



Jonathan Gish, AIA
Principal Architect

Jeff Morris, AIA
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Associate Architects

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Structural Engineering

PROJECT MANUAL

FOR

RIPON HIGH SCHOOL SHADE STRUCTURES

For Ripon Unified School District

OWNER:

**Ripon Unified School District
304 N Acacia Avenue
Ripon, CA 95366
(209) 599-2131**

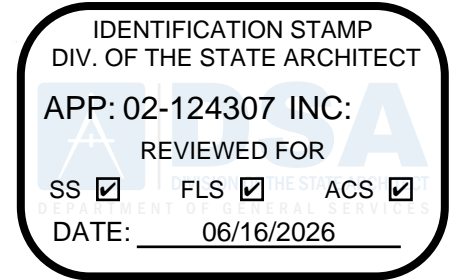
ARCHITECT:

**TPH Architects
519 McHenry Avenue
Modesto, CA 95354
(209) 571-2232**

BID SET

RIPON HIGH SCHOOL SHADE STRUCTURES FOR RIPON UNIFIED SCHOOL DISTRICT

TPH Architects
519 McHenry Avenue
Modesto, CA 95354
(209) 571-2232



Mike Clark, AIA
Principal Architect

H.C.S. Engineering
4512 Feather River Drive, Suite F
Stockton, CA 95219
(209) 478-8270



Richard Smith
Electrical Engineer

RIPON HIGH SCHOOL SHADE STRUCTURES

FOR
RIPON UNIFIED SCHOOL DISTRICT

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END OF SECTION

RIPON UNIFIED SCHOOL DISTRICT
304 N Acacia Avenue, Ripon, CA 95366

NOTICE TO BIDDERS

Sealed bids for RIPON HIGH SCHOOL SHADE STRUCTURES, for RIPON UNIFIED SCHOOL DISTRICT will be received in the Office of TPH Architects, 519 McHenry Avenue, Modesto, CA 95354 **until July 17, 2026 at 1:00 p.m., at which time they will be opened and publicly read.**

Plans and Specifications are on file and may be viewed or downloaded from the website of TPH Architects, at <http://tpharchitects.com/bidding/>

If further information is needed, call Jonathan Gish, AIA, at (209) 571-2232.

Bids shall be submitted on forms included in the Bid Package.

The District has determined the general prevailing rate to be the per diem wages for each craft or type of workman or mechanic needed to execute this contract as set forth in the collective bargaining agreements for Stanislaus, San Joaquin, and Merced Counties, California. COMPLIANCE MONITORING: This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations, Office of the Labor Commissioner. Copies of all collective bargaining agreements relating to the work are on file and available for inspection in the office of the California Department of Industrial Relations, Division of Labor Statistics and Research, 455 Golden Gate Avenue, San Francisco, CA, 94102, (415-703-4780), <http://www.dir.ca.gov/dlsr/> .

In compliance with SB 854, no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

In addition, no contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

A valid B contractor's license will be required.

RIPON UNIFIED SCHOOL DISTRICT reserves the right to waive any irregularity or informality in the bidding.

Published: June 26, 2026 and July 5, 2026

INSTRUCTIONS TO BIDDERS

Securing Documents:

Drawings and Specifications are available at: <http://tpharchitects.com/bidding/>.

Proposals:

Proposals to receive consideration shall be made in accordance with the following instructions:

1. Proposals shall be made on a form obtained from the Architect or Owner. All items on the form must be filled out. Numbers must be stated in figures, and the signatures of all individuals must be in longhand. The completed form must be without interlineation, alterations, or erasures.
2. No proposal will be considered which makes exceptions, changes, or in any manner makes reservations to the terms of the Contract Documents.
3. Questions regarding documents, discrepancies, omissions, or doubt as to meanings shall be referred immediately to the Architect who will send written instructions clarifying such questions to each bidder.
4. Each bid must give the full business address of the bidder and be signed by him and his usual signature. Bids by partnerships must furnish the full name of all partners and must be signed in the partnership name by one of the members of the partnership, or by an authorized representative, followed by the signature and designation of the person signing.

Bids by corporations must be signed with the legal name of the corporation, followed by the name of the state of incorporation and by the signature and designation of the president, secretary, or other person authorized to bind it in the matter. The name of each person signing shall also be typed or printed below the signature. When requested by the Owner, satisfactory evidence of the authority of the officer signing in behalf of the corporation shall be furnished.

5. Contractor Registration: In compliance with SB 854, no contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].

In addition, no contractor or subcontractor may be awarded a contract for public work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.

6. Labor Compliance Requirements: This contract/project is subject to compliance monitoring and enforcement by the Department of Industrial Relations, Office of the Labor Commissioner.

Vendor/Contractor must comply with all labor compliance requirements including but not limited to prevailing wage, SB 854, Labor Code section 1771, 1771.1., 1774-1776, 1777.5, 1813 and 1815, as applicable.

