Palm Springs Unified School District

PROJECT MANUAL

and

GENERAL CONDITIONS

For

Bid No. 07-10

Two Bunch Palms Elementary School

New Windscreen and Site Improvements

Bid Due: **March 11, 2010 no later than 2:00 p.m.**

Location: **Palm Springs Unified School District**
Staff Development Conference Room
980 E. Tahquitz Canyon Way, Suite 102
Palm Springs, CA 92262

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TECHNICAL SPECIFICATIONS

NOTICE INVITING BIDS
PALM SPRINGS UNIFIED SCHOOL DISTRICT
Bid No. 07-10
Two Bunch Palms Elementary School
New Windscreen and Site Improvements

Bids will be received at: 2:00 p.m. on March 11, 2010 at the
Palm Springs Unified School District
Staff Development Conference Room
980 E. Tahquitz Canyon Way, Suite 102
Palm Springs, CA 92262

at or after which time the bids will be opened and publicly read aloud. All bids shall be made and presented only on the forms presented by the school district. It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bids received after the time specified above or after any extensions due to material changes shall be returned unopened.

Project Description: Installation of New Block Walls and Glass Store Front at Two Bunch Palms Elementary School, Desert Hot Springs, CA

Place Plans are on file for viewing: OCB Reprographics - Plan Well at ww.ocbinc.com
OR Palm Springs Unified School District
Purchasing Department
980 E. Tahquitz Canyon Way, Suite 103
Palm Springs, CA 92262

Contractor's License Classification Required: "B" – General Building

There will be a **mandatory** Pre-Bid Conference on March 2, 2010 at 10:00 a.m. held at Two Bunch Palms Elementary School, 14-250 West Drive, Desert Hot Springs, CA 92240. Any Contractor bidding on the project who fails to attend the entire job walk and conference will be deemed a non-responsive bidder and will have its bid returned unopened.

NOTICE IS HEREBY GIVEN that the Governing Board of the Palm Springs Unified School District, hereinafter referred to as "District", is calling for and will receive sealed bids for the award of a contract for the above project up to, but not later than, the above-stated date and time.

Miscellaneous Information

Bid Documents are available through OCB Reprographics – Plan Well. To order bid documents, visit their website at www.ocbinc.com, then click on the Plan Well link to access the log in page or they can be contacted at 760-772-9794. Costs for the bid documents are non-refundable and will vary depending on the amount ordered. Pricing is based on the District's approved pricing schedule with OCB Reprographics.

Each bidder shall be a licensed contractor pursuant to the California Business and Professions Code, and be licensed to perform the work called for in the contract documents. The successful bidder must possess a valid and active Contractor's California State License Class as previously indicated at time of award of contract and throughout the duration of the project. The Contractor's California State License number shall be clearly stated on the bidder's proposal.

The District reserves the right to reject any or all bids or to waive any irregularities or informalities in any bids or in the bidding.

In accordance with California Public Contract Code Section 22300, the District will permit the substitution of securities for any moneys withheld by the District to ensure performance under the contract. At the request and expense of the CONTRACTOR, securities equivalent to the amount withheld shall be deposited with the District, or with a state or federally chartered bank as the escrow agent, who shall then pay such moneys to the CONTRACTOR. Upon satisfactory completion of the contract, the securities shall be returned to the CONTRACTOR.

The District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the contract. These per diem rates, including holiday and overtime work, as well as employer payments for health and welfare, pension, vacation, and similar purposes, are on file at the District, and are also available from the Director of the Department of Industrial Relations. Pursuant to California Labor Code Sections 1720 et seq., it shall be mandatory upon the CONTRACTOR to whom the contract is awarded, and upon any subcontractor under such CONTRACTOR, to pay not less than the said specified rates to all workers employed by them in the execution of the contract.

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.

Each bid must strictly conform with and be responsive to the contract documents as defined in the General Conditions.

Dated this 19th day of February, 2010
Diana A. Field
Director of Purchasing
Palm Springs Unified School District
Riverside County

Publish 2/19/10 and 2/26/10

INSTRUCTIONS TO BIDDERS

1. Preparation of Bid Form. Proposals under these specifications shall be submitted on the blank forms furnished herewith at the time and place stated in the Notice Inviting Bids. All blanks in the bid form must be appropriately filled in, and all proposed prices must be stated clearly and legibly in both words and numerals. All bids must be signed by the bidder in permanent ink and submitted in sealed envelopes, bearing on the outside, the bidder's name, address, telephone number, and California Contractor's License number, and the name of the project for which the bid is submitted. The District reserves the right to reject any bid if all of the above information is not furnished. Any bid received after the scheduled closing time for receipt of bids will be returned to the bidder unopened. It is each bidder's sole responsibility to ensure its bid is timely delivered and received at the location designated as specified above. Any bid received at the designated location after the scheduled closing time for receipt of bids shall be returned to the bidder unopened. **Each bid must strictly conform with and be responsive to the contract documents as defined in the General Conditions.**

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

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

If bidder is a corporation, the legal name of the corporation shall first be set forth, together the person's or person's signature who is duly authorized by the bylaws of the corporation. Such documents shall include the title of such signatories below the signature and shall bear the corporate seal.

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

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

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

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

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

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

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

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

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

8. Agreements, Insurance, and Bonds. The Agreement form which the successful bidder, as CONTRACTOR, will be required to execute, and the form of the bonds and insurance endorsements which such CONTRACTOR will be required to furnish, are included in the contract documents and should be carefully examined by the bidder. Payment bond and performance bonds in the amount of one hundred percent (100%) of the amount of the contract and insurance endorsements must be furnished as required in the contract, all prior to execution of the contract.

9. Interpretation of Plans and Documents. If any prospective bidder is in doubt as to the true meaning of any part of the contract documents, or finds discrepancies in, or omissions from the drawings and specifications, a written Request for Clarification (RFC) for an interpretation or

correction thereof may be submitted to the Architect. The bidder submitting the request shall be responsible for its prompt delivery.

All RFC's (Request for Clarification) regarding the bid shall be addressed to Mike Higgins at Ruhnau Ruhnau Clarke Architects. Each request shall be submitted in writing via fax to 951-684-6276 or via e-mail to mhiggins@rrcarch.com with the Bid Number and Bid Title referenced in the RFC. RFC's will be accepted up to March 5, 2010 by 4:00 p.m.

Any interpretation or correction of the contract documents will only be made by an addendum that is duly issued by the District. Addendums will be issued through OCB Reprographics ("OCB"). Bidders will be responsible for obtaining the addendums that are issued by the District by visiting the OCB website at www.ocbinc.com or by contacting OCB at 760-772-9794. Costs for any copies of addendums shall be borne by the District. Please note: Bidders are primarily and ultimately responsible for ensuring that they have received any and all addenda. Each bidder must verify that it has obtained any and all addenda and mark each addendum accordingly on the bid form before it submits a bid to the District. No person is authorized to make any oral interpretation of any provision in the contract documents, nor shall any oral interpretation be binding on the District. If discrepancies on drawings, or in specifications, or conflicts between drawings and specifications are not covered by addenda, bidder shall include in the bid methods of construction and materials resulting in the higher bid.

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

11. Award of Contract. The District reserves the right to reject any or all bids, or to waive any irregularities or informalities in any bids or in the bidding. The award of the contract, if made by the District, will be by action of the governing board. Each Bidder shall include an "Allowance" in their bid totaling Five Thousand Dollars ($5,000.00) for additional skateboard prevention site work and any other unforeseen site work yet to be determined. Expenditures from this contingency shall be utilized only upon receiving pre-approval by the District prior to work commencing. Each bidder is to include the above allowance as a separate line item in their Bid Forms so the allowance can be added to each bidder's Base Bid to calculate the bidder's "Total Cash Purchase Price". The Base Bid shall include all the labor, materials, equipment, tools, and utility and transportation services, etc. that are necessary to complete the Project pursuant to the Construction Documents with the exception of the Allowance work. The District will award the Project to the responsible and responsive bidder, among those bidders responsive to the call for bids, with the lowest Total Cash Purchase Price.

Each bidder understands and agrees that the Allowance set forth in this Section 11 will be utilized to pay for additional skateboard prevention site work and any other unforeseen site work yet to be determined by the District, if any. Any unused portion of the Allowance that remains at the completion of the Project shall be deducted from the final construction cost. The unused portion of the Allowance, if any, shall be credited back to the District in the form of a deductive change order. The Contractor shall not be entitled to retain any overhead or profit on any unused portion of the Allowance that is returned to the District.

In the event an award is made to bidder, and such bidder fails or refuses to execute the contract and provide the required documents within five (5) calendar days after notification of the award of the contract to bidder, the District may award the contract to the next lowest responsible and responsive bidder or release all bidders. **Each bid must conform and be responsive to the contract documents as defined in the General Conditions.**

12. Alternates. If alternate bids are called for, the contract may be awarded at the election of the governing board to the lowest responsible and responsive bidder using the method and procedures outlined in the Notice Inviting Bids.

13. Evidence of Responsibility. Upon the request of the District, a bidder whose bid is under consideration for the award of the contract shall submit promptly to the District satisfactory evidence showing the bidder's financial resources, surety and insurance claims experience, construction experience, completion ability, workload, organization available for the performance of the contract, and other factors pertinent to a project of the scope involved.

14. Listing Subcontractors. Each bidder shall submit with his bid, on the form furnished with the contract documents, a list of the names, license numbers and locations of the places of business of each subcontractor who will perform work or labor or render service to the bidder in or about the project, or a subcontractor who under subcontract to the bidder, specially fabricates and installs a portion of the work, in an amount in excess of one-half of 1 percent of the bidder's total bid as required by the Subletting and Subcontracting Fair Practices Act (Public Contract Code Section 4100, et. seq.). If alternate bids are called for and the bidder intends to use different or additional subcontractors, a separate list of subcontractors must be submitted for each such alternate. **Subcontractors shall hold a valid license pursuant to California law for the trades necessary to perform the work called for in the contract documents.**

15. Workers' Compensation. In accordance with the provisions of Labor Code Section 3700, the successful bidder as the CONTRACTOR shall secure payment of compensation to all employees. The CONTRACTOR shall sign and file with the District the following certificate prior to performing the work under this contract: "I am aware of the provisions of Section 3700 of the Labor Code, which requires every employer to be insured against liability for workers' compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract." The form of such certificate is included as a part of the contract documents.

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

17. Anti-Discrimination. It is the policy of the District that in connection with all work performed under contracts, there be no discrimination against any prospective or active employee engaged in the work because of race, color, ancestry, national origin, religious creed, sex, age, or marital status. The CONTRACTOR agrees to comply with applicable federal and California laws,

including, but not limited to, the California Fair Employment and Housing Act, beginning with Government Code section 12900 and Labor Code section 1735. In addition, the CONTRACTOR agrees to require like compliance by any subcontractors employed on the work by such CONTRACTOR.

18. Hold Harmless. CONTRACTOR shall defend, indemnify and hold harmless District, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors from all liabilities, claims, actions, liens, judgments, demands, damages, losses, costs or expenses of any kind arising from death, personal injury, property damage or other cause based or asserted upon any act, omission, or breach connected with or arising from the progress of Work or performance of service under this Agreement or the Contract Documents. As part of this indemnity, CONTRACTOR shall protect and defend, at its own expense, District, Architect, Inspector, the State of California and their officers, employees, agents and independent contractors from any legal action including attorneys fees or other proceeding based upon such act, omission, or breach.

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

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

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

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

CONTRACTOR, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on any such claim or liability, and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

19. Preference for Materials and Substitutions.

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

(b) Request for Substitution. All requests for substitutions pursuant to Public Contracts Code Section 3400 and as referenced in Technical Specification Section 01600 "Product Requirements," must be made on the form set forth in the contract documents and must be submitted to the District's Architect at the location noted in the Request for Substitution Form no later than seven (7) calendar days prior to the bid due date.

Bidder may, unless otherwise stated, offer any material, process, article, etc., which is materially equal or better in every respect to that so indicated or specified ("Specified Item") and will completely accomplish the purpose of the contract document. If bidder desires to offer a substitution for a Specified Item, such bidder must make a request in writing on the District's Request for Substitution form ("Request Form") and submit the completed Request Form to the District's Architect no later than seven (7) calendar days prior to the bid due date.. The Request Form must include, among other things, evidence as to whether the proposed substitution:

1. Is equal in quality, service, and ability to the Specified Item;
2. Will entail no changes in detail, construction and scheduling of related work;
3. Will be acceptable in consideration of the required design and artistic effect;
4. Will provide no cost disadvantage to the District;
5. Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and
6. Will require no change in the construction schedule.

In completing the Request Form, bidder must state with respect to each requested substitution whether bidder will agree to provide the Specified Item in the event that the District denies bidder's request for substitution of a Specified Item. In the event that bidder does not agree in the Request Form to provide the Specified Item and the District denies the requested substitution, the bidder's bid shall be considered non-responsive and the District may award the contract to the next lowest bidder or in its sole discretion, release all bidders. In the event that bidder has agreed in the Request Form to provide the Specified Item and the District denies bidder's requested substitution for a Specified Item, bidder shall execute the Agreement and provide the Specified Item without any additional cost or charge to the District, and if bidder fails to execute the Agreement with the Specified Item(s), bidder's bid bond will be forfeited.

Bidders shall provide, no later than seven (7) calendar days prior to the bid due date, any and all drawings, specification, samples, performance data, calculations, and other information as may be required to assist the Architect and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

After the District's receipt of such evidence by bidder, the District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The District shall have sole discretion in deciding as to whether a proposed request for substitution is equal to or better than a Specified Item. Any request for substitution which is granted by the District shall be documented and processed through an addendum. The District may condition its approval of any substitution upon delivery to the District of an extended warranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to DSA, or any other governmental agency having jurisdiction shall be on the bidder.

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

21. Unbalanced or Altered Bids. Proposals in which the prices are obviously unbalanced, and those which are incomplete or show any alteration of form, or contain any additions or conditional or alternate bids that are not called for or otherwise permitted, may be rejected. A proposal on which the signature of the bidder has been omitted may be rejected.

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

23. Non-Collusion Affidavit. Public Contract Code Section 7106 requires bidders to submit an affidavit of non-collusion with their bids. This form is included with the bid package and must be signed and dated by the bidder under penalty of perjury. Non-collusion affidavits between the Contractor and any listed sub-contractor must be dated prior to the bid opening and should be available to be presented to the District upon request.

24. Wage Rates, Travel and Subsistence.

(a) Pursuant to Labor Code Sections 1770 et. seq., the District has obtained from the Director of the Department of Industrial Relations the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this work is to be performed for each craft, classification or type of worker needed to execute the contract. Copies are available from the District to any interested party on request and are also available from the Director of the Department of Industrial Relations. The CONTRACTOR shall obtain copies of the above-referenced prevailing wage sheets and post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

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

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

(d) The CONTRACTOR shall post, at appropriate, conspicuous, weatherproof points at the site, a schedule showing all determined minimum wages actually earned.

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

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

26. Protest Process. Any bid protest by any Bidder regarding any other bid must be submitted in writing to the District, before 5:00 p.m. of the fifth (5th) business day following the bid opening. The protest must contain a complete statement of any and all bases for the protest. The protest must refer to the specific portions of all documents that form the bases for the protest. The protest must include the name, address and telephone number of the person representing the protesting party. The party filing the protest must concurrently transmit a copy of the protest and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other bidders or proposers who appear to have a reasonable prospect of receiving an award of the contract depending upon the outcome of the protest. The procedure and time limits set forth in this paragraph are mandatory and are each bidder's sole and exclusive remedy in the event of bid protest. Failure to comply with these procedures shall constitute a waiver of any right to further pursue the bid protest, including filing a Government Code claim or legal proceedings. The District will respond to any written protest that meets the requirements of this paragraph within five (5) days of receipt of such protest.

DESIGNATION OF SUBCONTRACTORS

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

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

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

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

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

* DESIGNATION OF SUBCONTRACTORS FORM

Description & Portion of Work	Name of Subcontractor	Location & Place of Business	License Number

DATED: _____

_____
Proper Name of Bidder

By: _____
_____
_____
(Signature of Bidder)

Address: _____
_____
_____

Phone: _____

* NONCOLLUSION AFFIDAVIT
(Prime Bidder)

STATE OF CALIFORNIA

County of _____ being first duly sworn, deposes and says that he/she

is _____ of _____,
(Title) (Name of Bidder)

the party making the foregoing bid; 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 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, further, that the bidder has not, directly or indirectly, submitted his or her price or any breakdown thereof, or the contents thereof, or divulged information of date relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company association, organization, bid depository, or to any member of agent thereof to effectuate a collusive or sham bid.

_____
(Signature)

_____
(Typed Name)

SUBSCRIBED BEFORE ME on this ___ day of _____, 20___.

_____
(Notary Public)

My Commission Expires: _____
(Expiration Date)

* BID BOND

KNOW ALL MEN BY THESE PRESENTS that we, the undersigned, (hereafter called "Principal"), and _____ (hereafter called "Surety"), are hereby held and firmly bound unto the Palm Springs Unified School District (hereafter called "Owner") in the sum of _____ ($_____) for the payment of which, well and truly to be made, we hereby jointly and severally bind ourselves, successors, and assigns.

SIGNED this _____ day of _____, 20___.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner a certain Bid, attached hereto and hereby made a part hereof, to enter into a contract in writing for Bid 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project.

NOW, THEREFORE,

a. If said Bid is rejected, or

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

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

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

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

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

PRINCIPAL: _____

_____

ATTEST: (if individual, two witnesses are required)

By:_____ By:_____

Title:_____ Title:_____

ATTEST: (if corporation)

By:_____

Title:_____

(Corporate Seal)

SURETY: _____

_____

ATTEST: (if individual, two witnesses are required)

By:_____ By:_____

Title:_____ Title:_____

ATTEST: (if corporation)

By:_____

Title:_____

(Corporate Seal)

IMPORTANT:

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

THIS IS A REQUIRED FORM.

Any claims under this bond may be addressed to:

(Name and Address of Surety)

_____

_____

_____

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

_____

_____

_____

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

_____

_____

_____

* BID FORM

TO: Palm Springs Unified School District, acting by and through its Governing Board, herein called "District."

FROM: _____
(Bidder's Name)

1. Pursuant to and in compliance with your Notice Inviting Bids and other documents relating thereto, the undersigned bidder, having familiarized himself with the terms of the contract, the local conditions affecting the performance of the contract and the cost of the work at the place where the work is to be done, hereby proposes and agrees to perform within the time stipulated, the contract, including all of its component parts, and everything required to be performed, including its acceptance by the District, and to provide and furnish any and all labor, materials, tools, expendable equipment, and utility and transportation services necessary to perform the contract and complete all of the work in a workmanlike manner required in connection with Bid 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project in the District described above, all in strict conformance with the drawings and other contract documents on file at the Purchasing Office of said District for amounts set forth herein.

2. ADDENDA: The undersigned has thoroughly examined any and all Addenda (if any) issued during the bid period and is thoroughly familiar with all contents thereof and acknowledges receipt of the following Addenda: (Bidder to list all addenda).

ADDENDUM NO. _____	DATE RECEIVED _____
ADDENDUM NO. _____	DATE RECEIVED _____
ADDENDUM NO. _____	DATE RECEIVED _____

3. BASE BID

The District will award the Project to the responsive and responsible bidder with the lowest **Total Cash Purchase Price** as set forth in Section 11 of the Instructions to Bidders. The undersigned bidder hereby submits the following Total Cash Purchase Price:

TOTALS

A. Base Bid for all Work (See Section 11 in the Instructions to Bidders) $_____

B. Allowance:
(Enter Allowance detailed in Section 11 in the Instruction to Bidders) $_____

TOTAL CASH PURCHASE PRICE (total of 3A and 3B) **$**_____

_____ DOLLARS

[Total Cash Purchase Price written in words]

ANY BIDDER THAT FAILS TO FULLY COMPLETE SECTION 3 ABOVE IN ITS ENTIRETY SHALL BE CONSIDERED NON-RESPONSIVE TO THE BID DOCUMENTS AND BID SPECIFICATIONS. BY COMPLETING THIS SECTION, THE UNDERSIGNED BIDDER ACKNOWLEDGES THAT IT HAS READ SECTION 11 IN THE INSTRUCTIONS TO BIDDERS AND FULLY AGREES TO THE TERMS SET FORTH THEREIN.

4. TIME FOR COMPLETION: The District may give a notice to proceed within ninety (90) days of the award of the bid by the District. Once the CONTRACTOR has received the notice to proceed, the CONTRACTOR shall complete the work in the time specified in the Agreement.

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

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

5. It is understood that the District reserves the right to reject any or all bids and/or waive any irregularities or informalities in this bid or in the bid process. The CONTRACTOR understands that it may not withdraw this bid for a period of sixty (60) days after the date set for the opening of bids.

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

   $ _____. Bid bond, certified check, cashier's check, or cash. (circle one)

7. The required List of designated subcontractors is attached hereto.

8. The required notarized Non-collusion Affidavit for the CONTRACTOR is attached hereto.

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

10. It is understood and agreed that if written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned after the opening of the bid, and within the time this bid is required to remain open, or at any time thereafter before this bid is withdrawn, the undersigned will execute and deliver to the District a contract in the form attached hereto in accordance with the bid as accepted, and that he will also furnish and deliver to the District

the Performance Bond and Payment Bond, all within five (5) calendar days after receipt of notification of award, and that the work under the contract shall be commenced by the undersigned bidder, if awarded the contract, by the start date provided in the District's Notice to Proceed, and shall be completed by the CONTRACTOR in the time specified in the contract documents.

11. Notice of Intent to Award Contract or other correspondence should be addressed to the undersigned at the address stated below.

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

_____

_____

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

13. The undersigned bidder shall be licensed and shall provide the following information:

Bidder's California Contractor's License Number: _____

License expiration date: _____

Name on License: _____

Type of License: _____

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

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

15. Pursuant to Government Code Section 4552, in submitting a bid to the District, the bidder offers and agrees that if the bid is accepted, it will assign to the District all rights, title, and interest in, and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. § 15) or under the Cartwright Act (Business and Professions Code Sections 16700, et. seq.,), arising from the purchase of goods, materials, or services by the bidder for sale to the District pursuant to the bid. Such assignment shall be made and become effective at the time the District tenders final payment to the bidder.

16. The bidder declares that he/she has carefully examined the location of the proposed work, that he/she has examined the Plans, General Conditions of the contract, Special Conditions of the contract, and Specifications, and read the accompanying instructions to bidders, and hereby proposes and agrees, if this proposal is accepted, to furnish all materials and do all work required to complete the said work in accordance with the Plans, General Conditions of the contract, Special Conditions of the contract, and Specifications, in the time and manner therein prescribed for the unit cost and lump sum amounts set forth in this Bid Form.

17. The bidder is familiar with Government Code Sections 12650, et. seq., and Penal Code Section 72 and understands that false claims can lead to imprisonment.

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

Firm (circle one): Corporation / Partnership / Proprietorship

_____
Proper Name of Bidder

_____
Address, including City, State, Zip Code

_____
E-Mail Address

_____
Telephone No.

_____
Fax No.

By: _____ Date: _____
Signature of Bidder

Title: _____

By: _____ Date: _____
Signature of Bidder

Title: _____

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

(Corporate Seal)

REQUEST FOR SUBSTITUTION FORM

Date: _____ Substitution Request No. _____

Project Name: _____

To: Ruhnau · Ruhnau · Clarke
3775 Tenth Street
Riverside, CA 92501
Attn: Mike Higgins
951-684-6276 - fax

From: _____

We hereby submit for your consideration the following product comparisons of the specified product and the proposed substitution. The undersigned fully understands that failure to answer any item below may be cause for rejection of request for substitution.

TO BE CONSIDERED BY THE DISTRICT, ALL REQUESTS FOR SUBSTITUTION SHALL TO THE ARCHITECT NO LATER THAN SEVEN (7) CALENDAR DAYS PRIOR TO THE BID DUE DATE.

Specified Product: _____

Project Manual Section Title _____, Number _____, Page _____, Paragraph _____.

Drawing No. _____, Detail No. _____

Proposed Substitution: _____

_____

Manufacturer: _____, Tel: _____

Reason request for substitution is being submitted: _____

_____

_____

Does proposed substitution affect dimensions, gages, weights, etc. on Drawing? No ____, Yes ____
(explain how) _____

_____

Does proposed substitution require changes in Drawings or design and installation changes?
No __, Yes___ (If yes, cost of these changes is the responsibility of the Contractor.)

Does proposed substitution affect product cost, delivery time, or construction schedule?
No __,Yes ___ Explain _____

Does proposed substitution comply with specified ICC Number, UL Rating, ASTM Numbers?
No ___, Yes __

Does proposed substitution affect other trades and systems such as wiring, piping, ductwork, structure, etc.?
No ____, Yes ____ (explain who and how)

_____

_____

_____

If yes, has impact on their work been included in price of proposed substitution? No ___, Yes ___.

Does proposed substitution product guarantee differ from that of the specified product?
No ___, Yes ___ (explain how) _____

_____

_____

If the substitution request is accepted, it will result in: No cost impact _____ credit of $ _____.

Attach a listing of 3 projects (one in service for at least 3 years) using the proposed substitution.

Substantiating Data: Attach product data/brochures and Vendor qualifications for both specified and substitute product. Provide samples for both specified and substitute products, if applicable.

Certification: Undersigned has examined Construction Documents, is familiar with specified product, understands indicated application of product, and understands design intent of Architect/Engineer. Undersigned states that proposed substitution has been fully investigated and complies with Construction Documents and will perform at least equally to specified product within limitations stated above. Undersigned accepts responsibility for coordinating application and installation of proposed substitution and waives all claims for additional costs resulting from incorporation of proposed substitution into Project or its subsequent failure to perform according to specified requirements. Undersigned will pay for changes to the building design, including additional studies, investigations, submittals, redesign and analysis by the Architect caused by the requested substitution.

Submitted by: _____ _____ _____
Typed Signature Date

Signature must be made by person having legal authority to bind his firm to the above terms.

Architects Comments:

_____ Accepted, _____ accepted as noted, _____ not accepted, _____ received too late.

Reviewed by:

Architect	Date
Project Manager	Date
District	Date

* CONTRACTOR'S CERTIFICATE REGARDING WORKERS' COMPENSATION

Labor Code Section 3700 in relevant part provides:

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

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

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

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

_____
Proper Name of Bidder

By: _____

_____

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

* ACKNOWLEDGMENT OF BIDDING PRACTICES REGARDING INDEMNITY

TO: Palm Springs Unified School District

PROJECT: Bid 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project.

Please be advised that with respect to the above-referenced PROJECT the undersigned CONTRACTOR on behalf of itself and all subcontractors hereby waives the benefits and protection of Labor Code Section 3864, which provides:

> "If an action as provided in this chapter is prosecuted by the employee, the employer, or both jointly against the third person results in judgment against such third person, the employer shall have no liability to reimburse or hold such third person harmless on such judgment or settlement in the absence of a written agreement to do so executed prior to the injury."

This Agreement has been signed by an authorized representative of the contracting party and shall be binding upon its successors and assignees. The undersigned further agrees to promptly notify the District of any changes of ownership of the contracting party or any subcontractor while this Agreement is in force.

_____
Signature

_____
Name of Agent/Title

***BID GUARANTEE FORM (in lieu of Bid Bond)**
(This form is only required with your bid submittal if a Bid Bond is not submitted)

Accompanying this proposal is cash, a cashier's check or a certified check payable to the order of the Palm Springs Unified School District (PSUSD) in an amount equal to ten percent (10%) of the base bid and alternates ($_____).

This cash or the proceeds of this check shall become the property of said PSUSD, if, this proposal shall be accepted by PSUSD through PSUSD's GOVERNING BOARD, and the undersigned fails to execute a contract with and furnish the sureties required by PSUSD within the required time; otherwise, said cash or check is to be returned to the undersigned.

_____

Bidder's Signature

AGREEMENT No. 710

THIS AGREEMENT, entered into this____ day of_____, 20__ in the County of Riverside of the State of California, by and between the Palm Springs Unified School District, (hereinafter called the "District"); and _____, (hereinafter called the "CONTRACTOR").

WITNESSETH that the District and the CONTRACTOR for the consideration stated herein agree as follows:

ARTICLE I - SCOPE OF WORK: The CONTRACTOR shall furnish all labor, materials, equipment, tools, and utility and transportation services, and perform and complete all work required in connection with Bid No. 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project in strict accordance with the contract documents enumerated in Article 7 below. The CONTRACTOR shall be liable to the District for any damages arising as a result of a failure to comply with that obligation, and the CONTRACTOR shall not be excused with respect to any failure to so comply by an act or omission of the Architect, Engineer, Inspector, Division of the State Architect (DSA), or representative of any of them, unless such act or omission actually prevents the CONTRACTOR from fully complying with the contract documents and the CONTRACTOR protests, in accordance with the contract documents, that the act or omission is preventing the CONTRACTOR from fully complying with the contract documents. Such protest shall not be effective unless reduced to writing and filed with the District office within seven (7) days of the date of occurrence of such act or omission preventing the CONTRACTOR from fully complying with the Contract Documents.

ARTICLE 2 - TIME OF COMPLETION: The District may give notice to proceed within ninety (90) days of the award of the bid by the District. Once the CONTRACTOR has received a notice to proceed, the CONTRACTOR shall complete the work within Seventy-five (75) calendar days from receipt of the notice to proceed. It is expressly understood that time is of the essence.

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

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

ARTICLE 3 - LIQUIDATED DAMAGES: It being impracticable and infeasible to determine the amount of actual damage, it is agreed that the CONTRACTOR will pay the District the sum of Two Hundred Dollars ($200.00) per calendar day for each and every day of delay beyond the time set forth in Article 2 of this Agreement for completing said work as liquidated damages and not as a penalty or forfeiture. In the event the same is not paid, the CONTRACTOR further agrees that the District may deduct such amount thereof from any money due or that may become due the CONTRACTOR under the contract. This Article shall not be construed as preventing the District from the recovery of damages under provisions of the contract documents.

ARTICLE 4 - CONTRACT PRICE: The District shall pay to the CONTRACTOR as full consideration for the faithful performance of the contract, subject to any additions or deductions as provided in the contract documents, the sum of _____ DOLLARS ($_____), said sum being the total amount stipulated in the proposal inclusive of the Allowance set forth in Section 11 of the Instructions to Bidders. Payment shall be made in accordance with the General Conditions and Section 11 of the Instructions to Bidders.

Should any Change Order result in an increase in the contract price, the cost of such Change Order shall be agreed to in advance by the CONTRACTOR and the District, subject to the monetary limitations set forth in Public Contract Code Section 20118.4. In the event that the CONTRACTOR proceeds with a change in work without an agreement between the District and CONTRACTOR regarding the cost of a Change Order, the CONTRACTOR waives any claim of additional compensation for such additional work.

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

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

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

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

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

CONTRACTOR, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on any such claim or liability, and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

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

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

Notice Inviting Bids
Instructions to Bidders
Designation of Subcontractors
Non-Collusion Affidavit
Bid Bond
Bid Form
Contractor's Certificate Regarding Worker's Compensation
Acknowledgment of Bidding Practices Regarding Indemnity
Agreement Form
Payment Bond
Performance Bond
Guarantee
Escrow Agreement for Security Deposit In Lieu of Retention
Insurance Documents and Endorsement
Contractor's Certificate Regarding Drug-Free Workplace
Contractor's Certificate Regarding Alcohol and Tobacco

Contractor's Certificate Regarding Workers' Compensation
General Conditions
Supplementary and Special Conditions
Specifications
All Addenda as Issued
Drawings (if applicable)
Substitution Request Form
Labor Compliance Program (if applicable)
DVBE (if applicable)

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

ARTICLE 8 - PREVAILING WAGES: Wage rates for this Project shall be in accordance with the general prevailing rate of holiday and overtime work in the locality in which the work is to be performed for each craft, classification, or type of work needed to execute the contract as determined by the Director of the Department of Industrial Relations. Copies of schedules of rates so determined by the Director of the Department of Industrial Relations are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations.

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

1. Chapter 1 of Part 7 of Division 2 of the Labor Code (Section 1720 et seq.)
2. California Code of Regulations, Title 8, Chapter 8, Subchapters 3 & 4 (Section 16000 et seq.)
3. The District's Labor Compliance Program

ARTICLE 9 - RECORD AUDIT: In accordance with Government Code Section 8546.7, records of both the District and the CONTRACTOR shall be subject to examination and audit by the Auditor General for a period of three (3) years after final payment.

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

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

Palm Springs Unified School District	CONTRACTOR:
James Novak Typed or Printed Name	_____ Typed or Printed Name
Assistant Superintendent, Business Services Title	_____ Title
_____ Signature	_____ Signature
_____ Date	_____ Date
	_____ Type or Printed Name
CORPORATE SEAL	_____ Title (Authorized Officers or Agents)
	_____ Signature
	_____ Date
	Address _____ _____ Phone_____ Fax _____ E-mail _____

PAYMENT BOND
(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the Palm Springs Unified School District (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "CONTRACTOR"); an agreement for the work described as follows: Bid No. 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project, (hereinafter referred to as the "Public Work"); and

WHEREAS, said CONTRACTOR is required to furnish a bond in connection with said Contract, and pursuant to California Civil Code Section 3247;

NOW, THEREFORE, We, _____, the undersigned CONTRACTOR, as Principal; and _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Palm Springs Unified School District and to any and all persons, companies, or corporations entitled by law to file stop notices under California Civil Code Section 3181, or any person, company, or corporation entitled to make a claim on this bond, in the sum of _____ Dollars ($_____), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which payment will and truly to be made, we bind ourselves, our heirs, executors and administrators, successors and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH that if said Principal, its heirs, executors, administrators, successors, or assigns, or subcontractor, shall fail to pay any person or persons named in Civil Code Section 3181; or fail to pay for any materials, provisions, or other supplies, used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind, or for amounts due under the Unemployment Insurance Code, with respect to work or labor thereon of any kind; or shall fail to deduct, withhold, and pay over to the Employment Development Department, any amounts required to be deducted, withheld, and paid over by Unemployment Insurance Code Section 13020 with respect to work and labor thereon of any kind, then said Surety will pay for the same, in an amount not exceeding the amount herein above set forth, and in the event suit is brought upon this bond, also will pay such reasonable attorneys' fees as shall be fixed by the court, awarded and taxed as provided in California Civil Code Sections 3247 et. seq.

This bond shall inure to the benefit of any person named in Civil Code Section 3181 giving such person or his/her assigns a right of action in any suit brought upon this bond.

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

any terms of payment or extension of time for payment pertaining or relating to any scheme or work of improvement herein above described; nor by any rescission or attempted rescission of the contract, agreement or bond; nor by any conditions precedent or subsequent in the bond attempting to limit the right of recovery of claimants otherwise entitled to recover under any such contract or agreement or under the bond; nor by any fraud practiced by any person other than the claimant seeking to recover on the bond; and that this bond be construed most strongly against the Surety and in favor of all persons for whose benefit such bond is given; and under no circumstances shall the Surety be released from liability to those for whose benefit such bond has been given, by reason of any breach of contract between the District and the CONTRACTOR or on the part of any obligee named in such bond; that the sole condition of recovery shall be that the claimant is a person described in California Civil Code Sections 3110 and 3112, and who has not been paid the full amount of his or her claim; and that the Surety does hereby waive notice of any such change, extension of time, addition, alteration or modification herein mentioned.

IN WITNESS WHEREOF, we have hereunto set our hands and seals this_____ day of _____, 20___.

PRINCIPAL/CONTRACTOR:

_____

By: _____

SURETY:

_____

By: _____
Attorney-in-Fact

IMPORTANT: THIS IS A REQUIRED FORM.

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

Any claims under this bond may be addressed to:

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

STATE OF CALIFORNIA)
) ss.
COUNTY OF)

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

_____ (SEAL)
Notary Public in and for said State

Commission expires:_____

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

CONTRACT PERFORMANCE BOND
(CALIFORNIA PUBLIC WORK)

KNOW ALL MEN BY THESE PRESENTS:

THAT WHEREAS, the Palm Springs Unified School District (sometimes referred to hereinafter as "Obligee") has awarded to _____ (hereinafter designated as the "CONTRACTOR"); an agreement for the work described as follows: Bid No. 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project, (hereinafter referred to as the "Public Work"); and

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

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

NOW, THEREFORE, we, _____, the undersigned CONTRACTOR, as Principal, and _____, a corporation organized and existing under the laws of the State of _____, and duly authorized to transact business under the laws of the State of California, as Surety, are held and firmly bound unto the Palm Springs Unified School District in the sum of _____ Dollars ($_____), said sum being not less than one hundred percent (100%) of the total amount payable by said Obligee under the terms of said Contract, for which amount well and truly to be made, we bind ourselves, our heirs, executors, administrators, successors, and assigns, jointly and severally, firmly by these presents.

THE CONDITION OF THIS OBLIGATION IS SUCH THAT, if the bounded CONTRACTOR, his or her heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions, and agreements in said Contract and any alteration thereof made as therein provided, on his or her part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning; and shall faithfully fulfill guarantees of all materials and workmanship; and indemnify, defend and save harmless the Obligee, its officers and agents, as stipulated in said Contract, then this obligation shall become null and void; otherwise it shall be and remain in full force and effect.

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

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

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

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

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

PRINCIPAL/CONTRACTOR:

_____

By: _____

SURETY:

_____

By: _____
Attorney-in-Fact

The rate of premium on this bond is _____ per thousand.

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

IMPORTANT: THIS IS A REQUIRED FORM.

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

Any claims under this bond may be addressed to:

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

STATE OF CALIFORNIA)
) ss.
COUNTY OF)

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

_____ (SEAL)
Notary Public in and for said State

Commission expires:_____

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

GUARANTEE

Guarantee for Bid No. 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements Project (hereinafter referred to as the "PROJECT"). We hereby guarantee that the work completed and any equipment installed in connection with the PROJECT has been done in accordance with the Contract Documents, including without limitation, the drawings and specifications, and that the work as installed will fulfill the requirements included in the bid documents. The undersigned agrees to repair or replace any or all such work, together with any other adjacent work, which may be displaced in connection with such replacement, that may prove to be defective in workmanship or material within a period of _____ (_____) years from the date of the Notice of Completion of the above-mentioned structure by the Palm Springs Unified School District, ordinary wear and tear and unusual abuse or neglect excepted.

In the event the undersigned fails to comply with the above-mentioned conditions within a reasonable period of time, as determined by the District, but not later than ten (10) days after being notified in writing by the District, the undersigned authorizes the District to proceed to have said defects repaired and made good at the expense of the undersigned, who will pay the costs and charges therefore upon demand.

	Countersigned
_____	_____
(Proper Name)	(Proper Name)
By: _____	By: _____
_____	_____
(Signature of Subcontract or Contractor)	(Signature of General Contractor if for Subcontractor)

Representatives to be contacted for service:

Name: _____

Address: _____

_____

Phone Number:_____

ESCROW AGREEMENT FOR SECURITY DEPOSITS IN LIEU OF RETENTION

This Escrow Agreement is made and entered into by and between the Palm Springs Unified School District, 980 East Tahquitz Canyon Way, Palm Springs, CA 92262, (hereinafter called "OWNER"); and _____ whose address is _____, (hereinafter called "CONTRACTOR"); and _____ whose address is _____, (hereinafter called "Escrow Agent").

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

(1) Pursuant to section 22300 of the Public Contract Code of the State of California, CONTRACTOR has the option to deposit securities with Escrow Agent as a substitute for retention earnings required to be withheld by OWNER pursuant to the Construction Contract entered into between the OWNER and CONTRACTOR for Bid No. 07-10; Two Bunch Palms Elementary School New Windscreen and Site Improvements 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 the CONTRACTOR as beneficial owner.

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

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

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

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

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

(7) The OWNER shall have a right to draw upon the securities in the event of default by the CONTRACTOR. Upon seven (7) days' written notice to the Escrow Agent from the OWNER of the 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:

Assistant Superintendent, Business Services
Title

James Novak
Name

_____
Signature

980 E. Tahquitz Canyon Way, Suite 202, Palm Springs, CA 92262
Address

On behalf of Contractor:

_____
Title

_____
Name

_____
Signature

_____
Address

On behalf of Agent:

_____
Title

_____
Name

_____
Signature

_____
Address

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

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

OWNER	CONTRACTOR
Assistant Superintendent, Business Services	_____
Title	Title
James Novak	_____
Name	Name
_____	_____
Signature	Signature

INSURANCE DOCUMENTS & ENDORSEMENTS

The following insurance endorsements and documents must be provided to the District within five (5) calendar days after receipt of notification of award. If the apparent low bidder fails to provide the documents required below, the District may award the contract to the next lowest responsible and responsive bidder or release all bidders, and the bidder's bid security will be forfeited. All insurance provided by the bidder shall fully comply with the requirements set forth in Article 18 of the General Conditions.

1. General Liability Insurance: Certificate of Insurance with all specific insurance coverages set forth in Article 18 of the General Conditions, proper Project description, designation of the District as the Certificate Holder, a statement that the insurance provided is primary to any insurance obtained by the District and minimum of 30 days' cancellation notice. Bidder shall also provide required additional insured endorsement(s) designating all parties required in Article 18 of the General Conditions. The additional insured endorsement shall be an ISO CG 20 10 (11/85) or ISO CG 20 10 (10/93) or their equivalent as determined by the District.

Incidents and claims are to be reported to the insurer at:

Attn: _____
(Title) (Department)

_____
(Company)

_____
(Street Address)

_____
(City) (State) (Zip Code)

(_____) _____
(Telephone Number)

2. Workers' Compensation/ Employer's Liability Insurance: Certificate of Workers' Compensation Insurance meeting the coverages and requirements set forth in Article 18 of the General Conditions, minimum of 30 days' cancellation notice, proper Project description, waiver of subrogation and any applicable endorsements.

3. Automobile Liability Insurance: Certificate of Automobile Insurance meeting the coverages and requirements set forth in Article 18 or the General Conditions, minimum 30 days' cancellation notice, any applicable endorsements and a statement that the insurance provided is primary to any insurance obtained by the District.

Incidents and claims are to be reported to the insurer at:

Attn: _____
(Title) (Department)

_____
(Company)

_____
(Street Address)

_____
(City) (State) (Zip Code)

(_____) _____
(Telephone Number)

DATE:_____ _____
CONTRACTOR

By:_____
Signature

CONTRACTOR'S CERTIFICATE REGARDING DRUG-FREE WORKPLACE

This Drug-Free Workplace Certification form is required from all successful bidders pursuant to the requirements mandated by Government Code Sections 8350 et. seq., the Drug-Free Workplace Act of 1990. The Drug-Free Workplace Act of 1990 requires that every person or organization awarded a contract or grant for the procurement of any property or service from any State agency must certify that it will provide a drug-free workplace by performing certain specified acts. In addition, the Act provides that each contract or grant awarded by a State agency may be subject to suspension of payments or termination of the contract or grant, and the CONTRACTOR or grantee may be subject to debarment from future contracting, if the contracting agency determines that specified acts have occurred.

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

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

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

1) The dangers of drug abuse in the workplace;

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

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

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

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

I, the undersigned, agree to fulfill the terms and requirements of Government Code Section 8355 listed above and will (a) publish a statement notifying employees concerning the prohibition of controlled substance at the workplace, (b) establish a drug-free awareness program, and (c) require each employee engaged in the performance of the 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 CERTIFICATION REGARDING BACKGROUND CHECKS

_____ certifies that it has performed one of the following:
(Name of Contractor)

(Mark the corresponding box next to the option you have selected)

☐ Pursuant to Education Code Section 45125.1, Contractor has conducted criminal background checks, through the California Department of Justice, of all employees providing services to the Palm Springs Unified School District, pursuant to the contract/purchase order dated _____, and that none have been convicted of serious or violent felonies, as specified in Penal Code Sections 1192.7(c) and 667.5(c), respectively.

As further required by Education Code Section 45125.1, attached hereto as Attachment "A" is a list of the names of the employees of the undersigned who may come in contact with pupils.

OR

☐ Pursuant to Education Code Section 45125.2, Contractor will ensure the safety of pupils by one or more of the following methods:

☐ 1) The installation of a physical barrier at the worksite to limit contact with pupils.

☐ (2) Continual supervision and monitoring of all employees of the entity by an employee of the entity whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

I declare under penalty of perjury under the laws of the United States that the foregoing is true and correct.

Date_____, 20___

_____
[Name of Contractor/Consultant]

_____

By its:_____

ATTACHMENT "A"

(INSERT NAMES OF EMPLOYEES WHO MAY COME IN CONTACT WITH PUPILS)

GENERAL CONDITIONS

ARTICLE 1 DEFINITIONS

1. Action of the Governing Board is a vote of a majority of the District's governing board.
2. Approval means written authorization through action of the governing board unless specific delegation of approval authority is delegated to a District representative.
3. As shown, as indicated, as detailed refers to drawings accompanying this specification.
4. Contract, Contract Documents includes all contract documents to wit: Notice inviting Bids, Instructions to Bidders, Bid Form, Designation of Subcontractors, Performance Bond, Payment Bond, Certificates of Insurance, Insurance Policies, General Conditions, Special Conditions, if any, Drawings, Plans, Specifications, the Agreement and all modifications, addenda, and amendments thereto.
5. Contractor, District and Architect are those mentioned as such in the Agreement. They are treated throughout the contract as if they are of singular number and neuter gender.
6. Locality in which the work is performed means the county in which the public work is done.
7. Project is the planned undertaking as provided for in the contract documents by District and Contractor.
8. Provide shall include "provide complete in place", that is, "furnish & install".
9. Safety Orders are those issued by the Division of Industrial Safety an OSHA Safety and Health Standards for construction.
10. Standards, Rules and Regulations referred to are recognized printed standards and shall be considered as one and a part of these specifications within limits specified.
11. Subcontractor, as used herein, includes those having direct contract with Contractor and one who furnishes material worked to a special design according to plans, drawings, and specifications for this work, but does not include one who merely furnishes material not so worked.
12. Surety is the person, firm, or corporation that executes as surety the Contractor's Performance Bond and Payment Bond.
13. Work of the Contractor or subcontractor includes labor or materials (including, without installation, equipment and appliances) or both, incorporated in, or to be incorporated in the construction covered by the complete Contract.
14. Workers include laborer, worker or mechanic.

ARTICLE 2 LAWS CONCERNING THE DISTRICT A PART HEREOF

Contract is subject to all provision of the Constitution of Laws of California governing, controlling or effecting District, or the property, funds operations, or powers of District, and such provisions are by his reference made a part hereof and of Contract.

ARTICLE 3 SITE INVESTIGATION

Before bidding on this work, Contractor shall make a careful investigation of the site and thoroughly familiarize himself with the requirement of the Contract. By the act of submitting a bid for the work included in this Contract, Contractor shall be deemed to have made such study and investigation and that Contractor is familiar with and accepts the conditions of the site.

