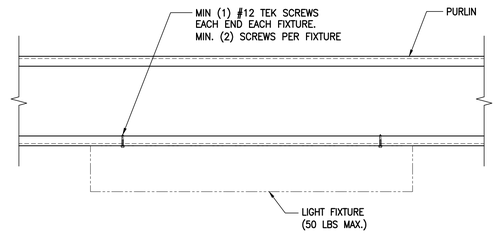
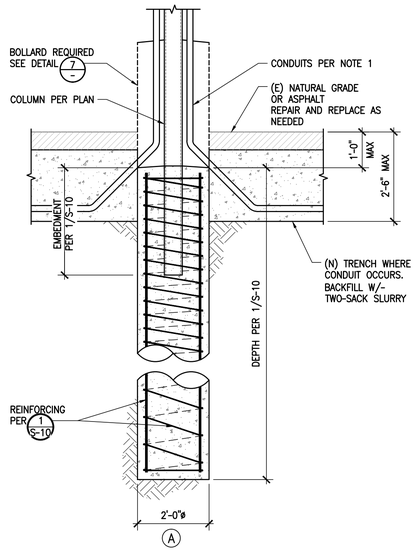
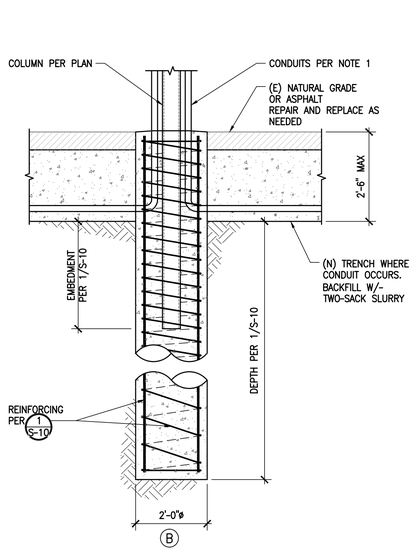


2 - ALTERNATE LIGHT INSTALLATION OPTIONS

1-1/2"=1'-0"

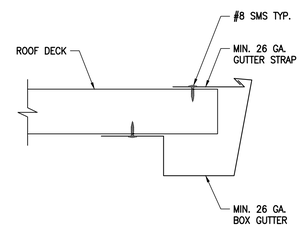




NOTE:
1. CONDUIT IN FOUNDATION SHALL NOT EXCEED (1) 2" MAX ø CONDUIT OR (2) 1½" MAX ø CONDUIT. WHEN (2) CONDUIT ARE USED IN THE SAME FOUNDATION, THE CONDUIT MAY ENTER THE FOUNDATION FROM EITHER SIDE.
2. CONDUIT TRENCH SHALL BE FILLED WITH MIN 2-SACK SLURRY.

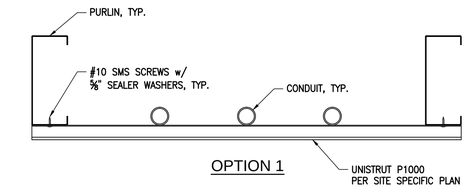
8 - CONDUIT AT DRILLED PIER

1"=1'-0"

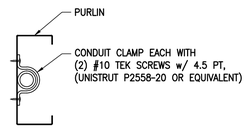


6 - GUTTER DETAIL

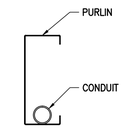
3"=1'-0"



OPTION 1



OPTION 2



OPTION 3

3 - CONDUIT SUPPORT/ LOCATION OPTIONS

1-1/2"=1'-0"

ENGINEER'S APPROVAL

REGISTERED PROFESSIONAL ENGINEER DUSTIN K. ROSEPINK S 5885 STRUCTURAL STATE OF CALIFORNIA

DATE SIGNED
11/28/2018

SITE SPECIFIC DSA APPROVAL

FILE NUMBER: PC-119
IDENTIFICATION STAMP
DIVISION OF THE STATE ARCHITECT
APP. NO: 04 - 117117 INCR :
AC DF FLS DS SS DP
DATE 12/05/2018

PRE-CHECK (PC) DOCUMENT
CODE: 2016 CBC
A SEPARATE PROJECT APPLICATION FOR CONSTRUCTION IS REQUIRED

MBARC CONSTRUCTION INC.
LIC # 869960
B AND C51
674 RANCHEROS DR
SAN MARCOS, CA
92069
PHONE: (760) 744-4131
FAX: (760) 744-4449
GREG@MBARCONLINE.COM
GREG JONES

4STEL ENGINEERING
STRUCTURAL ENGINEERING
26030 ACERO, SUITE 200
MISSION VIEJO, CA 92691
PHONE: (949) 305-1150
FAX: (949) 305-1420

VERSA CANOPY

STANDARD DETAILS 2

DRAWN GM
CHECKED KS
DATE 11/28/2018
4STEL JOB NO. MC03-01
SHEET S-12
12 OF 13 SHEETS