1771.1. (a) A contractor or subcontractor shall not be qualified to bid on, be listed in a bid proposal, subject to the requirements of Section 4104 of the Public Contract Code, or engage in the performance of any contract for public work, as defined in this chapter, unless currently registered and qualified to perform public work pursuant to Section 1725.5. It is not a violation of this section for an unregistered contractor to submit a bid that is authorized by Section 7029.1 of the Business and Professions Code or by Section 10164 or 20103.5 of the Public Contract Code, provided the contractor is registered to perform public work pursuant to Section 1725.5 at the time the contract is awarded.

7. Pursuant to the provisions of Sections 4100 to 4114, inclusive, of the Public Contract Code of the State of California, every Bidder shall, in his bid, set forth:
 - A. The name, location of the place of business, Contractor's License Number, and DIR Registration Number of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the bidder, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in plans and specifications, in an amount in excess of one-half (1/2) of one percent (1%) of the bidder's total bid.
 - B. The portion of the work which will be done by each such subcontractor. Only one subcontractor shall be listed for each such portion of the work as defined in the bid. If the bidder fails to specify a subcontractor for each portion of the work to be performed under the contract in excess of one-half (1/2) of one percent (1%) of the bidder's total bid, he agrees to perform that portion himself. The successful bidder shall not, without the consent of the Owner either:
 - 1) Substitute any person as subcontractor in place of the subcontractor designated in the original bid.
 - 2) Permit any subcontractor to be assigned or transferred or allow it to be performed by anyone other than the original subcontractor listed in the bid.
 - 3) Sublet or subcontract any portion of the work in excess of one-half (1/2) of one percent (1%) of the total bid as to which his original bid did not designate a subcontractor.

8. California Nonresident Vendors

- A. California nonresident vendors may be subject to a 7% withholding on payments over \$1500 annually who are paid for:
 - 1) Performing services in California,
 - 2) A rental/lease of property located in California,
 - 3) Rental/lease of machinery and equipment,
 - 4) Royalties.
- B. California nonresident vendors will be required to fully complete and provide the appropriate tax forms as required by the State of California Franchise Tax Board.
- C. California nonresident vendors will also be required to fully complete and provide a Form 587 or 590.
- D. All vendors will be required to fully complete and provide a Form W-9.

9. Proposals must be accompanied with a certified cashier's check, bank issued official check, or bidder's bond, for an amount not less than ten percent (10%) of the amount of the base bid. The certified cashier's check, bank issued official check, or bidder's bond shall be made payable to the order of RIPON UNIFIED SCHOOL DISTRICT. If a bidder's bond accompanied the proposal, said bond shall be secured by a California based surety company satisfactory to RIPON UNIFIED SCHOOL DISTRICT.

Said check or bond shall be given as a guarantee that the bidder will enter into the contract and furnish the necessary bonds and insurance if awarded the work, and in case of refusal or failure to enter into said contract, the check or bond, as the case may be, shall be payable to RIPON UNIFIED SCHOOL DISTRICT and retained as liquidated damages.

10. Proposals shall be sealed and filed in the Office of TPH Architects, 519 McHenry Avenue, Modesto, CA 95354 no later than July 17, 2026 at 1:00 p.m..

Withdrawal of Proposals:

Proposals may be withdrawn by the bidder prior to the time fixed for the opening of bids.

Opening of Proposals:

Opening of proposals shall be as soon after the hour set as will be possible. Any and all bidders will be permitted to attend. The Board of Trustees is allowed sixty (60) days from that date in which to determine low bidder.

Examination of Contract Documents and Site:

Before submitting a proposal, bidders shall examine the contract documents. They shall visit the site of the proposed work, examine the building, or buildings, if any, and any work that may have been done thereon. They shall fully inform themselves of all conditions, in, at, and about the site, the building or buildings, if any, and any work that may have been done thereon.

Form of Contract:

The form of contract which the successful bidder will be required to execute, if awarded the work, is attached hereto and is made a part hereof. Such contract contains, among other things, matters required by State Law to be inserted in contracts for public work, including wage scale, hours of work per day, etc.

Addenda:

Any addenda or bulletins, issued during the time of bidding, shall form a part of the contract documents loaned to the bidder for the preparation of his proposal, shall be covered in the proposal, and shall be made a part of the contract.

Award of Contract:

Rejection of any or all proposals, to abandon work entirely or waiver of any informality in receiving of bids is reserved as the right of the Owner. Before the contract is awarded, the Board of Trustees may at his sole discretion, require from the proposed Contractor further evidence of the reasonable qualifications of such contractor to faithfully, capable, and reasonable perform such proposed contract and may consider such evidence before making its decision on the award of such proposed contract.

The contract shall be awarded to the lowest responsible bidder as interpreted by the Owner and specified herein and shall be entered into by the successful bidder within the (10) days after being notified by the Owner. Identity of lowest bidder will be determined by adding to or subtracting from the base bid the cost of such alternatives as Owner decided to include in the work and contract. The award, if made, will be made within sixty (60) days after the opening of the proposal.