ARTICLE 4 STATUS OF CONTRACTOR

Contractor is and shall at all times be deemed to be an independent Contractor and shall be wholly responsible for the manner in which it performs the services required of it by the terms of this contract. Nothing herein contained shall be construed as creating the relationship of employer and employee, or

principal and agent, between the District, or any of the District's employees or agents, and Contractor or any of Contractor's agents or employees. Contractor assumes exclusively the responsibility for the acts of its employees as they relate to the services to be provided during the course and scope of their employment. Contractor, its agents and employees shall not be entitled to any rights or privileges of District employees. District shall be permitted to monitor the activities to determine compliance with the terms of this Contract. Contractor and subcontractors are required by law to be licensed and regulated by the Contractors State License Board.

ARTICLE 5 CONTRACTOR'S SUPERVISION

A. During progress of the work, Contractor shall keep on the premises (including both the site and the plant) a superintendent satisfactory to District and, if applicable, Architect. Before commencing the work herein, Contractor shall give written notice to District and Architect of the name and a Statement of Qualifications of such superintendent. Superintendent shall not be changed except with written consent of District, unless a superintendent proves to be unsatisfactory to Contractor and ceases to be in its employ, in which case, Contractor shall notify District in writing. Superintendent shall represent Contractor and all directions given to Superintendent shall be as binding as if given to Contractor.

B. The Contractor shall verify all indicated dimensions before ordering materials or equipment, or before performing work. The Contractor shall take field measurements, verify field conditions, and shall carefully compare such field measurements and conditions and other information known to the Contractor with the contract documents before commencing activities. Errors, inconsistencies, or omissions discovered shall be reported to the Architect at once. Upon commencement of any item of work, the Contractor shall be responsible for dimensions related to such item of work and shall make any corrections necessary to make work properly fit at no additional cost to District. This responsibility for verification of dimensions is a non-delegable duty and may not be delegated to subcontractors or agents.

C. Omissions from the drawings or specifications, or the misdescription of details of work which are manifestly necessary to carry out the intent of the drawings and specifications, or which are customarily performed, shall not relieve the Contractor from performing such omitted or misdescribed work, but they shall be performed as if fully and correctly set forth and described in the drawings and specifications.

ARTICLE 6 SUBCONTRACTORS

A. Contractor agrees to bind every subcontractor by terms of Contract as far as such terms are applicable to subcontractor's work. If Contractor shall subcontract any part of this Contract, Contractor shall be as fully responsible to District for acts and omissions of any subcontractor and of persons either directly or indirectly employed by any subcontractor, as it is for acts and omissions of persons directly employed by Contractor. Nothing contained in the contract documents shall create any contractual relation between any subcontractor and District, nor shall this Contract be construed to be for the benefit of any subcontractor. The Contractor shall be responsible for the coordination of the trades, subcontractors and materialmen engaged upon his work.

ARTICLE 7 DISTRICT'S INSPECTOR

If applicable, one or more Inspector(s), including special Inspectors, as required, will be employed by District in accordance with requirements of Title 24 of the California Code of Regulations and will be assigned to the work. Duties of an Inspector are specifically defined in Section 4-342 of Title 24. No work shall be carried on except with the knowledge and under the inspection of said Inspector(s). He shall have free access to any or all parts of work at any time. The District will provide inspection and testing at its cost during the normal eight (8) hour day Monday through Friday (except holidays).

Work by the Contractor outside of the normal eight (8) hour day shall constitute an authorization from the Contractor to the District to provide inspection and testing as required outside of the normal eight (8) hour day. Contractor shall reimburse District for inspection and testing outside the normal eight-hour day or for any retests caused by the Contractor.

ARTICLE 8 ARCHITECT'S STATUS

A. The Architect shall be the District's representative during construction period and shall observe the progress and quality of the work on behalf of the District. Architect shall have the authority to act on behalf of District only to the extent expressly provided in the contract documents. Architect shall have authority to stop work whenever such stoppage may be necessary in Architect's reasonable opinion to insure the proper execution of Contract.

B. The Architect shall be, in the first instance, the judge of the performance of this Contract. Architect shall side neither with District nor with Contractor, but shall exercise authority under Contract to enforce its faithful performance by both. Nothing herein authorizes Architect to act as arbitrator for the parties.

C. The Architect shall have all authority and responsibility established by law, including Title 24 of the California Code of Regulations.

D. The Architect shall be the final authority in determining the amount of work satisfactorily completed and the amount of money due during the progress of construction.

ARTICLE 9 ASSIGNMENT OF ANTITRUST ACTIONS

A. Pursuant to Government Code ' 4551, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or Subcontractor offers and agrees to assign to the District all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act, (15 U.S.C. ' 15) or under the Cartwright Act (Chapter 2 [commencing with ' 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from the purchase of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties. If the District receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Chapter 11 (commencing with ' 4550) of Division 5 of Title 1 of the Government Code, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the District any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the District as part of the bid price, less the expenses incurred in obtaining that portion of the recovery.

B. Upon demand in writing by the assignor, the District shall, within one (1) year from such demand, reassign the cause of action assigned pursuant to this Article if the assignor has been or may have been injured by the violation of law for which the cause of action arose and the District has not been injured thereby or the District declines to file a court action for the cause of action.

ARTICLE 10 OTHER CONTRACTS

A. District reserves the right to let other contracts in connection with this work. Contractor shall afford other contractors reasonable opportunity for introduction and storage of their materials and execution of their work and shall properly connect and coordinate its work with theirs.

B. Nothing herein contained shall be interpreted as granting to Contractor exclusive occupancy at the Project site. Contractor shall not cause any unnecessary hindrance or delay to any other contractor working on Project. If simultaneous execution of any Contract for Project is likely to cause interference with performance of some other contract or contracts, District shall decide which contractor shall cease work temporarily and which contractor shall continue or whether work can be coordinated so that contractors may proceed simultaneously.

ARTICLE 11 OCCUPANCY

District reserves the right to occupy portions of the Project at any time before completion, and such occupancy shall constitute final acceptance of that portion only to the extent that the Contractor will not be subject to performing work or repairs caused by the District's use of the occupied areas. Such occupancy shall not extend the date specified for completion of the work. The Contractor will be required to complete punch list items documented by District, Architect, Inspector and Contractor prior to final payment.

ARTICLE 12 DISTRICT'S RIGHT TO DO WORK

Should the Contractor, at any time during the process of construction, fail or refuse to furnish enough materials or workmen to properly execute the work, unless prohibited from so doing through the action of District, Architect, or other authorized official agencies, District, after giving ten (10) days written notice to Contractor may, without prejudice to any other rights he may have, proceed to furnish the materials and/or workmen necessary to proceed with or complete the work, and may deduct the cost thereof, together with reasonable expenses arising from such procedure, from any amounts then due or which may thereafter become due to Contractor.

ARTICLE 13 DISTRICT'S RIGHT TO TERMINATE CONTRACT

A. **Grounds for Termination.** The Contractor may terminate the Contract if the Work is stopped for a period of thirty (30) consecutive days through no act or fault of the Contractor, a Subcontractor, a Sub-subcontractor, their agents or employees, or any other persons performing portions of the Work for whom the Contractor is contractually responsible, for only the following reasons:

(1) Issuance of an order of a court or other public authority having jurisdiction; or
(2) An act of government, such as a declaration of national emergency.

B. **Notice of Termination.** If one of the above reasons exists, the Contractor may, upon written notice of seven (7) additional days to the District, terminate the Contract and recover from the District payment for Work executed and for reasonable costs verified by the Architect with respect to materials, equipment, tools, construction equipment, and machinery, including reasonable overhead, profit, and damages.

ARTICLE 14 TERMINATION BY THE DISTRICT FOR CAUSE

A. **Grounds for Termination.** The District may terminate the Contractor and/or this Contract for the following reasons:

(1) Persistently or repeatedly refuses or fails to supply enough properly skilled workers or proper materials;
(2) Persistently or repeatedly is absent, without excuse, from the job site;
(3) Fails to make payment to subcontractors, suppliers, materialmen, etc;
(4) Persistently disregards laws, ordinances, rules, regulations, or orders of a public authority having jurisdiction; or

(5) Otherwise is in substantial breach of a provision of the Contract Documents.

B. **Notification of Termination.** When any of the above reasons exist, the District may, without prejudice to any other rights or remedies of the District and after giving the Contractor and the Contractor's surety, if any, written notice of seven (7) days, terminate the Contract and may, subject to any prior rights of the surety:

(1) Take possession of the Project and of all material, equipment, tools, and construction equipment and machinery thereon owned by the Contractor;

(2) Accept assignment of Subcontracts. Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept; and

(3) Complete the Work by any reasonable method the District may deem expedient, including contracting with a replacement contractor or contractors.

C. **Payments Withheld.** If the District terminates the Contract for one of the reasons stated in Paragraph 14.A, the Contractor shall not be entitled to receive further payment until the Work is complete. All costs associated with the termination and completion of the Project shall be the responsibility of the Contractor and/or its surety.

D. **Payments Upon Completion.** If the unpaid balance of the Contract Sum exceeds costs of completing the Work, including compensation for professional services and expenses made necessary thereby, such excess shall be paid to the Contractor. If such costs exceed the unpaid balance, the Contractor shall pay the difference to the District. The amount to be paid to the Contractor, or District, as the case may be, shall be certified by the Architect upon application. This payment obligation shall survive completion of the Contract.

E. **Remedies Other Than Termination.** If a default occurs, the District may, without prejudice to any other right or remedy, including, without limitation, its right to terminate the Contract pursuant to Article 14, do any of the following:

(1) Permit the Contractor to continue under this Contract, but make good such deficiencies or complete the Contract by whatever method the District may deem expedient, and the cost and expense thereof shall be deducted from the Contract Price or paid by the Contractor to the District on demand;

(2) If the workmanship performed by the Contractor is faulty or defective materials are provided, erected or installed, then the District may order the Contractor to remove the faulty workmanship or defective materials and to replace the same with work or materials that conform to the Contract Documents, in which event the Contractor, at its sole costs and expense, shall proceed in accordance with the District's order and complete the same within the time period given by the District in its notice to the Contractor; or

(3) Initiate procedures to declare the Contractor a non-responsible bidder for a period of two to five years thereafter.

All amounts expended by the District in connection with the exercise of its rights hereunder shall accrue interest from the date expended until paid to the District at the maximum legal rate. The District may retain or withhold any such amounts from the Contract Price. If the Contractor is ordered to replace any faulty workmanship or defective materials pursuant to Paragraph (b) above, the Contractor shall replace the

same with new work or materials approved by the Architect and the District, and, at its own cost, shall repair or replace, in a manner and to the extent the Architect and the District shall direct, all work or material that is damaged, injured or destroyed by the removal of said faulty workmanship or defective material, or by the replacement of the same with acceptable work or materials. In no event shall anything in this Paragraph be deemed to constitute a waiver by the District of any other rights or remedies that it may have at law or in equity, it being acknowledged and agreed by the Contractor that the remedies set forth in this Paragraph are in addition to, and not in lieu of, any other rights or remedies that the District may have at law or in equity.

ARTICLE 15 TERMINATION OF CONTRACT BY DISTRICT (CONTRACTOR NOT AT FAULT)

A. **Termination for Convenience.** District may terminate the Contract upon fifteen (15) calendar days of written notice to the Contractor and use any reasonable method the District deems expedient to complete the project, including contracting with replacement contractor or contractors, if it is found that reasons beyond the control of either the District or Contractor make it impossible or against the District's interest to complete the work. In such a case, the Contractor shall have no claims against the District except: (1) the actual cost for labor, materials, and services performed which may be documented through timesheets, invoices, receipts, or otherwise, and (2) ten percent (10%) profit and overhead, and (3) five percent (5%) termination cost of the total of items (1) and (2). Contractor acknowledges and agrees that if the District (in its sole and absolute discretion) decides to takeover completion of the Project, the Contractor agrees to immediately assign all subcontracts to the District which the District has chosen to accept.

B. **Non-Appropriation of Funds/ Insufficient Funds.** In the event that sufficient funds are not appropriated to complete the Project or the District determines that sufficient funds are not available to complete the Project, District may terminate or suspend the completion of the Project at any time by giving written notice to the Contractor. In the event that the District exercises this option, the District shall pay for any and all work and materials completed or delivered onto the site for which value is received, and the value of any and all work then in progress and orders actually placed which cannot be canceled up to the date of notice of termination. The value of work and materials paid for shall include a factor of fifteen percent (15%) for the Contractor's overhead and profit and there shall be no other costs or expenses paid to Contractor. All work, materials and orders paid for pursuant to this provision shall become the property of the District. District may, without cause, order Contractor in writing to suspend, delay or interrupt the Project in whole or in part for such period of time as District may determine. Adjustment shall be made for increases in the cost of performance of the Agreement caused by suspense, delay or interruption.

ARTICLE 16 CONTRACT SECURITY - BONDS

Contractor shall furnish a surety bond in an amount equal to one hundred percent (100 %) of Contract price as security for faithful performance of this Contract and shall furnish a separate bond in an amount at least equal to one hundred percent (100%) of the Contract price as security for payment of persons performing labor and furnishing materials in connection with this Contract. Aforementioned bonds shall be in the form set forth in these contract documents.

ARTICLE 17 SUBSTITUTION OF SECURITIES

Pursuant to the requirements of Public Contract Code Section 22300, upon Contractor's request, District will make payment to Contractor of any funds withheld from payments under this Contract if Contractor deposits with the District or in escrow with a California or federally chartered bank acceptable to District, securities eligible for the investment of State Funds under Government Code Section 16430 or 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 the Contractor and the public agency.

ARTICLE 18 INSURANCE REQUIREMENTS

A. Before the commencement of the Work, the Contractor shall purchase from and maintain in a company or companies lawfully authorized to do business in California as admitted carriers with a financial rating of at least A status as rated in the most recent edition of Best's Insurance Reports or as amended by the Supplementary General Conditions, such insurance as will protect the District from claims set forth below, which may arise out of or result from the Contractor's operations under the Contract and for which the Contractor may be legally liable, whether such operations are by the Contractor, by a Subcontractor, by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable:

(1) Claims for damages because of bodily injury, sickness, disease, or death of any person District would require indemnification and coverage for employee claim;

(2) Claims for damages insured by usual personal injury liability coverage, which are sustained by a person as a result of an offense directly or indirectly related to employment of such person by the Contractor or by another person;

(3) Claims for damages because of injury or destruction of tangible property, including loss of use resulting therefrom, arising from operations under the Contract Documents;

(4) Claims for damages because of bodily injury, death of a person, or property damage arising out of the ownership, maintenance, or use of a motor vehicle, all mobile equipment, and vehicles moving under their own power and engaged in the Work;

(5) Claims involving contractual liability applicable to the Contractor's obligations under the Contract Documents, including liability assumed by and the indemnity and defense obligations of the Contractor and the Subcontractors; and

(6) Claims involving Completed Operations, Independent Contractors' coverage, and Broad Form property damage, without any exclusions for collapse, explosion, demolition, underground coverage, and excavating. (XCU)

(7) Claims involving sudden or accidental discharge of contaminants or pollutants.

B. **Subcontractor Insurance Requirements.** The Contractor shall require its Subcontractors to take out and maintain similar public liability insurance and property damage insurance required under Article 18.A in like amounts. A "claims made" or modified "occurrence" policy shall not satisfy the requirements of Article 18.A without prior written approval of the District.

C. **Additional Insured Endorsement Requirements.** The Contractor shall name, on any policy of insurance required under Article 18.A, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as additional insureds. Subcontractors shall name the Contractor, the District, Architect, Inspector, the State of California, their officers, employees, agents and independent contractors as additional insureds. The Additional Insured Endorsement included on all such insurance policies shall state that coverage is afforded the additional insured with respect to claims arising out of operations performed by or on behalf of the insured. If the additional insureds have other insurance which is applicable to the loss, such other insurance shall be on an excess or contingent basis. The insurance provided by the Contractor pursuant to 18.A must be designated in the policy as primary to any insurance obtained by the District. The amount of the insurer's liability shall not be reduced by the existence of such other insurance.

D. **Specific Insurance Requirements.** Contractor shall take out and maintain and shall require all subcontractors, if any, whether primary or secondary, to take out and maintain:

(1) Comprehensive General Liability Insurance with a combined single limit per occurrence of not less than $2,000,000.00 or Commercial General Liability Insurance (including automobile insurance) which provides limits of not less than:

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

(2) Insurance Covering Special Hazards

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

(a)	Automotive and truck where operated in amounts	$1,000,000.00
(b)	Material Hoist where used in amounts	$1,000,000.00
(c)	Explosion, Collapse and Underground (XCU) coverage	$1,000,000.00

E. **Workers' Compensation Insurance.** During the term of this Contract, the Contractor shall provide workers' compensation insurance for all of the Contractor's employees engaged in Work under this Contract on or at the Site of the Project and, in case any of the Contractor's Work is subcontracted, the Contractor shall require the Subcontractor to provide workers' compensation insurance for all the Subcontractor's employees engaged in Work under the subcontract. Any class of employee or employees not covered by a Subcontractor's insurance shall be covered by the Contractor's insurance. In case any class of employees engaged in Work under this Contract on or at the Site of the Project is not protected under the Workers' Compensation laws, the Contractor shall provide or cause a Subcontractor to provide adequate insurance coverage for the protection of those employees not otherwise protected. The Contractor shall file with the District certificates of insurance as required under Article 18.I and in compliance with Labor Code ' 3700.

F. **Builder's Risk/ "All Risk" Insurance.** The Contractor, during the progress of the Work and until final acceptance of the Work by District upon completion of the entire Contract, shall maintain Builder's Risk, Course of Construction or similar first party property coverage issued on a replacement cost value basis consistent with the total replacement cost of all insurable Work and the Project included within the Contract Documents. Coverage is to insure against all risks of accidental direct physical loss, and must include, by the basic grant of coverage or by endorsement, the perils of vandalism, malicious mischief (both without any limitation regarding vacancy or occupancy), fire, sprinkler leakage, civil authority, sonic boom, earthquake, flood, collapse, wind, lightning, smoke and riot. The coverage must include debris removal, demolition, increased costs due to enforcement of building ordinance and law in the repair and replacement of damage and undamaged portions of the property, and reasonable costs for the Architect's and engineering services and expenses required as a result of any insured loss upon the Work and Project which is the subject of the Contract Documents, including completed Work and Work in progress, to the full insurable value thereof. Such insurance shall include the District and the Architect as additional named insureds, and any other person with an insurable interest as designated by the District.

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

G. **Fire Insurance.** Before the commencement of the Work, the Contractor shall procure, maintain, and cause to be maintained at the Contractor's expense, fire insurance on all Work subject to loss or damage by fire. The amount of fire insurance shall be sufficient to protect the Project against loss or damage in full until the Work is accepted by the District.

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

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

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

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

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

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

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

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

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

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

companies thereunder of all rights of recovery by way of subrogation for any damages or claims covered by the insurance.

ARTICLE 19 PERFORMANCE AND PAYMENT BONDS

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

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

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

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

ARTICLE 20 DRAWINGS AND SPECIFICATIONS

A. Contract Documents are complementary, and what is called for by one shall be as binding as if called for by all.

B. Materials or work described in words which so applied has a well known technical or trade meaning shall be deemed to refer to such recognized standards.

C. It is not the intention of the Contract to go into detailed descriptions of any materials and/or methods commonly known to the trade under the "trade name" or "trade term." The mere mention or notation of such "trade name" or "trade term" shall be considered a sufficient notice to Contractor that it will be required to complete the work so named with all its appurtenances according to the best practices of the trade.

D. The naming of any material and/or equipment shall mean furnishing and installing of same, including all incidentals and accessory items thereto and/or labor therefor, as per best practices of the trade(s) involved, unless specifically noted otherwise.

E. Figured dimensions on drawings shall govern, but work not dimensioned shall be as directed. Work not particularly shown or specified shall be the same as similar parts that are shown or specified. Large scale details shall take precedence over smaller scale drawings as to shape and details of construction. Specifications shall govern as to materials, workmanship, and installations procedures. Drawings and specifications are intended to be fully cooperative and to agree. However, if Contractor observes that drawings and specifications are in conflict, Contractor shall promptly notify the District in

writing, and any necessary changes shall be adjusted as provided in Article 46 entitled "Changes and Extra Work." The specification calling for the higher quality material or workmanship shall prevail.

F. Specifications and accompanying drawings are intended to delineate and describe the Project and its component parts to such a degree as to enable skilled and competent contractors to intelligently bid upon the work, and to carry said work to a successful conclusion.

G. Drawings and specifications are intended to comply with all laws, ordinances, rules, and regulations of constituted authorities having jurisdiction, and where referred to in the contract documents, said laws, ordinances, rules, and regulations shall be considered as a part of said Contract within the limits specified. The Contractor shall bear all expenses of correcting work done contrary to said laws, ordinances, rules, and regulations if the Contractor knew or should have known that the work as performed is contrary to said laws, ordinances, rules, and regulations and if the Contractor performed same (1) without first consulting the Architect for further instructions regarding said work or (2) disregarded the Architect's instructions regarding said work.

H. Questions regarding interpretation of drawings and specifications shall be clarified by the Architect. Should the Contractor commence work or any part thereof without seeking clarification, Contractor waives any claim for extra work or damages as a result of any ambiguity, conflict, or lack of information.

I. Contractor will be furnished, free of charge, bid sets of permitted documents and specifications. Contractor is to provide reproducible drawings and all additional copies which he requires for his operations at his own expense. He shall maintain an accurate record of all copies made and shall return or otherwise account for all copies at the end of the Project.

ARTICLE 21 OWNERSHIP OF DRAWINGS

Pursuant to Education Code section 17316, all plans, drawings, designs, specifications, and other incidental architectural and engineering work or materials and other contract documents and copies thereof furnished by District are its property. They are not to be used in other work and, with the exception of signed sets of the Contract, are to be returned to the District on request at completion of work.

ARTICLE 22 DETAIL DRAWINGS AND INSTRUCTIONS

A. In case of ambiguity, conflict, or lack of information, Architect shall furnish, with reasonable promptness, additional instructions by means of drawings or otherwise, necessary for proper execution of work. All such drawings and instructions shall be consistent with contract documents, true developments thereof, and reasonably inferable therefrom.

B. Work shall be executed in conformity therewith and Contractor shall do no work without proper drawings and instructions.

C. The Architect will furnish necessary details to more fully explain the work, which details shall be considered as part of the contract documents.

D. Should any details require work and costs beyond those which reasonably should have been included in the contract, Contractor shall give written notice thereof to the District within ten (10) working days of the receipt of same. In case no notice is given to the District within ten (10) working days, it will be assumed the details are reasonable development of the scale drawings. In case notice is given, then the claim will be considered and, if found justified, the District or Architect will either modify the drawings or shall recommend to District a change order for the extra work involved.

E. All parts of the described and shown construction shall be of the quality of their respective kinds shown in the Plans or as specified, and the Contractor is hereby advised to use all diligence to become fully informed as to the required construction and finish, and in no case to proceed with the different parts of the work without first obtaining from the Architect some directions and/or drawings as may be necessary for the proper performance of the work.

F. If it is found at any time, before or after completion of the work, that the Contractor has varied from the drawings and/or specifications, in materials, quality, form, or finish, or in the amount or value of the materials and labor used, the District shall issue an order to Contractor: (1) that all such improper work should be removed, remade, and replaced, and all work disturbed by these changes be made good at the Contractor's expense; or (2) that the District deduct from any amount due Contractor, the sum of money equivalent to the difference in value between the work performed and that called for by the drawings and specifications. District shall in its sole discretion determine such difference in value. The District, at its option, may pursue either course.

ARTICLE 23 TESTS AND INSPECTIONS

A. Tests and inspections will comply with California Code of Regulations Title 21, Chapter 4 and Section 42, and Title 24, Chapter 4, Part I.

B. If Contract, District's instructions, laws, ordinances, or any public authority require any work to be specially tested or approved, Contractor shall give notice in accordance with such authority of its readiness for observation or inspection at least two (2) working days prior to being tested or covered up. If inspection is by authority other than District, Contractor shall inform District of date fixed for such inspection. Required certificates of inspection shall be secured by Contractor. Observations by District shall be promptly made and, where practicable, at source of supply. If any work should be covered up without approval or consent of District, it must, if required by District, be uncovered for examination and satisfactorily reconstructed at Contractor's expense in compliance with contract. Costs of tests of any materials found to be not in compliance with contract shall be paid for by Contractor. Other costs for tests and inspection of materials shall be paid by District.

C. Where such inspection and testing are to be conducted by an independent laboratory or agency, such materials or samples of materials to be tested shall be selected by such laboratory or agency, or District's representative, and not by Contractor.

D. Contractor shall notify District, a sufficient time in advance, of manufacture of materials to be supplied by him under contract, which must by terms of contract be tested, in order that District may arrange for testing of same at source of supply. Any materials shipped by Contractor from source of supply prior to having satisfactorily passed such testing and inspection, or prior to receipt of notice from said representative that such testing and inspection will not be required, shall not be incorporated in work without prior approval of District and subsequent testing and inspection.

E. Re-examination of questioned work may be ordered by District and, if so ordered, work must be uncovered by Contractor. If such work be found in accordance with contract documents, District shall pay costs of re-examination and replacement. If such work be found not in accordance with contract documents, Contractor shall pay such costs.

F. The District will pay costs for all tests and inspections and shall be reimbursed by the Contractor for such costs under the following conditions:

(1) When such costs are stipulated in the provisions of the Contract documents to be borne by the Contractor;
(2) When a material is tested or inspected and fails to meet the requirements of the specifications and/or drawings;
(3) When the source of the material is changed after the original test or inspection has been made and approved.

G. If, in the opinion of the District, subsequent delivery of a tested material seems inferior to, or differs from, the original, said material shall be retested upon written order from the District and, should the material fail to meet the requirements of the specifications and/or drawings, the Contractor shall pay all costs of such tests, but where the material does pass the requirements, the District will pay the cost.

H. All tests and inspections specified for each material shall be made in accordance with the detailed specifications for tests or inspections of the material as specified.

I. If a material is not required to be tested, the District may require the Contractor to furnish a certificate bearing the official and legal signature of the supplier, with each delivery of such material, stating that the material complies with the specifications.

ARTICLE 24 STATE AUDIT

Pursuant to and in accordance with the provisions of Government Section 10532, or any amendments thereto, all books, records, and files of District, Contractor, or any subcontractor connected with the performance of this Contract involving the expenditure of state funds in excess of ten thousand dollars ($10,000.00), including, but not limited to, the administration thereof, shall be subject to the examination and audit of the Office of the Auditor General of the State of California for a period of three (3) years after final payment is made under this Contract. Contractor shall preserve and cause to be preserved such books, records and files for the audit period.

ARTICLE 25 PREFERENCE FOR MATERIALS AND SUBSTITUTIONS

A. **One Product Specified.** Unless the plans and specifications state that no substitution is permitted, whenever the Contract Documents indicate any specific article, device, equipment, product, material, fixture, patented process, form, method, construction or any specific name, make, trade name, or catalog number, with or without the words Aor equal,@ such specification shall be deemed to be used for the purpose of facilitating the description of the material, process, or article desired shall be deemed to be followed by the words Aor equal.@

B. **Request for Substitution.** Bidder may, unless otherwise stated, offer any material, process, article, etc., which shall be materially equal or better in every respect to that so indicated or specified (ASpecified Item@) and will completely accomplish the purpose of the Contract Document. If bidder desires to offer a substitution for a Specified Item, such bidder must make a request in writing on District's Request for Substitution Form ("Request Form") and submit the completed Request Form to the District's Architect at the location noted on the Request Form no later than seven (7) calendar days prior to the bid due date. The Request Form must include, among other things, evidence as to whether the proposed substitution:

(1) Is equal in quality service ability to the Specified Item;
(2) Will entail no changes in detail, construction and scheduling of related work;
(3) Will be acceptable in consideration of the required design and artistic effect;
(4) Will provide no cost disadvantage to District;
(5) Will require no excessive or more expensive maintenance, including adequacy and availability of replacement parts; and

(6) Will require no change of the construction schedule.

In completing the Request Form, bidder must state with respect to each requested substitution whether bidder will agree to provide the Specified Item in the event that District denies bidder's request for substitution of a Specified Item. In the event that bidder does not agree in the Request Form to provide the Specified Item and the District denies the requested substitution, the bidder's bid shall be considered non-responsive and the District may award the contract to the next lowest bidder or in its sole discretion release all bidders. In the event that bidder has agreed in the Request Form to provide the Specified Item and the District denies bidder's requested substitution for a Specified Item, bidder shall execute the Agreement and provide the Specified Item without any additional cost or charges to the District, and if bidder fails to execute the Agreement with the Specified Item(s), bidder's bid bond will be a forfeited.

Bidders shall provide, no later than seven (7) calendar days prior to the bid due date, any and all drawings, specification, samples, performance data, calculations, and other information as may be required to assist the Architect and the District in determining whether the proposed substitution is acceptable. The burden of establishing these facts shall be upon the bidder.

After the District's receipt of such evidence by bidder, District will make its final decision as to whether the bidder's request for substitution for any Specified Items will be granted. The decision as to whether a proposed request for substitution is equal to a Specified Item shall be the sole discretion of District. Any request for substitution which is granted by the District shall be documented and processed through an addendum. The District may condition its approval of any substitution upon delivery to District of an extended warranty or other assurances of adequate performance of the substitution. Any and all risks of delay due to DSA, or any other governmental agency having jurisdiction shall be on the bidder.

ARTICLE 26 SAMPLES

A. Contractor shall furnish for approval, within thirty-five (35) days following award of Contract, all samples as required in specifications together with catalogs and supporting data required by District. Samples related to Requests for Substitutions shall be submitted to the District in accordance with Article 25 above. This provision shall not authorize any extension of time for performance of this Contract. District shall review such samples, as to conformance with design concept of work and for compliance with information given in contract documents and approve or disapprove same within ten (10) working days from receipt of same.

B. Unless specified otherwise, sampling, preparation of samples and tests shall be in accordance with the latest standards of the American Society for Testing and Materials.

C. Samples of materials and/or articles shall, upon demand of District, be submitted for tests or examinations and consideration before incorporation of same in work is started. Contractor shall be solely responsible for delays due to samples not being submitted in time to allow for tests. Acceptance or rejection will be expressed in writing. Work shall be equal to approved samples in every respect. Samples which are of value after testing will remain the property of Contractor.

ARTICLE 27 PROGRESS SCHEDULE

A. If applicable or requested by the District, within ten (10) calendar days after being awarded the contract, Contractor shall submit a progress schedule for District's approval. The schedule should indicate the beginning and completion of all phases of construction and shall use the "critical path method" (commonly called CPM) for the value reporting, planning and scheduling, of all work required under the contract documents. The scheduling is necessary for the District's adequate monitoring of the progress of the work and should be prepared in accordance with the time frame described in the Agreement. The

District may disapprove such a schedule and require modification to it if, in the opinion of the District, adherence to the progress schedule will not cause the work to be completed in accordance with the Agreement.

B. The Contractor, if requested by the District, shall provide revised schedules within ten (10) day if, at any time, District, considers the completion date to be in jeopardy because of "activities behind schedule." The additional schedule shall include a new arrow or precedence diagram and schedule reports conforming to the requirements above, designed to show how the Contractor intends to accomplish the work to meet the completion date. The form and method employed by the Contractor shall be the same as for the original initial schedule. The Contractor shall modify any portions of the schedule that become infeasible because of "activities behind schedule" or for any other valid reason. An activity that cannot be completed by its original latest completion date shall be deemed to be behind schedule.

ARTICLE 28 MATERIALS AND WORK

A. Except as otherwise specifically stated in this Contract, Contractor shall provide and pay for all materials, labor, tools, equipment, transportation, superintendence, temporary constructions of every nature, and all other services and facilities of every nature whatsoever necessary to execute and complete this Contract within specified time.

B. Unless otherwise specified, all materials shall be new and shall be of the respective kinds and grades as noted or specified.

C. Materials shall be furnished in ample quantities and at such times as to insure uninterrupted progress of work and shall be stored properly and protected as required. Contractor shall be entirely responsible for damages or loss by weather or other causes to materials or work under this Contract.

D. Contractor shall, after award of Contract by District, place orders for materials and/or equipment as specified so that delivery of same may be made without delays to the work. Contractor shall, upon demand from the District, furnish to the District documentary evidence showing that orders have been placed.

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

F. For all material and equipment specified or indicated in the Drawings, the Contractor shall provide all labor, materials, equipment, and services necessary for complete assemblies and complete working systems. Incidental items not indicated on the Drawings, nor mentioned in the Specifications, that can legitimately and reasonably be inferred to belong to the work described, or be necessary in good practice to provide a complete assembly or system, shall be furnished as though itemized here in every detail. In all instances, material and equipment shall be installed in strict accordance with each manufacturer's most recent published recommendations and specifications.

ARTICLE 29 OBTAINING OF PERMITS, LICENSES AND EASEMENTS

Permits, licenses, and certificates necessary for prosecution of work shall be secured and paid for by Contractor, unless otherwise specified. All such permits, licenses, and certificates shall be delivered to Architect before demand is made for the certificates of final payment. Contractor shall, and shall require subcontractors to, maintain Contractor's licenses in effect as required by law.

ARTICLE 30 ACCESS TO WORK

District and its representatives shall at all times have access to work wherever it is in preparation or progress. Contractor shall provide safe and proper facilities for such access so that District's representatives may perform their functions.

ARTICLE 31 SANITARY FACILITIES

If applicable, Contractor shall provide sanitary temporary facilities in no fewer numbers than required by law.

ARTICLE 32 CLEANING UP

Contractor at all times shall keep premises free from debris such as waste, rubbish, and excess materials and equipment caused by the work. Contractor shall not leave debris under, in, or about the premises, but shall promptly remove same from the premises. Upon completion of work, Contractor shall clean interior and exterior of building, including fixtures, equipment, walls, floors, ceilings, roofs, window sills and ledges, horizontal projections, and any areas where debris has collected so surfaces are free from foreign material or discoloration; Contractor shall clean and polish all glass, plumbing fixtures, and finish hardware and similar finish surfaces and equipment and remove temporary fencing, barricades, planking, sanitary facilities and similar temporary facilities from site. If Contractor fails to clean up, District may do so and the cost thereof shall be charged to Contractor.

ARTICLE 33 GUARANTEE

A. In addition to guarantees required elsewhere, Contractor shall, and hereby does guarantee all work furnished on the job against all defects for a period of one year after date of acceptance of work by District and shall repair or replace any and all such work, together with any other work, which may be displaced in so doing that may prove defective in workmanship and/or materials within one year period from date of acceptance without expense whatsoever to District, ordinary wear and tear, unusual abuse or neglect excepted. District will give notice of observed defects to Contractor and Surety with reasonable promptness. Contractor shall notify District upon completion of such repairs or replacement.

B. Contractor Warrants that the WORK (which includes any equipment furnished by Contractor as a part of the materials) shall: (a) Be free from defects in workmanship and material; (b) Be free from defects in any design performed by Contractor; (c) Be new, and conform and perform to the requirements stated in the Specifications, and where detail requirements are not so stated, shall conform to applicable industry standards; and (d) Be suitable for the use stated in the Specifications.

C. The warranty period for discovery of DEFECTIVE WORK shall commence on the date stamped on the Notice of Completion verifying County registration and continue for the period set forth in the Specifications or for one year if not so specified. If, during the warranty period, the WORK is not available for use due to DEFECTIVE WORK, such time of unavailability shall not be counted as part of the warranty period. The warranty period for corrected DEFECTIVE WORK shall continue for a duration equivalent to the original warranty period.

ARTICLE 34 DUTY TO PROVIDE FIT WORKERS

A. Contractor and Subcontractors shall at all times enforce strict discipline and good order among their employees and shall not employ on any person not skilled in the work assigned to such person. It shall be the responsibility of Contractor to ensure compliance with this Article.

B. Any person in the employ of the Contractor or subcontractors whom District may deem unfit shall be excluded from the work site and shall not again be employed on it except with written consent of District. As used in this Article, "unfit" means any person who the District concludes is either not, or improperly, skilled for the task assigned to that person, who fails to comply with the requirements of this Article, or who creates safety hazards which jeopardize other persons and/or property.

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

ARTICLE 35 FINGERPRINTING

If applicable, Contractor shall comply with all provisions of either Education Code Section 45125.1 or 45125.2. Pursuant to Education Code 45125.1, Contractor shall conduct criminal background checks of all employees of Contractor assigned to the District, and shall certify that no employees who have been convicted of serious or violent felonies, as specified in Education Code Section 45125.1, will have contact with pupils, by utilizing the certification set forth in the bid documents. As part of such certification, Contractor must provide the District with a list of all employees providing services pursuant to this Agreement, and designate which sites such employees will be assigned. In performing the services set forth in this Agreement, Contractor shall not utilize any employees who are not included on the above-referenced list. At District's sole discretion, District may make a finding, as authorized under Education Code Section 45125.1, that Contractor's employees will have only "limited contact" with pupils. Contractor's failure to comply with this law shall be considered a material breach of this Agreement upon where this Agreement may be terminated, at District's sole discretion, without any further compensation to Contractor.

Pursuant to Section 45125.2 Contractor shall ensure the safety of pupils by the installation of a physical barrier at the worksite and by continual supervision and monitoring of all these employees by an employee of Contractor whom the Department of Justice has ascertained has not been convicted of a serious or violent felony, as defined in Education Code Section 45125.2 (c).

ARTICLE 36 WAGE RATES, TRAVEL AND SUBSISTENCE

A. **Wage Rates.** Pursuant to the provisions of Article 2 (commencing at § 1720), Chapter 1, Part 7, Division 2, of the Labor Code, the District has obtained the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality in which this public Work is to be performed for each craft, classification, or type of worker needed for this Project from the Director of the Department of Industrial Relations ("Director"). These rates are on file at the administrative office of the District and are also available from the Director of the Department of Industrial Relations. Copies will be made available to any interested party on request. The Contractor shall post a copy of such wage rates at appropriate, conspicuous, weatherproof points at the Site.

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

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

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

D. **Per Diem Wages.** The Contractor shall pay and shall cause to be paid to each worker needed to execute the Work on the Project per diem wages including employer payments for health and welfare, pensions, vacation, travel time and subsistence pay as provided for in Labor Code §1773.1.

E. **Forfeiture and Payments.** Pursuant to Labor Code §1775 and the District's Labor Compliance Program, the Contractor shall forfeit to the District, not more than Fifty Dollars ($50.00) for each calendar day, or portion thereof, for each worker paid less than the prevailing wages rates as determined by the Director of the Department of Industrial Relations, for the work or craft in which the worker is employed for any Work done under the Agreement by the Contractor or by any Subcontractor under it. The amount of the penalty shall be determined by the Labor Commissioner and shall be based on consideration of: (1) whether the Contractor or Subcontractor's failure to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily correct upon being brought to the attention of the Contractor or Subcontractor; and (2) whether the Contractor or Subcontractor has a prior record of failing to meet its prevailing wage obligations. Further details regarding the enforcement of paying prevailing wage rates, reporting violations, withholding contract payments, forfeitures and hearing to review withholding of contract payments are set forth in the District's Labor Compliance Program.

ARTICLE 37 PAYROLL RECORDS

A. Pursuant to §1776 of the Labor Code, each Contractor and Subcontractor shall keep an accurate payroll record showing the name, address, social security number, work classification and straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker or other employee employed by him or her in connection with the Project.

B. All payroll records shall be certified and submitted to the District with each application for payment, but shall not be submitted less than once per month. All payroll records shall be available for inspection at all reasonable hours at the principal office of the Contractor on the following basis:

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

(2) A certified copy of all payroll records shall be made available for inspection or furnished upon request to a representative of 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 for copies thereof. However, a request by the public shall be made through the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement. If the requested payroll records have not been provided pursuant to Paragraph (2) above, the requesting party shall, prior to being provided the records, reimburse the costs of the preparation by the Contractor, Subcontractors, and the entity through which the request was made. The public shall not be given access to such records at the principal office of the Contractor.

C. The certified payroll records shall be on forms provided by the Division of Labor Standards Enforcement or shall contain the same information as the forms provided by the Division.

D. The Contractor or Subcontractor(s) shall file a certified copy of all payroll records with the entity that requested such records within 10 days after receipt of a written request.

E. Any copy of records made available for inspection as copies and furnished upon request to the public or any public agency by the District, the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement shall be marked or obliterated to prevent disclosure of an individual's name, address and social security number. The name and address of the Contractor awarded the Contract or the Subcontractor(s) performing the Contract shall not be marked or obliterated. Any copy of records made available for inspection by, or furnished to, a joint labor-management committee established pursuant to the federal Labor Management Cooperation Act of 1978 (Section 175a of Title 29 of the United States Code) shall be marked or obliterated only to prevent disclosure of an individual's name and social security number.

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

G. The Contractor or Subcontractor(s) shall have 10 days in which to comply subsequent to receipt of a written notice requesting payroll records. In the event that the Contractor or Subcontractor(s) fails to comply within the 10-day period, the Contractor or Subcontractor(s) shall, as a penalty to the District, forfeit Twenty-Five Dollars ($25.00) for each calendar day, or portion thereof, for each worker, until strict compliance is effectuated. Upon the request of the Division of Apprenticeship Standards or the Division of Labor Standards Enforcement, these penalties shall be withheld from progress payments then due. The Contractor is not subject to a penalty due to the failure of a Subcontractor to comply with this section.

The responsibility for compliance with this Article and the District's Labor Compliance Program shall rest upon the Contractor.

ARTICLE 38 WITHHOLDING OF CONTRACT PAYMENTS & PENALTIES

The District may withhold or delay contract payments to the Contractor and/or any Subcontractor if:

(1) The required prevailing rate of per diem wages determined by the Director of the Department of Industrial Relations is not paid to all workers employed on the Project; or

(2) The Contractor or Subcontractor(s) fail to submit all required certified payroll records with each application for payment, but not less than once per month; or

(3) The Contractor or Subcontractor(s) submit incomplete or inadequate payroll records; or

(4) The Contractor or Subcontractor(s) fail to comply with the Labor Code requirements concerning apprentices; or

(5) The Contractor or Subcontractor(s) fail to comply with the District's Labor Compliance Program; or

(6) The Contractor or Subcontractor(s) fail to comply with any applicable state laws governing labor on public works projects.

Any withholding of contract payments and penalties are set forth in the District's Labor Compliance Program.

ARTICLE 39 APPRENTICES

A. **Apprentice Wages and Definitions.** All apprentices employed by the Contractor to perform services under the Contract shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and as determined by the Director of the Department of Industrial Relations, and shall be employed only at the Work of the craft or trade to which he or she is registered. Only apprentices, as defined in §3077 of the Labor Code, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprenticeship agreements under Chapter 4 (commencing with §3070) of Division 3, are eligible to be employed under this Contract. The employment and training of each apprentice shall be in accordance with the apprenticeship standards and apprentice agreements under which he or she is training or in accordance with the rules and regulations of the California Apprenticeship Council.

B. **Employment of Apprentices.** Contractor agrees to comply with the requirements of Labor Code §1777.5. The Contractor awarded the Project, or any Subcontractor under him or her, in performing any of the Work under the Contract or subcontract, employs workers in any apprenticeable craft or trade, the Contractor and Subcontractor shall employ apprentices in the ratio set forth in Labor Code §1777.5 and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the Project site for a certificate approving the Contractor or Subcontractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the Contractor or Subcontractor, shall arrange for the dispatch of apprentices to the Contractor or Subcontractor. The Contractor or Subcontractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade" as used in this Article means a craft or trade determined as an apprenticeable occupation in accordance with the rules and regulations prescribed by the California Apprenticeship Council. The ratio of work performed by apprentices to journeyman employed in a particular craft or trade on the Project shall be in accordance with Labor Code §1777.5.

C. **Submission of Contract Information.** Prior to commencing work on the Project, the Contractor and Subcontractors shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the Project and make the request for the dispatch of apprentices in accordance with the Labor Code. The information submitted shall include an estimate of journeyman hours to be performed under the Contact, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the District

if requested. Within 60 days after concluding work on the Project, the Contractor and Subcontractors shall submit to the District, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the Project.

D. **Apprentice Fund.** The Contractor or any Subcontractor under him or her, who, in performing any of the Work under the Contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the Project. The Contractor and Subcontractors may take as a credit for payments to the Council any amounts paid by the Contractor or Subcontractor to an approved apprenticeship program that can supply apprentices to the Project. The Contractor and Subcontractors may add the amount of the contributions in computing his or her bid for the Contract.

E. **Prime Contractor Compliance.** The responsibility of compliance with Article 13 and §1777.5 of the Labor Code for all apprenticeable occupations is with the Prime Contractor. Any Contractor or Subcontractor that knowingly violates the provisions of this Article or Labor Code §1777.5 shall be subject to the penalties set forth in Labor Code §1777.7 and the District's Labor Compliance Program.

ARTICLE 40 PROTECTION OF PERSONS AND PROPERTY

A. The Contractor shall be responsible for all damages to persons or property that occur as a result of its fault or negligence in connection with the prosecution of this Contract and shall take all necessary measures and be responsible for the proper care and protection of all materials delivered and work performed until completion and final acceptance by the District. All work shall be solely at the Contractor's risk, with the exception of damage to the work caused by "acts of God" as defined in Government Code Section 4151(b). Contractor's liability for any injury or damage proximately caused by any "act of God" shall be limited to five percent (5%) of the Contract price pursuant to Government Code Section 4150.

B. Contractor shall take, and require subcontractor to take, all necessary precautions for safety of workers on the work and shall comply with all applicable federal, state, local and other safety laws, standards, orders, rules, regulations, and building codes to prevent accidents or injury to persons on, about, or adjacent to premises where work is being performed and to provide a safe and healthful place of employment. In addition to meeting all requirements of OSHA, Cal-OSHA, state, and local codes, Contractor shall furnish, erect and properly maintain at all times, as directed by District or Architect or required by conditions and progress of work, all necessary safety devices, safeguards, construction canopies, signs, audible devices for protection of the blind, safety rails, belts and nets, barriers, lights, and watchmen for protection of workers and the public and shall post danger signs warning against hazards created by such features in the course of construction. Contractor shall designate a responsible member of its organization on the work, whose duty shall be to post information regarding protection and obligations of workers and other notices required under occupational safety and health laws, to comply with reporting and other occupational safety requirements, and to protect the life, safety and health of workers. Name and position of person so designated shall be reported to District by Contractor. Contractor shall correct any violations of safety laws, rules, orders, standards, or regulations. Upon the issuance of a citation or notice of violation by the Division of Occupational Safety and Health, such violation shall be corrected promptly.

C. In an emergency affecting safety of life, of work, or of adjoining property, Contractor, without special instruction or authorization from Architect or District, is hereby permitted to act, at its discretion, to prevent such threatened loss or injury; and Contractor shall so act if so authorized or instructed by Architect or District. District will not hold Contractor liable for damages proximately caused by Contractor's actions if such actions were reasonably necessary to prevent loss of life or injury to person or damage to work or adjoining property. Any compensation claimed by Contractor on account of emergency work shall be determined by agreement.