Public Works Project Award Notification:

The PWC 100 form should be completed on-line by the Awarding Body. The completion and the submission of this form fulfills the required public works project award notification to both the Division of Apprenticeship Standards [Labor Code sec. 1773.3 (replacing former DAS-13 notification) and the Division of Labor Standards Enforcement Public Works Compliance Monitoring Unit [8 Cal. Code Reg. sec. 16451(a)].

Execution of Contract:

The Contract shall be signed by the successful bidder in duplicate counterpart and returned, together with the contract bonds and required insurance certificates, policies and endorsements within ten (10) days after the bidder has received notice that the contract has been awarded. Contractor and Owner shall sign a set of the contract documents for filing with the contract.

Contract Bonds:

Two bonds, as itemized below and in the forms presented in these contract documents, shall be furnished by the successful bidder at the time of entering into contract and filed with the Board of Trustees. They shall be in the form of surety bonds issued by corporations duly and legally licensed to transact business in the State of California, satisfactory to the Owner.

Performance Bond in the amount of one hundred percent (100%) of the contract sum to insure Owner during construction and for one year after completion against faulty or improper materials or workmanship and to assure Owner of full and prompt performance of contract and shall be secured from a California based surety or sureties satisfactory to the Owner.

Contractor's Bond (Labor and Material) in the amount of one hundred percent (100%) of the contract sum in accordance with the laws of the State of California to secure payment of any and all claims for labor and materials used or consumed in performance of this contract and shall be secured from a California based surety or sureties satisfactory to the Owner.

Payments:

Payments to the Contractor on account of the contract shall be made in accordance with the terms of the contract.

Certified Payroll:

All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement).

These new requirements will apply to all public works that are subject to the prevailing wage requirements of the Labor Code, without regard to funding source.

Time of Completion and Liquidated Damages:

Time is of the essence in this contract, and all work called for herein and all requirements shall be completed within (90) ninety calendar days.

Should said work not be completed within the time limit as may be extended as herein provided, damages will be sustained by the Owner. It is understood and agreed that it is and will be impracticable or extremely difficult to determine the actual amount of damages which the Owner will sustain in the event of and by reason of such delay, and it is therefore agreed that the contractor will pay the Owner liquidated damages as specified in Article 8 of the General Conditions.

Partial Payments:

Once each month during the progress of the work, Contractor shall submit to Architect a progress payment request. The progress payment request shall be based on the approved bid breakdown for the cost of the work completed plus the acceptable materials delivered to the site or stored subject to the control of Contractor and not yet installed. The progress payment request shall be submitted on the monthly anniversary of the day selected by the Owner at job start meeting. Architect shall review and may certify as to the validity of the request. No progress payment shall be made without the certification of Architect. Progress payment requests shall be processed with a minimum of a five percent (5%) retention. This retention is part security for the fulfillment of the contract by Contractor. Progress payments shall not be construed as acceptance of any work which is not in accordance with the requirements of the contract.

END OF SECTION

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned _____
_____ as principal, and _____
_____ as Surety, are hereby held and firmly bound unto
RIPON UNIFIED SCHOOL DISTRICT, hereinafter called the "Owner", in the sum of:

_____ Dollars
(\$ _____)

for payment of which sum, well and truly to be made, we hereby jointly and severally find ourselves, our heirs, executors, administrators, successors, and assigns.

The condition of the above obligation is such that whereas the Principal has submitted to the Owner a certain bid, attached hereto and hereby made a part hereof, to enter into a contract in writing for the:

RIPON HIGH SCHOOL SHADE STRUCTURES
for
RIPON UNIFIED SCHOOL DISTRICT

in strict accordance with Contract Documents.

NOW, THEREFORE,

- a. If said bid shall be rejected, or, in the alternate;
- b. If said bid shall be accepted and the Principal shall execute and deliver a contract in the form of agreement attached hereto and shall execute and deliver Performance and Contractor's Bonds in the forms attached hereto (all property completed in accordance with said bid), and shall in all other respects perform the agreement created by the acceptance of said bid;

Then this obligation shall be void, otherwise the same shall remain in force and effect, it being expressly understood and agreed that the liability of the Surety for any and all default of the Principal hereunder shall be the amount of this obligation as herein stated. Surety, for value received, thereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the contract on the call for bids, or to 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 to the work, or to the specifications.

In the event suit is brought upon this bond by the Owner and judgment is recovered the Surety shall pay all costs incurred by the Owner in such suit, including a reasonable attorney's fee to be fixed by the court.

IN WITNESS WHEREOF, the above-bounden parties have executed this Instrument under their several seals this _____ day of _____, 2026 the name and corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

In presence of:

_____(Seal)

(Address)

(Business Address)

(Seal)

(Individual Principal)

(Address)

(Business Address)

Attest:

(Corporate Principal)

(Business Address)

By: _____
(Affix Corporate Seal)

The rate or premium on this bond is _____
per thousand. Total amount of premium charged, \$ _____ .