D. Contractor shall provide such heat, cooling, covering, and enclosures as are necessary to protect all work, materials, equipment, appliances, and tools against damage by weather conditions.

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

F. Contractor shall (unless waived by the District in writing):

(1) When performing new construction on existing sites, become informed and take into specific account the maturity of the students on the site; and perform work which may interfere with school routine before or after school hours, enclose working area with a substantial barricade, and arrange work to cause a minimum amount of inconvenience and danger to students and faculty in their regular school activities. The Contractor shall comply with specifications and directives of the District regarding the timing of certain construction activities in order to avoid unnecessary interference with school functioning.

(2) Provide substantial barricades around any shrubs or trees indicated to be preserved.

(3) Deliver materials to building area over route designated by Architect of District.

(4) Take preventive measures to eliminate objectionable dust.

(5) Confine apparatus, the storage of materials, and the operations of workers to limits indicated by law, ordinances, permits or directions of Architect; and shall not interfere with the work or unreasonably encumber premises or overload any structure with materials; and enforce all instructions of District and Architect regarding signs, advertising, fires, and smoking and require that all workers comply with all regulations while on construction site.

(6) Take care to prevent disturbing or covering any survey markers, monuments, or other devices marking property boundaries or corners. If such markers are disturbed by accident, they shall be replaced by an approved land surveyor or civil engineer and all maps and records required therefrom shall be filed with county and local authorities, at no cost to the District. All filing and plan check fees shall be paid by Contractor.

ARTICLE 41 NON-DISCRIMINATION

In the performance of the terms of this Contract, Contractor agrees that it will not engage in nor permit such subcontractor as it may employ to engage in unlawful discrimination in employment of persons because of the race, religious creed, color, national origin, ancestry, physical handicap, medical condition, marital status, or sex of such persons.

ARTICLE 42 COST BREAKDOWN AND PERIODICAL ESTIMATES

A. If applicable, Contractor shall furnish on forms approved by District:

(1) Within ten (10) days of award of Contract a detailed estimate giving complete breakdown of Contract price for each Project or site; and (2) A periodical itemized estimate of work done for purpose of making partial payments thereon. (3) Within ten (10) days of

request of District, a schedule of estimated monthly payments which shall be due Contractor under Contract.

B. Values employed in making up any of these schedules will be used only for determining basis of partial payments and will not be considered as fixing a basis for additions to or deductions from Contract price.

C. Contractor shall include in any breakdown or estimate the cost of final Project record documents, guarantees, warranties, O & M Manuals, photographs, etc.

ARTICLE 43 CONTRACTOR CLAIMS & DISPUTES

A. **Decision of Architect.** Disputes between District and Contractor involving money or time, including those alleging an error or omission by the Architect shall be referred initially to the Architect for action as provided in Article 43.E. A decision by the Architect, as provided in Article 43.E, shall be required as a condition precedent to proceeding with remedies set forth in Article 43.F as to all such matters arising prior to the date final payment is due, regardless of whether such matters relate to execution and progress of the Work, or the extent to which the Work has been completed. The decision by the Architect in response to a Claim shall not be a condition precedent to the remedies under Articles 43.B through 43.E in the event: (1) the position of Architect is vacant; (2) the Architect has not received evidence or has failed to render a decision within agreed time limit; (3) the Architect has failed to take action required under Article 43.D within thirty (30) days after the Claim is made, forty-five (45) days have passed after the Claim has been referred to the Architect; or (4) the Claim relates to a Stop Notice Claim not arising from any extra change or Construction Change Directive for which approval has not been provided.

B. **Architect's Review.** The Architect will review claims and take one or more of the following preliminary actions within ten (10) days of receipt of a claim: (1) request additional supporting data from the claimant; (2) submit a schedule to the parties indicating when the Architect expects to take action; (3) reject the claim in whole or in part, stating reasons for rejection; (4) recommend approval of the claim; or (5) suggest a compromise. The Architect may also, but is not obligated to, notify the surety, if any, of the nature and amount of the claim.

C. **Documentation if Resolved.** If a claim has been resolved, the Architect will prepare or obtain appropriate documentation.

D. **Actions if Not Resolved.** If a claim has not been resolved and all documentation requested pursuant to Article 43.B has been provided, the party making the claim shall, within ten (10) days after the Architect's preliminary response, take one or more of the following actions: (1) modify the initial claim; (2) notify the Architect that the initial claim stands; or (3) supplement with additional supporting data.

E. **Architect's Written Decision.** If a claim has not been resolved after consideration of the foregoing and of other evidence presented by the parties or requested by the Architect, the Architect will notify the parties in writing that the Architect's decision will be made within twenty (20) days. Upon expiration of such time period, the Architect will render to the parties its written decision relative to the claim, including any change in the Contract Sum or Contract Time or both. The Architect may, but is not obligated to, notify the surety and request the surety's assistance in resolving the controversy.

F. **Continuing Contract Performance.** Pending final resolution of a Claim, including, negotiation, mediation, arbitration, or litigation, the Contractor shall proceed diligently with performance of the Contract, and the District shall continue to make any undisputed payments in accordance with the Contract. If the dispute is not resolved, Contractor agrees it will neither rescind the contract nor stop the progress of the work, but Contractor's sole remedy shall be to submit such controversy to determination by a

court of competent jurisdiction in the county where the project is located, after the project has been completed, and not before. At the District's sole option, the District may submit individual disputes for binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized for individual disputes, such resolution is full and final as to that particular claim.

G. **Claims for Extension of Time.** Subject to the requirements set forth in Article 50, if Contractor and District cannot agree upon an extension of time, whether compensable or not, the Contractor must comply with the requirements in this Article including those set forth under Article 44.

ARTICLE 44 CLAIMS PROCEDURES & REQUIREMENTS

A. **Procedures and Requirements Applicable to all claims.**

(1) Definition of Claim: A "Claim" means a separate demand by the Contractor for (1) time extension, (2) payment of money or damages arising from Work done by or on behalf of the Contractor pursuant to the Contract and payment of which is not otherwise expressly provided for or the claimant is not otherwise entitled to, or (3) and amount the payment of which is disputed by the District.

(2) Filing Claim is Not Basis To Discontinue Work: The Contractor shall promptly comply with Work under the Contract or Work requested by the District even though a written claim has been filed. The Contractor and the District shall make good faith efforts to resolve any and all claims that may arise during the performance of the Work covered by this contract.

(3) Claim Notification: The Contractor shall within seven (7) calendar days after the claim arises, submit a notification, in writing, with the District stating clearly the basis for the claim. If the notification is not submitted within seven (7) days after the claim arises, the Contractor shall be deemed to have waived all right to assert the claim and the claim shall be denied. Claims submitted after the final payment date shall also be considered null and void by the District. All claims shall be reviewed pursuant to Article 43.

(4) Formal Claim Submission: If the Contractor does not concur with the District's decision regarding the Claim Notification, the Contractor will issue a formal Claim Appeal within fourteen (14) days of receipt of the District's decision and all detailed information in support of the Claim Appeal within thirty (30) days. All appeals shall be submitted before final payment. If the Claim Appeal is not submitted within fourteen (14) calendar days and detailed information within thirty (30) days, the Contractor shall be deemed to have waived its right to assert the Claim and the Claim shall be denied. Contractor's failure to submit any detailed information which is in the possession of Contractor shall render such information inadmissible by Contractor at trial or arbitration.

(5) Appeal Claim Format: The Contractor shall provide all written detailed documentation which supports the claim, including but not limited to: arguments, justifications, cost, estimates, schedule analysis and detailed documentation. The format of the Claim Appeal shall be as follows:

a. Cover letter.
b. Summary of factual basis of claim and amount of claim.
c. Summary of the basis of the claim, including the specific clause and section under the Contract under which the claim is made.

d. Documents relating to the claim, including:

(i) Specifications
(ii) Drawings
(iii) Clarifications (RFI's)
(iv) Other relevant information
(v) Analysis of claim merit.
(vi) Analysis of claim cost.
(vii) For claims relating to time extensions, an analysis and supporting documentation evidencing any effect upon the critical path.
(viii) Certification.
(ix) Chronology of events and related correspondence.
(x) Daily reports and logs.

(6) Certification: The Contractor (and subcontractors, if applicable) shall submit with the claim a certification under penalty of perjury:

a. That the Contractor has reviewed the claim and that such claim is made in good faith;
b. Supporting data are accurate and complete to the best of the Contractor's knowledge and belief;
c. The amount requested accurately reflects the amount of compensation for which the Contractor believes the District is liable.
d. That the Contractor is familiar with Government Code Sections 12650 et seq. and Penal Code Section 72 and that false claims can lead to substantial fines and/or imprisonment.

(7) Signature of Certification: If the Contractor is not an individual, the certification shall be executed by an officer or general partner of the Contractor having overall responsibility for the conduct of the Contractor's affairs.

(8) Mandatory Claim Appeal Procedure: The Contractor's Claim Appeal shall be denied if it fails to provide the written basis of the claim and certification as set forth herein.

(9) District May Request Additional Information: Within thirty (30) days of receipt of the Claim Appeal and the information under this Article, the District may request in writing any additional documentation supporting the claim or documentation relating to defenses to the claim which the District may assert.

B. **Binding Arbitration of Individual Claim Issues.** At the District's sole option, the District may submit individual disputes, or claims, to binding arbitration and Contractor agrees to the resolution determined for each individual dispute by Arbitrator, including resolution of time and delays. If binding arbitration is utilized, such resolution is a full and final resolution of the particular claim or dispute. Under no circumstances may the Contractor stop work, rescind its contract or otherwise slow the progress of Work during resolution of individual claims in binding Arbitration.

C. **Resolution of Disputes in Court of Competent Jurisdiction.** If claims are not resolved under the procedure set forth and pursuant to Article 44.B, such claim or controversy shall be submitted to a court in the county of competent jurisdiction after the Project has been completed, and not before.

D. **Warranties, Guarantees and Obligations.** The duties and obligations imposed by these General Conditions and the rights and remedies available hereunder to the parties hereto, and, in particular

but without limitation, the warranties, guarantees and obligations imposed upon Contractor by the General Conditions and amendments thereto; and all of the rights and remedies available to District and Architect thereunder, are in addition to, and are not to be construed in any way as a limitation of, any rights and remedies available to any or all of them which are otherwise imposed or available by laws or regulations by special warranty or guarantee or by other provisions of the Contract Documents, and the provisions of this Article will be as effective as if repeated specifically in the Contract Documents in connection with each particular duty, obligation, right and remedy to which they apply.

ARTICLE 45 PAYMENTS TO CONTRACTOR

A. Unless otherwise specified, each month within thirty (30) days after receipt of approved periodic estimate for partial payment, there shall be paid to Contractor a sum equal to ninety percent (90%) of value of work performed and of materials delivered on the ground or stock subject to or under the control of District and unused up to the last day of the previous month, less aggregate previous payments. Monthly payments shall be made only on the basis of monthly estimates which shall be prepared by Contractor on a form approved by District and filed before the fifth (5th) day of the month during which payment is to be made. Work completed as estimated shall be an estimate only and no inaccuracy or error in said estimate shall operate to release Contractor or surety from any damages arising from such work or from enforcing each and every provision of this Contract, and District shall have the right subsequently to correct any error made in any estimate for payment. Contractor shall not be entitled to have any payment estimates processed or be entitled to have any payment for work performed so long as any lawful or proper direction concerning work, or any portion thereof, given by District or Architect has not been complied with by Contractor.

B. Before payment is made hereunder, the District will review the request for progress payment with District and Inspector for verification that the work for which payment is requested has been performed in accordance with the Terms of the Contract.

C. District and Inspector shall sign the request for payment as verification that the work has been performed. It is understood more over, that signature of the Inspector and Architect shall not be conclusive upon District, but merely advisory.

D. Upon request by the District, Contractor shall provide lien releases or partial lien releases for payments previously made. Contractor shall not be entitled to any payment for WORK performed if Contractor has not complied with any lawful direction from the District or has failed to provide lien releases as requested.

E. Prior to final payment, Contractor and each Subcontractor shall certify that the Project does not contain any asbestos containing materials.

F. After completion of the WORK, Contractor shall make a demand for final payment. The demand for final payment shall identify all disputed and undisputed amounts due under the CONTACT and, all claims for compensation under or arising out of this CONTRACT. The Contractor's negotiation of the payment of the final amount shall constitute a waiver of all amounts due under the CONTRACT and all claims against District under or arising out of this CONTRACT except those identified by Contractor in writing, and unsettled before Contractor's negotiation of final payment. The final payment, if unencumbered, shall be made no sooner than thirty-five (35) calendar days after recordation of the Notice of Completion by the County Registrar. Acceptance will be made only by ACTION OF THE GOVERNING BOARD.

G. No payment by District hereunder shall be interpreted so as to imply that District has inspected, approved, or accepted any part of the WORK.

ARTICLE 46 CHANGES AND EXTRA WORK

A. District may, as provided by law and without affecting the validity of this Contract, order changes, modifications, deletions and extra work by issuance of written change orders from time to time during the progress of the Project, Contract sum being adjusted accordingly. All such work shall be executed under conditions of original Contract except that any claim for an extension of time caused thereby shall be adjusted at time of ordering such change.

B. In giving instructions, Architect shall have authority to make minor changes in work, not involving change in cost, and not inconsistent with purposes of the building. Otherwise, except in an emergency endangering life or property, no extra work or change shall be made unless in pursuance of a written order from District, authorized by action of the Governing Board and no claim for addition to Contract sum shall be valid unless so ordered.

C. The following format shall be used as applicable by the District and the Contractor to communicate proposed additions and deductions to the Contract:

	EXTRA	CREDIT
(a) Material (attach itemized quantity and unit cost plus sales tax)	_____	_____
(b) Labor (attach itemized hours and rates)	_____	_____
(c) Equipment (attach invoices)	_____	_____
(d) Subtotal	_____	_____
(e) If Subcontractor performed Work, add Subcontractor's overhead and profit to portions performed by Sub-contractor, not to exceed fifteen percent (15%) of item (d).	_____	_____
(f) Liability and Property Damage Insurance, Worker's, Compensation Insurance, Social Security, and Unemployment Taxes, not to exceed as follows: FICA @ 6.2%- with a wage ceiling of $84,900; Medicare @ 1.45%- no wage ceiling; FUTA @ .8%- with a wage ceiling of $7,000; ETT and SUI @ 2.3%- with a wage ceiling of $7,000; Workers' Compensation @ 5.94%; Liability and Property Damage @ 2.5%. Total not-to-exceed is 19.19%. (*Note: Modifications to these percentages will be evaluated and possibly modified only on a case-by-case basis and only after proper proof of alternate percentages are documented and approved in advance. In*		

	EXTRA	CREDIT
addition, as wage ceilings are met, those corresponding percentages must drop from the "burden" calculations).	_____	_____
(g) Subtotal	_____	_____
(h) General Contractor's Overhead and Profit, not to exceed fifteen percent (15%) of Item (g). No more than five percent (5%) of Item (g) if work was performed by Subcontractor.	_____	_____
(i) Subtotal	_____	_____
(j) Bond not to exceed two percent (2%) of Item (g)	_____	_____
(k) TOTAL		_____
(l) Time	_____	

D. If the Contractor should claim that any instruction, request, drawing, specification, action, condition, omission, default, or other situation obligates the District to pay additional compensation to the Contractor or to grant an extension of time for the compensation of the Contract, or constitutes a waiver of any provision in the Contract, Contractor shall notify the District, in writing, of such claim within ten (10) calendar days from the date Contractor has actual or constructive notice of the factual basis supporting the claim. The Contractor's failure to notify the District within such ten (10) calendar day period shall be deemed a waiver and relinquishment of such a claim against the District. If such notice be given within the specified time, the procedure for its consideration shall be as stated above in this Article.

E. If Contractor does not remove such work within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal within ten (10) calendar days time thereafter, District may, upon ten (10) calendar days written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

F. Each bidder understands and agrees that the Allowance set forth in this Section 11 of the Instructions to Bidders will be utilized to pay for additional skateboard prevention site work and any other unforeseen site work yet to be determined by the District, if any. Any unused portion of the Allowance that remains at the completion of the Project shall be deducted from the final construction cost. The unused portion of the Allowance, if any, shall be credited back to the District in the form of a deductive change order. The Contractor shall not be entitled to retain any overhead or profit on any unused portion of the Allowance that is returned to the District.

ARTICLE 47 COMPLETION

The work may only be accepted as complete by action of the Governing Board.

ARTICLE 48 ADJUSTMENTS TO CONTRACT PRICE

A. If Contractor defaults or neglects to carry out the work in accordance with the contract documents or fails to perform any provision thereof, District may, after ten (10) days written notice to Contractor and without prejudice to any other remedy it may have, make good such deficiencies.

B. District shall adjust the total Contract price by reducing the amount thereof by the cost of making good such deficiencies. If District deems it inexpedient to correct work injured or not done in accordance with Contract provisions, an equitable reduction in Contract price shall be made therefore.

ARTICLE 49 CORRECTION OF WORK

A. Should it be considered necessary or advisable by the Owner at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the same, the Contractor shall on request promptly furnish all necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of the Contractor or his subcontractor, he shall defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and material necessarily involved in the examination and replacement shall be allowed the Contractor.

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

C. If Contractor does not remove such work within a reasonable time, fixed by written notice, District may remove it and may store the material at Contractor's expense. If Contractor does not pay expenses of such removal within ten {10) days time thereafter, District may, upon ten (10) days written notice, sell such materials at auction or at private sale and shall account for net proceeds thereof, after deducting all costs and expenses that should have been borne by Contractor.

ARTICLE 50 EXTENSION OF TIME - LIQUIDATED DAMAGES

A. The Contractor and District hereby agree that the exact amount of damages for failure to complete the work within the time specified is extremely difficult or impossible to determine. It is expressly understood that time is of the essence and that the Contractor must complete the Project within the time specified in the Agreement. Contractor shall be assessed the sum of Two Hundred Dollars ($200.00) per calendar day as liquidated damages for each and every day the work required under this contract remains unfinished past the time for completion, as set forth in the Agreement, and any extensions of time granted by the District to the Contractor under the terms of the contract documents and pursuant to Section 53069.85 of the Government Code. For purposes of this Article, the work shall be considered "complete" in accordance with the provisions of Article 47, "COMPLETION", except that the work may be considered complete without formal acceptance by the Governing Board so long as the board, at its next regularly scheduled meeting, accepts the work.

B. Contractor shall not be charged for liquidated damages, as set forth above, because of any delays in completion of work which are not the fault or negligence of Contractor, including but not restricted to: acts of God, acts of public enemy, acts of Government, fires, floods, epidemics and quarantine restrictions. Contractor shall, within ten (10) calendar days of beginning of any such delay (unless District grants in writing a further period of time to file such notice prior to date of final settlement of the Contract), notify District in writing of causes of delay; thereupon District shall ascertain the facts and extent of delay

and grant extension of time for completing work when, in its judgment, the findings of fact justify such an extension. The District's finding of fact thereon shall be final and conclusive on the parties hereto. Extensions of time shall apply only to that portion of work affected by delay, and shall not apply to other portions of work not so affected.

ARTICLE 51 PAYMENTS WITHHELD

A. In addition to amount which District may retain under Article 47 entitled "COMPLETION" and Article 45 entitled "PAYMENTS TO CONTRACTOR", District may withhold a sufficient amount or amounts of any payment or payments otherwise due to Contractor, as in its judgment may be necessary to cover:

(1) Payments which may be past due and payable for just claims against Contractor or any subcontractors, or against and about the performance of work on the Project under this Contract, including, without limitation, payments made pursuant to the Article 45 entitled "PAYMENTS BY CONTRACTOR";
(2) The cost of defective work which Contractor has not remedied;
(3) Liquidated damages assessed against Contractor;
(4) Penalties for violation of labor laws;
(5) The cost of materials ordered by the District pursuant to the Article 28 entitled "MATERIALS AND WORK";
(6) The cost of completion of this Contract if there is reasonable doubt that this Contract can be completed for the balance then unpaid to Contractor;
(7) Site clean-up as provided in Article 32 entitled "CLEANING UP".
(8) Amount necessary to satisfy any and all liens against District. Contractor shall provide release of all liens prior to final payment.
(9) Damages to another Contractor.
(10) Payments to indemnify, defend, or hold harmless the District.
(11) Any payments due to the District including but not limited to payments for failed tests, utilities or imperfections.

B. If the Contractor, at its own expense, removes the reason for withholding, then payment shall be made for amount withheld.

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

D. As an alternative to payment of such claims or obligations, District, in its sole discretion, may reduce the total Contract price as provided in Article 48 entitled "ADJUSTMENTS TO CONTRACT PRICE."

E. Payment by the District shall be without prejudice to any other action by the District to recover damages.

ARTICLE 52 EXCISE TAXES

If under Federal Excise Tax Law any transaction hereunder constitutes a sale on which a Federal Excise Tax is imposed and the sale is exempt from such Federal Excise Tax because it is a sale to a State or

Local Government for its exclusive use, District, upon request, will execute documents necessary to show (1) that District is a political subdivision of the State for the purposes of such exemption and (2) that the sale is for the exclusive use of District. No Federal Excise Tax for such materials shall be included in any bid price.

ARTICLE 53 TAXES

Bid price is to include any and all applicable sales taxes or other taxes that may be due in accordance with Section 7051 of the Revenue and Taxation Code; Regulation 1521 of the State Board of Equalization or any other tax codes that may be applicable.

ARTICLE 54 NO ASSIGNMENT

Contractor shall not assign this Contract or any part thereof.

ARTICLE 55 NOTICE AND SERVICE THEREOF

A. Any notice from one party to the other or otherwise under Contract shall be in writing and shall be dated and signed by party giving such notice or by a duly authorized representative of such party. Any such notice shall not be effective for any purpose whatsoever unless served in one of the following manners:

(1) If notice is given to District, by personal delivery thereof to District or by depositing same in United States mail, enclosed in a sealed envelope addressed to District, and sent by registered or certified mail with postage prepaid; (2) If notice is given to Contractor by personal delivery thereof to said Contractor or to Contractor's superintendent at site of Project, or by depositing same in United States mail, enclosed in a sealed envelope addressed to said Contractor at its regular place of business or at such address as may have been established for the conduct of work under this Contract, and sent by registered or certified mail with postage prepaid;(3) If notice is given to surety or other person by personal delivery to such surety or other person or by depositing same in United States mail, enclosed in a sealed envelope, addressed to such surety or person at the address of such surety or person last communicated by surety or other person to party giving notice, and sent by registered or certified mail with postage prepaid.

ARTICLE 56 NO WAIVER

The failure of District in any one or more instances to insist upon strict performance of any of the terms of this Contract or to exercise any option herein conferred shall not be construed as a waiver or relinquishment to any extent of the right to assert or rely upon any such terms or option on any future occasion.

ARTICLE 57 HAZARDOUS MATERIALS

In the event the Contractor encounters on the site material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) which has not been rendered harmless, the Contractor shall immediately stop work in the area affected and report the condition to the District and Architect in writing. The work in the affected area shall not thereafter be resumed except by written agreement of the District and Contractor if in fact the material is asbestos or polychlorinated biphenyl (PCB) and has not been rendered harmless. The work in the affected area shall be resumed in the absence of asbestos or polychlorinated biphenyl (PCB), or when it has been rendered harmless, by written agreement of the District and Contractor, or in accordance with final determination by the Architect.

ARTICLE 58 DISTRICT'S RIGHT TO CARRY OUT THE WORK

If Contractor defaults or neglects to carry out the work in accordance with the contract documents or fails to perform any provision of this Contract, the owner may, after ten (10) calendar days' written notice to Contractor and without prejudice to any other remedy he may have, made good such deficiencies. In such case an appropriate Change Order shall be issued deducting from the payments then or thereafter due Contractor the cost of correcting such deficiencies, including the cost of the Architect's additional service made necessary by such default, neglect or failure. If the payments then or thereafter due Contractor are not sufficient to cover such amount, then Contractor shall pay the difference to the Owner within ten (10) calendar days.

ARTICLE 59 INDEMNIFICATION

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

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

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

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

B. Contractor, at its own expense, cost, and risk, shall defend any and all claims, actions, suits, or other proceedings that may be brought or instituted against the District, its officers, agents or employees, on any such claim or liability, and shall pay or satisfy any judgment that may be rendered against the District, its officers, agents or employees in any action, suit or other proceedings as a result thereof.

ARTICLE 60 NON-UTILIZATION OF ASBESTOS MATERIAL

NO ASBESTOS OR ASBESTOS-CONTAINING PRODUCTS SHALL BE USED IN THIS CONSTRUCTION OR IN ANY TOOLS, DEVICES, CLOTHING, OR EQUIPMENT USED TO EFFECT THIS CONSTRUCTION.

Asbestos and/or asbestos-containing products shall be defined as all items containing, but not limited to, chrysolite, amosite, anthophyllite, tremolite, and actinolite. Any or all material containing greater than one-tenth of one percent (1%) asbestos shall be defined as asbestos-containing material. All work or materials found to contain asbestos or work or material installed with asbestos-containing equipment will be immediately rejected and this work will be removed at no additional cost to the District.

ARTICLE 61 LIEN RELEASES

Contractor shall, at its own cost, defend, indemnify and hold harmless the District, its officers, agents, employees, assigns, and successors in interest, from and against any and all liability, damages, losses, claims, demands, actions, causes of action, and costs including attorney's fees and expenses, or any of them, arising from or attributable to a lien or stop notice filed and/or severed in connection with the work.

ARTICLE 62 ALLOCATION OF COSTS

Contractor acknowledges that the projected cost of construction is potentially subject to change due to unanticipated increases in construction costs. In the event of an increase in costs, Contractor may be subject to an increase of up to ten percent (10%). In the event of any decrease in costs, the District shall allocate a fair and reasonable portion of the savings for purposes of reducing the Contractor's costs. In considering such costs, the District shall utilize the Engineering-News Record Building Cost Index history ("BCI") applicable as of the date bids are awarded. As a result, it is agreed that the Contractor shall be liable for its share of cost increases that exceed the BCI applicable the date bids are awarded which is presently contemplated by the District in the Allocation of Costs set forth in Section 13.13 of the General Conditions. For example, if the Project is built in 2005 and awarded in 2004, then the total accumulated differential between the 2004 BCI and the 2005 BCI percentage will be factored into the estimated cost per square foot of the Project. [i.e. ((BCI applicable at the time of construction - 4102)/ 4102) * Per Square Foot Cost = Adjustment to Square Foot Cost. Note that this number can be a negative number which adjusts price either up or down.] Notwithstanding any of the foregoing the District shall not be liable to the extent any increased costs are the result of any unreasonable failure by the Contractor to anticipate costs of labor, materials and supplies or timing in which materials are ordered.

Technical Specifications

For

Bid 07-10;

Two Bunch Palms Elementary School

New Windscreen and Site Improvements

TECHNICAL SPECIFICATIONS

PALM SPRINGS UNIFIED SCHOOL DISTRICT
BID NO: 07-10
TWO BUNCH PALMS ELEMENTARY SCHOOL
NEW SCREENWALL & SITE IMPROVEMENTS

Owner
PALM SPRINGS UNIFIED SCHOOL DISTRICT
980 Tahquitz Canyon Way
Palm Springs, CA 92262
760-416-6000 FAX 760-416-6114

Architect
RUHNAU · RUHNAU · CLARKE
3775 Tenth Street
Riverside, CA 92501
951/684-4664 FAX 951/684-6276

Ruhnau Ruhnau Clarke
Project No. 1.65.07

December 2009

DOCUMENT 00007
SIGNATURE AND APPROVALS

ARCHITECT
Ruhnau · Ruhnau · Clarke
3775 Tenth Street
Riverside, California 92501-3669

Roger Clarke, Architect of Record
License #C-21340

STRUCTURAL
KNA Consulting Engineers, Inc.
9931 Muirlands Blvd.
Irvine, CA 92618

Larry Kapnelian
License # S-2795

This space for DSA use (for approvals stamp):

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PROJECT DIRECTORY

1.0 PROJECT SITE

A. Project Address:

Two Bunch Palms Elementary School
65-750 West Drive
Desert Hot Springs, CA 92240

2.0 DISTRICT AND DISTRICT'S CONSULTANTS

A. District:

Palm Springs Unified School District — 760/416-6000
980 Tahquitz Canyon Way — FAX 760/416-6114
Palm Springs, CA 92262

Contact: Joel Sorensen
District's Representative

3.0 DESIGN TEAM

A. Architect:

Ruhnau · Ruhnau · Clarke — 951/684-4664
3775 Tenth Street — FAX 951/684-6276
Riverside, CA 92501

Contact: Mike Higgins
Project Director

B. Structural Engineer:

KNA Consulting Engineers, Inc. — 949/462-3200
9931 Muirlands Boulevard — FAX 949/462-3201
Irvine, CA 92618

Contact: Larry Kaprielian

END OF DOCUMENT

SECTION 01010
SUMMARY OF WORK

PART 1 - GENERAL

1.1 THE PROJECT

A. Project Title: **Palm Springs Unified School District - Bid No. 07-10 Two Bunch Palms Elementary School - New Screenwall & Site Improvements.**

B. Project Location: **65-750 West Drive, Desert Hot Springs, CA 92240.**

1.2 WORK INCLUDED IN THE CONTRACT

A. The Work: Provide new aluminum and glass storefront windscreen at administration building entrance. Provide new masonry windscreen walls, and partial improvements to existing hardscape, and landscape areas.

1. The Work includes site paving, concrete flatwork, and other site features to the extent indicated on the Drawings.
2. See Drawing T-1 for additional general information.

1.3 PERMITS, LICENSES AND FEES

A. Permits: For Work included in the Contract, Contractor shall obtain all permits from authorities having jurisdiction and from serving utility companies and agencies. District will reimburse Contractor for amount charged for such permits, without mark-up. For Work performed under design/build basis, plancheck and permit fees shall be included in the Contract Sum.

B. Licenses: Contractor shall obtain and pay all licenses associated with construction activities, such as business licenses, contractors' licenses and vehicle and equipment licenses. All costs for licenses shall be included in the Contract Sum.

C. Assessments: District will pay all assessments and utility service connection fees. Costs of assessments shall not be included in the Contract Sum.

D. Test and Inspection Fees: Contractor shall pay all fees charged by authorities having jurisdiction and from serving utility companies and agencies, for tests and inspections conducted by those authorities, companies and agencies. District will reimburse Contractor for actual amount of such fees, without mark-up. Refer to Section 01450 - Quality Control for additional information on tests and inspections and responsibility for payment of fees.

1.4 CONTRACT DOCUMENTS

A. Contract Requirements: Conditions of the Contract and other Contact documents have been included in the Project Manual, as indicated in the Table of Contents. Such documents are not Specifications. Specifications are found in Divisions 1 through 16 of the Project Manual.

B. Contract Drawings: The Drawings provided with and identified in the Project Manual are the Drawings referenced in the Agreement.

1. The location, extent and configuration of the required construction and improvements are shown and noted on Drawings. The Drawings are referenced in the Agreement. An index of Drawings is included in the set of Drawings.
2. Drawings are arranged into series according to design discipline. Such organization and all references to trades, subcontractor, specialty contractor or supplier shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of the Work to be performed by any trade.
3. Where the terms "as shown", "as indicated", "as noted", "as detailed", "as scheduled", or terms of like meaning, are used in the Drawings or Specifications, it shall be understood that reference is being made to the Drawings referenced in the Agreement.
4. Where reference to the word "plans" is made anywhere in Drawings, Specifications and related Contract Documents, it shall be understood to mean the Drawings referenced in the Agreement.

C. Contract Specifications: The Specifications provided in the Project Manual are the Specifications referenced in the Agreement.

1. Specifications are organized by Divisions and Sections in accordance with the recommended practices of the Construction Specifications Institute. Such organization shall not control the Contractor in dividing the Work among subcontractors or in establishing the extent of Work to be performed by any trade.
2. Specifications are included in the Project Manual, which may also include other Bidding and Contract Documents. Contents of the Project Manual are listed in Document 00010 - Table of Contents, in the Project Manual.

1.5 CONTRACTOR USE OF SITE AND PREMISES

A. Site Access: Limit access to site to indicated routes and access points as indicated. If routes and access points are not indicated, access shall be as approved by District. Do not restrict access to adjacent properties and do not restrict access for those performing work under separate contracts for the District.

B. Construction Limit: Limit construction activities to areas indicated on Drawings as Project Area or, if not indicated, to areas within the parcel as described in the legal description on the Drawings.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

SECTION 01250
CONTRACT MODIFICATION PROCEDURES

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Administrative requirements for changes in the Work.

B. Documentation of changes in Contract Sum and Contract Time.

C. Change procedures.

D. Field Change Directives.

E. Change Orders.

F. Execution of Change Orders.

G. Reconciliation of Change Orders.

1.2 RELATED DOCUMENTS AND SECTIONS

A. General Conditions of the Contract: Governing requirements for the changes in the Work, in Contract Sum and Time.

B. Section 01600 - Product Requirements: Product options, substitutions, omissions and misdescriptions.

C. Section 01770 - Contract Closeout: Project record documents.

1.1 ADMINISTRATIVE REQUIREMENTS FOR CHANGES IN THE WORK

A. Responsible Person for Contractor: Submit name of the individual authorized to receive construction change documents, and who is responsible for informing others in Contractor's employ or subcontractors of changes in the Work.

B. Change Order Forms: Form as directed by District.

1.4 DOCUMENTATION OF CHANGES IN CONTRACT SUM AND CONTRACT TIME

A. Documentation of Changes in Contract Sum and Contract Time: Provide full information required for evaluation of proposed changes and to substantiate costs of changes in the Work.

B. Document each quotation for a change in Contract Sum and Contract Time, with sufficient data to allow evaluation of the quotation.

C. Additional Data: Upon request, provide additional data to support computations:

1. Quantities of products, labor and equipment.

2. Taxes, insurance and bonds.
3. Overhead and profit.
4. Justification for change in Contract Time, if claimed.
5. Credit for deletions from Contract, similarly documented.

1.5 CONSTRUCTION BULLETINS

A. Construction Bulletins, General: The following describe administrative procedures to be followed in compliance with provisions of the Conditions of the Contract for Architect's Supplemental Instructions, Field Change Directives and Change Orders. The Architect will prepare and issue a Bulletin on which the Architect's Supplemental Instructions, a Field Change Directive or a Request for Proposal will be presented to the Contractor for action.

1.6 REQUESTS FOR PROPOSAL

A. Architect- or District-Initiated Requests for Proposal: The Architect will issue a Bulletin containing a Request for Proposal, which will include a detailed description of a proposed change, with supplementary or revised Drawings and Specifications as appropriate.

1. Such Request for Proposal may include an estimate of additions or deductions in Contract Time and Contract Sum for executing the change and may include stipulations regarding overtime work and the period of time the requested response from the Contractor shall be considered valid.
2. Contractor shall prepare and submit a response to the Request for Proposal within 14 days of the date of the Request for Proposal.

B. Contractor-Initiated Request for Proposal: The Contractor may propose a change by submitting a request for a change to the Architect, describing the proposed change and its full effect on the Work, with a statement describing the reason for the change, and a full description of effects on the Contract Sum, Contract Time, related Work and work being performed under separate contracts.

1. Requests for substitutions shall be included under this category, with procedures as specified in Section 01600 - Product Requirements.
2. After review of the request and with the District's approval, the Architect will prepare a Bulletin containing a Request for Proposal, as described above.
3. Issuance of such a request by the Architect shall not indicated authorization of the Contractor to proceed with the proposed change.
4. Changes will be approved only by an approved Field Change Directive and Change Order.

1.7 ARCHITECT'S SUPPLEMENTAL INSTRUCTIONS

A. Architect's Supplemental Instructions:

1. Minor changes in the Work, not involving an adjustment in either the Contract Sum or Contract Time, as authorized by the Conditions of the Contract, will be presented by the Architect using the Architect's Bulletin form.

2. Should the Architect's Supplemental Instructions result in disputed costs and time adjustments, such dispute shall be resolved in accordance with the provisions of the Conditions of the Contract.

1.8 FIELD CHANGE DIRECTIVES

A. Field Change Directives: In accordance with provisions of the Conditions of the Contract, the District may direct the Contractor to proceed with a change in the Work prior to formal preparation, review and agreement of a Change Order, in order to not delay construction.

1. The Architect will prepare and issue a Bulletin containing a Field Change Directive which, when signed by the District and the Architect, shall instruct the Contractor to proceed with a change in the Work, for subsequent inclusion in a Change Order.
2. Should the Field Change Directive result in disputed costs and time adjustments, such dispute shall be resolved in accordance with the provisions of the Conditions of the Contract.
3. Field Change Directives shall follow procedures specified below for Change Orders except that Contractor shall immediately proceed with the change upon receipt of the signed Change Directive.

B. Field Change Directive approval required from DSA prior to installation.

1.9 CHANGE ORDERS

A. Construction Changes Based on Stipulated Sum or Time: Based on the Contractor's response to a Request for Proposal or Field Change Directive, the District and Architect will review the response.

1. The District and Contractor shall negotiate a mutually acceptable adjustment in Contract Sum and Contract Time, as appropriate, prior to performance of the changed Work.
2. A Change Order for the stipulated amounts shall be prepared based on the stipulated sum and change in time.

B. Construction Changes Based on Unit Costs or Quantities: When the scope of a change in the Work cannot be accurately determined in advance, a Field Change Directive shall be executed based on mutually-acceptable quantities and pre-determined unit prices. Actual costs shall be determined after completion of the Work and a Change Order for this amount shall be executed.

C. Construction Changes Based on Time and Material Costs: When the scope of a change in the Work cannot be accurately determined in advance, a Field Change Directive shall be executed based upon an agreement that the District will adjust the Contract Sum and the Contract Time based on actual costs and time expended by the Contractor in performance of the change.

D. Cost and Time Resolution: If amounts for changes in Contract Sum and Contract Time cannot be agreed upon by District and Contractor, amounts shall be resolved in

accordance with provisions of the Conditions of the Contract for resolution of disputes and the following:

1. Contractor shall keep accurate records of time, both labor and calendar days, and cost of materials and equipment.
2. Contractor shall prepare and submit an itemized account and supporting data after completion of changed Work, within the time limits indicated in the Conditions of the Contract.
3. Contractor shall provide full information as required and requested, for District and Architect to evaluate and substantiate proposed costs and time for the change in the Work.
4. When District and Contractor determine mutually-acceptable amounts for changes in Contract Sum and Contract Time, a Change Order shall be executed for these amounts.
5. District shall have the right to audit Contractor's invoices and bid quotations to substantiate costs for Change Orders.

E. Change Order Preparation, General:

1. In response to each Request for Proposal or Field Change Directive, Contractor shall submit information for review by District and Architect, in order to confirm the scope of the proposed change and to determine the acceptable amounts, if any, for changes to be made in the Contract Sum and Contract Time.
2. In accordance with provisions of the Conditions of the Contract, the Architect and the District will review the Contractor's response to the Request for Proposal or Field Change Directive, confirm the scope of the proposed change and determine with the Contractor the acceptable amounts, if any, for changes in the Contract Time and the Contract Sum.

F. Execution of Change Orders:

1. When agreement is reached on changes, if any, in the Contract Time and the Contract Sum, the Contractor shall prepare a Change Order using a form as directed by the District, with supplementary documents as necessary to describe the change and the associated costs and schedule impacts.
2. Field Change Directive approval required from DSA prior to installation.
3. Submit Change Orders to District through the Architect.
4. Contractor shall prepare and submit five original sets of documents for each Change Order. District, Architect and Contractor shall sign the Change Order indicating acceptance and approval of the change.
5. All Change Orders must be approved by DSA prior to installation.
6. Upon approval of the Change Order, Contractor shall promptly execute the change in the Work.

1.10 RECONCILIATION OF CHANGE ORDERS

A. Schedule of Values: Contractor shall promptly revise the Schedule of Values and Application for Payment forms to record each authorized Change Order as a separate line item and adjustment to the Contract Sum.

B. Schedules: Contractor shall promptly revise progress schedules to reflect changes in Contract Time, revising sub-schedules to adjust time for other items of Work as may be

affected by the change. Contractor shall submit revised schedules at the next Application for Payment following approval and acceptance of the Change Order.

PART 2 - PRODUCTS - (Not applicable to this Section.)

PART 3 - EXECUTION - (Not applicable to this Section.)

END OF SECTION

SECTION 01290
MEASUREMENT AND PAYMENT

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Procedures for preparation and presentation of Applications for Payment.

1.2 RELATED DOCUMENTS AND SECTION

A. Agreement: Contract Sum, amounts of Progress Payments and Retainages, and time schedule for presenting Applications for Payment.

B. General Conditions of the Contract: Progress Payments and Final Payment.

C. Section 01250 - Contract Modification Procedures.

D. Section 01770 - Contract Closeout: Final Payment.

1.3 FORM

A. Prepare Applications for Payment on AIA Document G702 - Application and Certification for Payment. Include continuation sheets as necessary, using AIA Document G703 - Continuation Sheet, edition as for AIA Document G702.

1.4 PREPARATION OF APPLICATIONS

A. The following requirements supplement the provisions of the General Conditions of the Contract, as may be modified by the Supplementary Conditions of the Contract. Refer to appropriate Article, Payment and Completion, in the General Conditions of the Contract.

B. Present required information typewritten on the required forms.

C. Execute certification by signature of authorized officer of the Contractor.

D. Use data form approved Schedule of Values. Provide dollar value in each column of Application for each line item for portion of Work performed and for products stored, if permitted.

E. List each authorized Change Order as an extension on the continuation sheet, listing the Change Order number and dollar value as for an original portion of Work.

F. List each Field Change Directive as each provides for an adjustment in the Contract Sum. Include in the Application only amounts not in dispute. Refer to appropriate Paragraph of the General Conditions.

G. Prepare Application for Final Payment as specified in Section 01770 - Contract Closeout.

H. No Change Orders shall be included with Application for Payment until approved in writing by District and Architect.

1.5 SUBMITTAL PROCEDURES

A. The following requirements supplement the provisions of the General Conditions of the Contract, as may be modified by the Supplementary Conditions of the Contract. Refer to Paragraph referencing Applications for Payment, in the General Conditions of the Contract.

B. Submit five (5) copies of each Application for Payment with original signature. Round off values to nearest dollar or as specified for the Schedule of Values.

C. Submit an updated construction schedule with each Application for Payment.

D. Provide with each Application for Payment lien releases from all subcontractors, workers and materials suppliers employed for the Project covering their portion of Work to date for which payment application is made. Lien release forms will be provided by District and shall be completed in accordance with directions provided.

E. Payment Period: Submit Applications at intervals and covering periods stated in the Agreement. Application submission date may be adjusted by mutual consent of the District and Contractor to coincide with regularly scheduled progress meetings or to accommodate holiday periods.

1.6 SUBSTANTIATING DATA

A. Submit substantiating information, as required by District and Architect, to substantiate dollar amounts on Application for Payment. Substantiating information will normally be required only for those portions of Work whose completion state cannot be readily determined by observation of the completed Work.

B. Provide one copy of substantiating information with each copy of the Application.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

2. Subcontractors List: Distribute and discuss list of subcontractors and suppliers.
3. Construction Schedule: Distribute and discuss initial construction schedule and critical work sequencing of major elements of Work, including coordination of Owner-Furnished/Contractor-Installed (OFCI) products and work under separate contracts by serving utility agencies and companies and District.
4. Designation of Key Personnel: Designate key personnel and update and expand Document 00020 - Project Directory listings for District, Construction Manager, Architect, Architect's consultants, District's consultants, Contractor, major subcontractors, major materials suppliers, serving utilities and public agencies, other contractors performing work for District under separate contracts, OFCI equipment vendors, and authorities having jurisdiction.
5. Project Communication Procedures: Review requirements and administrative requirements for written and oral communications.
6. Change Procedures: Review requirements and administrative procedures for Change Orders, Field Change Directives, Architect's supplemental instructions and Contractor's Requests for Information.
7. Coordination: Review requirements for Contractor's coordination of Work; review sequence and schedule for work being performed for District under separate contracts.
8. Submittals Administration: Review administrative procedures for shop drawings, project data and samples submittals and review of preliminary submittals schedule.
9. Project Record Documents: Review requirements and procedures for project record drawings and specifications.
10. Construction Facilities and Temporary Utilities: Designate storage and staging areas, construction office areas; review temporary utility provisions; present District's requirements for use of premises.
11. Materials and Equipment: Review substitution requirements; review schedule for major equipment purchases and deliveries; review materials and equipment to be provided by District (OFCI products).
12. Site Access by District and Architect: Review requirements and administrative procedures Contractor may wish to institute for identification and reporting purposes.
13. Testing and Inspection: Review tests and inspections to be performed by the following.

    a. Independent testing and inspection agency.
    b. Manufacturers and installers.
    c. Serving utilities and public agencies.
    d. Authorities having jurisdiction.

14. Permits and Fees: Review Contract requirements and review schedule and process for obtaining permits and paying fees.

1.5 CONSTRUCTION PROGRESS MEETINGS

A. Schedule: Project meetings shall be periodically scheduled throughout progress of the Work. Frequency shall be as determined necessary for progress of Work.

B. Administration: Contractor shall make physical arrangements for meetings. Architect will prepare agenda with copies for participants, preside at meetings, record minutes and distribute copies within two days to District, Architect, participants and those affected by

decisions made at meetings. Every discussion item at Project meetings shall be numerically identified and carried through subsequent meeting minutes until resolved.

C. Attendance: Contractor's project manager and jobsite superintendent shall attend each meeting. Contractor's subcontractors and suppliers may attend as appropriate to subject under discussion. District will have a representative attend each meeting. Architect and Architect's consultants, as appropriate to agenda topics for each meeting and as provided in Owner-Architect Agreement, will also attend.

D. Suggested Agenda for Each Meeting:

1. Work progress, status of progress schedule and adjustments thereto.
2. Long-lead time equipment and materials delivery schedule.
3. Submittals status.
4. Requests for Information (RFI) status.
5. Maintenance of quality standards.
6. Pending changes and substitutions.
7. Other items affecting progress and quality of the Work.

1.6 PRE-INSTALLATION CONFERENCES

A. Pre-Installation Conferences: When specified in individual product specification Sections, convene a pre-installation conference prior to commencing Work specified in individual product Sections.

1. Notify DSA representative at least 72 hours in advance of each meeting.
2. Require attendance by representatives of firms whose activities directly affect or are affected by Work specified in the Section.
3. Review conditions of installation, preparation and installation procedures and coordination with related Work and work under separate contracts.

PART 2 - PRODUCTS - (Not applicable to this Section.)

PART 3 - EXECUTION - (Not applicable to this Section.)

END OF SECTION

SECTION 01315
COORDINATION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Coordination of Work under Contract.

1.2 RELATED SECTIONS

A. Section 01010 - Summary of Work: Various types of Work to be coordinated, including Owner-Furnished/Contractor-Installed products and work under separate Contracts.

B. Section 01600 - Product Requirements: Coordination of products, especially general requirements for system completeness and product substitutions.

1.3 COORDINATION

A. Coordination: Contractor shall coordinate the Work as stated in the Conditions of the Contract. Contractor shall also coordinate Work under the Contract with work under separate contracts by District. Contractor shall cooperate with District, Construction Manager, and others as directed by District in scheduling and sequencing the incorporation into the Work of Owner Furnished/Contractor Installed (OFCI) products identified in the Contract Drawings and Specifications.

B. Relationship of Documents: Drawings, Specifications and other Contract Documents in the Project Manual are intended to be complementary. What is required by one shall be as if required by all. What is shown or required, or may be reasonably inferred to be required, or which is usually and customarily provided for similar work, shall be included in the Work.

C. Discrepancies: Error, omission, ambiguity or conflict in Drawings or Specifications shall be brought to Architect's attention during the bidding period, for Architect's determination and direction in accordance with provisions of the Conditions of the Contract.

D. Construction Interfacing and Coordination: Layout, scheduling and sequencing of Work shall be solely the Contractor's responsibility.

1. Contractor shall verify, confirm and coordinate field measurements so that new construction correctly and accurately interfaces with conditions existing prior to construction.

E. Contractor shall bring together the various parts, components, systems and assemblies as required for the correct interfacing and interpretation of all elements of the Work. All work required to provide complete and fully operational systems shall be included in the contract price. Contractor shall coordinate Work to correctly and accurately connect abutting, adjoining, overlapping and related elements, including work under separate contracts by District, utility agencies and companies.

1.4 COORDINATION OF SUBCONTRACTS AND SEPARATE CONTRACTS

A. Superintendence of Work: Contractor shall appoint a field superintendent and a project manager, who shall directly and full time supervise and coordinate all Work of the Contract.

B. Subcontractors, Trades and Materials Suppliers: Contractor shall require all subcontractors, trades, crafts and suppliers to coordinate their portions of Work with the Contractor's field superintendent to prevent scheduling, sequencing, dimensional and other conflicts and omissions.

C. Coordination with Work Under Separate Contracts: Contractor shall coordinate and schedule Work under the Contract with work being performed for Project under separate contracts by District, serving utilities and public agencies. Contractor shall make direct contacts with parties responsible for work of the Project under separate contracts, in order to provide timely notifications and to facilitate information exchanges.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

SECTION 01330
SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Administrative requirements for shop drawings, product data and samples submittals.

B. Submittals Schedule.

C. Contractor's review of submittals.

D. Architect's review of submittals.

E. Product data submittals.

F. Shop drawing submittals.

G. Sample submittals.

H. Maintenance and operation data submittals.

1.2 RELATED SECTIONS

A. Section 01450 - Quality Control: Test and inspection reports.

B. Section 01770 - Contract Closeout: Submittals for occupancy, Acceptance and Final Payment.

1.3 DEFINITIONS

A. Shop Drawings, Product Data and Samples: Instruments prepared and submitted by Contractor, for Contractor's benefit, to communicate to Architect the Contractor's understanding of the design intent, for review and comment by Architect on the conformance of the submitted information to the general intent of the design. Shop drawings, product data and samples are not Contract Documents.

B. Shop Drawings: Drawings, diagrams, schedules and illustrations, with related notes, specially prepared for the Work of the Contract, to illustrate a portion of the Work.

C. Product Data: Standard published information ("catalog cuts") and specially prepared data for the Work of the Contract, including standard illustrations, schedules, brochures, diagrams, performance charts, instructions and other information to illustrate a portion of the Work.

D. Samples: Physical examples that demonstrate the materials, finishes, features, workmanship and other characteristics of a portion of the Work. Accepted samples shall serve as quality basis for evaluating the Work.

1.5 SUBMITTALS SCHEDULE

A. Format: Prepare schedules in format at Contractor's option, providing clear indication of sequencing and scheduling of Work, for determination of "critical path" of construction progress. Present schedules using opaque reproductions on substantial paper, with sheet size a multiple of 8-1/2 inches by 11-inches and large enough to clearly read characters.

B. Content: List all items specified to be submitted, indicating submittal number (see instructions following), submittal type (i.e., product data, shop drawings, sample, quality control report, maintenance and operating data, etcetera), scheduled date submittal is to be made and date review should be complete in order to maintain construction on schedule.

C. Administration:

1. Submit initial Submittals Schedule within 14 days of date of Notice of Award of construction.
2. After review and return by Architect, resubmit Submittals Schedule within 10 days and thereafter submit updated Submittals Schedules at each Construction Progress Meeting.
3. Submit one copy each to District, District's Construction Manager and Architect.

D. Posting: Post one copy of most recent Submittals Schedule in Contractor's field office, readily available to District, District's Construction Manager and Architect.

E. Archive: Preserve a minimum of two copies of all superseded schedules, with one copy available at field office for review by District or Architect.

1.6 CONTRACTOR'S REVIEW OF SUBMITTALS

A. Contractor's Review of Submittals: Prior to submission to Architect for review, Contractor shall review each submittal for completeness and conformance to specified requirements. Contractor shall stamp each submittal with a review action stamp and sign each copy certifying that:

1. Field measurements have been determined and verified.
2. Conformance with requirements of Contract Drawings and Specifications is confirmed.
3. Catalog numbers and similar data are correct.
4. Work being performed by various subcontractors and trades is coordinated.
5. Field construction criteria have been verified, including confirmation that information submitted has been coordinated with the work being performed by others for District and actual site conditions.
6. All deviations from requirements of Drawings and Specifications have been identified and noted.

B. Changes in Work: Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work. Changes shall only be authorized by separate written direction, in accordance with the Conditions of the Contract and Section 01250 - Contract Modification Procedures.

1.7 ARCHITECT'S REVIEW OF SUBMITTALS

A. Architect's Review of Submittals: Submittals shall be a communication aid between Contractor and Architect by which interpretation of Contract Documents requirements may be confirmed in advance of construction. Reviews by Architect and Architect's consultants shall be only for general conformance with the design concept of the Project and general compliance with the information given in the Drawings and Specifications.

B. Contract Requirements:

1. Review actions by Architect and Architect's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications.
2. No review action, implicit or explicit, shall be interpreted to authorize changes in the Work. Changes shall only be authorized by separate written Change Order or Construction Change Directive, in accordance with the Conditions of the Contract and Section 01250 - Contract Modification Procedures.

1.8 PRODUCT DATA SUBMITTALS

A. Copies: Submit eight (8) copies, minimum, of original catalog pages or xerographic copies only, with applicable data highlighted and cross-referenced to Drawings and Specifications requirements. Wet-process and thermal (fax) copies will not be acceptable.

B. Modifications to Standard Product Data: Modify manufacturer's standard catalog data to indicate precise conditions of the Project. Comply with requirements as for shop drawings, following. Provide space for review action stamps and, if required by governing authorities having jurisdiction, license seal of Architect and Architect's design consultant, if applicable.

1.9 SHOP DRAWINGS SUBMITTALS

A. Copies: Prepare shop drawings on minimum sheet size of 17-inches by 22-inches, or smaller if a multiple of 8-1/2 inches by 11-inches. Submit one (1) reproducible and nine (9) prints typically, except as noted in product Specifications Sections. Copies in excess of nine (9) will not be reviewed or returned.

B. Preparation: Shop drawings shall be original drawings prepared for submittal review, fabrication and execution of Work. Direct copies and modified reproductions of Contract Drawings will not be accepted for review. Provide space for review action stamps and, if required by governing authorities having jurisdiction, license seal of Architect and Architect's design consultant, if applicable.

C. Coordination: Show all field dimensions and relationships to adjacent or critical features of Work.

Ruhnau Ruhnau Clarke

Architects • Planners

■ 3775 Tenth Street Riverside, CA 92501-3669 T 951 684 4664 F 951 684 6276
☐ 5751 Palmer Way, Suite C Carlsbad, CA 92010-7249 T 760 438 5899 F 760 931 8194

SUBMITTAL / SHOP DRAWING TRANSMITTAL

To:

Contractor's Submittal No._____

Attn: _____

Contractor _____ Project _____

Street _____ RRC's Project No. _____

City _____ State _____ Subcontractor _____

CONTRACTOR TO FILL OUT THE FOLLOWING COVERING ONE COMPLETE SECTION OF THE SPECIFICATIONS ONLY:

Specification Section #:	Section Title:

☐ Initial Submittal

☐ 1st Resubmittal

☐ ____ Resubmittal

☐ Submittal was a previously approved substitution.
Approved Substitution Request Transmittal Form is enclosed.

Scheduled Date of Submittal _____

Scheduled Date of Submittal Return _____

Date Sent _____

Number of Copies _____

Number of Samples _____

CONTRACTOR COMPLETE EITHER (A) OR (B) FOLLOWING, CHECK ONE:	CONSTRUCTION MANAGERS CERTIFICATION
(A) WE HAVE VERIFIED THAT THE MATERIAL OR EQUIPMENT CONTAINED IN THIS SUBMITTAL MEETS ALL THE REQUIREMENTS SPECIFIED OR SHOWN (NO EXCEPTIONS). ☐	THIS IS TO CERTIFY THAT THE CONSTRUCTION MANAGER IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS, AND THE SUBMITTAL IS COMPLETE PER THE CONTRACT DOCUMENTS. SIGNATURE:
(B) WE HAVE VERIFIED THAT THE MATERIAL OR EQUIPMENT CONTAINED IN THIS SUBMITTAL MEETS ALL THE REQUIREMENTS SPECIFIED OR SHOWN, EXCEPT FOR THE FOLLOWING DEVIATIONS (LIST DEVIATIONS ON AN ATTACHED SHEET OR INDICATE DEVIATIONS CLEARLY ON SHOP DRAWINGS OR SUBMITTALS). ☐	**CONTRACTORS CERTIFICATION** THIS IS TO CERTIFY THAT THE CONTRACTOR IS REASONABLY CERTAIN THAT THE MATERIAL SPECIFIED IN THIS SUBMITTAL MEETS THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. SIGNATURE:

ARCHITECT'S USE ONLY BELOW THIS LINE.

Action:

☐ No Exception Taken ☐ Make Corrections Noted ☐ Rejected/Resubmit ☐ Revise and Resubmit

Comments:

Date Received By RRC: _____

Date Sent to Consultant:

Structural _____

Mechanical _____

Electrical _____

Other _____

Date Received From:

Consultant _____

No. of Copies Received _____

Final Distribution: Contractor _____ Inspector _____ District/P.M. _____ Architect _____

Final Distribution Date: _____

SECTION 01335
QUALITY CONTROL SUBMITTALS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Administrative requirements for submittals reporting results of tests and inspections.

1.2 RELATED SECTIONS

A. Section 01010 - Summary of Work: Subcontractor and materials suppliers list.

B. Section 01310 - Project Meetings: Quality control reports at meetings.

C. Section 01330 - Shop Drawings, Product Data and Samples: Quality control submittals for products prior to field work.

D. Section 01420 - Reference Standards and Abbreviations: Referenced standards for quality control.

E. Section 01450 - Quality Control: Test and inspection procedures.

F. Section 01770 - Contract Closeout: Submittals for occupancy, Acceptance and Final Payment.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Administration: Make all submittals to the Architect through the Construction Manager, unless otherwise directed.

B. Submittal Identification: Identify each submittal by Specification Section number followed by a number indicating sequential submittal for that Section. Coordinate submittal numbers with submittals specified in Section 01330 - Shop Drawings, Product Data and Samples. Resubmittals shall use same number as original submittal, followed by a letter indicating sequential resubmittal.

03300-1	First submittal for Section 03300 - Cast in Place Concrete.
03300-2	Second submittal for Section 03300 - Cast in Place Concrete.
03300-2A	Resubmittal of second submittal for Section 03300 - Cast in Place Concrete.
03300-2B	Second resubmittal of second submittal for Section 03300 - Cast in Place Concrete.

C. Project Identification: Title each submittal with Project name, submittal date and Architect's Project number.

D. Copies: Submit 6 copies, minimum, of reports of quality control reports on dry-process xerographic copies only.

E. Contractor's Review: Submittals shall be made by Contractor in accordance with requirements specified herein and in individual Sections. Indicate clearly on each submittal the specified or referenced values for each quality control activity and the values obtained. Contractor shall note clearly and sign each submittal certifying that reported quality control activity "Conforms" or "Does Not Conform".

F. Changes and Deviations: Identify all deviations from requirements of Drawings and Specifications. Changes in the Work shall not be authorized by submittals review actions. No review action, implicit or explicit, shall be interpreted to authorized changes in the Work. Changes shall only be authorized by separate written Change Order or Construction Change Authorization, in accordance with the General Conditions and Section 01250 - Contract Modification Procedures.

G. Record Submittals: When record submittals are specified, submit three copies or sets only. Record submittals will not be reviewed but will be retained for historical and maintenance purposes.

H. Unsolicited Submittals: Unsolicited submittals will be returned unreviewed.

1.4 QUALITY CONTROL SUBMITTALS SCHEDULE

A. Schedule Format: Include quality control submittals on Submittals Schedule specified in accordance with General Conditions.

B. Schedule Content: List all tests, inspections and reports specified to be submitted, indicating submittal number, submittal type (field test, field inspection, fabrication inspection, etcetera), scheduled date of quality control activity and date report should be made.

1.5 ARCHITECT'S REVIEW

A. General: Review by Architect and Architect's consultants shall be only for general conformance with the design concept and requirements based on the information presented. Neither Architect nor Architect's consultants shall verify submitted quality control data.

B. Contract Requirements: Review by Architect and Architect's consultants shall not relieve the Contractor from compliance with requirements of the Drawings and Specifications. Changes shall only be authorized by separate written Change Order or Construction Change Authorization, in accordance with the General Conditions and Section 01250 - Contract Modification Procedures.

PART 2 - PRODUCTS - (Not applicable to this Section.)

PART 3 - EXECUTION - (Not applicable to this Section.)

END OF SECTION

SECTION 01355
REQUESTS FOR ELECTRONIC FILES

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Requirements to receive electronic construction document files from Architect.

B. Hold Harmless Agreement form.

1.2 RELATED SECTIONS

A. Section 01330 - Shop Drawings, Product Data and Samples.

B. Section 01770 - Contract Closeout.

C. Division 2 - Sitework.

1.3 REQUIREMENTS

A. Electronic files have legal ramifications as information therein can be modified.

B. In order to receive this electronic information, the following Hold Harmless Agreement form must be executed in its entirety, including signature by a company officer.

C. Costs for processing and handling electronic files, however limited, will be $250.00

PART 2 - PRODUCTS - (Not applicable to this Section.)

PART 3 - EXECUTION

3.1 ELECTRONIC FILE TRANSFER PROCEDURE

A. Submit a check in the amount of $250.00 along with a list of the requested sheet numbers and an acknowledged copy of this waiver to the office of the Architect, Ruhnau . Ruhnau . Clarke Associates, 3775 Tenth Street, Riverside, CA 92501.

B. In order to expedite the transfer, upon receipt of a fax copy of this acknowledgement, the requested CAD files will be sent in the form of a compact disc to the recipient, as requested, by UPS or similar delivery service.

C. It is expressly understood that any transfer is done as a courtesy and can be revoked at any time by the Architect.

HOLD HARMLESS AGREEMENT

We, _____, understand that we may be receiving electronic media containing design information, not necessarily intended for construction. We agree to hold Ruhnau . Ruhnau . Clarke Associates harmless for any defects in this data. We agree that it shall be our responsibility to reconcile this electronic data with the paper plans, and that only the paper plans shall be regarded as legal documents for the referenced project.

Further, the Contractor acknowledges that the Architect's reports, drawings, specifications, field data, field notes, laboratory test data, calculations, estimates and other similar documents are instruments of professional service, not products. In accepting and utilizing any drawings or other data on any form of electronic media generated and provided by the Design Professionals, the Parties listed above covenant and agree that all such drawings and data are instruments of service of the Design Professionals, who shall be deemed the author of the drawings and data, and shall retain all common law, statutory law and other rights, including copyrights.

The Parties agree that in accepting and utilizing any drawings and other data, that the Design Professionals waive all responsibility for any subsequent use of these data, the accuracy of dimensions, and the interpretation of information contained herein.

The Parties further agree not to use these drawings and data, in whole or in part, for any purpose or project other than the project which is the subject of this Agreement. The Parties further agree to waive all claims against the Design Professionals resulting in any way from any unauthorized changes of the drawings and data or any other use other than for the project which is the subject of this Agreement.

The Contractor shall indemnify, defend and hold harmless the Design Professionals and its subconsultants and their officers, agents, employees from any claims, damages, losses, liabilities or expenses (including attorneys' fees) arising out of use of such documents without Consultant's prior written authorization.

Under no circumstances shall transfer of the drawings and other data be deemed a sale by the Design Professionals, and the Design Professionals make no warranties, either express or implied of the merchantability and fitness of the data for any particular purpose.

Acknowledged by:

_____	_____
Signature of Company Officer	Date
_____	_____
Print or Type Name	Company Name
	_____
	Street Address
	_____
	City, State, Zip Code
	_____
	E-mail Address

SECTION 01410
REGULATORY REQUIREMENTS

PART 1 - GENERAL

1.1 AUTHORITY AND PRECEDENCE OF CODES, ORDINANCES AND STANDARDS

A. Authority: All codes, ordinances and standards referenced in the Drawings and Specifications shall have the full force and effect as though printed in their entirety in the Specifications.

B. Precedence:

1. Where specified requirements differ from the requirements of applicable codes, ordinances and standards, the more stringent requirements shall take precedence.
2. Where the Drawings or Specifications require or describe products or execution of better quality, higher standard or greater size than required by applicable codes, ordinances and standards, the Drawings and Specifications shall take precedence so long as such increase is legal.
3. Where no requirements are identified in the Drawings or Specifications, comply with all requirements of applicable codes, ordinances and standards of authorities having jurisdiction.

1.2 APPLICABLE CODES, LAWS AND ORDINANCES

A. Applicable Codes, Laws and Ordinances: Refer also to Section 01010 - Summary of Work regarding permits and licenses.

1. Performance of the Work shall be governed by all applicable laws, ordinances, rules and regulations of Federal, State and local governmental agencies and jurisdictions having authority over the Project, including accessibility requirements.
2. Performance of the Work shall be accomplished in conformance with all rules and regulations of public utilities, utility districts and other agencies serving the development.
3. Where such laws, ordinances, rules and regulations require more care or greater time to accomplish Work, or require better quality, higher standards or greater size of products, Work shall be accomplished in conformance to such requirements with no change to the Contract Time and Contract Sum, except where changes in laws, ordinances, rules and regulations occur subsequent to the execution date of the Agreement.

B. Applicable Building Codes: References on the Drawings or in the Specifications to "code" or "building code" not otherwise identified shall mean the codes specified below, together with all additions, amendments, changes, and interpretations adopted by code authorities of the jurisdiction having authority over the Project.

1. Local and State Building Codes: Performance of the Work shall meet or exceed the minimum requirements of the following, as adopted by the City of Palm Springs:

a. 2007 Building Standards Administrative Code - Part 1, Title 24 CCR.

b. 2007 California Building Code (CBC), Part 2, Title 24 CCR.
c. 2007 California Electrical Code (CEC, NEC 2005), Part 3, Title 24 CCR.
d. 2007 California Mechanical Code (CMC), Part 4, Title 24 CCR.
e. 2007 California Plumbing Code (CPC), Part 5, Title 24 CCR.
f. 2007 California Energy Code, Part 6, Title 24 CCR.
g. 2007 California Elevator Safety Construction Code, CCR Title 8, Chapter 4, Subchapter 6 Elevator Safety Orders.
h. 2007 California Fire Code (CFC), Part 9, Title 24 CCR.
i. 2007 California Referenced Standards Code, Part 12, Title 24 CCR.
j. 1990 Title 19 CCR, Public Safety, State Fire Marshal Regulations.

2. Safety Codes: State of California, California Administrative Code, California Code of Regulations (CCR), Title 8 - Industrial Relations, Chapter 4, Subchapter 7, General Industry Safety Orders.
3. General Standards: California Building Code (CBC) Standards, UL Building Products Listing, FM Approval Guide and ASTM Standards in Building Codes.
4. Fire and Life Safety Standards: All referenced standards pertaining to fire rated construction and exiting.
5. State of California Requirements: Performance of the Work shall also comply with applicable requirements of the State of California, California Code of Regulations (CCR), as follows:

a. Title 19 - Public Safety.
b. Title 22 - Social Security.
c. Title 24 - Building Standards, Parts 2 through 7 specifically and any other applicable chapters, and Title 25 as applicable.
d. Title 24 - Accessibility Requirements shall conform to the following:

(1) Chapters 10, 11B and 30 specifically and any other applicable chapters of 2007 California Building Code, Part 2, Title 24, CCR.
(2) Applicable sections of 2007 Edition California Electrical Code, Part 3, Title 24, CCR.
(3) Applicable sections of 2007 California Plumbing Code, Part 5, Title 24, CCR.

C. Date of Codes, Laws and Ordinances: The applicable edition of all codes shall be that adopted at the time of issuance of permits by the jurisdiction having authority and shall include all modifications and additions adopted by that jurisdiction. The applicable date of laws and ordinances shall be that of the date of performance of the Work.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

SECTION 01420
REFERENCE STANDARDS AND ABBREVIATIONS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Use of references in Drawings and Specifications, including requirements for copies of reference standards at Project site.

B. Definitions of terms used in Specifications and Drawings, including abbreviations, acronyms, names and terms which may be used in Specifications.

1.2 USE OF REFERENCES

A. References: The Drawings and Specifications contain references to various standards, standard specifications, codes, practices and requirements for products, execution, tests and inspections. These reference standards are published and issued by the agencies, associations, organizations and societies listed in this Section or identified in individual product specification Sections.

B. Relationship to Drawings and Specifications: Such references are incorporated into and made a part of the Drawings and Specifications to the extent applicable.

C. Referenced Grades Classes and Types: Where an alternative or optional grade, class or type of product or execution is included in a reference but is not identified on the Drawings or in the Specifications, provide the highest, best and greatest of the alternatives or options for the intended use and prevailing conditions.

D. Copies of Reference Standards:

1. Reference standards are not furnished with the Drawings and Specifications because it is presumed that the Contractor, subcontractors, manufacturers, suppliers, trades and crafts are familiar with these generally-recognized standards of the construction industry.
2. Copies of reference standards may be obtained from publishing sources. The Architect will furnish, upon request, information on how to obtain copies.

E. Jobsite Copies:

1. Contractor shall obtain and maintain at the Project site copies of reference standards identified on the Drawings and in the Specifications in order to properly execute the Work.
2. At a minimum, the following shall be readily available at the site, as applicable to the Work:

   a. Local and State Building Codes: As referenced in Section 01410 - Regulatory Requirements.
   b. Safety Codes: State of California, California Code of Regulations (CCR), Title 8 - Industrial Relations, Chapter 4, Subchapter 7, General Industry Safety Orders.

c. General Standards: California Building Code (CBC) Standards (as amended and adopted by authorities having jurisdiction), other model Code standards, Underwriters Laboratories, Inc. (UL) Building Products Listing, Factory Mutual Research Organization (FM) Approval Guide and American Society for Testing and Materials (ASTM) Standards in Building Codes.

d. Fire and Life Safety Standards: All referenced standards pertaining to fire rated construction and exiting.

e. Common Materials Standards: American Concrete Institute (ACI), American Institute of Steel Construction (AISC), American Welding Society (AWS), Gypsum Association (GA), National Fire Protection Association (NFPA), Tile Council of America (TCA) and Woodwork Institute (WI) standards to the extent referenced within the Contract Specifications.

f. Research Reports: Current ICC Evaluation Service Reports and CABO National Evaluation Service Reports (NER), for products not in conformance to prescribed requirements stated in Building Code.

g. Product Listings: Approval documentation, indicating approval of authorities having jurisdiction for use of product within the applicable jurisdiction.

F. Edition Date of References:

1. When an edition or effective date of a reference is not given, it shall be understood to be the current edition or latest revision published as of the date of the permit issued by authorities having jurisdiction.
2. All amendments, changes, errata and supplements as of the effective date shall be included.

G. ASTM and ANSI References: Specifications and Standards of the American Society for Testing and Materials (ASTM) and the American National Standards Institute (ANSI) are identified in the Drawings and Specifications by abbreviation and number only and may not be further identified by title, date, revision or amendment. It is presumed that the Contractor is familiar with and has access to these nationally- and industry-recognized specifications and standards, and that the references will be current as of the date of this Project Manual.

1.3 DEFINITIONS OF TERMS

A. Basic Contract Definitions: Words and terms governing the Work are defined in the Conditions of the Contract, referenced in Document 00700 - General Conditions and in Document 00800 - Supplementary Conditions in the Project Manual.

B. Words and Terms Used on Drawings and in Specifications: Additional words and terms may be used in the Drawings and Specifications and are defined as follows:

1. "Applicable": As appropriate for the particular condition, circumstance or situation.
2. "Approved": The term approved, when used in conjunction with the Architect's action on the Contractor's submittals, applications, and requests, is limited to the Architect's duties and responsibilities as stated in the Conditions of the Contract.

3. "Approve(d)": Limited to duties and responsibilities of the Architect stated in the Conditions of the Contract, for actions performed in the professional judgment of the Architect or the Architect's responsible design consultant, in conjunction with submittals, applications, and requests. Approvals shall be valid only if obtained in writing and shall not apply to matters regarding the means, methods, techniques, sequences and procedures of construction. Approval shall not relieve the Contractor from responsibility to fulfill Contract requirements.
4. "And/or": If used, shall mean that either or both of the items so joined are required.
5. "Directed": Limited to duties and responsibilities of the Architect stated in the Conditions of the Contract, meaning as instructed by the Architect or the District, in writing, regarding matters other than the means, methods, techniques, sequences and procedures of construction. Terms such as "directed", "requested", "authorized", "selected", "approved", "required", and "permitted" mean "directed by the Architect", "requested by the Architect", and similar phrases. No implied meaning shall be interpreted to extend the Architect's responsibility into the Contractor's supervision of construction.
6. "Equal" or "Equivalent": As determined by Architect as being equivalent, considering such attributes as durability, finish, function, suitability, quality, utility, performance and aesthetic features.
7. "Furnish": Means "supply and deliver, to the Project site, ready for unloading, unpacking, assembly, installation, and similar operations."
8. "Indicated": The term indicated refers to graphic representations, notes, or schedules on the Drawings, or other Paragraphs or Schedules in the Specifications, and similar requirements in the Contract Documents. Terms such as "shown", "noted", "scheduled", and "specified" are used to help the reader locate the reference. There is no limitation on location.
9. "Install": Describes operations at the Project site including the actual unloading, unpacking, assembly, erection, placing, anchoring, applying, working to dimension, finishing, curing, protecting, cleaning and similar operations.
10. "Installer":

    a. "Installer" refers to the Contractor or an entity engaged by the Contractor, such as an employee, subcontractor, or sub-subcontractor for performance of a particular construction activity, including installation, erection, application and similar operations. Installers are required to be experienced in the operations they are engaged to perform.
    b. "Experienced Installer": The term "experienced," when used with "installer" means having a minimum of 5 previous Projects similar in size to this Project, knowing the precautions necessary to perform the Work, and being familiar with requirements of authorities having jurisdiction over the Work.

11. "Jobsite": Same as site.
12. "Necessary": With due considerations of the conditions of the Project and as determined in the professional judgment of the Architect as being necessary for performance of the Work in conformance with the requirements of the Contract Documents, but excluding matters regarding the means, methods, techniques, sequences and procedures of construction.
13. "Noted": Same as "Indicated."
14. "Per": Same as "in accordance with," "according to" or "in compliance with."
15. "Products": Material, system or equipment.

16. "Project Site": Same as "Site."
17. "Proper": As determined by the Architect as being proper for the Work, excluding matters regarding the means, methods, techniques, sequences and procedures of construction, which are solely the Contractor's responsibility to determine.
18. "Provide": Means "furnish and install, complete and ready for the intended use".
19. "Regulation": Includes laws, ordinances, statutes and lawful orders issued by authorities having jurisdiction, as well as and rules, conventions and agreements within the construction industry that control performance of the Work.
20. "Required": Necessary for performance of the Work in conformance with the requirements of the Contract Documents, excluding matters regarding the means, methods, techniques, sequences and procedures of construction, such as:

    a. Regulatory requirements of authorities having jurisdiction.
    b. Requirements of referenced standards.
    c. Requirements generally recognized as accepted construction practices of the locale.
    d. Notes, schedules and graphic representations on the Drawings.
    e. Requirements specified or referenced in the Specifications.
    f. Duties and responsibilities stated in the Bidding and Contract Requirements.

21. "Scheduled": Same as "Indicated."
22. "Selected": As selected by Architect or District from the full selection of the manufacturer's products, unless specifically limited in the Contract Documents to a particular quality, color, texture or price range.
23. "Shown": Same as "Indicated."
24. "Site": Same as "Site of the Work" or "Project Site;" the area or areas or spaces occupied by the Project and including adjacent areas and other related areas occupied or used by the Contractor for construction activities, either exclusively or with others performing other construction on the Project. The extent of the Project Site is shown on the Drawings, and may or may not be identical with the description of the land upon which the Project is to be built.
25. "Testing Laboratory" or "Testing Laboratories": Same as "Testing and Inspection Agency."
26. "Testing and Inspection Agency": An independent entity engaged to perform specific inspections or tests, at the Project Site or elsewhere, and to report on, and, if required, to interpret, results of those inspections or tests.

1.4 ABBREVIATIONS, ACRONYMS, NAMES AND TERMS, GENERAL

A. Abbreviations, Acronyms, Names and Terms: Where acronyms, abbreviations names and terms are used in the Drawings, Specifications or other Contract Documents, they shall mean the recognized name of the trade association, standards generating organization, authority having jurisdiction or other entity applicable.

    1. Refer to the Conditions of the Contract for definitions of Contract terms.

B. Abbreviations: The following are commonly-used abbreviations which may be found on the Drawings or in the Specifications:

AC or ac	Alternating current or air conditioning (depending upon context)
AMP or amp	Ampere
C	Celcius
CFM or cfm	Cubic feet per minute
CM or cm	Centimeter
CY or cy	Cubic yard
DC or dc	Direct current
DEG or deg	Degrees
F	Fahrenheit
FPM or fpm	Feet per minute
FPS or fps	Feet per second
FT or ft	Foot or feet
Gal or gal	Gallons
GPM or gpm	Gallons per minute
IN or in	Inch or inches
Kip or kip	Thousand pounds
KSI or ksi	Thousand pounds per square inch
KSF or ksf	Thousand pounds per square foot
KV or kv	Kilovolt
KVA or kva	Kilovolt amperes
KW or kw	Kilowatt
KWH or kwh	Kilowatt hour
LBF or lbf	Pounds force
LF or lf	Lineal foot
M or m	Meter
MPH or mph	Miles per hour
MM or mm	Millimeter
PCF or pcf	Pounds per cubic foot
PSF or psf	Pounds per square foot
PSI or psi	Pounds per square inch
PSY or psy	Per square yard
SF or sf	Square foot
SY or sy	Square yard
V or v	Volts

C. Undefined Abbreviations, Acronyms, Names and Terms: Words and terms not otherwise specifically defined in this Section, in the Instructions to Bidders, in the Conditions of the Contract, on the Drawings or elsewhere in the Specifications, shall be as customarily defined by trade or industry practice, by reference standard and by specialty dictionaries such as the following:

1. Dictionary of Architecture and Construction (Cyril M. Harris, McGraw-Hill Book Company, 1975).
2. The American Institute of Architects (AIA) Document M101, "Glossary of Construction Industry Terms".
3. The Construction Specifications Institute (CSI) Technical Document TD 2-4, "Abbreviations".
4. Encyclopedia of Associations, published by Gale Research Co., available in most libraries.

1.5 ABBREVIATIONS FOR AGENCIES, ASSOCIATIONS, CODES AND STANDARDS

A. Abbreviations for Agencies, Associations, Codes and Standards: The following abbreviations and acronyms may be used in the Drawings and Specifications. When used, the abbreviation or acronym shall mean the full name of the applicable agency, association, code, organization, society or standard.

AA	Aluminum Association 900 19th St., NW, Suite 300 Washington, DC 20006 202/862-5100
AAA	American Arbitration Association 355 Madison Avenue New York, NY 10017-4605 212/716-5800 or 800/778-7879
AAC	Aluminum Anodizers Council 1000 N. Rand Road, Suite 214 Wauconda, IL 60084 847/526-2010
AABC	Associated Air Balance Council 1518 K St., NW Washington, DC 20005 202/737-0202
AAMA	American Architectural Manufacturers Association 1827 Walden Office Square, Suite 550 Schaumburg, IL 60173-4268 847/303-5664
AASHTO	American Association of State Highway and Transportation Officials 444 North Capitol St., NW, Suite 249 Washington, DC 20001 202/624-5800
ACI	American Concrete Institute P.O. Box 9094 Farmington Hills, MI 48333-9094 248/848-3700
ACPA	American Concrete Pipe Association 222 W. Las Colinas Blvd., Ste. 641 Irving, TX 75039-5423 972/506-7216
ACPA	American Concrete Pumping Association 606 Enterprise Dr., Suite B Lewis Center, OH 43035-9434 614/431-5618

ADA	Americans with Disabilities Act ADA Information Office US Department of Justice, Civil Rights Division PO Box 66738 Washington, DC 20035 202/514-0301
ADC	Air Diffusion Council 1000 E. Woodfield Road, Suite 102 Schaumburg, IL 60173-5921 847/706-6750
AFPA	American Forest & Paper Association 1111 19th Street, N.W. Washington, DC 20036 202/463-2700 or 800/878-8878
AFSA	American Fire Sprinkler Association 9696 Skillman St., Suite 300 Dallas, TX 75243 214/349-5965
AGA	American Galvanizers Association 6881 S. Holly Circle, Suite 108 Centennial, CO 80112 720/554-0900 or 800/468-7732
AGA	American Gas Association 400 N. Capitol St., N.W. Washington, DC 20001 202/824-7000 or 800/841-8430
AGC	Associated General Contractors of America 333 John Carlyle St., Suite 200 Alexandria, VA 22314 703/548-3118
AI	Asphalt Institute 2696 Research Park Drive PO Box 14052 Lexington, KY 40511-8480 859/288-4960
AIA	The American Institute of Architects 1735 New York Ave., N.W. Washington, DC 20006-5292 202/626-7300 or 800/242-3837

AISC	American Institute of Steel Construction One East Wacker Drive, Suite 3100 Chicago, IL 60601-2001 312/670-2400
AISI	American Iron and Steel Institute 1101 17th Street N.W., Suite 1300 Washington, DC 20036 202/452-7100
AITC	American Institute of Timber Construction 7012 S. Revere Parkway, Suite 140 Englewood, CO 80112 303/792-9559 or 800/525-1625
ALSC	American Lumber Standards Committee, Inc. P.O. Box 210 Germantown, MD 20875-0210 301/972-1700
AMCA	Air Movement and Control Association Wauconda, IL 60084 847/526-2010
ANL	American Nursery and Landscape Association 1250 "I" St., NW, Suite 500 Washington, DC 20005-3922 202/799-2900
ANSI	American National Standards Institute 1819 'L' St. N.W., 6th Floor Washington DC 20036 202/293-8020
APA	American Plywood Association or Engineered Wood Association PO Box 11700 Tacoma, WA 98411-0700 253/565-6600
ARMA	Asphalt Roofing Manufacturers Association 1156 15th St., N.W., Suite 900 Washington, DC 20005 202/207-0917
ASA	American Subcontractors Association 1004 Duke Street Alexandria, VA 22314-3588 703/684-3450

ASC	Associated Specialty Contractors 3 Bethseda Metro Center, Suite 1100 Bethseda, MD 20814-4500 301/657-3110
ASCE	American Society of Civil Engineers 1801 Alexander Bell Dr. Reston, VA 20191-4400 703/295-6300 or 800/548-2723
ASHRAE	American Society of Heating, Refrigerating and Air-Conditioning Engineers, Inc. 1791 Tullie Circle, N.E. Atlanta, GA 30329-2305 800/5-ASHRAE 404/636-8400 and 800/527-4723
ASLA	American Society of Landscape Architects 636 Eye St., N.W. Washington, DC 20001-3736 202/898-2444
ASME	American Society of Mechanical Engineers Three Park Ave. New York, NY 10016-5902 212/591-7733 and 800/843-2763
ASPE	American Society of Plumbing Engineers 8614 W. Catalpa Ave., No. 1007 Chicago, IL 60656-1166 773/693-ASPE
ASSE	American Society of Sanitary Engineering 901 Canterbury, Suite A Westlake, OH 44145 440/835-3040
ASTM	American Society for Testing and Materials 100 Barr Harbor Dr. West Conshohocken, PA 19428-2959 610/832-9585
AWI	Architectural Woodwork Institute 1952 Isaac Newton Square W. Reston, VA 20190 703/733-0600
AWPA	American Wood Preservers Association P.O. Box 361784 Birmingham, AL 35236 205/733-4077

AWS	American Welding Society 550 N.W. LeJeune Road Miami, FL 33126 305/443-9353 and 800/443-9353
AWWA	American Water Works Association 6666 W. Quincy Ave. Denver, CO 80235 303/794-7711 and 800/926-7337
BHMA	Builders' Hardware Manufacturers Association 355 Lexington Ave., 17th Floor New York, NY 10017 212/297-2122
CABO	Council of American Building Officials 5203 Leesburg Pike, Suite 708 Falls Church, VA 22041 703/931-4533
CAC	California Administrative Code: See California Code of Regulations (CCR)
CBC	California Building Code International Code Council (ICC) 5360 S. Workman Mill Road Whittier, CA 90601-2298 562/699-0541 or 800/423-6587
CBM	Certified Ballast Manufacturers Association 355 Lexington Ave., 17th Floor New York, NY 10017-6603 212/297-2122
CCR	California Code of Regulations
CE	Corps of Engineers U.S. Department of the Army Chief of Engineers - Referral 20 Massachusetts Ave., N.W. Washington, DC 20314 202/272-0660
CEC	California Electrical Code International Code Council (ICC) 5360 Workman Mill Road Whittier, CA 90601-6587 562/699-0541 or 800/423-6587

CFC	California Fire Code International Code Council (ICC) 5360 Workman Mill Road Whittier, CA 90601-6587 562/699-0541 or 800/423-6587
CFR	Code of Federal Regulations (Available from the Government Printing Office) N. Capitol St. between G and H St. NW Washington, DC 20402 202/783-3238 (Material is usually first published in the "Federal Register")
CIMA	Construction Industry Manufacturers Association 111 E. Wisconsin Ave., Suite 1000 Milwaukee, WI 53202 414/272-0943
CISCA	Ceilings and Interior Systems Construction Association 1500 Lincoln Highway, Suite 202 St. Charles, IL 60174 630/584-1919
CISPI	Cast Iron Soil Pipe Institute 5959 Shallowford Road, Suite 419 Chattanooga, TN 37421 423/892-0137
CLFMI	Chain Link Fence Manufacturers Institute 10015 Old Columbia Rd., Suite B-215 Columbia, MD 21046 301/596-2583
CMC	California Mechanical Code International Code Council (ICC) 5360 S. Workman Mill Road Whittier, CA 90601-2298 562/699-0541 or 800/423-6587 and International Association of Plumbing and Mechanical Officials (IAPMO) 20001 East Walnut Drive South Walnut, CA 91789-2825 909/595-8449 or 800/201-0335 (Code Questions)

CPC	California Plumbing Code International Association of Plumbing and Mechanical Officials (IAPMO) 20001 Walnut Drive South Walnut, CA 91789-2825 909/595-8449 or 800/201-0335 (Code Questions)
CPSC	Consumer Product Safety Commission 4330 East-West Highway Bethesda, MD 20816-1469 800/638-2772
CRSI	Concrete Reinforcing Steel Institute 933 N. Plum Grove Rd. Schaumburg, IL 60173-4758 847/517-1200
CS	Commercial Standard (U.S. Department of Commerce) Washington, DC 20230 202/482-2000
CSI	The Construction Specifications Institute 99 Canal Center Plaza, Suite 300 Alexandria, VA 22314-1791 703/684-0300 or 800/689-2900
CTIOA	Ceramic Tile Institute of America, Inc. 12161 Jefferson Blvd. Culver City, CA 90230-6219 310/574-7800
CWC	Canadian Wood Council 99 Bank Street, Suite 400 Ottawa, Ontario Canada KIJ689 800/463-5091 or 613/747-5544 or P.O. Box 88828 Seattle, WA 98138 800/795-4966
DHI	Door and Hardware Institute 14150 Newbrook Drive, Suite 200 Chantilly, VA 20151-2223 703/222-2010

DLPA	Decorative Laminate Products Association 600 S. Federal St., Suite 400 Chicago, IL 60605 312/922-6222
DOC	U.S. Department of Commerce 14th St. and Constitution Ave., NW Washington, DC 20230 202/482-2000
DOT	Department of Transportation 400 Seventh St., SW Washington, DC 20590 202/366-4000
EPA	Environmental Protection Agency 1200 Pennsylvania Avenue, N.W. Washington, DC 20460 202/272-0167
ETL	ETL Testing Laboratories, Inc. c/o Intertek Testing Services 70 Codman Hill Road Boxborough, MA 01719 978/263-2662 or 800/967-5352
FCC	Federal Communications Commission 1919 'M' St., N.W. Washington, DC 20554 202/418-0200 or 888/835-5322
FCI	Fluid Controls Institute 1300 Sumner Ave. Cleveland, OH 44115-2851 216/241-7333
FM	Factory Mutual Research Corporation 1151 Boston-Providence Turnpike PO Box 9102 Norwood, MA 02062-9102 781/762-4300
FS	Federal Specification (from GSA) Specifications Unit (WFSIS) 7th and D St., SW Washington, DC 20407 202/708-9205

GA	Gypsum Association 810 First St., N.E., Suite 510 Washington, DC 20002 202/289-5440
GANA	Glass Association of North America 2945 S.W. Wanamaker Dr., Suite A Topeka, KS 66614 785/271-0166
GSA	General Services Administration 1800 F Street N.W. Washington, DC 20405 202/501-1021
H.I.	Hydraulic Institute 9 Sylvan Way Parsippany, NJ 07054-3802 973/267-9700
IAPMO	International Association of Plumbing and Mechanical Officials 20001 Walnut Drive South Walnut, CA 91789-2825 909/595-8449 or 800/201-0335
ICC	International Code Council 5360 S. Workman Mill Road Whittier, CA 90601-2298 562/699-0541 or 800/423-6587
ISO	International Organization for Standardization Case Postale 56 CH-1211 1 Rue De Varembe Geneva 201, Switzerland 011-41-22-749-01-11
ML/SFA	Metal Lath/Steel Framing Association (A Division of the National Association of Architectural Metal Manufacturers) 8 S. Michigan Ave., Suite 1000 Chicago, IL 60603 312/332-0405
MSS	Manufacturers Standardization Society of the Valve and Fittings Industry 127 Park St., N.E. Vienna, VA 22180 703/281-6613

NAAMM	National Association of Architectural Metal Manufacturers 8 S. Michigan Ave., Suite 1000 Chicago, IL 60603 312/332-0405
NAIMA	North American Insulation Manufacturers Association 44 Canal Center Plaza, Suite 310 Alexandria, VA 22314 703/684-0084
NEC	National Electrical Code (NFPA 70) National Fire Protection Association One Batterymarch Park PO Box 9101 Quincy, MA 02269-9101 617/770-3000 or 800/344-3555
NECA	National Electrical Contractors Association 3 Bethseda Metro Center, Suite 1100 Bethseda, MD 20814-5372 301/657-3110
NEMA	National Electrical Manufacturers Association 1300 N. 17th St., Suite 1847 Rosslyn, VA 22209 703/841-3200
NFC	National Fire Code 3310 Harrison St. Topeka, KS 66611 913/266-7014
NFPA	National Fire Protection Association One Batterymarch Park PO Box 9101 Quincy, MA 02269 617/770-3000 or 800/344-3555
NFSA	National Fire Sprinkler Association 40 Jon Barrett Road Box 1000 Patterson, NY 12563 845/878-4200
NGA	National Glass Association 8200 Greensboro Drive, Suite 302 McLean, VA 22102-3881 866/DIALNGA

NIBS	National Institute of Building Sciences 1090 Vermont Ave., N.W., Suite 700 Washington, D.C. 20005-4905 202/289-7800
NIST	National Institute of Standards and Technology (U.S. Department of Commerce) Building and Fire Research Laboratory 100 Bureau Drive, Stop 3460 Gaithersburg, MD 20899 301/975-2758
NPA	National Particleboard Association 18928 Premiere Court Gaithersburg, MD 20879-1569 301/670-0604
NPCA	National Precast Concrete Association 10333 North Meridian, Suite 272 Indianapolis, IN 46290-1081 317/571-9500 or 800/366-7731
NRCA	National Roofing Contractors Association 10255 W. Higgins Rd., Suite 600 Rosemont, IL 60018-5607 847/299-9070 or 800/323-9545
NSF	National Sanitation Foundation PO Box 130140 Ann Arbor, MI 48113-0140 313/769-8010
NSPE	National Society of Professional Engineers 1420 King St. Alexandria, VA 22314-2715 703/684-2800 or 888/285-6773
OSHA	Occupational Safety and Health Administration (U.S. Department of Labor) 200 Constitution Ave., NW, Room N-3647 Washington, DC 20210 202/693-1999 and 800/321-6742
PCA	Portland Cement Association 5420 Old Orchard Road Skokie, IL 60077-1083 847/966-6200

PCI	Precast/Prestressed Concrete Institute 209 W. Jackson Blvd., Suite 500 Chicago, IL 60606 312/786-0300
PDCA	Painting and Decorating Contractors of America 11960 Westline Industrial Dr., Suite 201 St. Louis, MO 63146-3209 314/514-7322 or 800/332-7322
PDI	Plumbing and Drainage Institute 800 Turnpike St., Suite 300 North Andover, MA 01845 800/589-8956 or 978/557-0720
PS	Product Standard of National Bureau of Standards (NBS) (U.S. Department of Commerce) Washington, DC 20230 202/482-2000
RIS	Redwood Inspection Service California Redwood Association 405 Enfrente Drive, Suite 200 Novato, CA 94949-7602 415/382-0662 and 888/225-7339
SDI	Steel Door Institute 30200 Detroit Road Cleveland, OH 44145-1967 440/899-0010
SFM	State Fire Marshal (California)
SGCC	Safety Glazing Certification Council P.O. Box 9 Henderson Harbor, NY 13651 315/646-2234
SIGMA	Sealed Insulating Glass Manufacturers Association 401 N. Michigan Ave., Suite 2400 Chicago, IL 66611 312/644-6610
SMACNA	Sheet Metal and Air Conditioning Contractors National Association, Inc. 4201 Lafayette Center Dr. Chantilly, VA 20151 703/803-2980

SPI	Society of the Plastics Industry 1667 K Street N.W., Suite 1000 Washington, DC 20006-1301 202/974-5200
SSPC	Steel Structures Painting Council 40 24th St., 6th Floor Pittsburgh, PA 15222-4623 412/281-2331
SWRI	Sealant, Waterproofing and Restoration Institute 14 W. 3rd. St., Suite 200 Kansas City, MO 64105 816/472-SWRI
TCA	Tile Council of America 100 Clemson Research Blvd. Anderson, SC 29625 864/646-8453
UFC	Uniform Fire Code International Code Council (ICC) and Western Fire Chiefs Association 28924 Front Street, Suite 107 Temecula, CA 92590
UL	Underwriters Laboratories, Inc. 333 Pfingsten Rd. Northbrook, IL 60062 630/272-8800 or 800/704-4050
UMC	Uniform Mechanical Code International Code Council (ICC) 5360 S. Workman Mill Road Whittier, CA 90601-2298 562/699-0541 or 800/423-6587 and International Association of Plumbing and Mechanical Officials (IAPMO) 20001 East Walnut Drive South Walnut, CA 91789-2825 909/595-8449 or 800/201-0335 (Code Questions)

UPC	Uniform Plumbing Code International Association of Plumbing and Mechanical Officials (IAPMO) 20001 Walnut Drive South Walnut, CA 91789-2825 909/595-8449 or 800/201-0335 (Code Questions)
USDA	U.S. Department of Agriculture Forest Products Lab 1 Gifford Pinchot Drive Madison, WI 53705 608/231-9200
WCLIB	West Coast Lumber Inspection Bureau PO Box 23145 Portland, OR 97281-3145 503/639-0651
WI	Woodwork Institute 3164 Industrial Blvd. P.O. Box 980247 West Sacramento, CA 95798-0247 916/372-9943
WRI	Wire Reinforcement Institute 942 Main St., Suite 300 Hartford, CT 06103 800/542-4974
WWPA	Western Wood Products Association Yeon Building 522 S.W. 5th Avenue, Suite 500 Portland, OR 97204-2122 503/224-3930

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

SECTION 01450
QUALITY CONTROL

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Regulatory requirements for testing and inspection.