(This bond must be signed and acknowledged
by both Principal and Surety before a
Notary Public, and acknowledgments
with Notarial Seals attached hereto.)

Surety

By: _____
Attorney-in-fact

(The above must be filled in by Corporate Surety. Surety company must be California admitted insured.)

END OF SECTION

PAYMENT BOND
(Labor & Material)

KNOW ALL MEN BY THESE PRESENTS:

That WHEREAS,

and _____

Hereinafter designated as the "Principal," have entered into a contract for the furnishing of all materials and labor, services and transportation, necessary, convenient, and proper to:

RIPON HIGH SCHOOL SHADE STRUCTURES
for
RIPON UNIFIED SCHOOL DISTRICT
301 N Acacia Avenue, Ripon, CA 95366

Which said agreement dated _____, 2026, and all of the contract documents attached to or forming a part of said agreement, are hereby referred to and made a part hereof; and

WHEREAS, the Principal is required, before entering upon the performance of the work, to file a good and sufficient bond with the body by whom the contract is awarded to secure the claims arising under said agreement.

NOW, THEREFORE, THESE PRESENTS WITNESSETH:

That the said Principal and the undersigned _____
_____ as Corporate Surety, are held and firmly bound unto all laborers, material men, and other persons referred to in said statutes in the sum of

_____ Dollars
which sum well and truly be made, we bind ourselves, our heirs, executors, administrators, successors, or assigns, jointly and severally, by these presents.

The conditions of this obligation is that if the said Principal or any of his or its subcontractors, or the heirs, executors, administrators successors, or assigns of any, all, or either of them, shall fail to pay for any materials, provisions, provender or other supplies, or teams, 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 Act with respect to such work or labor, that said Surety will pay the same in an amount not exceeding the amount hereinabove set forth, and also in case suit is brought upon this bond, will pay a reasonable attorney's fee to be awarded and fixed by the Court, and to be taxed as costs and to be included in the judgment therein rendered.

It is hereby expressly stipulated and agreed that this bond shall inure to the benefit of any and all persons, companies, and corporation entitled to file claims so as to give a right of action to them or their assigns in any suit brought upon this bond.

Should the condition of this bond be fully performed, then this obligation shall become null and void, otherwise it shall be and remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no charge, extension of time, alteration, or addition to the terms of said contract or the specifications accompanying the same shall in any manner affect its obligations on this bond, and it does hereby waive notice of any such change, extension, alteration, or addition.

IN WITNESS WHEREOF, this instrument has been duly executed by the Principal and Surety this _____ day of _____, 2026.

(To be signed by _____)
(Principal and Surety, _____)
(and acknowledged and _____)
(Notarial Seal Attached. _____)
Principal

Surety

By _____
(Attorney-in-fact)

The above bond is accepted and approved this _____ day of _____, 2026.

END OF SECTION

PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____
_____, as Principal, and _____
_____, as Surety, are held and firmly bound unto RIPON UNIFIED
SCHOOL DISTRICT, in the County of _____,
State of California, hereinafter called the "Owner", in the sum of

_____ Dollars
(\$ _____)

for the payment of which sum well and truly made, we bind ourselves, our heirs, executors,
administrators, and successors, jointly and severally, firmly by these presents.

The condition of this obligation is such, that whereas the Principal entered into a certain contract
with the Owner, date _____, 2026 for:

RIPON HIGH SCHOOL SHADE STRUCTURES
for
RIPON UNIFIED SCHOOL DISTRICT
301 N Acacia Avenue, Ripon, CA 95366

NOW THEREFORE, if the Principal shall well and truly perform and fulfill all the undertakings,
covenants, terms, conditions, and agreements of said contract during the original term of said
contract and any extension thereof that may be granted by the Owner, with or without notice to the
Surety, and during the life of any guaranty required under the contract, and shall also well and truly
perform and fulfill all the undertakings, covenants, terms, conditions, and agreements of any and all
duly authorized modifications of said contract that may hereafter be made, then, this obligation to
be void, otherwise to remain in full force and virtue.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of
time, alternation or addition to the terms of the contract or to the work to be performed thereunder,
or the specifications accompanying the same, shall in anyway affect its obligation 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.

IN WITNESS WHEREOF, the above-bounden parties have executed this instrument under their
several seals this _____ day of _____, 2026, the name and corporate seal of
each corporate party being hereto affixed and these presents duly signed by its undersigned
representative, pursuant to authority of its governing body.

In presence of:

(Individual Principal)	(Seal)
(Address)	(Business Address)

Attest:

	(Corporate Principal)
	(Business Address)
	By: _____
	(Affix Corporate Seal)

Attest:

	(Corporate Surety)
	(Business Address)
	By: _____
	(Affix Corporate Seal)

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

Total amount of premium charged, \$ _____ .

(The above must be filled in by Corporate Surety.)

END OF SECTION

FORM OF PROPOSAL

_____, California

_____, 2026

Board of Trustees
RIPON UNIFIED SCHOOL DISTRICT
304 N Acacia Avenue, Ripon, CA 95366

Members of the Board:

The undersigned doing business under the firm name of _____

_____ understands that the District may select from any line item(s) or combination of line items listed on the Base Bid. Furthermore, the undersigned, having carefully examined the Contract Documents, titled,

RIPON HIGH SCHOOL SHADE STRUCTURES

for

RIPON UNIFIED SCHOOL DISTRICT

proposes to furnish all materials and labor called for by them for the entire work, including all taxes for the following amounts:

Base Bid: The undersigned proposes to perform **all** work as defined in the Plans and Specifications to construct the project and all appurtenant work thereto for the sum of:

_____ Dollars

(\$_____).

If written notice of the acceptance of this bid is mailed, telegraphed, or delivered to the undersigned within sixty (60) days after the date of opening of the bids, or any time thereafter before the bid is withdrawn, the undersigned will, within ten (10) days after the date of such mailing, telegraphing, or delivering of such notice, execute and deliver a contract in the form of agreement present in these contract documents and give Performance and Contractor's Bonds and insurance certificates, endorsements, and/or policies in accordance with the Contract Documents.

The Undersigned hereby designates as his office to which such notice of acceptance may be mailed, telegraphed, or delivered:

Our Public Liability and Property Damage Insurance is placed with:

Our Worker's Compensation Insurance is placed with:

Circular letters, addenda, etc., bound with specifications or issued during the time of bidding are included in the proposal, and, in completing the contract, they are to become part thereof.

The receipt of the following addenda to the specifications is acknowledged:

Addendum No.	_____	Date	_____
Addendum No.	_____	Date	_____
Addendum No.	_____	Date	_____

This bid may be withdrawn by the bidder at any time prior to the scheduled time for the opening of bids. The representations made herein are made under penalty of perjury.

Dated _____ ,

License No. _____

Expiration Date of License _____

By (please print) _____

Signed _____

Business Address _____

Telephone _____

Fax _____

Federal I.D# or Social Security #: _____

Department of Industrial Relations #: _____

Note: If Bidder is a corporation, write state of incorporation under signature, attach notarized proof of authority to bind corporation and list corporation officers; and, if a partnership, give full names of all partners. Use space below to record this information.

Do not include in the envelope any bids for other work.

DESIGNATION OF SUBCONTRACTORS

Contractor's Name: _____

In accordance with the provisions of Division 1, Chapter 4 of the Public Contract Code, known as the "Subletting and Subcontracting Fair Practices Act," the contractor signatory to this agreement shall be known as the prime contractor of the work herein specified, and he shall set forth in his bid the complete name, location of the place of business and license number of each subcontractor who will perform work or labor, or render service to the prime contractor in or about the construction of the work in an amount in excess of one-half (1/2) of one (1) percent of the prime contractor's total bid, and the portion of the work which will be done by each subcontractor if the contract for said work is awarded to said bidder. The prime contractor shall list only one subcontractor for each such portion of the work as is defined by the prime contractor in his bid.

If the prime contractor fails to specify a subcontractor or if he specified more than one subcontractor for any portion of work to be performed under the contract, in excess of one-half (1/2) of one (1) percent of the prime contractor's total bid, he agrees that he is fully qualified to perform that portion himself, and that he shall perform that portion himself. If, after the award of the contract, the prime contractor shall, except as provided for in said Chapter herein above referred to, subcontract any such portion of the work, the prime contractor shall be subject to the penalties provided.

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

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Portion of Work: _____ **License#:** _____ **DIR#:** _____

Subcontractor Name: _____ **Location:** _____
Portion of Work: _____ **License#:** _____ **DIR#:** _____

"NONCOLLUSION AFFIDAVIT"

(TO BE EXECUTED BY BIDDER AND SUBMITTED WITH BID)

_____, being first duly sworn, deposes and says that he or she is

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

Added Stats 1988 ch 1548 sec 1.

Signature

Date

Notary

END OF SECTION

GENERAL CONDITIONS OF THE CONTRACT FOR CONSTRUCTION

ARTICLE 1 - CONTRACT DOCUMENTS

1.1 DEFINITIONS

- 1.1.1 The Contract Documents - The Contract Documents consist of the Contract, the Instructions to Bidders, Performance and Payment Bond, the Conditions of the Contract, the Drawings, the Specifications, all Addenda, issued prior to execution of the Contract, and all Modifications thereto. A Modification is (1) a written amendment to the Contract signed by both parties, (2) a Change Order, (3) a written interpretation issued by the Architect pursuant to Subparagraph 1.2.5., or (4) a written order for a minor change in the work issued by the Architect pursuant to Paragraph 12.4. A Modification may be made only after execution of the Contract.
- 1.1.2 The Contract - The Contract Documents form the Contract. The Contract represents the entire and integrated agreement between the parties hereto, and supersedes all prior negotiation, representations, or agreements, either written or oral, including the bidding documents. The Contract may be amended or modified only by a Modification as defined in Subparagraph 1.1.1.
- 1.1.3 The Work - The term work comprises the completed construction required by the Contract Documents and includes all labor necessary to produce the construction required by the Contract Documents, and all materials and equipment incorporated or to be incorporated in such construction.
- 1.1.4 The Project - The Project is the total construction designed by the Architect of which the work performed under the Contract Documents may be the whole or a part.
- 1.1.5 Owner - The Owner is St. Joseph's Catholic Church, of Stanislaus County, California, and named as such in the Agreement.
- 1.1.6 Estimated Completion Date - The Estimated Completion Date shall be the date set forth as such in the General Conditions.