B. Contractor's quality control.

C. Quality of the Work.

D. Inspections and tests by governing authorities.

E. Inspections and tests by serving utilities.

F. Inspections and tests by manufacturer's representatives.

G. Inspections by independent testing and inspection agency.

1.2 RELATED SECTIONS

A. Section 01315 - Coordination: Coordination of Work under Contract.

B. Section 01335 - Quality Control Submittals: Administrative requirements for submittals reporting results of tests and inspections during field Work.

C. Section 01410 - Regulatory Requirements: Compliance with applicable codes, ordinances and standards.

D. Section 01457 - Testing and Inspection: Testing laboratory services and inspections required by Division of State Architect (DSA), during the course of construction.

E. Section 01600 - Product Requirements: Product options, substitutions, transportation and handling requirements, storage and protection requirements, and system completeness requirements.

1.3 REGULATORY REQUIREMENTS FOR TESTING AND INSPECTION

A. Regulatory Requirements for Testing and Inspection: Inspections, testing and approvals as required by authorities having jurisdiction. Refer to Section 01410 - Regulatory Requirements and Section 01457 - Testing and Inspection.

1.4 CONTRACTOR'S QUALITY CONTROL

A. Contractor's Quality Control: Contractor shall ensure that products, services, workmanship and site conditions comply with requirements of the Drawings and Specifications by coordinating, supervising, testing and inspecting the Work and by utilizing only suitably qualified personnel.

B. Quality Requirements: Work shall be accomplished in accordance with quality requirements of the Drawings and Specifications, including, by reference, all Codes, laws, rules, regulations and standards. When no quality basis is prescribed, the quality shall be in accordance with the best accepted practices of the construction industry for the locale of the Project, for projects of this type.

C. Quality Control Personnel: Contractor shall employ and assign knowledgeable and skilled personnel as necessary to perform quality control functions to ensure that the Work is provided as required.

1.5 QUALITY OF THE WORK

A. Quality of Products: Unless otherwise indicated or specified, all products shall be new, free of defects and fit for the intended use.

B. Quality of Installation: All Work shall be produced plumb, level, square and true, or true to indicated angle, and with proper alignment and relationship between the various elements.

C. Protection of Existing and Completed Work: Take all measures necessary to preserve and protect existing and completed Work free from damage, deterioration, soiling and staining, until Acceptance by the District.

D. Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Unless more stringent requirements are indicated or specified, comply with manufacturer's instructions and recommendations, reference standards and building code research report requirements in preparing, fabricating, erecting, installing, applying, connecting and finishing Work.

E. Deviations from Standards and Code Compliance and Manufacturer's Instructions and Recommendations: Document and explain all deviations from reference standards and building code research report requirements and manufacturer's product installation instructions and recommendations, including acknowledgement by the manufacturer that such deviations are acceptable and appropriate for the Project.

F. Verification of Quality: Work shall be subject to verification of quality by District, Construction Manager or Architect in accordance with provisions of the General Conditions of the Contract.

1. Contractor shall cooperate by making Work available for inspection by District, Construction Manager, Architect or their designated representatives.
2. Such verification may include mill, plant, shop, or field inspection as required.
3. Provide access to all parts of the Work, including plants where materials or equipment are manufactured or fabricated.
4. Provide all information and assistance as required, including that by and from subcontractors, installers, fabricators, materials suppliers and manufacturers, for verification of quality by District, Construction Manager or Architect.
5. Contract modifications, if any, resulting from such verification activities shall be governed by applicable provisions in the General Conditions.

G. Observations by Architect and Architect's Consultants: Periodic and occasional observations of Work in progress will be made by Architect and Architect's consultants as deemed necessary to review progress of Work and general conformance with design intent.

H. Limitations on Inspection, Test and Observations: Neither employment of an Independent Testing and Inspection Agency nor observations by Architect and Architect's consultants shall in any way relieve Contractor of obligation to perform Work in full conformance to all requirements of Contract Documents and applicable Building Code and other regulatory requirements.

I. Architect's Acceptance and Rejection of Work: Architect reserves the right to reject all Work not in conformance to the requirements of the Drawings and Specifications.

J. Correction of Non-Conforming Work: Non-conforming Work shall be modified, replaced, repaired or redone by the Contractor at no change in Contract Sum or Contract Time.

K. Acceptance of Non-Conforming Work: Acceptance of non-conforming Work, without specific written acknowledgement and approval of the District, shall not relieve the Contractor of the obligation to correct such Work.

1. Acceptance of structurally related non-conforming work shall be submitted to DSA for review and approval.

L. Contract Adjustment for Non-conforming Work: Should Architect or District determine that it is not feasible or in District's interest to require non-conforming Work to be repaired or replaced, an equitable reduction in Contract Sum shall be made by agreement between District and Contractor. If equitable amount cannot be agreed upon, a Construction Change Directive will be issued and the amount in dispute resolved in accordance with applicable provisions of the General Conditions.

M. Non-Responsibility for Non-Conforming Work: Architect and Architect's consultants disclaim any and all responsibility for Work produced not in conformance with the Drawings and Specifications.

1.6 INSPECTIONS AND TESTS BY GOVERNING AUTHORITIES

A. Inspections and Tests by Authorities Having Jurisdiction: Contractor shall cause all tests and inspections to be made for Work under this Contract, as required by Building Departments, Department of Public Works, Fire Department, Health Department and similar agencies having jurisdiction. Except as specifically noted, scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

1.7 INSPECTIONS AND TESTS BY SERVING UTILITIES

A. Inspections and Tests by Serving Utilities: Contractor shall cause all tests and inspections required by serving utilities to be made for Work under this Contract. Scheduling, conducting and paying for such inspections shall be solely the Contractor's responsibility.

1.8 INSPECTIONS AND TESTS BY MANUFACTURER'S REPRESENTATIVES

A. Inspections and Tests by Manufacturer's Representatives: Contractor shall cause all tests and inspections specified to be conducted by materials or systems manufacturers to be made. Additionally, all tests and inspections required by materials or systems manufacturers as conditions of warranty or certification of Work shall be made, the cost of which shall be included in the Contract Sum.

1.9 INSPECTIONS BY INDEPENDENT TESTING AND INSPECTION AGENCY

A. Inspections by Independent Testing and Inspection Agency or Agencies: Contractor shall cause all tests and inspections required by Division of State Architect (DSA) during the course of construction to be conducted. See Section 01457 - Testing and Inspection.

PART 2 - PRODUCTS - (Not applicable to this Section.)

PART 3 - EXECUTION - (Not applicable to this Section.)

END OF SECTION

SECTION 01457
TESTING AND INSPECTION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. DSA approved testing laboratory services and inspections required during the course of construction.

1.2 TESTS

A. The District will select an independent testing laboratory to conduct tests. Material required to be tested will be selected by the laboratory or the District's Inspector and not by the Contractor.

B. The Contractor shall notify the District's Inspector a minimum of 5 working days in advance of the manufacture of material to be supplied by him under the Contract Documents, which must be by terms of the Contract be tested, in order that the District may arrange for the testing of such material at the source of supply.

C. Material shipped by the Contractor from the source of supply before having satisfactorily passed such testing and inspection or before the receipt of notice from said Inspector that such testing and inspection will not be required, shall not be incorporated in the Project.

D. The District will select and pay testing laboratory costs for all tests and inspections, but may be reimbursed by the Contractor for such costs under the Contract conditions. Any direct payments by the Contractor to the testing laboratory on this project is prohibited.

1.3 TESTING LABORATORY

A. Testing and inspections will be performed by an independent testing laboratory selected and employed by the District and approved by the Division of the State Architect (DSA). Qualification of a testing agency or laboratory will be under the jurisdiction of the DSA Office of Regulation Services (ORS) Structural Safety Section (SSS). Procedural and acceptance criteria are set forth in the 2007 California Building Code (CBC) Sec. 4-335.

B. Testing and inspection services which are performed shall be in accordance with requirements of the 2007 CBC, and as specified herein. Testing and inspection services shall verify that work meets the requirements of the Contract Documents.

C. In general, tests and inspections for structural materials shall include all items enumerated on the Structural Tests and Inspections list for this project as prepared and distributed by the Architect.

D. Test reports shall be signed by a Civil Engineer licensed in the State of California.

1.4 PAYMENTS

A. Costs of initial testing and inspection, except as specifically modified herein, or specified otherwise in technical sections, will be paid for by the District, providing such testing and inspection indicates compliance with Contract Documents. Initial tests and inspections are defined as the first tests and inspections as herein specified.

B. In the event a test or inspection indicates failure of a material or procedure to meet requirements of Contract Documents, costs for retesting and reinspection will be paid by the District and backcharged to the Contractor.

C. Additional tests and inspections not herein specified but requested by District or Architect, will be paid for by District, unless results of such tests and inspections are found to be not in compliance with Contract Documents, in which case the District will pay all costs for initial testing as well as retesting and reinspection and backcharge the Contractor.

D. Costs for additional tests or inspections required because of change in materials being provided or change of source or supply will be paid by District and backcharged to the Contractor.

E. Costs for tests or inspections which are required to correct deficiencies will be paid by the District and backcharged to the Contractor.

F. Cost of testing which is required solely for the convenience of Contractor in his scheduling and performance of work will be paid by the District and backcharged to the Contractor.

G. Overtime costs for testing and inspections performed outside the regular work day hours, including weekends and holidays, will be paid for by the District and backcharged to the Contractor. Such costs include overtime costs for the District's Inspector.

H. Testing Laboratory shall separate and identify on the invoices, the costs covering all testing and inspections which are to be backcharged to the Contractor as specified above.

I. Testing Laboratory shall furnish to District a cost estimate breakdown covering initial tests and inspections required by Contract Documents. Estimate shall include number of tests, man-hours required for tests, field and plant inspections, travel time, and costs.

1.5 TEST AND INSPECTION REPORTS

A. At the completion of the project, Testing Laboratory shall certify in writing that all work specified or required to be tested and inspected conforms to drawings, specifications and applicable building codes.

B. Each and every test or inspection report shall bear the File Number and Application Number assigned to this project by the DSA.

C. The Testing Laboratory will make the following distribution of test and inspection reports:

School District	1
Architect	2

Structural Engineer	1
Contractor	1
District's Inspector	1
Division of the State Architect	1
District's Representative	1

D. Test reports shall include all tests made, regardless of whether such tests indicate that the material is satisfactory or unsatisfactory. Samples taken but not tested shall also be reported. Records of special sampling operations as required shall also be reported. The reports shall show that the material or materials were sampled and tested in accordance with the requirements of the 2007 CBC, and with the approved specifications. They shall also state definitely whether or not the material or materials tested comply with requirements.

1. Test reports shall be issued within 14 days of finding being known, to all parties listed above.

1.6 VERIFICATION OF TEST REPORTS

A. The Testing Laboratory of record shall submit to the DSA a verified report covering all tests which are required to be made by that agency during the progress of the project. Such report shall be furnished each time that work on the project is suspended, covering the tests up to that time, and at the completion of the project.

1.7 REPORTING TEST FAILURES

A. Immediately upon determination of a test failure, the Laboratory shall telephone the results to the Architect. On the same day, Laboratory shall send test results by facsimile to the Architect, Structural Engineer, and District's Inspector

1.8 AVAILABILITY OF SAMPLES

A. Contractor shall make materials required for testing available to Laboratory and assist in acquiring these materials as directed by the District's Inspector. The samples shall be taken under the immediate direction and supervision of the Testing Laboratory or District's Inspector.

B. If work which is required to be tested or inspected is covered up without prior notice or approval, such work may be uncovered at the discretion of Architect at no additional cost to the District. Refer to paragraph "Payments" herein.

C. Unless otherwise specified, Contractor shall notify Testing Laboratory a minimum of 10 working days in advance of all required tests, and a minimum of 2 working days in advance of all required inspections. All extra expenses resulting from a failure to notify the Laboratory will be paid by the District and backcharged to the Contractor.

D. Contractor shall give sufficient advance notice to Testing Laboratory in the event of cancellation or time extension of a scheduled test or inspection. Charges due to insufficient advance, notice of cancellations, or time extension will be paid for by the District and backcharged to the Contractor.

1.9 REMOVAL OF MATERIALS

A. Unless otherwise directed, materials not conforming to the requirements of Contract Documents shall be promptly removed from the Project site.

1.10 INSPECTION BY THE DISTRICT

A. The District shall have the right to reject materials and workmanship which are defective, or to require their correction. Rejected workmanship shall be satisfactorily corrected and rejected materials shall be removed from the premises without charge to the District. If the Contractor does not correct such rejected work within a reasonable time, the District may correct such rejected work and charge the expense to the Contractor.

B. Should it be considered necessary or advisable by the District at any time before final acceptance of the entire work to make an examination of work already completed by removing or tearing out the completed work, the Contractor shall on request promptly furnish necessary facilities, labor and materials. If such work is found to be defective in any respect due to fault of the Contractor or his subcontractor, he shall defray all expenses of such examinations and of satisfactory reconstruction. If, however, such work is found to meet the requirements of the Contract, the additional cost of labor and material necessarily involved in the examination and replacement shall be allowed the Contractor.

1.11 DISTRICT'S INSPECTOR (INSPECTOR OF RECORD)

A. An Inspector employed by the District and approved by Architect, Structural Engineer and DSA in accordance with the requirements of the 2007 CBC will be assigned to the work. His duties are specifically defined in CCR Title 24 Part 1, Sec. 4-342.

B. The District's Inspector shall at all times have access for the purpose of inspection to all parts of the work and to the shops where the work is in preparation, and the Contractor shall at all times maintain proper facilities and provide safe access for such inspection.

C. The work of construction in all stages of progress shall be subject to the personal continuous observation of the Inspector. The Contractor shall furnish the Inspector reasonable facilities for obtaining such information as may be necessary to keep him fully informed respecting the progress and manner of the work and the character of the materials. Inspection of the work shall not relieve the Contractor from any obligation to fulfill this Contract.

1. Inspector of Record is required to work a normal 40 hour week on this project only. Any overtime required will be at the expense of the contractor and sub-contractor requiring the inspection.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION

3.1 TESTS AND INSPECTIONS

A. Tests and inspections for the following will be required in accordance with the 2007 CBC, unless otherwise specified:

B. Concrete (Chapter 19A):

1. Materials:

Portland Cement Tests	1903A, 1916A.1
Concrete Aggregates	1903A, 1903A.3
Reinforcing Bars	1903A.4, 1916A.2
Batch Plant Inspection	1704A.4.3
Waiver of Batch Plant Inspection and Tests	1704A.4.4
Admixtures	1903A, 1903A.5

2. Concrete Quality:

Proportions of Concrete	1904A, 1905A.1,2,3,4,5
Strength Tests of Concrete	1905A.6

3. Concrete Inspection:

Job Site Inspection	1704A.4.6, 1704A.4.7, 1905A.7
Batch Plant or Weighmaster Inspection	1704A.4.3
Reinforcing Bar Welding Inspection	1704A.4.2

C. Masonry (Chapter 21A):

1. Materials:

Masonry Units	2103A.1, 2103A.7
Mortar	2103A.8
Grout	2103A.12
Reinforcing Bars	1903A.4, 1916A.2, 2103A.13

2. Masonry Quality:

Portland Cement Tests	1903A, 1916A.1
Mortar and Grout Tests	2105A.5
Masonry Unit Tests	2105A.2.2.1

3. Masonry Inspection:

Reinforced Masonry	1704A.5.3
Reinforcing Bar Welding Inspection	1704A.4.2

D. Structural Steel (Chapter 22A):

1. Materials:

Structural Steel, Cold Formed Steel	2212A.1
Material Identification	2203A

2. Inspection of Structural Steel:

Tests of Structural & Cold Formed Steel	2212A.1
Welding Inspection	1704A.3.1

3.2 INSPECTION OF EARTHWORK

A. The Geotechnical Engineer of record or a Geotechnical Engineer selected by the District will provide continuous inspection of fill and will field test fill and earth backfill as placed and compacted, and inspect excavations and subgrade before concrete is placed and provide periodic inspection of open excavations, embankments, and other cuts or vertical surfaces of earth. The Geotechnical Engineer will submit a report indicating that he has observed and tested fills and that in his opinion the fills were placed in accordance with the project specifications.

B. Contractor shall remove unsatisfactory material, re-roll, adjust moisture, place new material, or in the case of excavations, provide proper protective measures, perform other operations necessary, as directed by the Geotechnical Engineer whose decisions and directions will be considered final.

C. Soils Test and Inspection Procedure:

1. Allow sufficient time for testing, and evaluation of results before material is needed. The Geotechnical Engineer shall be sole and final judge of suitability of all materials.
2. Laboratory compaction tests to be used will be in accordance with ASTM D1557.
3. Field density tests will be made in accordance with ASTM D1556.
4. Number of tests will be determined by Geotechnical Engineer. Materials in question may not be used pending test results.
5. Excavation and embankment inspection procedure. Geotechnical Engineer will visually or otherwise examine such areas for bearing values, cleanliness and suitability.
6. Earthwork Test Reports: In order to avoid misinterpretations by the reviewing agencies, all retest results shall be reported on the same sheet, immediately following the previous failure test to which it is related. Retests shall be clearly noted as such.

3.3 TESTING AND INSPECTION OF CONCRETE

A. Concrete Mix Design:

1. The District will pay for the sampling of aggregate and preparation of mix design one time for each strength and aggregate size specified. Testing cost for additional mix designs will be paid by the District and backcharged to the Contractor. Continuous plant inspection and all tests of materials will be paid by the District, but the Contractor will be backcharged for all tests performed on materials that do not meet specification requirements.
2. Test concrete aggregates for mix design only.
3. Deliver samples of approved aggregate to Project for comparison with material delivered, if job mixed concrete is used.
4. Test suitability of aggregates in accordance with ASTM C88 if material is under suspicion and if so directed by Architect or DSA.

B. If compressive test of core specimens fail to show compressive strength specified, remove and replace concrete or adequately strengthen in a manner acceptable to Architect and DSA.

C. Make all tests, take samples, and prepare samples in accordance with the latest standards adopted by American Society for Testing and Materials, referred to as ASTM.

D. Concrete mixed at certified automatic concrete batch plants shall have quality control as follows:

1. Laboratory designed mixes using adequate cement factors.

E. Concrete mixed at non-certified plants shall have quality control as follows:

1. Laboratory designed mixes using adequate cement factors.
2. Continuous batch plant inspection.
3. Measure all water, including wash water, so total on truck does not exceed 95 percent maximum allowed in mix design.
4. Legible weighmaster's certificates shall be provided to the Inspector for all structural and nonstructural concrete.
5. At end of job, furnish affidavit to DSA on form provided, certifying that all concrete furnished conforms to requirements of the 2007 CBC.

F. Waiver of Batch Plant Inspection: Batch plant inspection may be waived if the concrete plant complies fully with the requirements of 2007 CBC 1916A.4 and has been certified to comply with the requirements of the National Ready Mixed Concrete Association. The plant must be equipped with an automatic batcher in which the total batching cycle, except for the measuring and introduction of an admixture, is completed by activating a single starter device. Prior to waiving of batch plant inspection, the testing lab must certify and submit evidence of compliance to DSA and obtain DSA approval prior to mixing concrete.

G. District Inspector will do the following:

1. Inspect placing of reinforcing steel and concrete at Project.
2. Obtain weighmaster's certificate and identify mix before accepting each load. Keep daily record of concrete placement, identifying each truck load, time of receipt, and location of concrete in structure. Keep record until completion of Project and make available for inspection by DSA field engineer.
3. During progress of work, take reasonable number of test cylinders as directed by Architect, but at least one set of cylinders for each 50 cubic yards or fractional part thereof for each class of concrete and at least one set from each day's pour. Conform to CBC 1905A.6.2. Test cylinders need not be made for concrete used in exterior flatwork.
4. One set of cylinders shall consist of 4 samples all taken from same batch, one to be tested at age of 7 days and two at 28 days. The 28-day test may be omitted if the 7-day compressive strength exceeds 85 percent of the specified 28-day strength.
5. Make and store cylinders according to ASTM C31.
6. Deliver cylinders to laboratory or store cylinders in a suitable protected environment for pick up by laboratory personnel.
7. Make slump test of wet concrete according to test for slump of portland cement concrete, ASTM C143, at least at the same frequency that the cylinders are taken.

3.4 TESTING AND INSPECTION OF REINFORCING STEEL

A. Tests:

1. Tests shall be performed before the delivery of steel to Project site. Steel not meeting specifications shall not be shipped to the Project.
2. Testing procedure shall conform to ASTM A615 or ASTM A706.
3. Sample at the place of distribution, before shipment: Make one tensile test and one bending test from samples out of 10 tons, or fraction thereof, of each size and kind of reinforcing steel, where taken from bundles as delivered from the mill and properly identified as to heat number. Mill analysis shall accompany report. Where identification number cannot be ascertained, or where random samples are taken, make one series of tests from each 2-1/2 tons, or fraction thereof, of each size and kind of reinforcing steel. Tests on unidentified reinforcing steel will be paid by the District and backcharged to the Contractor. Samples shall include not fewer than 2 pieces, each 18 inches long, of each size and kind of reinforcing steel.
4. Inspection of welding of reinforcing steel shall be done by a specially qualified laboratory inspector and tested in accordance with AWS D1.4. Inspector shall be present during welding of all reinforcing steel. Inspector of welded reinforcing steel shall meet requirements of 1704A.4.2.
5. District's Inspector will inspect all reinforcement for concrete work for size, dimensions, locations and proper placement.

3.5 TESTING AND INSPECTION OF STRUCTURAL STEEL

A. Mill certificates or affidavits and manufacturers' certification shall be supplied to the Testing Laboratory and Inspector for verification of steel materials. Testing Laboratory shall be notified at least 2 working days in advance of fabrication and supplied with the reports so that it can make a shop inspection of the steel.

B. Tests of Steel Materials: If structural steel cannot be identified by heat or melt numbers, or if its source is questionable, not less than one tension test and one bend test will be made for each 5 tons or fractional part thereof. Comply with CBC 2212A.1. Such testing shall be paid for by the District and backcharged to the Contractor. Structural steel identified by heat or melt numbers marked at the mill need not be tested, except testing is required of steel with Fy greater than 36 ksi.

C. General Inspection:

1. Testing Laboratory will visit the fabricator's plant to verify that materials used check with the mill tests, affidavits of test reports, and that fabrication and welding procedures meet specifications.
2. Testing Laboratory will visually check fabricated steel against the contract drawings and reviewed shop drawings for compliance, and will make physical tests and measurements as required to meet the specifications. Single pass fillet welds may be visually checked.
3. Testing Laboratory will review welding procedure specifications as prepared by the fabricator.
4. Inspection of Shop Fabrication: Inspection of shop fabrication is required. This inspection shall be made by a qualified inspector approved by the DSA. He shall

furnish the Architect and the DSA a report duly verified by him that the materials and workmanship conform to the approved plans and specifications.

5. Inspection of welding shall be in accordance with the requirements of the 2007 CBC Title 24 Part 2, Sec. 1704A.3.1.
6. Erection Inspection: If so designated on the Structural Tests and Inspections list, Testing Laboratory will visually inspect bolted and field welded connections, perform such additional tests and inspections of field work as are required by the Architect and prepare test reports for the Architect's review.
7. Shop Fabrication Inspection Outside of Area: The added cost of shop fabrication inspection, and material testing outside the State of California or 150 mile radius of the Project site will be paid by the District and backcharged to the Contractor.
8. Ultrasonic Testing: All full penetration multi-pass groove welds shall be subject to ultrasonic testing.

    a. Defective welds shall be repaired and retested with ultrasonic equipment.
    b. Initially, all multi-pass groove field welds shall be tested at the rate of 100 percent of each individual welder. If rejectable defects occur in less than 5 percent of the welds tested, the frequency of testing may be reduced to 25 percent. If the rate of rejectable defects increases to 5 percent or more, 100 percent testing shall be reestablished until the rate is reduced to less than 5 percent. The percentage of rejects shall be calculated for each welder independently.
    c. When ultrasonic indications arising from the weld root can be interpreted as either a weld defect or the backing strip itself, the backing strip shall be removed at the expense of the Contractor, and if no root defect is visible, the weld shall be retested. If no defect is indicated on this retest, and no significant amount of the base and weld metal have been removed, no further repair or welding is necessary. If a defect is indicated, it shall be repaired at the Contractor's expense.

9. The ultrasonic instrumentation shall be calibrated by the technician to evaluate the quality of the welds in accordance with AWS D1.1 latest Edition.
10. Should defects appear in welds tested, repairs shall be similarly inspected at the Contractor's expense and at the direction of the Architect until satisfactory performance is assured.
11. Other methods of inspection, for example, X-ray, gamma ray, magnetic particle, or dye penetrant, may be used on welds if felt necessary by the Architect.

D. Inspection and Tests for End Welded Studs:

1. Inspection of all the shop and field welding operations for the automatic end welded studs shall be made in accordance with the 2007 CBC Title 24 Part 2, Sec. 1704A.3.1 by a qualified welding inspector approved by the DSA. The type and capacity of the welding equipment shall be in accordance with the manufacturer's recommendations and shall be checked and approved by the welding inspector.
2. At the beginning of each day's work, a minimum of 2 test stud welds shall be made with the equipment to be used on metal which is the same as the actual work piece. The test studs shall be subjected to a 90 degree bend test by striking them with a heavy hammer. After the above test, the weld section shall not exhibit any tearing out or cracking.

E. Corrections:

1. Correct deficiencies in structural steel work which inspections and test reports indicate to be not in compliance with the specified requirements.
2. Perform additional tests required to reconfirm noncompliance of the original work and to show compliance of corrected work. Costs for all additional tests will be paid for by the District and backcharged to the Contractor.

3.6 ASPHALTIC CONCRETE PAVING

A. Asphaltic concrete mix design proposed by the Contractor shall be submitted to the District for review. Proposed mix shall be tested for conformance with the specifications, including grading, asphalt content and stability.

B. One sample of the mix shall be taken during each day's paving operation and tested for asphalt content and gradation.

C. Continuous inspection of the paving operation shall be provided. Testing Laboratory shall check for proper thickness, proper mix temperatures, proper rolling procedures and general workmanship.

END OF SECTION

STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES

DIVISION OF THE STATE ARCHITECT

FORM **DSA-103**

INCREMENT #

DSA File No.:

Application No.:

Date Submitted:

Revised:

Revised:

Statement of Structural Tests and Special Inspections

School Name	Two Bunch Palms Elem. - New Vestibule & Site Improvements	District	Palm Springs Unified School District

IMPORTANT: This form is only a summary list of the tests and special inspections required on the project. The actual tests and inspections must be performed as detailed on the approved plans and specifications. 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.

INSTRUCTIONS: Click a plus sign (+) before any category or subcategory to reveal additional tests and special inspections. An "X" before a listed test or inspection indicates it is a mandatory requirement. A shaded box indicates a test or special inspection that may be required, depending on the scope of the construction and other 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 finally selected. **For more information on use of this form, see DSA-103.INSTR.**

Note: All references to the California Building Code (CBC) are to the 2007 edition.

REQUIRED?	TEST OR SECIAL INSPECTION	TYPE **	PERFORMED BY **	CODE REFERENCE AND NOTES
+	**SOILS**			
-	**CONCRETE** (based on 2007 CBC, Table 1704A.4)			
-	**7. Cast In Place Concrete**			
	Material Verification and Testing:			
X	a. Verify use of required design mix.	Periodic	*	* To be performed by batch-plant special inspector and project inspector.
X	b. Test reinforcing steel.	Test	Lab	1916A.2; (see 1916A.4 for waiver). ASTM A370-06.
X	c. Perform slump test, determine the temperature of the concrete, and (where required) perform air content test.	Test	Lab	ASTM C172-04, ASTM C31-98.
X	d. Test concrete (compression test).	Test	Lab	1905A.6. ASTM C39-05.
	Inspection:			
X	e. Inspect batching of concrete.	Continuous	Special	1704A.4.3; (see 1704A.4.4 for waiver).
X	f. Inspect placement of formwork, reinforcing steel, embedded items and concrete. Inspect curing and form removal.	Continuous	Project*	* May be performed by a special inspector when specifically approved by DSA.
-	**11. Post-installed Anchors:**			
X	a. Inspect installation of post-installed anchors	Continuous	Project	Table 1704A.4
	b. Test post-installed anchors.	Test	Lab	1916A.8
-	**MASONRY** (based on 2007 CBC, Table 1704A.5.3)			
-	**13. Structural Masonry: Check one: f'm = 1500psi**	X	2500psi	
	Material Verification and testing:			
X	a. Test reinforcing steel.	Test	Lab	1916A.2. ASTM A370-06.
X	b. Test masonry units, mortar and grout (unit strength method).	Test	Lab	1708A.1.4, 2105A.2.2.1 and 2105A.5. ASTM C140-06, C1586-05 & C1019-03.
X	d. Verify proportions of site-prepared mortar and grout and/or verify certification of premixed mortar and plant batched grout.	Periodic	Special	ASTM C780-06.
	e. Test core-drilled samples in compression and shear.	Test	Lab	2105A.4.
	Inspection:			
X	g. Verify size, location and condition of all dowels, construction supporting masonry, etc.	Periodic	Special	
X	h. Verify specified size, grade, and type of reinforcement.	Periodic	Special	

Statement of Structural Tests and Special Inspections

X	j. Inspect placement of reinforcement, connectors, masonry units and construction of mortar joints.	Periodic	Special	
X	k. Verify protection of masonry during cold weather (temperature below 40 degrees F) or hot weather (temperature above 90 degrees).	Periodic	Special	
X	l. Inspect type, size, and location of anchors and all other items to be embedded in masonry including other details of anchorage of masonry to structural members, frames and other construction.	Continuous	Special	
X	m. Inspect grout space prior to grouting and placement of grout.	Continuous	Special	
-	**STEEL**	(based on 2007 CBC, Table 1704A.3)		
-	**17. Structural Steel**			
	Material Verification:			
X	a. 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.	Periodic	*	* By special inspector when performed off-site; by project inspector for steel shipped directly to project site without welding or fabrication.
X	b. Test unidentified materials	Test	Lab	2212A.1. ASTM A370-06.
X	c. Examine seam welds of structural tubes and pipes	Periodic	Special*	* See DSA IR 17-3.
	Inspection:			
X	d. Verify member locations, bracing and all details constructed in the field.	Continuous	Project	
	e. Verify stiffener locations, connection tab locations and all construction details fabricated in the shop.	Periodic	Special	
-	**19. Welding:**			DSA IR 17-3. AWS D1.1-06.
	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	Special	
X	b. Verify weld filler material manufacturer's certificate of compliance.	Periodic	Special	
X	c. Verify WPS, welder qualifications and equipment.	Periodic	Special	See DSA IR 17-3
-	**19.2 Field Welding:**			
X	b. Inspect single-pass fillet welds ≤ 5/16"	Periodic	Special	Per AISC 360 (and AISC 341 as applicable).
+	**WOOD**			
+	**OTHER**			

STATE OF CALIFORNIA DEPARTMENT OF GENERAL SERVICES

DIVISION OF THE STATE ARCHITECT

FORM **DSA-103**

INCREMENT #

DSA File No.:

Application No.:

Date Submitted:

Revised:

Revised:

Statement of Structural Tests and Special Inspections

Summary of Verified Reports Required:

Note: Project inspector, contractor, architect and engineer verified reports are always required (Form DSA-6 or DSA 6A/E as applicable).

1 All Structural Testing: Laboratory Verified Report - Form DSA-291
2 Concrete Batch Plant Inspection: Special Inspection Verified Report - Form DSA-292
3 Masonry Inspection: Special Inspection Verified Report - Form DSA-292
4 Shop Welding Inspection: Special Inspection Verified Report - Form DSA-292
5 Field Welding Inspection: Special Inspection Verified Report - Form DSA-292

KEY to Columns

** **Type -**

Continuous – Indicates that a continuous special inspection is required

Periodic – Indicates that a periodic special inspection is required

Test – Indicates that a test is required

(Note: The difference between "tests" and "special inspections" is addressed in IR 17-B)

** **Performed By -**

GE – Indicates that the special inspection is to be performed by a registered geotechnical engineer or his or her authorized representative

Lab – Indicates that the test is to be performed by a testing laboratory accepted in the DSA laboratory Evaluation and Acceptance (LEA) Program

Project – Indicates that the special inspection is to be performed by the project inspector

Special – Indicates that the special inspection is to be performed by a special inspector

(Note that reassignment of responsibility is permitted only with the written approval of DSA)

Roger Clarke, C-21340

Name of Architect or Engineer in general responsible charge

Larry R. Kaprielian, S-2795

Name of Structural Engineer (When structural design has been delegated)

Larry R. Kaprielian 12-7-09

Signature of Architect or Strucutral Engineer date

REGISTERED PROFESSIONAL ENGINEER LARRY R. KAPRIELIAN No. 2795 Exp. 9/30/11 STRUCTURAL STATE OF CALIFORNIA

IDENTIFICATION STAMP
DIV OF THE STATE ARCHITECT
APP. #

AC N/A F/LS N/A SS

DATE

SECTION 01600
PRODUCT REQUIREMENTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. General requirements for products used for the Work, including:

1. General characteristics of products.
2. Product options.
3. Substitutions and Request for Substitution Form.
4. System completeness.
5. Transportation and handling requirements.
6. Storage and protection of products.
7. Installation of products.

1.2 RELATED SECTIONS

A. Section 01330 - Shop Drawings, Product Data and Samples: Requirements applicable to submittals for "or equal" and substitute products.

B. Section 01410 - Regulatory Requirements: Codes and standards applicable to product specifications; minimum requirements.

C. Section 01420 - Reference Standards and Abbreviations: References to various standards, standard specifications, codes, practices and other requirements.

1.3 GENERAL PRODUCT REQUIREMENTS

A. Products, General: Items purchased for incorporation in the Work, whether purchased for the Project or taken from previously purchased stock, and include materials, equipment, assemblies, fabrications and systems.

1. Named Products: Items identified by manufacturer's product name, including make or model designations indicated in the manufacturer's published product data.
2. Materials: Products that are shaped, cut, worked, mixed, finished, refined or otherwise fabricated, processed or installed to form a part of the Work.
3. Equipment: A product with operating parts, whether motorized or manually operated, that requires connections such as wiring or piping.

B. Specific Product Requirements: Refer to requirements of Section 01450 - Quality Control and individual product Specifications Sections in Divisions 2 through 16 for specific requirements for products.

C. Minimum Requirements: Specified requirements for products are minimum requirements. Refer to general requirements for quality of the Work specified in Section 01450 - Quality Control and elsewhere herein.

D. Product Selection: Provide products that fully comply with the Contract Documents, are undamaged and unused at installation. Comply with additional requirements specified herein in Article titled "PRODUCT OPTIONS".

E. Standard Products: Where specific products are not specified, provide standard products of types and kinds that are suitable for the intended purposes and that are usually and customarily used on similar projects under similar conditions. Products shall be as selected by Contractor and subject to review and acceptance by the District and Architect.

F. Product Completeness: Provide products complete with all accessories, trim, finish, safety guards and other devices and details needed for a complete installation and for the intended use and effect. Comply with additional requirements specified herein in Article titled "SYSTEM COMPLETENESS".

G. Code Compliance: All products, other than commodity products prescribed by Code, shall have a current ICC Evaluation Service Research Report (ICC ESRR) or CABO National Evaluation Report (NER). Refer to additional requirements specified in Section 01410 - Regulatory Requirements.

H. Interchangeability: To the fullest extent possible, provide products of the same kind from a single source. Products required to be supplied in quantity shall be the same product and interchangeable throughout the Work. When options are specified for the selection of any of two or more products, the product selected shall be compatible with products previously selected.

I. Product Nameplates and Instructions:

1. Except for required Code-compliance labels and operating and safety instructions, locate nameplates on inconspicuous, accessible surfaces. Do not attach manufacturer's identifying nameplates or trademarks on surfaces exposed to view in occupied spaces or to the exterior.

2. Provide a permanent nameplate on each item of service-connected or power-operated equipment. Nameplates shall contain identifying information and essential operating data such as the following example:

   Name of manufacturer
   Name of product
   Model and serial number
   Capacity
   Operating and Power Characteristics
   Labels of Tested Compliance with Codes and Standards

3. Refer to additional requirements which may be specified in Division 15 - Mechanical, if included in the Project Manual.
4. For each item of service-connected or power-operated equipment, provide operating and safety instructions, permanently affixed and of durable construction, with legible machine lettering. Comply with all applicable requirements of authorities having jurisdiction and listing agencies.

J. Mechanical Product Requirements: Comply with requirements specified in Division 15 - Mechanical, if included in the Project Manual.

K. Electrical Product Requirements: Comply with requirements specified in Division 16 - Electrical.

1.4 PRODUCT OPTIONS

A. Products Specified by Description: Where Specifications describe a product, listing characteristics required, with or without use of a brand name, provide a product that has the specified attributes and otherwise complies with specified requirements.

B. Products Specified by Performance Requirements: Where Specifications require compliance with performance requirements, provide product(s) that comply and are recommended by the manufacturer for the intended application. Verification of manufacturer's recommendations may be by product literature or by certification of performance from manufacturer.

C. Products Specified by Reference to Standards: Where Specifications require compliance with a standard, provided product shall fully comply with the standard specified. Refer to general requirements specified in Section 01420 - Reference Standards and Abbreviations regarding compliance with referenced standards, standard specifications, codes, practices and requirements for products.

D. Products Specified by Identification of Manufacturer and Product Name or Number:

1. "Specified Manufacturer": Provide the specified product(s) of the specified manufacturer.

   a. If only one manufacturer is specified, without "acceptable manufacturers" being identified, provide only the specified product(s) of the specified manufacturer.
   b. If the phrase "or equal" is stated or reference is made to the "or equal provision," products of other manufacturers may be provided if such products are equivalent to the specified product(s) of the specified manufacturer. Equivalence shall be demonstrated by submission of information in compliance with requirements specified herein under the Article titled "SUBSTITUTIONS."

2. "Acceptable Manufacturers": Product(s) of the named manufacturers, if equivalent to the specified product(s) of the specified manufacturer, will be acceptable in accordance with the requirements specified herein in the Article titled "SUBSTITUTIONS", except considerations regarding changes in Contract Time and Contract Sum will be waived if no increase in Contract Time or Contract Sum results from use of such equivalent products.
3. Unnamed manufacturers: Product(s) of unnamed manufacturers will be acceptable when disclosed during the bidding period and only as follows:

   a. Unless specifically stated that substitutions will not be accepted or considered, the phrase "or equal" shall be assumed to be included in the description of specified product(s). Equivalent products of unnamed manufacturers will be accepted in accordance with the "or equal" provision specified herein, below.
   b. If provided, products of unnamed manufacturers shall be subject to the requirements specified herein in the Article titled "SUBSTITUTIONS."

4. Quality basis: Specified product(s) of the specified manufacturer shall serve as the basis by which products by named acceptable manufacturers and products of unnamed manufacturers will be evaluated. Where characteristics of the specified product are described, where performance characteristics are identified or where reference is made to industry standards, such characteristics are specified to identify the most significant attributes of the specified product(s) which will be used to evaluate products of other manufacturers.

E. Products Specified by Combination of Methods: Where products are specified by a combination of attributes, including manufacturer's name, product brand name, product catalog or identification number, industry reference standard, or description of product characteristics, provide products conforming to all specified attributes.

F. "Or Equal" Provision: Where the phrase "or equal" or the phrase "or approved equal" is included, equivalent product(s) of unnamed manufacturer(s) may be provided as specified above in subparagraph titled "Unnamed manufacturers" and Article herein titled "SUBSTITUTIONS" with the following conditions:

1. The requirements specified herein in the Article titled "SUBSTITUTIONS" shall apply to products provided under the "or equal" provision except, if the proposed product(s) are determined to be equivalent to the specified product(s) of the specified manufacturer, the requirement specified for substitutions to result in a net reduction in Contract Time or Contract Sum will be waived.
2. Use of product(s) under the "or equal" provision shall not result in any delay in completion of the Work, including completion of portions of the Work for use by District or for work under separate contract by District.
3. Use of product(s) under the "or equal" provision shall not result in any costs to the District, including design fees and permit and plancheck fees.
4. Use of product(s) under the "or equal" provision shall not require substantial change in the intent of the design, in the opinion of the Architect. The intent of the design shall include functional performance and aesthetic qualities.
5. The determination of equivalence will be made by the Architect and District, and such determination shall be final.

G. Visual Matching: Where Specifications require matching a sample, the decision by the Architect on whether a proposed product matches shall be final. Where no product visually matches but the product complies with other requirements, comply with provisions for substitutions for selection of a matching product in another category.

H. Visual Selection of Products: Where requirements include the phrase "as selected from manufacturer's standard colors, patterns and textures", or a similar phrase, selections of products will be made by indicated party or, if not indicated, by the Architect. The Architect will select color, pattern and texture from the product line of submitted manufacturer, if all other specified provisions are met.

1.5 SUBSTITUTIONS

A. Substitutions Regulation: All Request for Substitutions pursuant to Public Contracts Code Section 3400 must be made on the form set forth in the Contract Documents and must be submitted to the Architect as specified on said form (Request for Substitutions) no later than seven (7) calendar days prior to the bid due date. Subsequent requests will be considered only in the case of product unavailability through no fault of the

Contractor, or for reasons of cost reducing value engineering requested by the District after the bid due date.

B. Substitutions: Requests by Contractor to deviate from specified requirements for products, materials, equipment, and methods, or to provide products other than those specified, shall be considered requests for substitutions except under the following conditions:

1. Substitutions are requested during the bidding period, and accepted prior to execution of the Contract. Acceptance shall be in the form of written Addendum to the Bidding documents or revision to the Drawings or Specifications for use as Construction Contract Documents.
2. Changes in products, materials, equipment, and methods of construction are directed by the District or Architect.
3. Contractor options for provision of products and construction methods are specifically stated in the Contract Documents.
4. Change in products, materials, equipment, and methods of construction is required for compliance with Codes, ordinances, regulations, orders and standards of authorities having jurisdiction.

C. Substitution Provisions: Refer to substitution provisions of the General Conditions, in addition to the requirements specified herein. Provisions for consideration and acceptance of substitutions shall be as follows:

1. Documentation: Substitutions will not be considered if they are indicated or implied on shop drawing, product data or sample submittals. All requests for substitution shall be made by separate written request from Contractor.
2. Cost and Time Considerations: Substitutions will not be considered unless a net reduction in Contract Sum or Contract Time results to the District's benefit, including redesign costs, life cycle costs, changes in related Work and overall performance of building systems.
3. Design Revision: Substitutions will not be considered if acceptance will require substantial revision of the Contract Documents or will substantially change the intent of the design, in the opinion of the Architect. The intent of the design shall include functional performance and aesthetic qualities.
4. Data: It shall be the responsibility of the Contractor to provide adequate data demonstrating the merits of the proposed substitution, including cost data and information regarding changes in related Work.
5. Determination by Architect: Architect will determine the acceptability of proposed substitutions and will notify Contractor, in writing within a reasonable time, of acceptance or rejection. The determination by the Architect regarding functional performance and aesthetic quality shall be final.
6. Non-Acceptance: If a proposed substitution is not accepted, Contractor shall immediately provide the specified product.
7. Substitution Limitation: Only one request for substitution will be considered for each product.

D. Substitution Submission Period:

1. Time Limit: All requests for substitutions pursuant to Public Contracts Code Section 3400 must be submitted to the Architect as specified on said form (Request for Substitutions) no later than seven (7) calendar days prior to the bid due date to be considered by the Architect.

2. Product Availability Waiver: Substitutions will be considered after the Time Limit only when a product becomes unavailable due to no fault of the Contractor. Failure to place orders for specified products sufficiently in advance of required date for incorporation into the Work will not be considered as a valid reason for which Contractor may request a substitution or deviation from requirements of the Drawings and Specifications.
3. Waiver: At the discretion of the District, limitations on substitutions may be waived.

E. Request for Substitution Process:

1. Contractor shall prepare a request for substitution and submit the request to the Architect for review and acceptance. Submit a minimum of 4 copies. Form and other administrative requirements shall be as included herein or as directed by the Architect.
2. Substitution requests shall included complete product data, including drawings and descriptions of products, fabrication details and installation procedures. Include samples where applicable or requested.
3. Substitution requests shall include appropriate product data for the specified product(s) of the specified manufacturer, suitable for use in comparison of characteristics of products.

    a. Include a written, point-by-point comparison of characteristics of the proposed substitute product with those of the specified product.
    b. Include a detailed description, in written or graphic form as appropriate, indicating all changes or modifications needed to other elements of the Work and to construction to be performed by the District and by others under separate Contract with District, that will be necessary if the proposed substitution is accepted.