1.2 EXECUTION, CORRELATION, INTENT AND INTERPRETATIONS

- 1.2.1 The Contract Documents, including the Contract in the forms furnished the bidder prior to his bid, shall be signed in not less than triplicate by the Owner and Contractor.
- 1.2.2 By executing the Contract, the Contractor represents that he has visited the site, familiarized himself with the local conditions under which the work is to be performed, and correlated his observations with the requirements of the Contract Documents.

- 1.2.3 The Contract Documents are complementary, and what is required by any one shall be as binding as if required by all. The intention of the Documents is to include all labor, materials, equipment, and other items as provided in Subparagraph 4.4.1 necessary for the proper execution and completion of the work. It is not intended that work not covered under any heading, section, branch, class, or trade of the Specifications shall be supplied unless it is required elsewhere in the Contract Documents or is reasonable inferable therefrom as being necessary to produce the intended results. Words which have well-known technical or trade meanings are used herein in accordance with such recognized meanings.
- 1.2.4 The organization of the Specifications into divisions, sections, and articles, and the arrangement of Drawings shall not control the Contractor in dividing the work among Subcontractors or in establishing the extent of work to be performed by any trade.
- 1.2.5 Written interpretations necessary for the proper execution of progress of the work, in the form of drawings or otherwise, will be issued with reasonable promptness by the Architect and in accordance with any schedule agreed upon. Such interpretations shall be consistent with and reasonable inferable from the Contract Documents, and may be effected by Field Order.

1.3 COPIES FURNISHED AND OWNERSHIP

- 1.3.1 Unless otherwise provided in the Contract Documents, the Contractor will be furnished, free of charge, six (6) copies of Drawings and Specifications.

ARTICLE 2 - ARCHITECT

2.1 DEFINITION

- 2.1.1 The Architect is the person or organization identified as such in the Agreement and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Architect means the Architect or his authorized representative.
- 2.1.2 Nothing contained in the Contract Documents shall create any contractual relationship between the Architect and the Contractor.

2.2 ADMINISTRATION OF THE CONTRACT

- 2.2.1 The Architect will provide general Administration of the Construction Contract, including performance of the functions hereinafter described.
- 2.2.2 The Architect will be the Owner's representative during construction and until final payment. The Architect will have authority to act on behalf of the Owner to the

extent provided in the Contract Documents, unless otherwise modified by written instrument which will be shown to the Contractor. The Architect will advise and consult with the Owner, and all of the Owner's instructions to the Contractor shall be issued through the Architect.

- 2.2.3 The Architect, his representatives, including the inspectors and owner, shall at all times have access to the work wherever it is in preparation and progress. The Contractor shall provide facilities for such access so the architect may perform his functions under the Contract Documents.
- 2.2.4 The Architect will make periodic visits to the site to familiarize himself generally with the progress and quality of the work and to determine, in general, if the work is proceeding in accordance with the Contract Document. On the basis of his on-site observations as an Architect, he will keep the Owner informed of the progress of the work, and will endeavor to guard the Owner against defects and deficiencies in the work of the Contractor. The Architect will not be required to make exhaustive or continuous on-site inspections to check the quality or quantity of the work. The Architect will not be responsible for construction means, methods, techniques, sequences, or procedures, or for safety precautions and programs in connections with the work, and he will not be responsible for the Contractor's failure to carry out the work in accordance with the Contract Documents.
- 2.2.5 Based on such observations and the Contractor's Applications for Payment, the Architect will review the amounts owing to the Contractor and will issue Certificates for Payment in such amounts, as provided in Paragraph 9.4.
- 2.2.6 The Architect will be, in the first instance, the interpreter of the requirements of the Contract Documents and the judge of the performance thereunder by both the Owner and Contractor. The Architect will, within a reasonable time, render such interpretations as he may deem necessary for the proper execution of progress of the work.
- 2.2.7 Claims, disputes and other matters in question between the Contractor and the Owner relating to the execution or progress of the work or the interpretation of the Contract Documents shall be referred initially to the Architect for decision which he will render in writing within a reasonable time.
- 2.2.8 All interpretations and decisions of the Architect shall be consistent with the intent of the Contract Documents.
- 2.2.9 The Architect's decision in matters relating to artistic effect will be final if consistent with the intent of the Contract Documents.