4. Substitution requests shall include a statement indicating the substitution's effect on the Construction Schedule. Indicate the effect of the proposed substitution on overall Contract Time and, as applicable, on completion of portions of the Work for use by District or for work under separate contract by District.
5. Except as otherwise specified, substitution requests shall include detailed cost data, including a proposal for the net change, if any, in the Contract Sum.
6. Substitution requests shall include signed certification that the Contractor has reviewed the proposed substitution and has determined that the substitution is equivalent or superior in every respect to product requirements indicated or specified in the Contract Documents, and that the substitution is suited for and can perform the purpose or application of the specified product indicated or specified in the Contract Documents.
7. Substitution requests shall include a signed waiver by the Contractor for change in the Contract Time or Contract Sum because of the following:

    a. Substitution failed to perform adequately.
    b. Substitution required changes in on other elements of the Work.
    c. Substitution caused problems in interfacing with other elements of the Work.
    d. Substitution was determined to be unacceptable by authorities having jurisdiction.

8. If, in the opinion of the Architect, the substitution request is incomplete or has insufficient data to enable a full and thorough review of the intended substitution, the substitution may be summarily refused and determined to be unacceptable.

F. Contract Document Revisions:

1. Should a Contractor-proposed substitution or alternative sequence or method of construction require revision of the Contract Drawings or Specifications, including revisions for the purposes of determining feasibility, scope or cost, or revisions for the purpose of obtaining review and approval by authorities having jurisdiction, revisions will be made by Architect or other consultant of District who is the responsible design professional, as approved in advance by District.
2. Services of Architect or other consultant of the District, including time spent in researching and reporting on proposed substitutions or alternative sequence and method of construction, shall be paid by Contractor when such activities are considered additional services to the design services contracts of the Architect or other responsible design professional with the District.
3. Costs of services by Architect or other responsible design professional of the District shall be paid on a time and materials basis, based on current hourly fee schedules, with reproduction, long distance telephone and shipping costs reimbursable at cost plus usual and customary mark-up for handling and billing.
4. Such fees shall be paid whether or not the proposed substitution or alternative sequence or method of construction is ultimately accepted by District and a Change Order is executed.
5. Such fees shall be paid from Contractor's portion of savings, if a net reduction in Contract Sum results. If fees exceed Contractor's portion of net reduction, Contractor shall pay all remaining fees unless otherwise agreed in advance by the District.
6. Such fees owed shall be deducted from the amount owed Contractor on the Application for Payment next made following completion of revised Contract Drawings and Specifications or completion of research and other services. District will then pay Architect or other consultant of the District.
7. Substitutions require Preliminary Change Order approval from DSA.

1.6 SYSTEM COMPLETENESS

A. System Completeness:

1. The Contract Drawings and Specifications are not intended to be comprehensive directions on how to produce the Work. Rather, the Drawings and Specifications are instruments of service prepared to describe the design intent for the completed Work.
2. It is intended that all equipment, systems and assemblies be complete and fully functional even though not fully described. Provide all products and operations necessary to achieve the design intent described in the Contract Documents.
3. Refer to related general requirements specified in Section 01410 - Regulatory Requirements regarding compliance with minimum requirements of applicable codes, ordinances and standards.

B. Omissions and Misdescriptions: Contractor shall report to Architect immediately when elements essential to proper execution of the Work are discovered to be missing or misdescribed in the Drawings and Specifications or if the design intent is unclear.

1. Should an essential element be discovered as missing or misdescribed prior to receipt of Bids, an Addendum will be issued so that all costs may be accounted for in the Contract Sum.
2. Should an obvious omission or misdescription of a necessary element be discovered and reported after execution of the Agreement, Contractor shall provide the element as though fully and correctly described, and a no-cost Change Order shall be executed.
3. Refer to related General Conditions or general requirements specified in Section 01315 – Coordination regarding construction interfacing and coordination.

1.7 TRANSPORTATION, DELIVERY AND HANDLING

A. Transportation, Delivery and Handling, General: Comply with manufacturer's instructions and recommendations for transportation, delivery and handling, in addition to the following.

B. Transportation: Transport products by methods to avoid product damage.

C. Delivery:

1. Schedule delivery to minimize long-term storage and prevent overcrowding construction spaces. Coordinate with installation to ensure minimum holding time for items that are flammable, hazardous, easily damaged, or sensitive to deterioration, theft and other losses.
2. Deliver products in undamaged condition in manufacturer's original sealed container or packaging system, complete with labels and instructions for handling, storing, unpacking, protecting and installing.

D. Handling:

1. Provide equipment and personnel to handle products by methods to prevent soiling, marring or other damage.
2. Promptly inspect products on delivery to ensure that products comply with contract documents, quantities are correct, and to ensure that products are undamaged and properly protected.

1.8 STORAGE AND PROTECTION

A. Storage and Protection, General: Store and protect products in accordance with manufacturer's instructions, with seals and labels intact and legible.

1. Periodically inspect to ensure products are undamaged, and are maintained under required conditions.
2. Products damaged by improper storage or protection shall be removed and replaced with new products at no change in Contract Sum or Contract Time.
3. Store moisture- and sun-sensitive products in weathertight enclosures.

B. Inspection Provisions: Arrange storage to provide access for inspection and measurement of quantity or counting of units.

C. Structural Considerations: Store heavy materials away from the structure in a manner that will not endanger supporting construction.

D. Weather-Resistant Storage:

1. Store moisture-sensitive products above ground, under cover in a weathertight enclosure or covered with an impervious sheet covering. Provide adequate ventilation to avoid condensation.
2. Maintain storage within temperature and humidity ranges required by manufacturer's instructions.
3. For exterior storage of fabricated products, place products on raised blocks, pallets or other supports, above ground and in a manner to not create ponding or misdirection of runoff. place on sloped supports above ground.
4. Store loose granular materials on solid surfaces in a well-drained area. Prevent mixing with foreign matter.

E. Protection of Completed Work:

1. Provide barriers, substantial coverings and notices to protect installed Work from traffic and subsequent construction operations.
2. Remove protective measures when no longer required and prior to Substantial Completion review of the Work.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION

3.1 INSTALLATION OF PRODUCTS

A. Installation of Products:

1. Comply with manufacturer's instructions and recommendations for installation of products, except where more stringent requirements are specified, are necessary due to Project conditions or are required by authorities having jurisdiction.
2. Anchor each product securely in place, accurately located and aligned with other Work.
3. Clean exposed surfaces and provide protection to ensure freedom from damage and deterioration at time of Substantial Completion review. Refer to additional requirements specified in Section 01740 - Final Cleaning.

END OF SECTION

SECTION 01720
FIELD ENGINEERING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Layout of Work.

B. Other engineering services as necessary to accomplish the Work.

1.2 RELATED DOCUMENTS AND SECTIONS

A. District issued General Conditions: Basic site engineering requirements.

B. Section 01450 - Quality Control: Contractor quality control responsibilities.

C. Section 01770 - Contract Closeout: Project record documents.

1.3 LAYOUT OF WORK

A. Employ a licensed land surveyor, registered in the State of California and acceptable to Architect and District, to lay out Work. For Project record, submit name, address and telephone number of Land Surveyor before starting Work.

1.4 EXAMINATION

A. Verify locations of survey control points prior to starting Work.

B. Promptly notify Architect of discrepancies discovered.

1.5 SURVEY REFERENCE POINTS

A. Contractor shall locate and protect survey control and reference points.

B. Control datum for survey is that established by District-provided survey.

C. Protect survey control points prior to starting site Work. Preserve permanent reference points during construction.

D. Promptly report to Architect the loss or destruction of reference point or relocation required because of changes in grades or other reasons.

E. Replace dislocated survey control points based on original survey control. Make no changes without prior written notice to Architect.

1.6 SURVEY REQUIREMENTS

A. Provide field engineering services. Utilize recognized engineering survey practice.

B. Establish a minimum of two permanent bench marks on site, referenced to established control points. Record locations, with horizontal and vertical data, on Project Record Drawings.

C. Establish elevations, lines and levels. Locate and lay out by instrumentation and similar appropriate means:

1. Site improvements, including pavements; stakes for grading, fill and topsoil placement; utility locations, slopes and invert elevations; and retaining walls.
2. Grid or axis for structures.

D. Periodically verify layouts by same means.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

SECTION 01730
CUTTING AND PATCHING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Requirements and limitations for cutting and patching of Work.

1.2 RELATED SECTIONS

A. Section 01010 - Summary of Work: Work by District or by separate contractors.

B. Individual product Specification Sections:

1. Cutting and patching incidental to Work specified in the Section.
2. Coordination with Work specified in other Sections for openings required to accommodate Work specified in those other Sections.

1.3 SUBMITTALS

A. Written Requests for Cutting and Alteration:

1. Submit written request in advance of cutting or alteration which affects:

   a. Structural integrity of any element of new or existing construction.
   b. Integrity of weather-exposed or moisture-resistant elements.
   c. Efficiency, maintenance, or safety of operational elements.
   d. Visual qualities of elements exposed to view in the completed construction.
   e. Work of District or separate contractor.
   f. Existing construction not otherwise indicated to be revised by Work under the Contract.

2. Include in requests for cutting and alteration:

   a. Identification of Project.
   b. Location and description of affected Work. Include shop drawings as necessary to identify locations and communicate descriptions.
   c. Explanation of necessity for cutting and patching.
   d. Description of proposed Work and products to be used.
   e. Alternatives to cutting and patching.
   f. Effect on work of District or separate contractor.
   g. Effect on existing construction of District and, if applicable, work for Project being provided by District under separate contract.

3. Include written evidence that those performing work under separate contract for District have been notified and acknowledge that cutting and patching work will be occurring. Include written permission for intended cutting and patching, included scheduled times.
4. Indicate date and time cutting and patching Work will be performed.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Primary Products: As required for original installation and to match surrounding construction.

B. Product Substitution: For each proposed change in materials, submit request for substitution under provisions of Section 01600 - Product Requirements.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examination, General: Inspect existing conditions prior to commencing Work, including elements subject to damage or movement during cutting and patching.

B. After uncovering existing Work, inspect conditions affecting proper accomplishment of Work.

C. Beginning of cutting or patching shall be interpreted to mean that existing conditions were found by Contractor to be acceptable.

3.2 PREPARATION

A. Temporary Supports: Provide supports to ensure structural integrity of the Work. Provide devices and methods to protect other portions of Project from damage.

B. Weather Protection: Provide protection from elements for areas which may be exposed by uncovering Work. Maintain excavations free of water.

3.3 CUTTING AND PATCHING

A. Cutting and Patching: Execute cutting, fitting, and patching, excavation and fill, to complete the Work.

1. Coordinate installation or application of products for integrated Work.
2. Uncover completed Work as necessary to install or apply products out of sequence.
3. Remove and replace defective or non-conforming Work.
4. Provide openings in the Work for penetration of mechanical and electrical Work.

3.4 PERFORMANCE

A. Execute cutting and patching by methods to avoid damage to adjoining Work, and which will provide appropriate surfaces to receive final finishing.

B. Execute cutting and patching of weather-exposed, moisture-resistant elements and surfaces exposed to view by methods to preserve weather, moisture and visual integrity.

C. Cut rigid materials using diamond grit abrasive saw or similar cutter for smooth edges. Do not overcut corners.

1. Core drill holes through concrete and masonry.
2. Pneumatic tools will not be allowed without prior approval.

D. Restoration:

1. Restore Work with new Products as specified in individual Sections.
2. Fit work neat and tight allowing for expansion and contraction. Butt new finishes to existing exposed structure, pipes, ducts, conduit, and other penetrations through surfaces.

E. Finishing: Refinish surfaces to match adjacent and similar finishes as used for the Project.

1. For continuous surfaces, refinish to nearest intersection or natural break.
2. For an assembly, refinish entire unit.

END OF SECTION

SECTION 01740
FINAL CLEANING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Cleaning for Substantial Completion review and final acceptance of the Work.

1.2 RELATED SECTIONS

A. Additional Requirements: Cleaning for specific products or elements of Work are described in individual product Specification Sections in Divisions 2 through 16.

1.3 CLEANING AND DISPOSAL REQUIREMENTS

A. Cleaning Procedures: All cleaning processes, agents and materials shall be subject to Construction Manager's review and approval. Processes and degree of cleanliness shall be as directed by Construction Manager.

B. Cleaning and Disposal Requirements, General: Conduct cleaning and disposal operations in compliance with all applicable codes, ordinances and regulations, including environmental protection laws, rules and practices.

PART 2 - PRODUCTS

2.1 MATERIALS

A. Cleaning Agents and Materials: Use only those cleaning agents and materials which will not create hazards to health or property and which will not damage or degrade surfaces.

1. Use only those cleaning agents, materials and methods recommended by manufacturer of the material to be cleaned.
2. Use cleaning materials only on surfaces recommended by cleaning agent manufacturer.
3. Before use, review cleaning agents and materials with Construction Manager for suitability and compatibility. Use no cleaning agents and materials without approval of Construction Manager.

PART 3 - EXECUTION

3.1 SUBSTANTIAL COMPLETION REVIEW CLEANING, GENERAL

A. Substantial Completion Review Cleaning, General: Execute a thorough cleaning prior to Substantial Completion review by Architect and District. Employ experienced workers or professional cleaners for cleaning operations for Substantial Completion review.

1. Clean each surface or unit to the condition expected in a normal, industrial building cleaning and maintenance program.
2. Substantial Review cleaning will not require sanitation of "clean" rooms.

3. Remove waste and surplus materials, rubbish and temporary construction facilities, utilities and controls.

3.2 FINAL COMPLETION INTERIOR CLEANING

A. Final Completion Cleaning, General: Complete final cleaning before submitting final Application for Payment.

1. Employ professional building cleaners to thoroughly clean building immediately prior to Final Completion inspection by District and, if applicable, by authorities having jurisdiction.
2. Remove grease, mastic, adhesives, dust, dirt, stains, fingerprints, labels, and other foreign materials from all visible interior and exterior surfaces.
3. Remove dust from all horizontal surfaces not exposed to view, including light fixtures and ledges.
4. Clean all horizontal surfaces to dust-free condition, including tops of door and window frames, tops of doors.

B. Glass Cleaning: Clean and polish all glass as specified in Section 08800 - Glazing.

C. Metalwork: Clean and buff all metalwork, to be free of soiling and fingerprints. Mirror finished metalwork shall be buffed to high luster.

D. Fixture Cleaning: Clean lighting fixture lenses.

E. Floor Cleaning:

1. Exposed concrete floors: Thoroughly sweep and wet mop floors in enclosed spaces. At parking areas and ramps, sweep and hose off floor surface.

F. Site Cleaning: Broom clean exterior paved surfaces. Rake clean other surfaces of the grounds.

1. Wash down and scrub where necessary all paving soiled as a result of construction activities. Thoroughly remove mortar droppings, paint splatters, stains and adhered soil.
2. Remove from the site all construction waste, unused materials, excess soil and other debris resulting from the Work.

3.3 INSPECTION

A. Cleaning Inspection: Prior to Final Payment or acceptance by District for partial occupancy or beneficial use of the premises, Contractor and Construction Manager shall jointly conduct an inspection of interior and exterior surfaces to verify that entire Work is acceptably clean.

B. Inadequate Cleaning: Should final cleaning be inadequate, as determined by Construction Manager, and Contractor fails to correct conditions, District may order thorough cleaning by workers under separate contract and deduct cost from Final Payment.

END OF SECTION

SECTION 01770
CONTRACT CLOSEOUT

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Contract closeout procedures.

B. Project record documents.

1.2 RELATED SECTIONS

A. Section 01330 - Shop Drawings, Product Data and Samples: General requirements for submittals.

B. Section 01500 - Construction Facilities and Temporary Controls: Cleaning and debris removal during construction.

C. Section 01740 - Final Cleaning: Cleaning as part of Contract closeout.

1.3 FINAL COMPLETION ACTIONS

A. Final Application for Payment: In the Application for Payment that coincides with the date Substantial Completion is claimed, show 100 percent completion for the portion of the Work claimed substantially complete.

B. Warranties, Bonds and Certificates: Submit specific warranties, guarantees, workmanship bonds, maintenance agreements, final certifications and similar documents.

C. Locks and Keys: Change temporary lock cylinders over to permanent keying and transmit keys to the District, unless otherwise directed or specified.

D. Tests and Instructions: Complete start-up testing of systems, and instruction of the District's personnel. Remove temporary facilities from the site, along with construction tools, mock-ups, and similar elements.

1.4 SUBSTANTIAL COMPLETION REVIEW

A. Contractor's Notification for Substantial Completion Review: When the Contractor determines that the Work is complete in accordance with Contract Documents, the Contractor shall submit to the District and Architect written certification that the Contract Documents have been reviewed, the Work has been inspected by the Contractor and by authorities having jurisdiction, and the facility is ready for the Substantial Completion review.

B. Preliminary Contract Closeout Review Meeting: As authorized by the District, Architect and Architect's and District's consultants, as appropriate, will attend a meeting at the Project site to review Contract closeout procedures and to review the list of items to be completed and corrected (punch list) to make the Work ready for acceptance by the District. This meeting shall be scheduled not earlier than 14 days prior to the date anticipated for the Substantial Completion review.

C. Correction (Punch) List: Contractor shall prepare and distribute at the preliminary Contract closeout review meeting, a typewritten, comprehensive list of items to be completed and corrected (punch list) to make the Work ready for acceptance by the District.

1. The punch list shall include all items to be completed or corrected prior to the Contractor's application for final payment.
2. The punch list shall identify items by location (room number or name) and consecutive number. For example, 307-5 would identify item 5 in Room 307, Roof-4 would identify item 4 on Roof.
3. Contractor shall prepare separate lists according to categories used for Drawings. For example, provide lists for Architectural, Structural, Mechanical, Plumbing, Electrical, Civil, Landscape, Process Piping and Laboratory Furnishings. Provide a list also for the Fire Protection (sprinkler) system.
4. Architect, Architect's consultants and District's consultants, if in attendance, will conduct a brief walk-through of Project with the Contractor to review scope and adequacy of the punch list.
5. Verbal comments will be made to the Contractor by the Construction Manager, the Architect and the Architect's and District's consultants, if in attendance, during the walk-through. These comments will indicate generally the additions and corrections to be made to the punch list. Such comments shall not be considered to be comprehensive; Contractor shall use the comments as guidance in preparing the punch list for the Substantial Completion review.

B. Substantial Completion Meeting: On a date mutually agreed by the District, Architect and Contractor, a meeting shall be conducted at the Project site to determine whether the Work is satisfactory and complete for filing a Notice of Completion (Substantial Completion).

1. Contractor shall provide three working days notice to Architect for requested date of Substantial Completion meeting.
2. The Construction Manager, the Architect and the Architect's and District's consultants, as authorized by the District, will attend the Substantial Completion meeting.
3. In addition to conducting a walk-through of the facility and reviewing the punch list, the purpose of the meeting shall include submission of warranties, guarantees and bonds to the District, submission of operation and maintenance data (manuals), provision of specified extra materials to the District, and submission of other Contract closeout documents and materials as required and if not already submitted.
4. The Construction Manager, the Architect and Architect's consultants, as appropriate, will conduct a walk-through of the facility with the Contractor and review the punch list.

5. Contractor shall correct the punch list and record additional items as may identified during the walk-through, including notations of corrective actions to be taken.
6. Contractor shall retype the punch list and distribute it within three working days to those attending the meeting.
7. If additional site visits by the Construction Manager, the Architect and the Architect's and District's consultants are required to review completion and correction of the Work, the costs of additional visits shall be reimbursed to the District by the Contractor by deducting such costs from the Final Payment.

C. Uncorrected Work: Refer to requirements specified in Section 01450 - Quality Control regarding Contract adjustments for non-conforming Work.

D. Clearing and Cleaning: Prior to the Substantial Completion review, Contractor shall conduct a thorough cleaning and clearing of the Project area, including removal of construction facilities and temporary controls. Refer to Section 01740 - Final Cleaning.

E. Inspection and Testing: Prior to the Substantial Completion review, complete inspection and testing required for the Work, including securing of approvals by authorities having jurisdiction.

1. Complete all inspections, tests, balancing, sterilization and cleaning of plumbing and HVAC systems.
2. Complete inspections and tests of electrical power and signal systems.
3. Complete inspections and tests of conveying (elevator or wheelchair lift) systems.

F. Architect's Certification of Substantial Completion: When Architect determines that list of items to be completed and corrected (Punch List) is sufficiently complete for District to occupy Project for the use to which it is intended, Architect will complete and issue to the District and Contractor a Certificate of Substantial Completion using The American Institute of Architects Form G704 - CERTIFICATE OF SUBSTANTIAL COMPLETION or other form if directed by the District.

G. Notice of Completion: Contractor, after receipt of Architect's certification, shall record and pay for Notice of Completion in compliance with the requirements of authorities having jurisdiction. Provide copies to District and Architect.

1.5 FINAL COMPLETION SUBMITTALS

A. Final Completion Submittals: Prior to application for Final Payment, Contractor shall submit the following.

B. Agency Document Submittals: Submit to District all documents required by authorities having jurisdiction, including serving utilities and other agencies. Submit original versions of all permit cards, with final sign-off by inspectors. Submit all certifications of inspections and tests.

C. Final Specifications Submittals: Submit to District all documents and products required by Specifications to be submitted, including the following:

1. Project record drawings and specifications.

2. Operating and maintenance data.
3. Guarantees, warranties and bonds.
4. Keys and keying schedule.
5. Spare parts and extra stock.
6. Test reports and certificates of compliance.

D. Certificates of Compliance and Test Report Submittals: Submit to District certificates and reports as specified and as required by authorities having jurisdiction, including the following:

1. Sterilization of water systems.
2. Sanitary sewer system tests.
3. Gas system tests.
4. Lighting, power and signal system tests.
5. Ventilation equipment and air balance tests.
6. Fire sprinkler system tests.
7. Roofing inspections and tests.

E. Lien and Bonding Company Releases: Submit to District, with copy to Architect, evidence of satisfaction of encumbrances on Project by completion and submission of The American Institute of Architects Forms G706 - CONTRACTOR'S AFFIDAVIT OF PAYMENT OF DEBTS AND CLAIMS, G706A - CONTRACTOR'S AFFIDAVIT OF RELEASE OF LIENS, and (if applicable) G707 - CONSENT OF SURETY. Comply also with other requirements of District, as directed. All signatures shall be notarized.

F. Subcontractor List: Submit to two copies to District and two copies to Architect of updated Subcontractor and Materials Supplier List.

G. Warranty Documents: Prepare and submit to District all warranties and bonds as specified in Section 01785 - Warranties and Bonds.

1.6 PROJECT RECORD DOCUMENTS

A. Project Record Documents, General: Maintain on site, one set of the following record documents and record actual construction and all revisions to the Work:

1. Contract Drawings.
2. Project Manual, with Specifications, Addenda, Change Orders and other Modifications to the Contract.
3. Reviewed shop drawings, product data and samples.
4. Store Record Documents separate from documents used for construction.

B. Record Drawings: Record information continuously as Work progresses. Do not conceal Work permanently until all required information is recorded. Legibly and to scale, mark a reproducible set of Contract Drawings to record actual construction, including:

1. Measured depths of foundations and footings encountered, measured in relation to finish First Floor datum.
2. Measured horizontal and vertical locations of underground utilities and appurtenances, referenced to permanent ground improvements.
3. Field changes of dimension and detail.

4. Details not on original Contract Drawings. Application of copies of details produced and provided by Architect during construction will be accepted.
5. Reproducible set of Contract Drawings will be provided to Contractor by District through Architect or Construction Manager.

C. Record Specifications: Record changes made by Addenda and Change Orders. In PART 2 - PRODUCTS in each Section, legibly mark and record actual Products installed or used, including:

1. Manufacturer's name and product model or catalog number.
2. Product substitutions or alternates utilized.

D. Submission: Submit Record Documents to Architect with final Application for Payment.

1.7 FINAL PAYMENT

A. Final Payment: After completion of all items listed for completion and correction, after submission of all documents and products and after final cleaning, submit final Application for Payment, identifying total adjusted Contract Sum, previous payments and sum remaining due. Payment will not be made until the following are accomplished:

1. All Project Record Documents have been transferred and accepted by District.
2. All extra materials and maintenance stock have been transferred and received by District.
3. All warranty documents and operation and maintenance data have been received and accepted by District.
4. All liens have been released or bonded by Contractor.
5. Contractor's surety has consented to Final Payment.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

SECTION 01785
WARRANTIES AND BONDS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. General administrative and procedural requirements for preparation and submission of warranties and bonds required by the Contract Documents, including manufacturer's standard warranties on products and special Project warranties.

1. Refer to the Conditions of the Contract for terms of Contractor's special warranty of workmanship and materials.
2. Certifications and other commitments and agreements for continuing services to District are specified elsewhere in the Contract Documents.

1.2 RELATED DOCUMENTS AND SECTIONS

A. District issued General Conditions of the Contract and District issued Supplementary Conditions of the Contract: Performance bond and labor and material payment bond; provisions of the Contract for correction of the Work.

B. Section 01330 - Shop Drawings, Product Data and Samples: General administrative requirements for submittals, applicable to warranties and bonds.

C. Section 01770 - Contract Closeout: General requirements for closeout of the Contract.

D. Individual Product Specifications Sections: Special Project warranty requirements for specific products or elements of the Work; commitments and agreements for continuing services to District.

1.3 DEFINITIONS

A. Warranty: Assurance to District by Contractor, installer, supplier, manufacturer or other party responsible as warrantor, for the quantity, quality, performance and other representations of a product, system service of the Work, in whole or in part, for the duration of the specified period of time.

B. Guarantee: Assurance to District by Contractor or product manufacturer or other specified party, as guarantor, that the specified warranty will be fulfilled by the guarantor in the event of default by the warrantor.

C. Standard Product Warranty: Preprinted, written warranty published by product manufacturer for particular products and specifically endorsed by the manufacturer to the District.

D. Special Project Warranty: Written warranty required by or incorporated into Contract Documents, to extend time limits provided by standard warranty or to provide greater rights for District.

E. Correction Period: As defined in the Conditions of the Contract, Correction Period shall be synonymous with "warranty period", "guarantee period" and similar terms used in the Contract Specifications.

1.4 WARRANTIES AND GUARANTEES

A. Warranties and Guarantees, General: Provide all warranties and guarantees with District named as beneficiary. For equipment and products, or components thereof, bearing a manufacturer's warranty or guarantee that extends for a period of time beyond the Contractor's warranty and guarantee, so state in the warranty or guarantee.

B. Provisions for Special Warranties: Refer to Conditions of the Contract for terms of the Contractor's special warranty of workmanship and materials.

C. General Warranty and Guarantee Requirements: Warranty shall be an agreement to repair or replace, without cost and undue hardship to District, Work performed under the Contract which is found to be defective during the Correction Period (warranty or guarantee) period. Repairs and replacements due to improper maintenance or operation, or due to normal wear, usage and weathering are excluded from warranty requirements unless otherwise specified.

D. Specific Warranty and Guarantee Requirements: Specific requirements are included in product Specifications Sections of Divisions 2 through 16, including content and limitations.

E. Disclaimers and Limitations: Manufacturer's disclaimers and limitations on product warranties and guarantees shall not relieve Contractor of responsibility for warranty and guarantee requirements for the Work that incorporates such products, nor shall they relieve suppliers, manufacturers, and installers required to countersign special warranties with Contractor.

F. Related Damages and Losses: When correcting warranted Work that has been found defective, remove and replace other Work that has been damaged as a result of such defect or that must be removed and replaced to provide access for correction of warranted Work.

G. Reinstatement of Warranty: When Work covered by a warranty has been found defective and has been corrected by replacement or rebuilding, reinstate the warranty by written endorsement. The reinstated warranty shall be equal to the original warranty with an equitable adjustment for depreciation.

H. Replacement Cost: Upon determination that Work covered by a warranty has been found to be defective, replace or reconstruct the Work to a condition acceptable to District, complying with applicable requirements of the Contract Documents. Contractor shall be responsible for all costs for replacing or reconstructing defective Work regardless of whether District has benefited from use of the Work through a portion of its anticipated useful service life.

I. District's Recourse: Written warranties made to the District shall be in addition to implied warranties, and shall not limit the duties, obligations, rights and remedies

otherwise available under law, nor shall warranty periods be interpreted as limitations on time in which the District can enforce such other duties, obligations, rights, or remedies.

1. Rejection of Warranties: The District reserves the right to reject warranties and to limit selections to products with warranties not in conflict with requirements of the Contract Documents.

J. Warranty as Condition of Acceptance: District reserves the right to refuse to accept Work for the Project where a special warranty, certification, or similar commitment shall be required on such Work or part of the Work, until evidence is presented that entities required to countersign such commitments are willing to do so.

1.5 PREPARATION OF WARRANTY AND BOND SUBMITTALS

A. Number of Copies: Make all submittals of warranties, guarantees and bonds in duplicate.

B. Project Warranty and Guarantee Forms: Forms for special Project warranties and guarantees are included at the end of this Section. Prepare written documents utilizing the appropriate form, ready for execution by the Contractor, or the Contractor and subcontractor, supplier or manufacturer. Submit a draft to District through Architect for approval prior to final execution.

1. Refer to product Specifications Sections of Divisions 2 through 16 for specific content requirements, and particular requirements for submittal of special warranties.
2. Prepare standard warranties and guarantees, excepting manufacturers' standard printed warranties and guarantees, on Contractor's, subcontractor's, material supplier's, or manufacturer's own letterhead, addressed to District.
3. Warranty and guarantee letters shall be signed by all responsible parties and by Contractor in every case, with modifications only as approved in advance by District to suit the conditions pertaining to the warranty or guarantee.

C. Manufacturer's Guarantee Form: Manufacturer's guarantee form may be used in lieu of special Project form included at the end of this Section. Manufacturer's guarantee form shall contain appropriate terms and identification, ready for execution by the required parties.

1. If proposed terms and conditions restrict guarantee coverage or require actions by District beyond those specified, submit draft of guarantee to District through Architect for review and acceptance before performance of the Work.
2. In other cases, submit draft of guarantee to District through Architect for approval prior to final execution of guarantee.

D. Signatures: Signatures shall be by person authorized to sign warranties, guarantees and bonds on behalf of entity providing such warranty, guarantee or bond. All signatures on warranties, guarantees and bonds shall be notarized.

E. Co-Signature: All installer's warranties and bonds shall be co-signed by Contractor. Manufacturer's guarantees will not require co-signature.

1.6 FORM OF WARRANTY AND BOND SUBMITTALS

A. Form of Warranty and Bond Submittals: Prior to final Application and Certificate for Payment, compile two copies of each required warranty, guarantee and bond, properly executed by Contractor, or jointly by Contractor, subcontractor, supplier, or manufacturer. Collect and assemble all written warranties and guarantees into binders and deliver binders to District for final review and acceptance.

1. Prior to submission, verify that documents are in proper form and contain all required information and are properly signed.
2. Organize warranty and guarantee documents into an orderly sequence based on the Table of Contents of the Project Manual.
3. Include Table of Contents for binder, neatly typed, following order and Section numbers and titles as used in the Project Manual.
4. Bind warranties, guarantees and bonds in heavy-duty, commercial quality, durable 3-ring vinyl covered loose-leaf binders, thickness as necessary to accommodate contents, with clear front and spine to receive inserts, and sized to receive 8-1/2 inch by 11-inch paper.
5. Provide heavy paper dividers with celluloid or plastic covered tabs for each separate warranty. Mark tabs to identify products or installation, and Section number and title.
6. Include on separate typed sheet, if information is not contained in warranty or guarantee form, a description of the product or installation, and the name, address, telephone number and responsible person for applicable installer, supplier and manufacturer.
7. Identify each binder on front and spine with typed or printed inserts with title "WARRANTIES AND BONDS", the Project title or name, and the name of the Contractor. If more than one volume of warranties, guarantees and bonds is produced, identify volume number on binder.

1.7 TIME OF WARRANTY AND BOND SUBMITTALS

A. Submission of Preliminary Copies: Unless otherwise specified, obtain preliminary copies of warranties, guarantees and bonds within ten days of completion of applicable item or Work. Prepare and submit preliminary copies for review as specified herein.

B. Submission of Final Copies: Submit fully executed copies of warranties, guarantees and bonds within ten days of date identified in Certificate of Completion but no later than three days prior to date of final Application for Payment.

C. Date of Warranties and Bonds: Unless otherwise directed or specified, commencement date of warranty, guarantee and bond periods shall be the date established in the Certificate of Completion.

1. Warranties for Work accepted in advance of date stated in Certificate of Completion: When a designated system, equipment, component parts or other portion of the Work is completed and occupied or put to beneficial use by District, by separate agreement with Contractor, prior to completion date established in the Certificate of Completion, submit properly executed warranties to District within ten days of completion of that designated portion of the Work. List date of commencement of warranty, guarantee or bond period as the date established in the Certificate of Completion.

2. Warranties for Work not accepted as of date established in the Certificate of Completion: Submit documents within ten days after acceptance, listing date of acceptance as beginning of warranty, guarantee or bond period.

D. Duration of Warranties and Guarantees: Unless otherwise specified or prescribed by law, warranty and guarantee periods shall be not less than the Correction Period required by the Conditions of the Contract, but in no case less than one year from the date established for completion of the Project in the Certificate of Completion. See product Specifications Sections in Divisions 2 through 16 of the Project Manual for extended warranty and guarantee beyond the minimum one year duration.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION - (Not Applicable to this Section.)

END OF SECTION

(Sample Form Letters follow)

********** FORM LETTER **********

FOR CONTRACTOR'S / SUBCONTRACTOR'S / MANUFACTURER'S WARRANTY

CONTRACTOR'S/SUBCONTRACTOR'S/SUPPLIER'S LETTERHEAD

SPECIAL LIMITED PROJECT WARRANTY FOR _____ WORK.

We, the undersigned, do hereby warrant that the portion of the Work described above which we have provided for [NAME OF PROJECT] is in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by us, together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of (*years*), commencing (*date identified in Certificate of Completion, unless otherwise directed*) and terminating (*date*).

The following terms and conditions apply to this warranty (*obtain District's approval before submission*):

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by the District, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize the District to have said defective Work repaired or replaced to be made good, and agree to pay to the District upon demand all moneys that the District may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

Local Representative: For warranty maintenance, repair, or replacement service, contact:

(*Name*)_____

(*Address*)_____

(*City*) _____ (*State*) _____ (*ZIP*) _____

(*Phone*) _____ / _____

_____ (*signed*)

_____ (*signed*)

(*Date*) _____

(*Typed Name*) _____

(*Title*) _____

(*Firm*) _____
(*Installer, applicator, manufacturer or supplier*)

(*Date*) _____

(*Typed Name*) _____

(*Title*) _____

(*Firm*) _____
(*Contractor*)

State License No: _____

********** FORM LETTER **********

********** FORM LETTER **********

FOR CONTRACTOR'S / MANUFACTURER'S GUARANTEE

CONTRACTOR'S / MANUFACTURER'S LETTERHEAD

SPECIAL LIMITED PROJECT [WARRANTY] [GUARANTEE] FOR _____ WORK.

We, the undersigned, do hereby [warrant] [guarantee] that the portion of the Work described above which [we have provided] [was provided by (*Installer or Subcontractor's Name*) for [NAME OF PROJECT] in accordance with the Contract Documents and that all such Work as installed will fulfill or exceed all minimum warranty requirements. We agree to repair or replace Work installed by [us,] [(*Installer or Subcontractor's Name*)] together with any adjacent Work which is displaced or damaged by so doing, that proves to be defective in workmanship, material, or function within a period of (*years*), commencing (*date indicated in Certificate of Completion, unless otherwise directed*) and terminating (*date*).

The following terms and conditions apply to this [warranty] [guarantee] (*obtain District's approval before submission*):

In the event of our failure to comply with the above-mentioned conditions within a reasonable time period determined by the District, after notification in writing, we, the undersigned, all collectively and separately, hereby authorize the District to have said defective Work repaired or replaced to be made good, and agree to pay to the District upon demand all moneys that the District may expend in making good said defective Work, including all collection costs and reasonable attorney fees.

Local Representative: For warranty maintenance, repair, or replacement service, contact:

(*Name*)_____

(*Address*)_____

(*City*) _____ (*State*) _____ (*ZIP*) _____

(*Phone*) _____ / _____

_____ (*signed*)

_____ (*signed*)

(*Date*) _____

(*Typed Name*) _____

(*Title*) _____

(*Firm*) _____
(*Installer, applicator, manufacturer or supplier*)

(*Date*) _____

(*Typed Name*) _____

(*Title*) _____

(*Firm*) _____
(*Contractor*)

State License No: _____

********** FORM LETTER **********

SECTION 02226
SELECTIVE SITE DEMOLITION

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Demolition and removal of existing site improvements within Project area, as indicated on Drawings and as necessary to accomplish the Work, including:

1. Asphaltic concrete and portland cement concrete paving.
2. Pavement cutting and removal.
3. Debris removal.

B. Handling and disposal of removed materials.

C. Dewatering of excavations as necessary to control surface and sub-surface water.

1.2 RELATED SECTIONS

A. Section 01010 - Summary of Work: Requirements for scheduling and sequencing of Work.

1.3 SUBMITTALS

A. Demolition and Removal Procedures and Schedule: Submit for Project record only.

B. Project Record Drawings: Submit in accordance with provisions specified in Section 01770 - Contract Closeout. Indicate verified locations of underground utilities and storm drainage system on project record drawings. Refer to Section 01770 - Contract Closeout.

1.4 QUALITY ASSURANCE

A. Regulatory Requirements: Comply with California Building Code (CBC) including CCR Title 24, Volume 2, Part 2, Chapter 18A requirements for demolition activities and all applicable laws, ordinances and regulations of local, State and Federal authorities having jurisdiction, regarding environmental protection and waste management.

1. Obtain required demolition and disposal permits from authorities having jurisdiction.
2. Notify serving utility companies and agencies before starting demolition Work on utilities. Comply cutting and capping sequences and procedures of serving utility.
3. Do not close or obstruct roadways sidewalks hydrants without permits. Maintain fire lanes and exitways clear at all times. Arrange for haul routes with City of Desert Hot Springs Public Works Department.
4. Conform to applicable regulatory procedures when discovering hazardous or contaminated materials.

B. Pre-Construction Conference:

1. Convene a conference at the Project site 3 days prior to starting demolition to review the Drawings and Specifications, requirements of authorities having jurisdiction, instructions and requirements of serving utilities, sequencing and interface considerations and project conditions.
2. Conference shall be attended by Construction Manager, supervisory and quality control personnel of Contractor and all subcontractors performing this and directly-related Work.
3. Submit minutes of meeting to District, Project Inspector and Architect, for Project record purposes.

1.5 PROJECT CONDITIONS

A. Field Measurements and Conditions: In addition to provisions of the Conditions of the Contract, verify dimensions and field conditions prior to construction. Verify condition of substrate and adjoining Work before proceeding with demolition Work. If conflict is found notify Construction Manager, Project Inspector and Architect.

B. Sequencing and Scheduling: Refer to sequence requirements specified in Section 01010 - Summary of Work.

C. Existing Conditions: Conduct demolition to minimize interference with continuing operation of adjoining facilities and to surrounding landscaped areas.

D. Demolition:

1. Use techniques acceptable to authorities having jurisdiction and which will achieve intended results and provide protection of surrounding features to remain.
2. Some items may have been demolished prior to Work of this Contract. Verify existing conditions prior to start of demolition. If items are or have been demolished, contact the Construction Manager.
3. Some items may require postponement of demolition until late in Contract Time period.
4. Phase demolition as necessary to provide adequate interfacing of related Work.

E. Protection: Protect existing construction and adjacent areas with temporary barriers and security devices in accordance with requirements specified in Section 01500 - Temporary Construction Facilities and Controls.

1. Review location and type of construction of temporary barriers with District and/or the Construction Manager.
2. Barriers shall control dust, debris and provide protection for persons occupying and using adjacent facilities.
3. Maintain protected egress and access at all times, in accordance with requirements of authorities having jurisdiction and with permission of Riverside County Building Services Department.

PART 2 - PRODUCTS - (Not Applicable to this Section.)

PART 3 - EXECUTION

3.1 PREPARATION

A. Preparation for Demolition: Erect and maintain temporary barriers to prevent spread of debris, to provide for continued use of adjacent properties.

1. Protect existing construction which is not indicated to be altered.

3.2 DEMOLITION, GENERAL

A. Selective Demolition of Site and Building Elements:

1. Use techniques acceptable to authorities having jurisdiction and which will achieve intended results and provide protection of surrounding features to remain.
2. Some items may have been demolished prior to Work of this Contract. Verify existing conditions prior to start of demolition. If items are or have been demolished contact the Architect and Construction Manager.
3. Some items may require postponement of demolition until late in Contract Time period.
4. Phase demolition as necessary to provide adequate interfacing of related Work.
5. Demolish in an orderly and careful manner. Protect existing foundations, retaining walls, utility structures, other structures and finish materials to remain.

B. Cutting and Patching: Refer to requirements specified in Section 01730 - Cutting and Patching.

3.3 SALVAGED MATERIALS

A. Ownership: Unless otherwise indicated, all materials demolished and removed shall become property of Contractor.

B. Disposal of Materials: Contractor shall haul and dispose of all demolished and removed materials to offsite disposal sites in any legal manner.

1. Except where noted otherwise, immediately remove demolished materials from site.
2. Promptly remove from the site and properly dispose of all contaminated, vermin infested, or dangerous materials encountered.
3. Do not burn or bury materials on site.

3.4 PORTLAND CEMENT CONCRETE AND ASPHALTIC CONCRETE PAVING DEMOLITION

A. Cutting: Make a saw cut at edges of existing paving to be removed, where portions of existing paving are indicated to remain.

B. Cutting Method: Cut with abrasive type, water-cooled saw to a minimum depth of 1-1/2 inches. Cut lines straight and square to face of paving.

C. Aggregate Base: Existing aggregate base may be retained except where landscaping and overexcavation are indicated.

D. Concrete Removal: Break concrete and remove debris. Preserve straight cut.

E. Disposal: Remove debris from the site except where allowed or directed for fill for subsequent earthwork or for landscape walls.

3.5 DEWATERING

A. Dewatering: Dewater site in localized areas as Work progresses.

1. Provide an adequate system to lower and control groundwater in order to permit excavation, construction of structures, and placement of fill materials under dry conditions.
2. Install sufficient dewatering equipment to pre-drain waterbearing strata above and below bottom of structure foundations, drains, sewers, and other excavations.
3. Maintain excavations free of standing water.
4. Provide dewatering 24 hours per day in advance of placement of concrete.
5. Allow no concrete to be placed in standing water.
6. Ensure that trenching and excavations do not cave in due to water.

B. Surface Run-off Water Control:

1. Minimize flow of ground water from adjacent areas into Work areas.
2. Do not restrict flow from adjacent properties such that natural flow is hindered.

C. Water Disposal:

1. Dispose of run-off by legal means and as acceptable to authorities having jurisdiction.
2. Dispose of water removed from excavations in a manner to avoid endangering public health, property, and portions of Work under construction or completed.
3. Dispose of water in a manner to avoid inconvenience to others engaged in work about site.
4. Provide sumps, sedimentation tanks, and other flow control devices as required by authorities having jurisdiction.

3.6 DUST CONTROL

A. Refer to County of Riverside ordinances and requirements.

END OF SECTION

SECTION 02750
PORTLAND CEMENT CONCRETE PAVING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Concrete paving for pedestrian and vehicular traffic.

B. Portland cement concrete mow strips, curbs and gutters.

C. Portland cement concrete sidewalks.

1.2 RELATED SECTIONS

A. Section 02226 - Selective Site Demolition.

B. Section 03300 - Cast-In-Place Concrete

1.3 REFERENCES

A. Standard Specifications for Public Works Construction ("Green Book"), by Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association and the Southern California Districts of the Associated General Contractors of California. Standard Specifications is published by and available from Building News, Division of BNI Publications, Inc., Los Angeles, CA, (213/202-7775).

1. Standard Specifications shall be as amended and adopted by authorities having jurisdiction.
2. Where reference is made to Standard Details, such reference shall be to the Standard Details accompanying the Standard Specifications, as amended and adopted by authorities having jurisdiction.
3. Wherever term "Agency" occurs in Standard Specifications, it shall be understood to mean District for purposes of the Contract.
4. Wherever term "Engineer" occurs in Standard Specifications, it shall be understood to mean Architect for purposes of the Contract.

1.4 SUBMITTALS

A. Mix Design: Design mixes for each concrete mix.

B. Material Certificates signed by manufacturers for each of the following:

1. Cementitious materials and aggregates.
2. Steel reinforcement and reinforcement accessories.
3. Admixtures.
4. Curing compounds.
5. Joint fillers.

1.5 QUALITY ASSURANCE

A. Industry Standard: Perform concrete paving Work in accordance with ACI 301.

B. Regulatory Requirements: Where reference is made to Standard Specifications, perform on-site Work as indicated and referenced on the Contract Drawings and as specified herein.

C. Source Quality Control: Obtain like materials from one source throughout.

D. Lines and Levels: Established by California State Licensed Surveyor or registered Civil Engineer. Costs of surveying services shall be included in the Contract Sum.

1.6 REGULATORY REQUIREMENTS

A. Conform to Standard Specifications for Public Works Construction.

B. Conform to California Code of Regulations (CCR), Volume 2, Part 2, Chapters 18, 18A, 19 and 19A.

C. Conform to California Building Code (CBC), Chapter 11B and ADAAG for accessibility requirements.

D. Comply with OSHA and Cal-OSHA requirements.

E. Continuous surfaces, including walks and sidewalks, shall have a continuous common surface, not interrupted by steps or by abrupt changes in level exceeding 1/2-inch and shall have a minimum width of 48 inches.

F. Surface cross slopes shall not exceed 1/4-inch per foot on any accessible path of travel, except when the enforcing agency finds that due to local conditions it creates an unreasonable hardship, the cross slope may be increased to 1/2 per foot.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery, Storage and Handling: Comply with requirements specified for regular concrete in Section 03301 - Cast-In-Place Concrete System and Sheet AD.1 - Concrete.

1.8 PROJECT CONDITIONS

A. Water and Dust Control: Maintain control of concrete dust and water at all times. Do not allow adjacent planting areas to be contaminated.

PART 2 - PRODUCTS

2.1 BASE MATERIAL

A. Sub-Base and Aggregate Base Material under Portland Cement Concrete Paving: For pavement subject to vehicular traffic, provide sub-base and aggregate base material as as indicated on the Drawings. Aggregate base is not required under portland cement concrete paving subject only to pedestrian traffic in normal use.

2.2 FORM MATERIALS

A. Forms: Steel or wood, profiled to suit Project conditions, to the lines and grades shown on Drawings. Soil forms shall not be used for portland cement concrete paving.

2.3 REINFORCEMENT

A. Steel Reinforcing Bars: ASTM A615, Grade 60, unless otherwise indicated, deformed billet steel bars, clean and free from rust, scale and coatings that would reduce bond.

B. Welded Wire Mesh: ASTM A185, welded plain cold-drawn steel wire fabric, minimum 6 x 6 / 1.9 x 1.9 or as noted on Drawings or required by reference standards and details. Furnish reinforcement in flat sheets, not rolls.

C. Dowels: ASTM A615, 1/2-inch diameter, smooth billet steel slip bars at expansion joints.

D. Tie Wires: 18 gage minimum, black annealed steel.

2.4 CONCRETE MATERIALS

A. Concrete Materials, General: As indicated on Drawings and as specified following. Concrete strengths shall be 2500 psi.

B. Cement: ASTM C150, Type II or Type V, unless sulfate resistance is determined unnecessary by sulfate content tests.

C. Fine and Coarse Aggregates: ASTM C33.

D. Water: Clean and not detrimental to concrete.

E. Chemical Admixtures: ASTM C494, types as follows.

1.	Water Reducing:	Type A.
2.	Set Retarding:	Type B.
3.	Set Accelerating:	Type C.
4.	Water Reducing and Set Retarding:	Type D.
5.	Water Reducing and Set Accelerating:	Type E.
6.	High Range Water Reducing	Type F and G.

Use no admixtures not included in mix design.

F. Color Additive: Natural Color Concrete Paving: Carbon black, harmless to set and strength of concrete, amount per cubic yard of concrete as required by Standard Specifications and details adopted by authorities having jurisdiction.

G. Liquid Curing Compound: ASTM C309 Type I. Comply with all applicable air pollution requirements.

2.5 ACCESSORY MATERIALS

A. Soil Sterilant: As specified in Standard Specifications for Public Works Construction. Soil sterilant shall comply with all applicable environmental protection and hazardous materials laws and regulations.

B. Expansion Joint Filler: ASTM D1751, premolded, compressible 1/2-inch thick non-extruding bituminous type resilient filler, compatible with joint backing and sealing products.

2.6 CONCRETE MIX

A. Concrete Mix and Delivery Requirements, General: Comply with requirements specified in Section 03301 - Cast in Place Concrete System.

B. Concrete Mix for Pedestrian (Sidewalk) Pavements, Natural Color: Standard Specification for Public Works Construction, Section 201-1.1.2 - Class 520-B-2500, with minimum slump of 4-inches.

C. Admixtures: Use accelerating admixtures in cold weather or set retarding admixtures in hot weather only when approved by Architect/Engineer. Do not use calcium chloride.

PART 3 - EXECUTION

3.1 PREPARATION

A. Subgrade Preparation: As indicated on drawings. Fine grading, checking, shaping, and compacting of subgrade shall be complete before start of portland cement concrete paving Work.

B. Aggregate Base: Where indicated the Drawings or, if not indicated, provide aggregate base conforming to requirements of Standard Specifications for Public Works Construction. Compact to 95 percent at vehicular traffic and 90 percent at pedestrian-only traffic.

1. Provide aggregate base at portland cement concrete paving and slabs on grade subject to vehicular traffic or impact loads.
2. Base shall be in place and properly compacted before start of portland cement concrete Work.

C. Curbs and Gutters: Schedule portland cement concrete curbs and gutters to be in place and cured prior to start of adjoining asphaltic concrete and portland cement concrete paving Work.

D. Soil Sterilant: Sterilize soil areas to receive portland cement concrete paving. See Drawings for specifications. Apply soil sterilant in accordance with manufacturer's instructions and applicable environmental regulations. Take care to confine application to the areas to be paved.

E. Moisture Conditioning: Moisten base to minimize absorption of water from fresh concrete. Do not place concrete on standing water.

3.2 FORMING

A. Concrete Formwork:

1. Construct formwork accurately and to configurations and dimensions indicated for finish concrete Work.
2. Formwork shall be substantial, mortar-tight and braced to maintain position and shape during placement of reinforcing and concrete.
3. Hold forms rigidly in place by stakes, clamps, spreaders and braces where required to ensure rigidity.
4. Construct curb forms with smooth side placed next to exposed concrete face.
5. Curb forms shall have true, smooth upper edge.
6. Depth of curb forms at back of curbs shall be equal to full depth of curb.
7. Depth of face forms shall be equal to full face height of curb.
8. Benders or thin plank forms may be used to form curves and at grade changes and curb returns.
9. Back forms for curb returns may be made of 1/2-inch thick benders cleated together for full depth of the curb.
10. Formwork shall not deviate more than 1/4-inch maximum from required positions and levels.
11. Verify formwork alignment and levels as Work proceeds, promptly making adjustments and adding bracing as necessary.
12. Construct and assemble formwork to permit easy stripping and dismantling without damage to concrete. Locate joints at acceptable locations.
13. Place embedded joint filler in position, vertically and in straight lines. Secure joint filler to formwork during concrete placement.

B. Surfaces and Edges: Except where special finishes and tooled edges are indicated, provide all exposed finish surfaces of dense concrete with sharp arises and outside corners.

C. Recesses and Openings: As indicated on Drawings or as directed.

D. Formwork Removal: Remove forms without damaging concrete.

1. Remove the form on the front of curbs in not less than one hour nor more than 6 hours after the concrete has been placed.
2. Remove side forms for sidewalks, gutter depressions, island paving and driveways, not less than 12 hours after the finishing has been completed.

3.3 COORDINATION WITH EXISTING CONSTRUCTION

A. Connection to Existing Construction: Where new concrete is doweled to existing construction, drill holes in existing concrete, insert steel dowels and pack with non-shrinking grout.

B. Preparation of Existing Concrete: Prepare previously placed concrete by cleaning with steel brush and apply bonding agent in accordance with manufacturer's instructions.

3.4 REINFORCEMENT

A. Reinforcement Placement, General: Locate reinforcement as indicated on Drawings or in Standard Specifications, whichever is more stringent.

1. Locate reinforcement to provide required cover by concrete. If not otherwise indicated on Drawings or in Standard Specifications, provide concrete cover in compliance with ACI 318.
2. Place, support and secure reinforcement against displacement.

B. Reinforcement Spacing: Space reinforcement as indicated on Sheet AD.1 - Reinforcing Steel. If not indicated, maintain clear spacing of two times bar diameter but not less than 1-1/2 inches nor less than 1-1/3 times maximum size aggregate.

C. Coordination: Locate reinforcement to accommodate embedded products and formed openings and recesses.

D. Reinforcement Supports: Provide load bearing pads under supports or provide precast concrete block bar supports.

E. Wire Fabric Placement: Place fabric in sheets as long as practicable, lapping adjoining pieces at least one full mesh and lace splices with 16 gage wire. Offset end laps in adjacent widths to prevent continuous laps. Extend fabric to within 1-inch of edge at slabs on grade. Cut mesh at expansion joints and full depth control joints.

F. Dowels: Secure tie dowels in place before depositing concrete. Provide No. 3 bars for securing dowels where no other reinforcement is provided.

3.5 FORMED JOINTS

A. Expansion Joints: Provide expansion (contraction) joints as indicated on the Drawings, but not less than 20 feet on center maximum, in all concrete walks, other exterior flatwork and concrete curbs and gutters. If expansion joints are not indicated, comply with standard details and specifications of authorities having jurisdiction, including Standard Details for Public Works Construction and Standard Specification for Public Works Construction, as applicable.

1. Coordinate locations to align expansion joints in adjoining concrete walks, curbs, gutters and other exterior flatwork.
2. Provide expansion joints also at beginning and end of all curved segments.
3. Provide expansion joints also at intersections of concrete curbs and gutters and building footing.
4. Provide expansion joints also at intersections of concrete paving and building footing.
5. Lay out expansion joint locations to occur where possible at penetrations such as handrail posts and columns.
6. Place expansion control filler to correct elevation and profile.
7. Align curb, gutter, and sidewalk expansion joints.

B. Crack Control Joints: Provide crack control joints as indicated on Drawings, evenly spaced, not to exceed 5 feet on center maximum. If not indicated, locate joints in compliance with Standard Details.

1. Lay out control joint locations to occur at penetrations such as handrail posts and columns and where shown on Drawings.
2. Refer to Drawings for additional information and joint locations.

C. Joint Filler: Place expansion control filler to correct elevation and profile. Recess top of filler 3/4-inch.

3.6 CONCRETE MIXING, CONVEYING AND PLACEMENT

A. Mixing: If batch plant is within travel time not exceeding maximum limits, transit mix concrete in accordance with ASTM C94. If travel time exceeds limits, provide alternative means for mixing and submit for review and approval.

B. Concrete Conveying and Placement: Convey and place concrete in accordance with ACI 301 and requirements specified on Sheet AD.1 - Concrete. Place concrete continuously between predetermined construction joints.

C. Concrete Placement and Consolidation: Comply with ACI 304.

D. Hot Weather Placement: ACI 305.

E. Cold Weather Placement: ACI 306.

F. Natural Color Concrete Paving and Other Exterior Concrete: Provide natural color concrete typically.

G. Protection: Ensure that reinforcement, embedded products, joint fillers and joint devices are not disturbed during concrete placement.

3.7 CONCRETE PAVING FINISHING AND CURING

A. Edges: Rounded, 1/8-inch radius.

B. Tooled Joints: 1-inch deep by 3/16-inch wide tooled joints with 1/8-inch radius corners.

C. Concrete Paving Finish: ACI 301, two-step trowel finish, followed after surface has achieved initial set by flooding of surface and light rubbing with bristle brush so that concrete fines are exposed slightly.

1. Finish surface less than 6 percent shall receive medium broom finish resembling medium grit sandpaper.
2. Finish surface greater than 6 percent shall receive heavy broom finish.
3. Surfaces shall have static coefficients of friction of 1.3 to 1.6 (dry) and 1.2 to 1.4 (wet) when field tested in accordance with ASTM C1028.

D. Concrete Finish at Curbs and Gutters: Comply with Standard Specifications.

E. Curing and Sealing:

1. Curing, Natural Color Exterior Concrete: Apply curing compound immediately after finishing.
2. Curing, Concrete Curbs and Gutters: Apply curing compound as specified in Section 03301 - Cast In Place Concrete System, immediately after finishing. Apply compound in accordance with manufacturer's instructions.

3.8 TOLERANCES AND TESTS

A. Exterior Concrete Tolerance: ACI 301, Class B, 1/4-inch in 10 feet.

B. Drainage Test: After concrete has thoroughly cured, flood test all paving to demonstrate positive drainage. No standing water shall remain 1-hour after test.

C. Inspection and Testing:

1. Field inspection and testing will be performed under provisions of Section 01450.
2. Three concrete test cylinders will be taken for every 75 or less cu. yds. of each class of concrete placed each day.
3. One additional test cylinder will be taken during cold weather and cured on site under same conditions as concrete it represents.
4. One slump test will be taken for each set of test cylinders taken.
5. Maintain records of placed concrete items. Record date, location of pour, quantity, air temperature, and test samples taken.

3.9 PROTECTION

A. Protection During Curing: Protect concrete from premature drying, excessive hot or cold temperatures, and mechanical injury.

B. Protection from Traffic and Mechanical Damage:

1. Prohibit all traffic on portland cement concrete until concrete has fully cured. Minimum time, in all cases, shall be 7 days.
2. Prohibit all vehicular traffic across pedestrian paving unless suitable base and reinforcement have been added.
3. Provide lumber ramping and plywood covering where curbs and gutters are subject to vehicular and equipment traffic during construction.

END OF SECTION

SECTION 03100
CONCRETE FORMWORK

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Formwork for cast in place concrete, with shoring, bracing and anchorage.

B. Forming of openings in concrete for Work specified in other Sections.

C. Form accessories.

D. Placement in forms of inserts and embedded products furnished under other Sections.

1.2 RELATED SECTIONS

A. Section 02750 - Portland Cement Concrete Paving: Formwork for site concrete work.

B. Sheet AD.1 - Reinforcing Steel

C. Section 03300 - Cast-In-Place Concrete

1.3 REFERENCES

A. American Concrete Institute (ACI):

1. ACI 117 – Standard Specifications for Tolerances for Concrete Construction and Materials.
2. ACI 301 - Specifications for Structural Concrete.
3. ACI 318 - Building Code Requirements for Structural Concrete.
4. ACI 347 - Guide to Formwork for Concrete.

B. U.S. Department of Commerce/National Bureau of Standards (NBS): NBS PS 1 - Construction and Industrial Plywood.

1.4 DEFINITIONS

A. Unexposed Finish: A general-use finish, with no appearance criteria, applicable to all formed concrete concealed from view after completion of construction.

B. Exposed Finish: A general-use finish applicable to all formed concrete exposed to view and including surfaces which may receive a paint coating (if any).

1.5 SYSTEM REQUIREMENTS

A. Formwork Design Requirements: Formwork products and execution specified herein are for finish surface quality only.

1. Design, layout and construction of formwork shall be solely the responsibility of the Contractor.

2. Design and construct formwork, shoring and bracing to conform to California Building Code (CBC), Title 24, Part 2, Chapter 19A requirements and ACI 318.
3. Resulting concrete shall conform to shapes, lines and dimensions indicated and required.
4. Tolerances for concrete shall be as specified in ACI 117, ACI 301, ACI 318 and ACI 347, unless otherwise specified or indicated.

1.6 SUBMITTALS

A. Materials List: Forming materials in contact with concrete, if requested by Architect.

B. Product Data: Form release agent.

1.7 QUALITY ASSURANCE

A. Industry Standard: Formwork design and construction shall be in accordance with ACI 301 and ACI 318.

B. Formwork Designer's Qualifications: When required by authorities having jurisdiction, designer of formwork shall be a Civil or Structural Engineer licensed in the State of California.

1.8 REGULATORY REQUIREMENTS

A. Regulatory Requirements: Conform to formwork construction requirements of the California Building Code (CBC) Title 24, Part 2, Chapter 19A as amended and adopted by authorities having jurisdiction.

B. Coordination: Coordinate Work specified in this Section with other Sections which require placement of embedded products and provision of openings and recesses. If formwork is placed after reinforcement, resulting in insufficient concrete cover over reinforcement, request instructions from the Architect before proceeding.

PART 2 - PRODUCTS

2.1 FORMING MATERIALS

A. Forming Materials, General: Conform to ACI 301. Provide materials for contact with concrete which will impart suitable surface quality to completed concrete, including the following.

1. Forms for Exposed Finish Concrete: Plywood, metal, metal-framed plywood faced, or other acceptable panel-type materials to provide continuous, straight, smooth, exposed surfaces. Furnish in largest practical sizes to minimize number of joints and to conform to joint system shown on the Drawings.
2. Forms for Unexposed Finish Concrete: Plywood, lumber, metal, or another acceptable material. Provide lumber dressed on at least two edges and one side for tight fit. When unexposed concrete is intended to receive waterproofing, provide form as for exposed finish concrete.

B. Plywood for Form Surfaces:

1. Plywood for Concealed Surfaces: PS 1, undamaged face, minimum APA C-C Plugged EXT or APA Structural I Sheathing.
2. Plywood, for Exposed Surfaces: PS 1, smooth-faced, undamaged, APA A-C or B-B High Density Overlaid Concrete Form, Class I, if forms are intended to be re-used, or PS 1, smooth-faced, undamaged, APA B-B Plyform, Class I. Plywood for exposed surfaces shall be minimum 5/8-inch thick. Seal with resin type sealer, Form-Saver by Sonneborn, or equal. Product shall comply with applicable air quality regulations for VOC.

C. Hardboard: For curved surfaces, tempered hardboard, Masonite Corp., or equal.

D. Fillets for Chamfered Corners: Wood molding at plywood or lumber forms; rigid plastic at steel, fiberglass and plastic forms.

2.2 FORMWORK MATERIALS

A. Formwork Materials, General: Conform to ACI 301. Provide materials to construct formwork to support forming materials in contact with concrete, of sufficient capacity to withstand pressures of concrete placement and to support concrete in place until cured, without distortion.

2.3 FORMWORK ACCESSORIES

A. Form Ties: Factory-fabricated, adjustable-length, removable or snap-off metal form ties designed to prevent form deflection and to prevent spalling of concrete upon removal.

1. Provide units that will leave no metal closer than 1-1/2 inches to the plane of the exposed concrete surface.
2. Provide units that will leave no hole no larger than 1-inch diameter.

B. Form Release Agent: Commercial formulation form release agent, colorless product with the following characteristics:

1. Will not bond with, stain concrete, absorb moisture or adversely affect concrete surfaces.
2. Will not impair subsequent treatments of concrete surfaces or bond of applied coatings.
3. Complies with applicable air quality regulations for volatile organic compounds (VOC's).

PART 3 - EXECUTION

3.1 EARTH FORMS

A. Earth (Soil) Forms, General: Except as otherwise indicated on Drawings, conform to ACI 301, ACI 347 and California Building Code (CBC) requirements. Refer also to notes on Structural Drawings.

B. Soil Forms and Trenches: Hand trim sides and bottom of soil forms and trenches. Remove loose soil prior to placing concrete.

3.2 CONSTRUCTED FORMWORK

A. Constructed Formwork, General: Construct and erect formwork, shoring and bracing to achieve design requirements, in conformance to ACI 301, ACI 347 and California Building Code (CBC) Title 24, Part 2 requirements.

B. Constructed Formwork Design:

1. Design and fabricate forms for easy removal, without impact, shock, or damage to concrete surfaces or other portions of the work.
2. Design to support all applied loads until concrete is adequately cured, within allowable tolerances and deflection limits.

C. Constructed Formwork Construction: Construct and brace formwork to accurately achieve end results required by contract documents, with all elements properly located and free of distortion. Provide for necessary openings, inserts, anchorages, and other features shown or otherwise required.

1. Formwork Segments: Arrange and assemble formwork to permit dismantling and stripping without damage to concrete.
2. Joints: Minimize form joints and make forms watertight to prevent leakage of concrete mortar. Locate form joints, at exposed concrete, to be symmetrical about center of panel, unless otherwise noted. Align joints symmetrically at exposed conditions.
3. Chamfers: Provide 3/4-inch chamfered edges and corners at all exposed locations, unless specifically indicated otherwise on the Drawings.
4. Permanent openings: Provide openings to accommodate Work specified in other Sections. Size and locate openings accurately. Securely support items built into forms; provide additional bracing at openings and discontinuities in formwork.
5. Temporary openings: Provide temporary openings for cleaning and inspection. Provide drain openings at bottoms of formwork to allow water to drain. Locate temporary openings in most inconspicuous locations at base of forms, closed with tight-fitting panels designed to minimize appearance of joints in finished concrete Work.

D. Formwork Bracing and Shoring: Provide bracing and shores to ensure stability of formwork and accommodate all construction loads. Use form ties of sufficient strength and sufficient quantities to prevent formwork spreading. Maintain principal shores to support concrete until minimum required strength is achieved.

E. Inspection: Before placing of concrete, and after placement of reinforcing steel in the forms, provide notification so that proper inspection can be made. Make such notification at least 2 working days in advance of placing concrete.

F. Rejection of Defective Work: Any movement or bellying of forms during construction or variations in excess of the tolerances specified will be considered just cause for the removal of such forms and, in addition, the concrete construction so affected. Reconstruct forms, place new concrete and required reinforcing steel at no additional cost to the District.

3.3 INSERTS, EMBEDDED PRODUCTS AND OPENINGS

A. Embedded Products: Provide formed openings where required for items to be embedded in or pass through concrete. Install accessories in accordance with manufacturer's instructions and referenced standards, level, straight and plumb.

B. Openings: Size and locate formed openings, depressions, recesses and chases to accommodate products to be applied to, built into and pass through concrete Work. Coordinate size, location and placement of inserts, embedded products, openings and recesses with Work specified in other Sections.

C. Anchors and Other Devices: Set and build into concrete formwork anchorage devices and other embedded products required for Work to be attached to or supported by concrete elements.

D. Locating Embedded Products and Openings: Use setting drawings, diagrams, instructions and templates to set embedded products.

E. Screeds: Set screeds and establish level for tops of concrete slabs and leveling for finish surfaces. Shape surfaces as indicated on the Drawings. Provide cradle, pad or base type screed supports for concrete over waterproof membranes and vapor retarders.

3.4 FORM RELEASE AGENT

A. Form Release Agent: Provide either form materials with factory-applied non-absorptive liner or field-applied form coating which shall comply with applicable air quality regulations for VOC. If field-applied coating is employed, thoroughly clean and recondition formwork and reapply coating before each use. Rust on form surfaces will not be acceptable.

B. Form Release Agent Application: Comply with manufacturer's instructions and recommendations.

C. Restrictions: Do not apply release agent where concrete will receive applied finish which might be affected by agent. Do not apply release agent where decorative wood graining is intended for concrete surface. Leave form face dry.

3.5 FORM CLEANING

A. Form Cleaning, General: Clean and remove foreign matter within forms as erection and placement proceeds. Clean formed cavities of debris prior to concrete placement.

B. Formwork Reuse: Do not reuse wood and plywood forming materials which contact concrete, except as follows:

1. High density plywood may be cleaned and reused for exposed concrete.
2. Unfaced plywood may be reused for concealed concrete.
3. Steel and fiberglass forming materials may be cleaned and reused.

C. Patching and Repairs: Patch tie holes with sheet metal patches and restore forms to like new condition prior to reuse.

3.6 FORMWORK REMOVAL

A. Removal of Non-Load-Bearing Formwork After Superimposed Loads or as Approved by Engineer: Provided that concrete has hardened sufficiently that it will not be damaged and has achieved sufficient strength to support its own weight and all imposed construction and design loads, forms not actually supporting weight of concrete or weight of soffit forms may be removed after concrete has cured at not less than 50 degrees F for 24 hours. Comply with California Building Code (CBC) requirements. Maintain curing and protection operations after form removal.

B. Removal of Load-Bearing Formwork: Do not remove shoring and forms supporting weight of concrete, such as beam soffits, joists, slabs, and other structural elements, until concrete has attained its 28 day specified compressive strength, unless otherwise specified or permitted by the Structural Engineer of Record. In addition, the Contractor shall have determined that the actual compressive strength attained is adequate to support the weight of the concrete and superimposed loads. Comply with California Building Code (CBC) requirements. Maintain curing and protection operations after form removal.

C. Formwork Removal:

1. Loosen forms carefully. Do not wedge pry bars, hammers or tools against concrete surfaces to be exposed to view.
2. Remove formwork progressively so no unbalanced loads are imposed on structure. Remove formwork without damaging concrete surfaces.
3. Remove or snap off metal spreader ties inside wall surface. Cut nails and form ties off flush and leave surfaces level and clean.

3.7 PATCHING

A. Schedule: Patch forming and tie holes immediately after form removal.

B. Cleaning: Clean surface of all loose materials and soiling.

C. Patching: Patch all holes and depressions with grouting gun and grout mix of one part cement and 2-1/2 parts mortar sand.

3.8 FORMWORK SCHEDULE

A. Footings and Walls, Not Exposed to View: Site fabricated plywood or lumber, coated with form release agent.

B. Footings and Walls, Exposed to View: Site fabricated plywood, coated with form release agent compatible with applied finish coatings.

END OF SECTION

SECTION 07600
FLASHING AND SHEET METAL

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Flashing and sheet metal components for building construction:

1. Sheet metal fascia

1.2 RELATED SECTIONS

A. Section 09900 - Painting: Field finish painting of exposed flashing and sheet metal except prefinished systems.

1.3 REFERENCES

A. National Roofing Contractors Association (NRCA):

1. NRCA - Roofing and Waterproofing Manual.
2. NRCA - Steep Roofing Manual.

B. Sheet Metal and Air Conditioning Contractors National Association (SMACNA) - Architectural Sheet Metal Manual, current edition.

C. American Society for Testing and Materials (ASTM).

1.4 SUBMITTALS

A. Product Data: For flashing, sheet metal, and accessories; manufacturer's technical product data, installation instructions and general recommendations for each specified sheet material and fabricated product.

B. Shop Drawings:

1. Indicate layout, material profiles, methods of joining, and fastening and anchorages details, and installation details.
2. Include major counterflashings, trim/fascia units and expansion joint systems.
3. Include gutters, downspouts and scuppers.
4. Describe material profile, jointing pattern, jointing details, fastening methods, and installation details.
5. Provide layouts at 1/4" = 1'-0" scale minimum and details at 3" = 1'-0" scale minimum.
6. Scaled manufacturer's catalog data may be submitted for standard production, factory-fabricated products.

1.5 QUALITY ASSURANCE

A. Fabricator and Installer: Company specializing in flashing and sheet metal work with minimum of five years of verifiable, experience on commercial and institutional projects.

B. Pre-Application Conference: Attend roofing pre-application conference with Contractor, roofing subcontractor, District Representative and Architect to establish coordination of parties and full understanding of construction documents.

1.6 DELIVERY, STORAGE AND HANDLING

A. Delivery: Package and protect materials during shipment to avoid dampness and staining. Uncrate and inspect materials for damage, dampness, and staining upon delivery to the Project site. Remove from the site and replace damaged materials that cannot be restored to like-new condition.

B. Storage: Store materials in dry, weather-tight, ventilated areas until immediately before installation. Stack preformed and prefinished material to prevent twisting, bending, or abrasion, and to provide ventilation. Prevent contact with materials during storage which may cause discoloration, staining, or damage.

C. Handling: Handle sheet metal items to avoid damage to surfaces, edges, and ends.

1.7 PROJECT CONDITIONS

A. Coordination: Coordinate Work specified in this Section with interfacing and adjoining Work for proper sequencing of each installation. Ensure best possible weather resistance and durability of Work and protection of materials and finishes.

PART 2 - PRODUCTS

2.1 FLASHING AND SHEET METAL MATERIALS

A. Zinc-Coated (Galvanized) Steel: Commercial quality sheet steel with 0.20 percent copper, ASTM A653; Coating Designation G60 hot-dip galvanized typically and G90 for parapet caps, mill phosphatized where indicated for painting; 20 gage minimum except as otherwise indicated on the Drawings or recommended by SMACNA Architectural Sheet Metal Manual.

2.2 ACCESSORY MATERIALS

A. Accessory Materials: Provide accessory materials and other items essential to complete the sheet metal installation. Metal accessories shall be made of the same materials as the items to which they are applied.

B. Fasteners, General: Same metal as flashing/sheet metal or other non-corrosive metal as recommended by sheet manufacturer. Match finish of exposed heads with material being fastened. Provide soft neoprene washers at exposed fasteners.

1. Sheet steel fasteners: Galvanized steel or stainless steel.
2. Fasteners to wood substrate: Refer to Section 06100 - Rough Carpentry for requirements. See details on Drawings. Use full-threaded screws unless otherwise indicated.
3. Fasteners to concrete, masonry and metal substrates: Refer to Section 05501 - Miscellaneous Metal Fabrications for requirements. See details on Drawings.

a. Use threaded concrete and masonry fasteners typically at concrete and solid masonry substrates.
b. Use self-drilling, self-threading fasteners typically at metal substrates.

C. Bituminous Coating: Tnemec 46-450 Heavy Tnemecol or equal, high-build mineral-filled coal tar pitch coating, or a cold-applied asphalt mastic complying with SSPC-Paint 12, except containing no asbestos fibers.

D. Mastic Sealant: Polyisobutylene; non-hardening, non-skinning, non-drying, non-migrating sealant, as specified in Section 07900 - Joint Sealers.

E. Elastomeric Sealant: Generic type recommended by manufacturer of metal and fabricator of components being sealed and complying with requirements for joint sealants as specified in Section 07900 - Joint Sealers.

F. Epoxy Seam Sealer: 2-part non-corrosive metal seam cementing compound, recommended by metal manufacturer for exterior/interior non-moving joints including riveted joints.

G. Adhesives: Type recommended by flashing sheet manufacturer for waterproof/weather-resistant seaming and adhesive application of flashing sheet.

H. Elastic Flashing Filler: Closed-cell polyethylene or other soft closed-cell material recommended by elastic flashing manufacturer as filler under flashing loops to ensure movement with minimum stress on flashing sheet.

B. Field Primer and Finish Paints: As specified in Section 09900 - Painting.

J. Plastic Cement: FS SS-C-153, Type I, asphaltic base cement.

K. Miscellaneous Metal Accessories: Provide sheet metal clips, straps, anchoring devices, and similar accessory units as required for installation of the Work, matching or compatible with material being installed, non-corrosive, size and gage required for performance.

2.3 FABRICATION

A. Shop Fabrication, General: Shop-fabricate sheet metal to greatest extent possible. Comply with details shown on Drawings and with applicable requirements of referenced standards and other recognized industry practices to accommodate local climatic considerations.

1. Fabricate sheet metal for waterproof and weather-resistant performance, with expansion provisions for running work, sufficient to permanently prevent leakage, damage, or deterioration of the Work.
2. Fabricate sheet metal items of the materials specified below. Form sheet metal Work to fit substrates.
3. Form exposed sheet metal work without excessive oil-canning, buckling, and tool marks, true to line and levels indicated, with exposed edges folded back to form hems.
4. Form pieces and sections in longest practical lengths, true to shape, accurate in size, square, and free from distortion or defects.

5. Typically, provide sheet metal items in 8- to 10-foot lengths. Single pieces less than 8-feet long may be used to connect to factory-fabricated inside and outside corners, and at ends of runs.
6. Fabricate vertical faces with bottom edge formed outward 1/4-inch and hemmed to form drip, fabricate to allow toe to extend 2 inches over roofing.

B. Edges: Hem exposed edges on underside 1/2-inch. Miter and seam corners.

C. Corners: Fabricated from one piece with minimum 18-inch long legs; lock seam and solder for rigidity.

D. Seams: Typically fabricate non-moving seams in sheet metal with flat lock seams.

1. Typical Seams: Overlapped and sealed seams.
2. Coping Seams: Lock seams, flattened.
3. Seams, Horizontal to Vertical Transitions: Solder joints.
4. Soldered seams: Tin edges to be seamed, form seams, and solder.

E. Configurations: As indicated on Drawings and as referenced to SMACNA Architectural Sheet Metal Manual.

F. Expansion Provisions: Where lapped or bayonet-type expansion provisions in sheet metal Work cannot be used or would not be sufficiently waterproof and weatherproof, form expansion joints of intermeshing hooked flanges, not less than 1-inch deep, filled with mastic sealant (concealed within joints).

1. Provide expansion joints per SMACNA Standards, but not greater than 30 feet on center.

G. Sealant Joints: Where movable, non-expansion type joints are indicated or required for proper performance of sheet metal Work, form metal to provide for proper installation of elastomeric sealant, in compliance with referenced SMACNA standards.

H. Exposed Sheet Metal Items: Galvanized sheet steel.

I. Metal Separations: Provide for separation of metal from non-compatible metal or corrosive substrates by coating concealed surfaces at locations of contact, with bituminous coating or other permanent separation as recommended by manufacturer/fabricator.

J. Standard Products: Standard production products, conforming substantially to details and design as shown, intended, or as required to provide continued watertightness, are acceptable for counterflashing, reglets, gravel stops, copings and edging in stock patterns.

2.4 SHEET METAL FINISH (GALVANIZED)

A. Preparation: Shop prepare metal surfaces for field painting by bonderizing or priming. Pretreat galvanized metal as recommended by primer paint manufacturer.

B. Sheet Metal Finish: Unless otherwise indicated, all exposed exterior sheet metal, except stainless steel or factory finish painted steel, is intended to receive field-applied special

coating finish, as specified in Section 09966 - Urethane Coating System for Steel. Other sheet metal shall be painted only if so noted on the Drawings.

C. Priming: All exposed sheet metal, except stainless steel, is intended for field finish painting. Shop prime all sheet metal indicated to be field painted. Exposed surfaces shall be ready for field finish painting as specified in Section 09966 - Urethane Coating System for Steel or Section 09900 - Painting, as applicable.

D. Backpriming: Backpaint concealed metal surfaces with bituminous coating, to a minimum dry film thickness of 15 mils.

E. Fasteners: Exposed fasteners shall match finish of surrounding material.

PART 3 - EXECUTION

3.1 PREPARATION

A. Field measure site conditions prior to fabricating Work.

B. Install starter and edge strips, and cleats before starting installation.

C. Verify roof openings, curbs, pipes, sleeves, ducts and vents through roof are solidly set, cant strips and reglets in place and nailing strips located.

D. Verify membrane termination and base flashings in place, sealed and secure.

3.2 INSTALLATION, GENERAL

A. Locations and Details: As indicated on Drawings. If conditions are not indicated, generally provide sheet metal flashing in the angles formed where roof decks abut walls, curbs, ventilators, pipes, or other vertical surfaces and wherever indicated and necessary to make the Work watertight and weathertight.

B. Installation, General: Except as otherwise indicated, conform to Drawing details and with referenced SMACNA - Architectural Sheet Metal Manual details. If details or conditions are not indicated, comply with standard details and recommended practices in SMACNA - Architectural Sheet Metal Manual, and referenced industry standards. For proprietary products, conform to manufacturer's installation instructions and recommendations.

1. Make lines, profiles, arrises, and angles accurate, sharp and true. Make corners square, surfaces true and straight in planes.
2. Exposed surfaces shall be free from visible wave, warp, and buckle, and tool marks. Fold back exposed edges neatly to form a 1/2-inch hem on the concealed side. Make sheet metal exposed to the weather watertight with provisions for expansion and contraction.
3. Anchor sheet metal fabrications securely in place by methods indicated, providing for thermal expansion of metal units; conceal fasteners where possible, and set units true to line and level as indicated.
4. Install sheet metal flashing and trim with laps, joints, and seams that will be permanently watertight and weatherproof. Provide lapped and sealed joints only where indicated and where approved by the Architect.

5. Seal metal joints watertight. Apply plastic cement compound between metal flashings and felt flashings.

C. Expansion Control: Provide for expansion and contraction of sheet metal as recommended in reference standards.

1. Sheet metal shall accommodate thermal expansion and contraction resulting from an ambient temperature differential of 120 degrees F, which may result in a metal surface temperature range of 180 degrees F, without causing buckling, excessive stresses on structural elements or fasteners, stresses on glazing, failure of seals, reduction of performance, or other detrimental effects on appearance and performance.
2. Provide expansion and contraction control joints at not more than 40-foot intervals typically, except for copings, gravel stops and other roof edge terminations.
3. For copings, gravel stops and other roof edge terminations, provide expansion and contraction control joints at 10 feet on center maximum.
4. Space joints evenly.
5. Where the distance between the last expansion joint and the end of the continuous run is more than half the required interval, provide an additional joint.

D. Protection from Contact with Dissimilar Materials:

1. Metal surfaces: Coat surfaces in contact with mortar, concrete, or other cementitious materials, with alkali-resistant bituminous coating.
2. Dissimilar metals: Apply 7-1/2 mil minimum dry film thick coating of bituminous paint to each contacting face of dissimilar metals, for net 15 mil minimum thickness of coating.
3. Wood or other absorptive materials: Paint surfaces that may become repeatedly wet and in contact with metal with heavy coat of bituminous coating.

3.3 PROTECTION

A. Protection: Protect sheet metal flashings and trim during remainder of construction to ensure that Work will be without damage or deterioration other than natural weathering at time of Substantial Completion review.

END OF SECTION

SECTION 07900
JOINT SEALERS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Exterior joints sealers in vertical surfaces and non-traffic horizontal surfaces.

B. Fire-rated joint sealers in vertical surfaces of exterior walls.

C. Fire-rated joint sealers at floor to wall condition.

1.2 RELATED SECTIONS

A. Section 02750 - Portland Cement Concrete Paving: Curb and gutter and paving joints shall be sealed with products specified in Section 07900 - Joint Sealers.

B. Section 07600 - Flashing and Sheet Metal: Joint shall be sealed with products specified in Section 07900 - Joint Sealers.

C. Section 08410 - Aluminum Entrances and Storefronts: Sealants used for fabrication of framing and for installation of glazing. Perimeter joints shall be sealed with products specified in Section 07900 - Joint Sealers.

D. Section 08800 - Glazing: Sealers used for installation of glass.

E. Section 09900 - Painting: Use of painter's caulk for preparation of surfaces to receive field finish paint.

1.3 SYSTEM DESCRIPTION

A. Joint Sealer Work for Weathertightness: Work includes all interior and exterior caulking and sealing required to make building weathertight and includes caulking and sealing wherever expansion and contraction occurs and between materials and products which could lead to infiltration of moisture, water, light or air blown particles into building.

B. Joint Sealer Work for Acoustical Control: Work includes interior caulking and sealing required to stop airborne sound transmission through building assemblies.

C. Joint Sealer Work for Moisture Control: Work includes interior caulking and sealing to fill openings and seams to prevent moisture penetration.

D. Joint Sealer Work for Appearance: Work includes interior caulking and sealing to neatly trim and fill openings prior to painting.

E. Definition: The terms sealant and caulking shall be considered synonymous.

1.4 REFERENCES

A. Sealant, Waterproofing and Restoration Institute (SWRI): Sealants - The Professional's Guide.

B. American Society for Testing and Materials (ASTM): Standards referenced apply to the work only to the extent specified by the reference.

1.5 SUBMITTALS

A. Product Data: Each joint sealant product required. Indicate sealant chemical characteristics, performance criteria, limitations, color availability.

B. Installation Instructions: Instructions for joint preparation and joint sealer application. Note all deviations from SWRI recommendations.

C. Samples:

1. For initial selection purposes: Manufacturer's standard bead samples, consisting of strips of actual products showing full range of colors available, for each product exposed to view.
2. For verification purposes: Each type and color of joint sealant required. Install joint sealant samples in 1/2-inch-wide joints formed between two 6-inch-long strips of material matching the appearance of exposed surfaces adjacent to joint sealants.

D. Certification:

1. Certification by joint sealant manufacturer that sealants plus the primers and cleaners required for sealant installation comply with local regulations controlling use of volatile organic compounds.
2. Certification from manufacturers of joint sealants attesting that their products comply with specification requirements and are suitable for the use indicated.

E. Qualification Data: Installer's qualifications, complying with requirements specified in Article titled QUALITY ASSURANCE. Include list of completed projects with project names addresses, names of architects and owners, plus other information specified.

F. Test Data: Compatibility and adhesion test reports from elastomeric sealant manufacturer indicating that materials forming joint substrates and joint sealant backings have been tested for compatibility and adhesion with joint sealants. Include sealant manufacturer's interpretation of test results relative to sealant performance and recommendations for primers and substrate preparation needed to obtain adhesion.

G. Product test reports for each type of joint sealants indicated, evidencing compliance with requirements specified.

H. Pre-Construction field test reports indicating which products and joint preparation methods demonstrate acceptable adhesion to joint substrates.

1.6 QUALITY ASSURANCE

A. Applicator's Qualifications: Company specializing in joint sealer work with minimum three years documented experience and approved by sealant manufacturer. Installer shall have successfully completed, within previous 3 years, at least 3 joint sealer installations of similar type and scope as that required for Project.

B. Single Source Responsibility for Joint Sealer Materials: Obtain joint sealer materials from a single manufacturer for each different product required.

C. Industry Standard: Conform to SWRI - Sealants: The Professionals Guide, requirements and recommendations for installation conditions, substrate materials and sealant product selection.

D. Product Testing: Provide comprehensive test data for each type of joint sealer based on tests conducted by a qualified independent testing laboratory on current product formulations within a 24-month period preceding date of Contractor's submittal of test results to Architect.

1. Test elastomeric sealants for compliance with requirements specified by reference to ASTM C920. Include test results for hardness, stain resistance, adhesion and cohesion under cyclic movement (in conformance to ASTM C719), low-temperature flexibility, modulus of elasticity at 100 percent strain, effects of heat aging, and effects of accelerated weathering.
2. Include test results performed on joint sealers after they have cured 1 year.

E. Pre-Construction Field Testing: Prior to installation of joint sealants, field-test their adhesion to joint substrates as follows:

1. Locate test joints where directed by Architect.
2. Conduct field tests for each application indicated below:

   a. Each type of elastomeric sealant and joint substrate indicated.
   b. Each type of non-elastomeric sealant and joint substrate indicated.

3. Arrange for tests to take place with both Architect and joint sealer manufacturer's technical representative present.
4. Test Method: Test joint sealers by hand pull method described below:

   a. Install joint sealants in 5-feet joint lengths using same materials and methods for joint preparation and joint sealant installation required for completed Work. Allow sealants to cure fully before testing.
   b. Make knife cuts as follows: A horizontal cut from one side of joint to the other followed by 2 vertical cuts approximately 2 inches long at side of joint and meeting horizontal cut at top of 2 inch cuts. Place a mark 1 inch from top of 2 inch piece.
   c. Use fingers to grasp 2 inch piece of sealant just above 1 inch mark; pull firmly down at a 90 degree angle or more while holding a ruler along side of sealant. Pull sealant out of joint to the distance recommended by sealant manufacturer for testing adhesive capability, but not less than that equaling specified maximum movement capability in extension; hold this position for 10 seconds.

5. Report whether or not sealant in joint connected to pulled-out portion failed to adhere to joint substrates or tore cohesively. Include data on pull distance used to test each type of product and joint substrate.
6. Evaluation of Field Test Results: Sealants not evidencing adhesive failure from testing, in absence of other indications of noncompliance with requirements, will be considered satisfactory. Do not use sealants which fail to adhere to joint substrates during testing.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery: Deliver materials in original, tightly sealed containers or unopened packages with manufacturer's name, labels, product identification, lot numbers (where appropriate), color, expiration period for use, pot life, curing time, and mixing instructions for multi-component materials.

B. Storage and Handling: Store and handle materials in compliance with manufacturers' instructions and recommendations, to prevent their deterioration or damage due to moisture, high and low temperatures, contaminants, or other causes. Store materials out of weather in original containers or unopened packages as recommended by manufacturer.

1.8 WARRANTY

A. Extended Warranty: Contractor and sealant applicator shall jointly furnish a written warranty to the District stating that joints sealed as specified in this Section which fail to achieve and maintain air tight and watertight seal, exhibit loss of adhesion or cohesion, or do not cure within a period of five years from the date established in "Notice of Completion", except for failure due to structural defects, will be repaired or reconstructed at no cost to District.

1.9 PROJECT CONDITIONS

A. Environmental Conditions: Do not proceed with installation of joint sealants under the following conditions:

1. When ambient and substrate temperature conditions are outside the limits permitted by joint sealant manufacturer; below 40 degrees F or above 100 degrees F.
2. When joint substrates are wet.

B. Joint Width Conditions: Do not proceed with installation of joint sealants where joint widths are less than allowed by joint sealant manufacturer for application indicated.

C. Joint Substrate Conditions: Do not proceed with installation of joint sealants until contaminants capable of interfering with their adhesion are removed from joint substrates.

D. Project Conditions:

1. Do not install solvent curing sealants in enclosed building spaces.
2. Maintain temperature and humidity recommended by the sealant manufacturer during and after installation.

1.10 SEQUENCING AND SCHEDULING

A. Sequencing and Scheduling: Sequence installation of joint sealers to occur not less than 21 nor more than 30 days after completion of waterproofing, unless otherwise indicated.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

A. Compatibility: Provide joint sealers, joint fillers and other related materials that are compatible with one another and with joint substrates under conditions of service and application, as demonstrated by sealant manufacturer based on testing and field experience.

B. Colors: Standard or custom colors as selected by Architect to match or suit surrounding finish materials.

2.2 ELASTOMERIC JOINT SEALANTS

A. Elastomeric Sealant Standard: Provide manufacturer's standard chemically curing, elastomeric sealant of base polymer indicated which complies with ASTM C920 requirements, including those referenced for Type, Grade, Class, and Uses.

B. One-Part Non-Acid-Curing Silicone Sealant: Type S, Grade NS, Class 25; suitable for Uses T, NT, M, G, A, and, as applicable to joint substrates indicated, O; and complying with the following requirements for Uses and additional joint movement capability:

1. Additional capability, when tested for adhesion and cohesion under maximum cyclic movement in conformance to ASTM C719, to withstand the following percentage changes in joint width as measured at time of application and remain in compliance with other requirements of ASTM C920 for Uses with 50 percent movement in both extension and compression for a total of 100 percent movement.
2. Acceptable Products and Manufacturers: As listed below. Equivalent products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

    a. Chem-Caulk N-Cure 2000, by Bostik Construction Products Div.
    b. Dow Corning 790, by Dow Corning Corp.
    c. Silglaze N SCS 2501, by General Electric Co.
    d. Silpruf SCS 2000, by General Electric Co.
    e. 864, by Pecora Corp.
    f. Rhodorsil 5C, by Rhone-Poulenc Inc.
    g. Spectrum 1, by Tremco, Inc.
    h. Spectrum 2, by Tremco, Inc.

C. One-Part Acid-Curing Silicone Sealant: Type S, Grade NS, Class 25; suitable for Uses NT, G, A, and others as recommended by sealant manufacturer.

1. Acceptable Products and Manufacturers: As listed below. Equivalent products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

   a. Chem-Caulk 1200, by Bostik Construction Products Div.
   b. Dow Corning 999A, by Dow Corning Corp.
   c. SCS 1000, by General Electric Co.
   d. Construction 1200, by General Electric Co.
   e. 863, by Pecora Corp.
   f. Rhodorsil 3B, by Rhone-Poulenc Inc.
   g. Rhodorsil 90, by Rhone-Poulenc Inc.
   h. OmniPlus, by Sonneborn Building Products Div., Rexnord Chemical Products Inc.
   i. Proglaze, by Tremco, Inc.

D. One-Part Mildew-Resistant Silicone Sealant: Type S, Grade NS, Class 25; suitable for Uses NT, G, A, and, as applicable to non-porous joint substrates indicated, O; formulated with fungicide; intended for sealing interior joints with non-porous substrates and subject to in-service exposure to conditions of high humidity and temperature extremes.

1. Acceptable Products and Manufacturers: As listed below. Products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

   a. Dow Corning 786, by Dow Corning Corp.
   b. SCS 1702 Sanitary, by General Electric Co.
   c. 863 #345 White, by Pecora Corp.
   d. Rhodorsil 6B White, by Rhone-Poulenc Inc.
   e. Proglaze White, by Tremco Inc.
   f. OmniPlus, by Sonneborn Building Products Div., Rexnord Chemical Products Inc.

E. One-Part Non-Acid-Curing Silicone Sealant for Use T: Type S, Grade NS, Class 25; suitable for Uses T, M, and, as applicable to joint substrates indicated, O; and complying with the following requirement for additional joint movement capability:

1. Additional capability, when tested for adhesion and cohesion under maximum cyclic movement in conformance to ASTM C719, to withstand the following percentage changes in joint width as measured at time of application and remain in compliance with other requirements of ASTM C920 for Uses with 100 percent movement in extension and 50 percent movement in compression for a total of 150 percent movement.
2. Specified Product and Manufacturer: Dow Corning 888, by Dow Corning Corp.
3. Acceptable Products and Manufacturers: None identified. Products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

2.3 LATEX JOINT SEALANTS

A. Acrylic-Emulsion Sealant: Manufacturer's standard, one part, non-sag, mildew-resistant, acrylic-emulsion sealant complying with ASTM C834, formulated to be paintable and

recommended for exposed applications on interior and on protected exterior locations involving joint movement of not more than plus or minus 5 percent.