- 2.2.10 The Architect will have authority to reject work which does not conform to the Contract Documents. Whenever he considers it necessary or advisable to insure the proper implementation of the Contract Documents, he will have authority to require the contractor to stop the work or any portion thereof, or to require special inspection or testing of the work as provided in Subparagraph 7.8.2 whether or not such work be then fabricated, installed or completed. However, neither the Architect's authority to act under this Subparagraph 2.2.11, nor any decision made by him in good faith either to exercise or not to exercise such authority, shall give rise to any duty or responsibility of the Architect to the Contractor, any subcontractor, any of their agents or employees, or any other person performing any of the work.
- 2.2.11 The Architect will review Shop Drawings and Samples.
- 2.2.12 The Architect will prepare Change Orders in accordance with Article 12, and will have authority to order minor changes in the work.
- 2.2.13 The Architect will conduct inspections to determine the dates of the Substantial Completion and final completion, will review written guarantees and related documents required by the Contract and assembled by the Contractor, and will issue a final Certificate for Payment.
- 2.2.14 The Architect will not be responsible for the acts or omissions of the Contractor, or any Subcontractors, or any of his or their agents or employees, or any other persons performing any of the work.
- 2.2.15 In case of the termination of the employment of the Architect, the Owner shall appoint an architect whose status under the Contract Documents shall be that of the former architect.

ARTICLE 3 - OWNER

3.1 INFORMATION AND SERVICES REQUIRED OF THE OWNER

- 3.1.1 Information or services under the Owner's control shall be furnished by the Owner with reasonable promptness to avoid delay in the orderly progress of the work.
- 3.1.2 The Owner shall issue all instructions to the Contractor through the Architect.
- 3.1.3 The foregoing are in addition to other duties and responsibilities of the Owner enumerated herein and especially those in respect to Payment and Insurance in Article 9 and 11 respectively.

3.2 OWNER'S RIGHT TO STOP THE WORK

3.2.1 If the Contractor fails to correct defective work as required by Paragraph 13.2 or persistently fails to carry out the work in accordance with the Contract Documents, the Owner, by a written order signed personally or by an agent specifically so empowered by the Owner in writing, may order the Contractor to stop the work, or any portion thereof, until the cause for such order has been eliminated; however, this right of the Owner to stop the work shall not give rise to any duty on the part of the Owner to exercise this right for the benefit of the Contractor or any other person or entity.

ARTICLE 4 - CONTRACTOR

4.1 DEFINITION

4.1.1 The Contractor is the person or organization identified as such in the Contract and is referred to throughout the Contract Documents as if singular in number and masculine in gender. The term Contractor means the Contractor or his authorized representative.

4.2 REVIEW OF CONTRACT DOCUMENTS

4.2.1 The Contractor shall carefully study and compare the Contract Documents and shall at once report to the Architect any error, inconsistency or omission he may discover; but the Contractor shall not be liable to the Owner or the Architect for any damage resulting from any such errors, inconsistencies or omissions in the Contract Documents. The Contractor shall perform no portion of the work at any time without Contract Documents or where required, approved Shop Drawings, Product Data or Samples for such portion of the work.

4.3 SUPERVISION AND CONSTRUCTION PROCEDURES

4.3.1 The Contractor shall supervise and direct the work, using his best skill and attention. He shall be solely responsible for all construction means, methods, techniques, sequences and procedures and for coordinating all portions of the work under the Contract.

4.3.2 The Contractor shall be responsible to the owner for the acts and omissions of his employees, Subcontractors, and their agents and employees, and other persons performing any of the work under a contract with the Contractor.

4.3.3 The Contractor shall not be relieved from his obligations to perform the work in accordance with the Contract Documents either by the activities or duties of the Architect in his administration of the Contract, or by inspections, tests or approvals required or performed under Paragraph 7.8 by persons other than the Contractor.

4.4 LABOR AND MATERIALS

- 4.4.1 Unless otherwise specifically provided in the Contract Documents, the Contractor shall provide and pay for all labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of the work, whether temporary or permanent and whether or not incorporated or to be incorporated in the work.
- 4.4.2 The Contractor shall at all times enforce strict discipline and good order among his employees and shall not employ on the work any unfit person or anyone not skilled in the task assigned to him.

4.5 WARRANTY

- 4.5.1 The Contractor warrants to the Owner and the Architect that all materials and equipment furnished under this contract will be new unless otherwise specified, and that all work will be of good quality, free from faults and defects, and in conformance with the Contract Documents. All work not so conforming to these standards may be considered defective.
- 4.5.2 The warranty provided in this Paragraph 4.5 shall be in addition to and not in limitation of any other warranty or remedy required by law or by the Contract Documents.

4.6 TAXES

- 4.6.1 The Contractor shall pay all sales, consumer, use, and other similar taxes required by law.