1. Acceptable Products and Manufacturers: As listed below. Products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

   a. Chem-Calk 600, by Bostik Construction Products Div.
   b. AC-20, by Pecora Corp.
   c. Sonolac, by Sonneborn Building Products Div.; Rexnord Chemical Products, Inc.
   d. Tremco Acrylic Latex 834, by Tremco Inc.

2.4 JOINT FILLERS FOR PAVING

A. Joint Fillers for Paving, General: Provide joint fillers of thickness and widths indicated.

B. Bituminous Fiber Joint Filler: Preformed strips of composition below, complying with ASTM D1751, asphalt saturated fiberboard.

2.5 JOINT SEALANTS FOR PAVING

A. Two-Part Jet-Fuel-Resistant Cold-Applied Sealant: Manufacturer's standard, pourable, chemically curing, elastomeric sealant complying with FS SS-S-200.

1. Acceptable Products and Manufacturers: As listed below. Products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

   a. Vulkem 200 or 202, by Mameco International, Inc.
   b. Gardox, by W.R. Meadows, Inc.
   c. Urexpan NR-300, by Pecora Corp.
   d. Sonolastic SL1 or SL2, by Sonneborn Building Products Div., Rexnord Chemical Products Inc.

2.6 FIRESTOPPING JOINT SEALANT

A. Specified Manufacturer: Specified Technologies, Inc. (STI), Somerville, NJ (800/992-1180; local representative, McGee Co., Commerce, CA 213/261-0181).

B. Acceptable Manufacturers: None identified. Equivalent products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

C. Firestopping Silicone Joint Sealant: STI SpecSeal PEN300 Silicone Joint Sealant, one-part silicone sealant for use as a component in UL-listed fire-resistive joint system and complying with ASTM C920, Type S, NS, Class 25.

1. At exterior tilt-up concrete walls indicated, joints shall be rated for 1 to 4-hour fire resistance and for joint widths from 3/4-inch to 2-inches, as indicated on the Drawings.

2. Joint sealant shall also function as weatherseal, preventing intrusion by moisture, including wind-driven rain.
3. Joint sealant shall be resistant to heat, cold, ultraviolet radiation, ozone and sunlight.

D. Firestopping Joint Sealant at Floor to Wall Condition: Tremco, Inc., Tremstop Acrylic, UL BW-S-0006, or equal.

2.7 MISCELLANEOUS MATERIALS

A. Joint Sealant Backing, General: Provide sealant backings of material and type which are non-staining; are compatible with joint substrates, sealants, primers and other joint fillers; and are approved for applications indicated by sealant manufacturer based on field experience and laboratory testing.

B. Primer: Provide type recommended by joint sealer manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from pre-construction joint sealer-substrate tests and field tests.

C. Cleaners for Non-porous Surfaces: Provide non-staining, chemical cleaners of type which are acceptable to manufacturers of sealants and sealant backing materials, which are not harmful to substrates and adjacent non-porous materials, and which do not leave oily residues or otherwise have a detrimental effect on sealant adhesion or in-service performance.

D. Masking Tape: Provide non-staining, non-absorbent type compatible with joint sealants and to surfaces adjacent to joints.

E. Plastic Foam Joint Fillers: Preformed, compressible, resilient, non-waxing, non-extruding strips of flexible, non-gassing plastic foam of material indicated below; non-absorbent to water and gas; and of size, shape and density to control sealant depth and otherwise contribute to producing optimum sealant performance.

1. Specified Manufacturer and Product: Applied Technologies, Inc., Sof Rod, proprietary, reticulated, closed-cell polymeric foam, non-outgassing, with a density of 2.5 pcf and tensile strength of 35 psi per ASTM D1623, and with water absorption less than 0.02 gms/cc per ASTM C1247.
2. Acceptable Manufacturer and Product: None identified. Equivalent products of other manufacturers will be considered in accordance with the "or equal" provision specified in Section 01600 - Product Requirements.

F. Elastomeric Tubing Joint Fillers: Neoprene, butyl, EPDM, or silicone tubing complying with ASTM D1056, non-absorbent to water and gas, capable of remaining resilient at temperatures down to -26 degrees F. Provide products with low compression set and of size and shape to provide a secondary seal, to control sealant depth, and otherwise contribute to optimum sealant performance.

G. Bond-Breaker Tape: Polyethylene tape or other plastic tape as recommended by sealant manufacturer for preventing sealant from adhering to rigid, inflexible joint filler materials or joint surfaces at back of joint where such adhesion would result in sealant failure. Provide self-adhesive tape where applicable.

H. Mineral Wool: For fire-rated joint construction, Partek Paroc Industrial Board 1240 or equal. Product shall be as required for UL-listed fire-rated joint construction.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Verify that surfaces and joint openings are ready to receive work and field measurements are as shown on Drawings and recommended by the manufacturer.

B. Examine joints to be sealed for construction defects which would adversely affect execution of Work. Correct all defects and detrimental conditions before proceeding with joint sealers.

C. Ensure that concrete has cured 28 days minimum.

3.2 PREPARATION

A. Surface Cleaning of Joints: Clean out joints immediately before installing joint sealers to comply with recommendations of joint sealer manufacturers and the following requirements:

1. Remove all foreign material from joint substrates which could interfere with adhesion of joint sealer, including dust; paints, except for permanent, protective coatings tested and approved for sealant adhesion and compatibility by sealant manufacturer; old joint sealers; oil; grease; waterproofing; water repellents; water; surface dirt; and frost.
2. Clean concrete, unglazed surfaces of ceramic tile, and similar porous joint substrate surfaces by brushing, grinding, blast cleaning, mechanical abrading, or a combination of these methods to produce a clean, sound substrate capable of developing optimum bond with joint sealants. Remove loose particles remaining from above cleaning operations by vacuuming or blowing out joints with oil-free compressed air.
3. Remove laitance and form release agents from concrete.
4. Clean metal, glass, porcelain enamel, surfaces of ceramic tile; and other non-porous surfaces by chemical cleaners or other means which are not harmful to substrates or leave residues capable of interfering with adhesion of joint sealers.

B. Joint Priming: Prime joint substrates where indicated or where recommended by joint sealer manufacturer based on pre-construction joint sealer-substrate tests or prior experience. Apply primer to comply with joint sealer manufacturer's recommendations. Confine primers to areas of joint sealer bond, do not allow spillage or migration onto adjoining surfaces.

C. Masking Tape: Use masking tape where required to prevent contact of sealant with adjoining surfaces which otherwise would be permanently stained or damaged by such contact or by cleaning methods required to remove sealant smears. Remove tape immediately after tooling without disturbing joint seal.

3.3 JOINT DIMENSIONS

A. Butyl Base Type Sealant: Minimum joint width 1/4-inch and depth of 3 times width of joint, with maximum depth of 3/4-inch.

B. Silicone Rubber Sealant: Minimum joint width 1/4-inch and depth of approximately one-half the width, but in no case less than 1/4-inch. Other wide-to-depth ratios as follows:

JOINT WIDTH:	JOINT DEPTH:	
For Non-Porous Surfaces:	Minimum:	Maximum:
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	1/2 of width	Equal to width
Over 1/2"	Not Permitted	
For Porous Surfaces:		
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	1/4"	Equal to width
1/2" to 1"	1/2"	Equal to width
Over 1"	Not Permitted	

C. Acrylic and Polyurethane: Minimum joint width 1/4-inch and depth equal to width, but in no case deeper than 1/2-inch. Other width-to-depth ratios as follows:

JOINT WIDTH:	JOINT DEPTH:	
For Non-Porous Surfaces:	Minimum:	Maximum:
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	Equal to width	Equal to width
Over 1/2" to 1" maximum	1/2"	1/2"
For Porous Surfaces:		
1/4" (minimum)	1/4"	1/4"
1/4" to 1/2"	1/4"	Equal to width
1/2" to 1"	1/2"	Equal to width
Over 1"	Not Permitted	

3.4 COMPRESSION SEALS INSTALLATION

A. Environmental Conditions for Compression Seals Installation:

1. Ambient air temperature: 45 degrees F to 85 degrees F.
2. Rain: Install compression seals under dry conditions only.
3. Substrate: Clean, free from dust, dirt and debris.

B. Joint Preparation for Compression Seals: Prepare joint in accordance with manufacturer's instructions and recommendations. Thoroughly clean substrate. Apply adhesive to joint edges. Apply lubricant to seal edges.

3.5 INSTALLATION OF JOINT SEALANTS

A. Installation of Joint Sealants, General: Comply with joint sealant manufacturer's printed installation instructions applicable to products and applications indicated, except where more stringent requirements apply.

B. Elastomeric Sealant Installation Standard: Comply with recommendations of ASTM C920 and C1193 for use of joint sealants as applicable to materials, applications and conditions indicated.

C. Solvent-Release-Curing Sealant Installation Standard: Comply with requirements of ASTM C1311 for use of solvent-release-curing sealants.

D. Latex Sealant Installation Standard: Comply with requirements of ASTM C834 and C1193 for use of latex sealants.

E. Installation of Sealant Backings: Install sealant backings to comply with the following requirements:

1. Install joint fillers of type specified, to provide support of sealants during application and at position required to produce the cross-sectional shapes and depths of installed sealants relative to joint widths which allow optimum sealant movement capability.

   a. Do not leave gaps between ends of joint fillers.
   b. Do not stretch, twist, puncture, or tear joint fillers.
   c. Remove absorbent joint fillers which have become wet prior to sealant application and replace with dry material.

2. Install bond breaker tape between sealants and joint fillers, compression seals, or back of joints where adhesion of sealant to surfaces at back of joints would result in sealant failure.
3. Install compressible seals serving as sealant backings to comply with requirements indicated above for joint fillers.

F. Installation of Sealants: Install sealants by proven techniques that result in sealants directly contacting and fully wetting joint substrates, completely filling recesses provided for each joint configuration, and providing uniform, cross-sectional shapes and depths relative to joint widths which allow optimum sealant movement capability.

G. Tooling of Non-Sag Sealants: Immediately after sealant application and prior to time skinning or curing begins, tool sealants to form smooth, uniform beads of configuration indicated, to eliminate air pockets, and to ensure contact and adhesion of sealant with sides of joint. Remove excess sealants from surfaces adjacent to joint. Do not use tooling agents which discolor sealants or adjacent surfaces or are not approved by sealant manufacturer.

1. Provide concave joint configuration in conformance to Figure 4 in ASTM C1193, unless otherwise indicated.
2. Provide flush joint configuration in conformance to Figure 4 in ASTM C1193, where indicated. Use masking tape to protect adjacent surfaces of recessed tooled joints.
3. Provide Recessed joint configuration in conformance to Figure 4 in ASTM C1193, of recess depth and at locations indicated.

3.6 FIRE-RATED JOINT INSTALLATION

A. Fire-Rated Joint Construction, General: Comply with instructions of manufacturer and listing authority.

B. Fire-Rated Joint Construction: Construct joint with foam backer rod as specified for conventional joints. Comply with UL System Numbers J900Z022 and U900Z021, as applicable.

1. Apply firestopping silicone joint sealant installed on both sides of joint, to depth as required for fire-rating (approximately 1-1/2 inches).
2. At exterior side, depress face of joint sealant to allow for installation of compression seal to match appearance of other joints.

3.7 CLEANING AND PROTECTION

A. Progress Cleaning: Clean off excess sealants or sealant smears adjacent to joints as work progresses by methods and with cleaning materials approved by manufacturers of joint sealers and of products in which joints occur.

1. Clean joints by mechanical means or with solvent as recommended by sealant manufacturer and compatible with finish material, to eliminate soiling and overlap on adjacent surfaces.
2. Clean adjacent soiled surfaces.

B. Repairs: Repair or replace defaced or disfigured finishes caused by joint sealer Work.

3.8 PROTECTION

A. Protection: Protect joint sealants during and after curing period from contact with contaminating substances or from damage resulting from construction operations or other causes.

1. Joint sealers shall be without deterioration or damage at Substantial Completion review.
2. If, despite such protection, damage or deterioration occurs, cut out and remove damaged or deteriorated joint sealants immediately so that and installations with repaired areas are indistinguishable from original work.

3.9 SCHEDULE OF EXTERIOR JOINTS IN VERTICAL SURFACES AND NON-TRAFFIC HORIZONTAL SURFACES

Location	Sealant
Joints in cast in place concrete and, between metal and concrete.	One-Part Non-Acid Curing Silicone Sealant, at edges of compression seal.
Perimeter joints between materials listed above and frames of doors, windows, aluminum entrances and storefronts and sloped glazing system.	One-Part Non-Acid Curing Silicone Sealant
Control and expansion joints in ceiling and	One-Part Non-Acid Curing Silicone Sealant

overhead surfaces.

Exposed joints within sheet metal copings, flashings and trim, aluminum entrance and storefront system and sloped glazing system.	One-Part Acid-Curing Silicone Sealant

3.10 SCHEDULE OF EXTERIOR JOINTS IN HORIZONTAL TRAFFIC SURFACES

Location	Sealant
Control, expansion, and isolation joints in cast in place concrete slabs for floors and pedestrian paving.	One-Part Non-Acid Curing Silicone Sealant for Use T
Control, expansion, and isolation joints in cast in place concrete slabs for floors and vehicular paving.	Two-Part Jet Fuel-Resistant Cold-Applied Sealant
Tile control and expansion joints.	One-Part Non-Acid Curing Silicone Sealant for Use T
Joints between different materials listed above.	One-Part Non-Acid Curing Silicone Sealant for Use T

3.11 SCHEDULE OF INTERIOR JOINTS IN VERTICAL SURFACES

Location	Sealant
Joints in cast-in-place concrete and between metal and concrete.	One-Part Non-Acid Curing Silicone Sealant.
Perimeter joints between materials listed above and frames of doors, windows, aluminum entrances and storefront.	One-Part Non-Acid Curing Silicone Sealant.

END OF SECTION

SECTION 08410
ALUMINUM ENTRANCES AND STOREFRONTS

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Storefront framing and glazing support members.

1.2 RELATED SECTIONS

A. Section 07600 - Flashing and Sheet Metal: Opening flashing.

B. Section 0880 - Glazing.

1.3 DESIGN REQUIREMENTS

A. Thermal Performance: Provide for expansion and contraction of glazing system components resulting from an ambient temperature differential of 120 degrees F, which may result in a metal surface temperature range of 180 degrees F within glazing system framing, without causing buckling, excessive stresses on structural elements or fasteners, stresses on glazing, failure of seals, reduction of performance, or other detrimental effects on appearance and performance.

B. Structural Performance:

1. Design Wind Load: Calculate in accordance with CBC, for locale, exposure, height and Project conditions.
2. Mullion Deflection: Maximum 1/175 or flexural limit of glass with full recovery of glazing materials, whichever is less, ASTM E330 and allowable stress with a safety factor of 1.65 minimum.
3. Submit calculations to DSA prior to backcheck.

C. Weathering Performance:

1. Internal Drainage: Drain to exterior all water entering joints, condensation occurring in glazing channels or migrating moisture within system.

2. Air Infiltration: Through assembly, 0.04 cubic feet per minute per square foot of surface area, ASTM E283.
3. Water Leakage: No leakage at pressure differential of 8 psf, when tested in compliance with ASTM E331.

D. Resistance to Forcible Entry: Jambs adjacent to door locks shall resist a force of 1600 pounds.

2.1 MANUFACTURER

A. Specified Manufacturer: Kawneer Company, Inc., Norcross, GA (local representative, Cerritos, CA 714/828-5178 or 951/765-7048).

B. Acceptable Manufacturers: Equivalent products of the manufacturers listed below will be acceptable in accordance with the "or equal" provision specified in Section 01600 - Product Requirements. Equivalent products of other manufacturers meeting or exceeding physical and performance characteristics of specified products will be considered with substitution provisions specified in Section 01600 - Product Requirements.

1. United States Aluminum Corporation, Vernon, CA (800/766-6063).
2. Vistawall Architectural Products, Division of Butler Manufacturing Company, Terrell, TX 214/551-6100 or 800/869-4567 (local representative 951/212-0760).

2.2 FRAMING, GENERAL

A. Aluminum Extrusions: ASTM B221, 6063-T5 alloy, temper as suitable for use.

B. Fasteners: Stainless steel.

C. Dissimilar Metals: Isolate aluminum from steel, galvanized steel and cementitious products with field-applied asphalt-based coating. See Section 05501 - Miscellaneous Metal Fabrications.

D. Glazing Gaskets: As recommended by storefront system manufacturer, EPDM extrusions.

E. Sealants: As specified in Section 07900 - Joint Sealers.

2.3 FRAMING SYSTEM

A. Framing Systems, General: Provide shear block or screw spline systems for storefronts and fixed windows of sizes and details as indicated on Drawings. A "stick system" not acceptable.

B. Storefront, Entrance and Window Wall Framing System: Kawneer Trifab VG 450 Series, thermally broken, framing nominally 2-inches wide by 4-1/2 inches deep, glazing offset to exterior in framing section, for 1/4-inch glass, as detailed on the Drawings.

C. Head Receptor: Provided sub-head receptor at head of openings to allow for deflection and other movements in framing.

D. All storefront systems shall include "top-load" glazing gaskets.

2.4 GLASS AND GLAZING MATERIALS

A. Glass and Glazing Materials, General: As specified in Section 08800 - Glazing and as indicated on Drawings.

B. Safety Glazing: Provide safety glazing as required by Building Code and as indicated on Drawings.

PART 3 - EXECUTION

3.1 FABRICATION

A. Fabrication: Shop or field fabricate framing system into complete units.

B. Workmanship: Fabricate framing in accordance with the manufacturer's instructions and recommendations. Accurately miter and fit all members to hairline joints. Weld or mechanically fasten along entire line of contact on the unexposed side. No discolorations on the face after application of finish will be accepted.

3.2 FRAMING INSTALLATION

A. Framing Installation, General: Install framing with adequate provision for settling, expansion and contraction without distorting or breaking glass.

B. Anchoring: Firmly anchor framing using fasteners as recommended by manufacturer, sized to suit loads and type suitable for substrate, to positively attach members for long life under hard use.

C. Adjustment: Align assembly plumb and level, free of warp or twist. Maintain assembly dimensional tolerances, aligning with adjacent work.

D. Protection: Wherever aluminum is in contact with concrete or dissimilar metal, apply bituminous paint or by such other isolation approved in advance by the Architect.

E. Sill Flashing: Install sheet metal sill flashing to prevent water migration under framing. Comply with requirements specified in Section 07600 - Flashing and Sheet Metal. Set sill flashing in bedding sealant as specified in Section 07900 - Joint Sealers.

3.3 GLAZING

A. Installation: Install glazing as specified in Section 08800 - Glazing, except butt glazing shall be as recommended by framing system manufacturer.

B. Testing: Water test all storefront and glazing after completion by spraying with hose heavily for 5 minutes. Repair all leaks discovered by testing procedures and repeat test until leak-free performance is achieved.

3.3 JOINT SEALERS

A. Joint Sealers: Install joint sealers as specified in Section 07900 - Joint Sealers.

3.4 TOLERANCES

A. Variation from Plane: 0.03 inches per foot maximum or 0.25 inches per 30 feet whichever is less.

B. Misalignment of Two Adjoining Members Abutting in Plane: 0.015 inches.

3.5 CLEANING

A. Protective Coverings: Remove protective materials from prefinished aluminum surfaces immediately prior to cleaning for Substantial Completion review.

B. Cleaning: For initial cleaning and for cleaning prior to Substantial Completion review.

1. Wash down exposed surfaces using a solution of mild detergent in warm water, applied with soft, clean wiping cloths.
2. Take care to remove soiling and dust accumulation from corners.
3. Flush thoroughly and wipe surfaces clean.
4. Remove excess sealant by moderate use of mineral spirits or other solvent acceptable to sealant manufacturer.

C. Glass Cleaning: See Section 08800 - Glazing.

END OF SECTION

SECTION 08800
GLAZING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Single glass types; clear float. Tempered as indicated.

B. Glazing materials.

1.2 RELATED SECTIONS

A. Section 08410 - Aluminum Entrances and Storefronts: Glazing requirements for glazed framing and glazed aluminum doors.

1.3 QUALITY ASSURANCE

A. Environmental Conditions: Do not start field glazing work until the outdoor temperature is above 40 degrees F and rising, unless approved provisions are made to warm the glass and rabbet surfaces. Create an environment sufficiently dust free for sealant and glazing Work.

1. Do not perform glazing work during damp or rainy weather.
2. Do not install mirrors until required temperature and relative humidity conditions have been stabilized and maintained in installation areas. Provide sufficient ventilation to prevent moisture condensation.

B. Manufacturer's Instructions and Recommendations: Comply with referenced documents as applicable and all other instructions and recommendations of glass and glazing products manufacturers.

1. GANA Publications:

a. Tempering Division - Engineering Standards Manual
b. Laminating Division - Laminating Glass Design Guide

2. LSGA Publications.

C. Insulating Glass: Comply with Sealed Insulating Glass Manufacturers Association (SIGMA) standards for construction and insulating value and shall have passed class CBA test in accordance with ASTM E774. Label each insulating glass unit.

1.4 REGULATORY REQUIREMENTS

A. Comply with the all applicable codes and ordinances, including California Building Code (CBC), Title 24, Part 2, Chapter 24 as amended and adopted by authorities having jurisdiction, and US Consumer Product Safety Commission Standard 16CFR1201 CI and CII.

B. Where safety glass is indicated or required, provide glazing materials that conform to ANSI Z97.1-1984 and CPSC16CFR, Part 1201 and are so identified in accordance with CBC Title 24, Part 2 Sec. 2406.

C. Glass Identification: Per CBC Section 2403.1 and 2403.1.1, each light shall bear the manufacturer's label designating the type and thickness of glass. When approved by the enforcement agency, labels may be omitted from other than safety glazing materials, provided an affidavit is furnished by the glazing contractor certifying that each light is glazed in accordance with approved plans and specifications. Identification of safety glazing material installed in hazardous locations as defined in Section 2406 of this chapter shall be identified by label which will specify the labeler, whether the manufacturer or installer, and state that safety glazing material has been utilized in such installations. The label shall be legible and visible from the inside of the building after installation and shall specify that label shall not be removed. Tempered glass shall have an etched manufacturer's label.

1.5 DESIGN REQUIREMENTS

A. Where glass thicknesses are not indicated, provide thickness based on the wind pressures required by the California Building Code (CBC), Title 24, Part 2, 2403 and 2404, wind pressure shall be assumed to have a one minute duration. Upon first application of design wind load for the specified durations, probability of breakage shall not exceed 8/1000 for vertical glass. Probability of breakage relative to glass thermal stress shall not exceed 8/1000 for vertical glass.

1.6 SUBMITTALS

A. Samples: 12-inch by 12-inch, 3 of each type or kind.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery, Storage and Handling: Deliver, store and handle glass in accordance with manufacturer's instructions and recommendations. Package, handle, and store glass so that water does not touch or condense on glass surfaces.

B. Protection: Protect glass edges against chipping and other damage. Protect coated glass surfaces from abrasion and scratching.

C. Storage: Store glass and glazing products in controlled environment, out of sunlight, so that temperature does not go above 80 F. Bring glazing materials to at least 40 F, or higher temperature if recommended by producer, before applying.

D. Labels: Furnish labels identifying each type of glass. Keep labels in place until glass is installed.

1.8 WARRANTY

A. Installer's Warranty: For two years from date established in "Notice of Completion", covering glazing to be free from defective products and execution.

B. Guarantee:

1. Reflective Glass: Provide manufacturer's guarantee that the reflective coating shall not peel under normal conditions for period of 10 years from date established in "Notice of Completion".
2. Laminated Glass: Provide fabricator's guarantee against delamination for a period of 5 years from date of "Notice of Completion".
3. Mirror: Provide manufacturer's guarantee that mirror will show no evidence of silver spoilage for 5 years from date established in "Notice of Completion".
4. Insulating Glass Units: Provide fabricator's warranty that seal will retain its integrity for 5 years from date established in "Notice of Completion".
5. Spandrel Glass: Provide manufacturer's warranty covering deterioration due to normal conditions of use and not to handling, installing and cleaning practices contrary to the glass manufacturer's published instructions.

C. Remedial Provisions: Upon notification of defects, within the warranty period, party providing warranty or guarantee shall replace the glass and glazing at no cost to District.

PART 2 - PRODUCTS

2.1 GLASS, GENERAL

A. Primary Glass Standard: Provide primary glass which complies with ASTM C1036 requirements, including those indicated by reference to type, class, quality, and, if applicable, form, finish, mesh and pattern. Thicknesses, where shown, are minimum. Determine thickness in conformance to applicable Codes and standards.

B. Heat-Treated Glass Standard: Provide heat-treated glass which complies with ASTM C1048 requirements, including those indicated by reference to kind, condition, type, quality, class, and, if applicable, form, finish, and pattern. Glass with reflective coating on No. 2 surface heat treated as recommended by manufacturer.

C. Tempered Glass: Provide tempered glass as required by Code, including in all openings of non-rated doors, all glazed openings within 4 feet of the side of a door and all glazed openings within 18-inches of the floor or walkway adjacent and wherever safety glazing or tempered glass is indicated or specified. Temper glass by horizontal (roller hearth, "tongless") process, to be free of tong marks.

D. Acceptable Manufacturers: Equivalent glass products of manufacturers other than those listed below or in the following paragraphs, and meeting or exceeding physical and performance characteristics of specified products will be considered with substitution provisions specified in Section 01600 - Product Requirements.

1. AGC Flat Glass North America, Inc., local representative Orange, CA (714/614-3156).
2. Libbey-Owens-Ford (LOF), Los Angeles, CA (800/522-9430).
3. Oldcastle Glass, Rosemont, IL (866/653-2278 and Los Angeles, CA 323/887-6000).
4. PPG Industries, Inc., (local representative Santa Ana, CA 714/479-0890).
5. Viracon, Owatonna, MN (800/533-2080; local representative Bob Paal 949/631-8361).
6. Visteon Glass Systems, Allen Park, MI (800/521-4674).
7. Technical Glass Products, Kirkland, WA (800/426-0279).

2.2 VISION GLASS

A. Clear Float Glass: q3 (Glazing Select) quality, annealed, 1/4-inch thick (DS) float glass, except provide tempered glass where indicated or required.

2.3 GLAZING MATERIALS

A. Glass Setting Blocks, Edge Blocks, Spacers and Gaskets: Chloroprene (neoprene), EPDM or silicone.

1. Applicable standard: ASTM C864.
2. Hardness of setting blocks: Sufficient to compress no more than 20 percent under weight of glass.

B. Shims and Spacers for Leveling and Securing Framing Members: Aluminum, compatible stainless steel, or other plated or corrosion resistant non-resilient material. Do not use wood for shims.

C. Compressible Filler Rod: Closed-cell or waterproof-jacketed foam of polyethylene, butyl rubber, neoprene, polyurethane or vinyl, tested for compatibility with specified glazing sealants, of 5 to 10 psi compression strength (25 percent deflection), recommended by sealant manufacturer for use in glazing channel to prevent sealant exudation from the channel.

D. Cleaners, solvents: As recommended by glazing material producer for each type of glass, glazing material and substrate.

2.4 GLAZING ACCESSORIES

A. Glazing Accessories, General: Provide accessories as required for a complete installation. Accessories shall include glazing points, clips, shims, angles, beads, and spacer strips.

B. Metal Accessories: Provide non-corroding metal accessories.

C. Primer-Sealers and Cleaners: As recommended by the glass and sealant manufacturers.

2.5 PREFORMED TAPE WET GLAZING

A. Preformed Tape Wet Glazing: 100 percent solids, extruded, non-staining butyl-isobutylene tape. Provide hard spacer rod for use in lights over 80 united inches.

B. Applicable Standards: AAMA A804.1, for normal use and AAMA A807.1, for use where much thermal movement is anticipated. Acceptable products, or equal:

1. Pecora Corp.; Extru-Seal Preshimmed Tape.
2. Protective Treatments, Inc.; PTI 303 Space Rod Tape.
3. Tremco; Preshimmed 440 Tape.

2.6 GUNABLE SEALANT WET GLAZING

A. Gunable Sealant Wet Glazing: 2-part polysulfide or 1-part silicone sealant, skinning formulation. Select modulus of elasticity for optimum performance with anticipated glass/frame movement.

B. Applicable Standard: ASTM C920, Type S or M, Grade NS, Class 25, Uses G, A, and O. Sealant shall be compatible with interlayer used in laminated glass.

2.7 COMPRESSION GASKET AND PREFORMED GASKET DRY GLAZING

A. Compression Gasket and Preformed Gasket Dry Glazing: Chloroprene (neoprene), EPDM, or silicone compression gaskets in a soft and a dense formulation for the two sides of the glass.

1. Select soft gasket to compress 25 to 40 percent when glass and dense gasket are in place.
2. Where small lites (as in doors) can be glazed with a continuous preformed elastomeric glazing extrusion, use a gasket of the dense formulation, compressed to watertightness outside and inside, with either a bent joint or a tightly compressed cut joint at corners.

B. Applicable Standards:

1. Soft gaskets: ASTM C509.
2. Dense gaskets: ASTM C864.

PART 3 - EXECUTION

3.1 PREPARATION

A. Examination: Examine frames and other construction which supports or underlies glazing Work.

1. Where frames are out of square, out of plane, subject to excessive deflection, or where substrates contain bond breaking substances, moisture, unsound material, or where there are other conditions unsuitable for proper installation or performance of the glazing Work, do not start glazing Work until defects have been corrected.
2. Determine prior to start of field glazing that framing, flashing, fasteners and trim are of proper materials and will not create staining problems on glass.

B. Measurements: Measure actual openings to determine glazing sizes to provide the required edge clearances.

C. Glass Preparation: Cut glass and grind smooth all edges of glass that will be exposed in finish Work.

D. Frame Preparation: Do not start glazing until each lite is provided with 2 or more weepholes, not more than 3-feet on center.

E. Preparatory Cleaning: Remove dust and other bond breaking substances from surfaces to be glazed. Do not glaze wet, damp, or uncured surfaces.

3.2 GLASS INSTALLATION

A. Glazing Installation: Install glazing systems in accordance with manufacturers' instructions and recommendations. Where applicable, use beads or stops which are furnished with the items to be glazed to secure the glass in place. Refer to additional installation requirements specified in Section 08410 - Aluminum Entrances and Storefronts.

B. Safety Glazing: Provide safety glass in lites where required by 16CPR1201 and public authorities, and at other locations as specified herein.

C. Glazing Installation Standard: Prepare and install glazing in accordance with GANA Glazing Manual.

D. Glass Orientation: Orient glass so that wave and other distortions run horizontally.

E. Edges: No chips, fissures; edges clean and straight.

F. Glazing in Steel Frames: Glaze after prime painting and before finish painting. Do not glaze in rabbets and steps that have not been prime painted.

G. Tempered Glass Installation: Completely fabricate in shop to sizes required, including all edgework. Do no field fabrication or modification.

H. Stop Glazing: Where frames are not provided with resilient glazing gaskets, set glass in full beds of glazing compound at sides of rabbets.

1. Use setting blocks and spacer shims to center glass in rabbets and maintain proper edge clearances. After glazing, strip excess compound at an angle (not undercut).
2. Apply removable stops with cadmium plate screws at steel frames, stainless steel screws at aluminum frames, and brass screws at wood frames. Screws shall be spaced not more than 8-inches on centers, and shall be countersunk flat head types.
3. Glaze steel and wood frames after prime painting and before finish painting. Do not glaze in rabbets or stops that have not been prime painted.

3.3 WATER TEST

A. Exterior glazing shall be completely watertight and water tests to prove this may be required by District at Contractor's expense.

3.4 CLEANING AND PROTECTION

A. Cleaning and Protection, General:

1. Take precautionary measures as necessary to prevent damage to glazing products.
2. Glass shall be clean, whole and free from scratches, rattles and other imperfections at time of Substantial Completion review.

3. Replace scratched and damaged units at no cost to District.

B. Temporary Identification:

1. Identify glazed areas by hanging narrow streamers from walls and mullions. Do not mark glass nor affix decals to glass.
2. Factory Labels: Leave labels in place until the installation is accepted, except remove applied labels on tinted glass and on insulating glass units as soon as glass is installed.

C. Sash and Doors Protection: Securely fix movable items or keep in a closed and locked position until glazing compound has thoroughly set.

D. Progress Cleaning: Clean installed glass frequently during construction. Do not place other materials in contact with glass nor in such a way as to create a heat trap.

E. Exterior Glass Cleaning: In addition, clean outside of exterior glass once every 90 days maximum until time of Substantial Completion review, to prevent heavy accumulation of soiling. Clean reflective glass in compliance with manufacturer's instructions and recommendations.

1. Reflective glass requires cleaning with mild detergent solution and soft cloths that will not damage coating. Thoroughly rinse with clean water.

F. Final Cleaning: Within 10 days of Substantial Completion review, thoroughly clean inside and outside of all new and existing glass.

1. Thoroughly clean glass surfaces and remove labels, paint spots, and other defacement.
2. Avoid scratching glass or frames.

END OF SECTION

SECTION 09900
PAINTING

PART 1 - GENERAL

1.1 SECTION INCLUDES

A. Surface preparation for painting.

B. Priming and finish painting of sheet metal fascia within contract limits, unless otherwise indicated.

1.2 RELATED SECTIONS

A. Section 07600 - Flashing and Sheet Metal

1.3 WORK NOT TO BE PAINTED

A. Work Not to be Painted: Painting is not required on prefinished items, finished metal surfaces, concealed surfaces, operating parts, and labels.

B. Pre-Finished Items: Unless otherwise specified or noted, do not paint factory-finished components.

C. Concealed Surfaces: Do not paint concealed surfaces, including wall or ceiling surfaces in the following generally inaccessible areas.

1. Furred areas.
2. Utility chases and pipe spaces.
3. Duct, piping and conduit shafts.

D. Finished Metal Surfaces: Do not paint finished metal surfaces, including the following.

1. Anodized aluminum.
2. Stainless steel.
3. Chromium plate.

E. Labels: Do not paint over Underwriter's Laboratories, Inc. (UL), Factory Mutual Research Organization (FM) and other code-required labels and over equipment names, identifications, performance ratings, and nomenclature plates.

1.4 REFERENCES

A. Steel Structures Painting Council (SSPC): SSPC - Surface Preparation Specifications.

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

1.5 SUBMITTALS

A. Product Data: Submit materials list for all paint products. For substitute products, submit full product technical data, including certification of conformance to air quality regulations, in accordance with requirements of Section 01600 - Product Requirements.

B. Paint Schedule: Prepare in format similar to that included in this Section. Indicate product and color for each condition. Clearly identify manufacturer.

C. Color Samples:

1. Preliminary selection samples: Submit two sets of color samples for colors not specified or indicated on Drawings. Samples shall be marked with corresponding Finish Schedule Designations (eg. P-1) to avoid rejection.
2. Verification samples: After preliminary review and selection, and for colors specified or indicated on Drawings, prepare field mock-up samples for review. Prepare mock-up as quickly as pH level of concrete sufficiently low for paint application.
3. Mock-Up: Prepare, prime and paint a minimum 18-foot wide by full building height sample panel of selected exterior paint finishes. Location of mock-up to be selected by Architect as most representative of color variations occurring on building. Mock-up which may require up to 2 changes of color before approval by Architect, will serve as basis of color and quality by which subsequent painting work will be judged. The mock-up may be incorporated into the Work.

1.6 QUALITY ASSURANCE

A. Reference: Refer to ASTM D16 - Definitions of Terms Relating to Paint, Varnish, Lacquer, and Related Products for definitions of terms used in this Section.

B. Applicator Qualification: Company specializing in application of quality paints and coatings, with three years documented experience.

C. Regulatory Requirements: Conform to California Air Resources Board (CARB), and other applicable local air quality regulations for products and application.

D. Application Conditions, General:

1. Comply with requirements specified herein except comply with manufacturer's requirements and recommendations if more stringent.
2. Substrate Condition: Dry and well-cured.
3. Wind and Drafts: Minimal only, no direct air movement across surface being painted.
4. Dust: Do not paint under dusty conditions. Remove dust from substrate before painting. Do not allow dust to adhere to wet surface.

E. Exterior Application Conditions:

1. Do not apply exterior coatings during rain, fog or freezing conditions, or when relative humidity is above 50 percent, unless permitted by manufacturer's instructions and recommendations.

2. Exterior Substrate Temperature: Minimum 40 degrees F to maximum 80 degrees F.

F. Application Temperatures:

1. Water-Base Paints: Apply water-base paint at interior between 45 and 90 degrees F ambient temperature. Apply water-base paint at exterior between 50 and 90 degrees F ambient temperature.
2. Solvent-thinned paints: If used, apply solvent-thinned paint between 45 and 95 degrees F.

1.7 DELIVERY, STORAGE AND HANDLING

A. Delivery, Storage and Handling, General: Deliver, store and handle products in accordance with requirements of Section 01600 - Product Requirements and in conformance to applicable air quality and safety regulations.

B. Delivery: Deliver products to site and keep in sealed and labeled containers until ready for use. Label containers with manufacturer's name, type of paint, brand name, brand code, air quality regulation certification, coverage rate, surface preparation requirements, drying time, cleanup, color designation, and instructions for mixing and reducing.

C. Storage: Store paint materials at minimum ambient temperature of 45 degrees F and a maximum of 90 degrees F, in well ventilated area and in accordance with applicable fire and air quality regulations. Comply with manufacturer's instructions and recommendations if more stringent. Take precautionary measures to prevent fire hazards and spontaneous combustion.

1.8 EXTRA STOCK

A. Provide an extra stock equaling 2 percent of each color, type and gloss of paint used in the Work, but not less than 1 gallon nor more than 5 gallons of each.

1.9 WARRANTY

A. In addition to the warranty and correction of work requirements of the General Conditions, warrant painting and finishing against peeling, fading, cracking, blistering, or crazing for a period of 2 years from the date of "Notice of Completion". The written warranty shall include materials and labor. The warranty shall be signed by the paint manufacturer, the painter and the Contractor.

PART 2 - PRODUCTS

2.1 PAINT MATERIALS

A. Acceptable Manufacturers: Equivalent products of the manufacturers listed below will be acceptable in accordance with the "or equal" provision specified in Section 01600 - Product Requirements. Equivalent products of other manufacturers meeting or exceeding physical and performance characteristics of specified products will be considered in accordance with the substitution provision specified in Section 01600 - Product Requirements.

1. Dunn-Edwards Corporation, Los Angeles, CA (800/733-3866 or 323/771-6382).
2. Frazee Paint and Wallcovering, San Diego, CA (local representative, Anaheim, CA (714/278-0288).
3. ICI Paint, Los Angeles, CA (213/888-8888 or 800/339-6910)
4. Sherwin-Williams Co., Cleveland, OH (216/566-2000 or 800/524-5979; local representative, 310/999-9396).
5. Vista Paint, Fullerton, CA (714/680-3800).
6. Carboline Corp.
7. Rustoleum Co.
8. Tnemec, Inc., Compton, CA (310/637-2363).
9. Valspar.

B. Acceptable Products: Unless otherwise specified in the Paint Schedule, acceptable products include the following or equal:

1. Masonry Block Filler:

   Dunn-Edwards Corp.; Blocfil Emulsion Type W-305
   Frazee Blockfiller 262
   ICI Paint; 3010 Prep and Prime Block Primer
   Vista Paint: 040 Block Kote

2. Epoxy Primer:

   Carboline Corp.; 893
   Frazee / Ameron Amerlock 2 VOC (self priming)
   ICI Devoe; Bar Rust 235
   Rustoleum Co.; HS 9369 Red Epoxy Primer
   Sherwin-Williams Co.; Recoatable Epoxy Primer B67 Series/B67 V5
   Tnemec, Inc.; Series 69 Hi-Build Epoxoline II

3. Organic Zinc Primer:

   Carboline Corp.; D858
   Frazee / Ameron Dimetcote 21-5 Zero VOC
   ICI Devoe; Catha-Coat 302H
   Rustoleum Co.; 9334 Zinc-Sele
   Sherwin-Williams Co.; Zinc Clad IV B69A8/B69V8
   Tnemec, Inc.; 90-94 Tneme-Zinc

4. Galvanized Metal Primer:

   Dunn-Edwards Corp.; Galv-Alum QD43-7
   Frazee Paint Co.; 561 Acrylic Metal Prime
   ICI Paint; 4360 Devguard Low-VOC Universal Primer
   Sherwin-Williams Co.; DTM Primer/Finish B66W1
   Vista Paint; 999 Metal Prime

5. Ferrous Metal Primer:

Dunn-Edwards Corp.; Block-Rust Red Oxide Primer 43-4
Frazee Paint Co.; 561 Acrylic Metal Prime
ICI Paint; 4360 Devguard Low-VOC Universal Pimer
Sherwin-Williams Co.; Kem Bond HS B50Z Series
Vista Paint; 999 Metal Prime

6. Concrete Primer - Exterior:

Dunn-Edwards Corp.; Eff - Stop W 709
Frazee Paint Co.; 266 Epotilt
ICI Paint; 6001 Prep and Prime Hydrosealer W/B Multipurpose Primer
Sherwin-Williams Co.; Loxon Exterior Acrylic Masonry Primer A24 Series
Vista Paint; 4600 Uniprime II

7. Intermediate Metal Undercoat - Exterior:

Dunn-Edwards Corp.; Loc-Kote Synthetic Undercoat 42-23
Frazee Paint Co.; 661F774 Metal Prime or 561 Acrylic Metal Prime
ICI Paint; 4360 Devguard Low-VOC Universal Primer
Sherwin-Williams Co.; Kem Bond HS Primer B50Z Series
Vista Paint: 999 Metal Prime

C. Paints, Stains and Special Coatings: See PART 3, SCHEDULE, following for specific primers and finish paints, stains and special coatings.

D. Primers and Undercoats: Provide primers and other undercoat paint produced by same manufacturer as finish coats.

2.2 MISCELLANEOUS MATERIALS

A. Thinners, General: Use only thinners approved by paint manufacturer, and use only within recommended limits.

B. Oil-based Thinner: Volatile mineral spirits, FS-TT-T-2912.

C. Acrylic-based Product Thinner: Clear, potable water, free from materials detrimental to paint performance.

D. Putty: Acrylic, fast-drying, low shrinkage.

E. Painter's Caulk: Joint filler, acrylic-based, as specified in Section 07900 - Joint Sealers.

F. Galvanizing Repair Compound: Premixed cold galvanizing compound for field touch-up of galvanized coatings by ZRC Worldwide GALVILITE, Marshfield, MA (800/831-3275), or approved equal. Provide silvery-finish galvanic zinc-rich coating containing 95 percent zinc by weight in the dry film and conforming to Federal Specification DOD-P-21035A.

2.3 COLORS

A. Paint Colors:

1. Provide factory mixed paint, colors modified in field only under direction of Architect.
2. Provide colors as indicated on Drawings or, if not indicated, as selected by Architect.
3. Generally, colors will be evenly divided between like conditions, unless otherwise indicated.
4. Tint undercoats and primer slightly different than following coats.

B. Color Selection: Cooperate by supplying selection and presentation chips from which to make selection.

PART 3 - EXECUTION

3.1 PREPARATION

A. Examination: Examine substrate for conditions which may adversely affect finish application durability and appearance. Do not proceed until defects are corrected. Proceeding will be interpreted to mean that substrate conditions were acceptable.

B. Trim Removal: Remove electrical plates, hardware, light fixture trim, and fittings prior to preparing surfaces or finishing.

C. Masking and Covering: Exercise care not to deface adjoining Work. Use suitable clean cover cloths or other approved protection materials to cover adjoining Work. Mask small items and edges to prevent and control paint coverage.

D. Cleaning, Impervious Surfaces: Wash surfaces with mild detergent solution. Remove mildew by scrubbing with solution of tri-sodium phosphate and bleach. Rinse with clean water and allow surface to dry.

E. Cleaning, Aluminum Surfaces Scheduled for Paint Finish: Remove surface contamination by steam or high pressure water. Remove oxidation with acid etch and solvent washing. Apply etching primer immediately following cleaning.

F. Cleaning, Galvanized Surfaces: Remove surface contamination and oils by wash with solvent.

3.3 PRIMING

A. Compatibility: Verify compatibility of primers with surfaces on which to be applied. If primer or finish coating is incompatible, follow manufacturer's recommendations.

B. Galvanized Steel Substrate: If unprimed, pretreat before priming by applying coat of etching primer.

C. Pre-Primed Surfaces: Touch up with matching primer. Reprime steel items which have been exposed to weather more than 7 days.

3.4 FINISH PAINT APPLICATION, GENERAL

A. Finish Paint Application, General:

1. Comply with manufacturer's instructions and recommendations.
2. Carry finish coats to natural breaks and transitions.
3. Apply each coat to uniform film thickness, not less than and not exceeding amount to achieve recommended dry film thickness of paint manufacturer. Adjust applied thickness to suit substrate and ambient temperatures to minimize brush and roller marks.
4. Allow each coat to cure before recoating, adjusting manufacturer's minimum time between coats to accommodate Project conditions.

B. Coverage: Manufacturer's rating and scheduled number of coats shall be minimums only. Apply paint in number of coats as required to completely cover, without holidays or thin spots. Alter tint of each coat to facilitate evaluation of coverage.

C. Holidays and Thin Spots: Recoat and blend in. If blending is unsuccessful, sand and recoat entire surface.

D. Dust, Runs, Drips, Sags and Color Separation: Remove surface defects, sand and recoat entire surface.

E. Metal Surfaces: If brush application cannot produce a smooth surface without laps or brush marks, use spray application under dustfree conditions.

F. Final Finish: Even, smooth color and finish with no apparent brush or roller marks.

3.5 CLEANING AND TOUCH-UP

A. Cleaning: As Work proceeds, promptly remove paint where spilled, splashed, or spattered. Remove all paint spots, oils or stains from adjacent surfaces, leaving the Project clean and ready for Acceptance.

B. Debris and Waste: During progress of Work maintain premises free of unnecessary accumulation of tools, equipment, surplus materials, and debris. Collect cotton waste, cloths, and material which may constitute a fire hazard, place in closed metal containers and remove daily from site. Remove empty paint containers from site.

C. Touch-Up: At completion of Work specified in other Sections, touch-up painted and finished surfaces and restore to original condition finishes damaged or defaced.

3.6 PAINT SCHEDULE

A. Paint Schedule: Provide paint systems as follows and as recommended by paint manufacturer.

1. The number of coats listed is the minimum number of coats required. Provide coats as required for full and complete coverage.
2. The first (primer) coat of 3-coat finish may be omitted on products shop or factory primed and on existing surfaces to be repainted. Sand existing painted

surfaces or otherwise prepare as recommended by paint manufacturer for repainting.

3. Tint undercoat or first of final 2 coats slightly lighter than final coat

B. Exterior Surfaces:

1. Galvanized Metals - High Performance Gloss:

1 coat Galvanized Metal Primer
2 coats Synthetic Industrial Enamel – Gloss

Note: Galvanizing repair, if required, specified in Article 2.2 of this section.

END OF SECTION