4.7 PERMITS, FEES, AND NOTICES

- 4.7.1 The Contractor shall secure and pay for all permits and licenses necessary for the prosecution of the work, including utility fees. District will reimburse Contractor the actual documented cost of such permits, licenses and fees, with no overhead or profit added.
- 4.7.2 The Contractor shall give all notices and comply with all laws, ordinances, rules, regulations, and orders of any public authority bearing on the performance of the work. If the Contractor observes that any of the Contract Documents are at variance therewith in any respect, he shall promptly notify the Architect in writing, and any necessary changes shall be adjusted by appropriate modification. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Architect, he shall assume full responsibility therefore, and shall bear all costs attributable thereto.

- 4.7.3 All materials and workmanship shall conform to the California Building Code. All work and materials shall be in full accordance with the 2025 Rules and Regulations of the State Fire Marshal, National Board of Fire Underwriters, California Electric Code, Safety Orders of Division of Industrial Safety, California Plumbing Code, and other applicable federal and state laws and regulations. Such laws and regulations shall be considered a part of these specifications, as if set forth herein in full and all work hereunder shall be executed in accordance therewith. Nothing in these plans or specifications is to be construed to permit work not conforming to the Codes.
- 4.7.4 All materials furnished and all work done under these specifications shall be subject to rigid inspection by the Architect and Owner who shall furnish competent and adequate inspection during normal working periods. When specific inspection is required as called for in plans and specifications, the Contractor shall inform the Architect and Inspector of the schedule of such work. Failure to do so may require such work to be torn out and replaced under proper inspection, and the entire cost of tearing out and replacement including cost of any materials furnished by the Owner and used in the work torn out, shall be borne by the Contractor. Work covered up without the approval of the Architect or the Owner shall be uncovered to the extent required and the Contractor shall similarly bear the cost of performing all the work and furnishing all the materials necessary for the removal of the covering and its subsequent replacement.
- 4.7.5 Whenever the Contractor arranges to work at night, or at any time when work is not usually in progress, or to vary the period during which work is carried out each day, he shall give the Owner due notice so that inspection may be provided. Such work shall be done without extra compensation to the Contractor and such additional inspection costs shall be chargeable to the Contractor providing such work is not performed at the request of the Owner to meet earlier completion time than that established in the Contract, or for a cause not under control of the Contractor.

4.8 ALLOWANCES (not used)

4.9 SUPERINTENDENT

- 4.9.1 The Contractor shall employ a competent superintendent and necessary assistants who shall be in attendance at the project site during the progress of the work. The superintendent shall be satisfactory to the Architect, and shall not be changed except with the consent of the Architect, unless the superintendent proves to be unsatisfactory to the Contractor and ceases to be in his employ. The superintendent shall represent the Contractor and all communications given to the superintendent shall be as binding as if given to the contractor. Important communications will be confirmed in writing. Other communications will be so confirmed on written request in each case.

4.10 PROGRESS SCHEDULE

4.10.1 The Contractor, immediately after being awarded the Contract, shall prepare and submit for the Architect's approval an estimated progress schedule for the work. The progress schedule shall be related to the entire Project to the extent required by the Contract Documents. This schedule shall indicate the dates for the starting and completion of the various stages of construction and shall be revised as required by the conditions of the work, subject to the Architect's approval.

4.11 DRAWINGS AND SPECIFICATIONS AT THE SITE

4.11.1 The Contractor shall maintain at the site for the Owner one copy of all Drawings, Specifications, Addenda, approved Shop Drawings, Change Orders, and other modifications, in good order and marked to record all changes made during construction. These shall be available to the Architect. The Drawings, marked to record all changes made during construction, shall be delivered to the Architect for the Owner upon completion of the work.

4.12 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES

4.12.1 Shop Drawings are drawings, diagrams, illustrations, schedules, performance charts, brochures and other data which are prepared by the Contractor or any Subcontractor, manufacturer, supplier or distributor, and which illustrate some portion of the work.

4.12.2 Product Data are illustrations, standard schedules, performance charts, instructions, brochures, diagrams and other information furnished by the Contractor to illustrate a material, product or system for some portion of the work.

4.12.3 Samples are physical examples furnished by the Contractor to illustrate materials, equipment, or workmanship, and to establish standards by which the work will be judged.

4.12.4 The Contractor shall review, stamp with his approval and submit, with reasonable promptness and in orderly sequence so as to cause no delay in the work or in the work of any other contractor, all Shop Drawings and Samples required by the Contract Documents or subsequently by the Architect as covered by modifications. Shop Drawings and Samples shall be properly identified as specified, or as the Architect may require. At the time of submission the Contractor shall inform the Architect in Writing of any deviation in the Shop Drawings or Samples from the requirements of the Contract Documents.

- 4.12.5 By approving and submitting Shop Drawings, Product Data and Samples, the Contractor thereby represents that he has determined and verified all field measurements, field construction criteria, materials, catalog numbers and similar data, or will do so, and that he has checked and coordinated the information contained within such submittal with the requirements of the work and of the Contract Documents.
- 4.12.6 The Architect will review and approve Shop Drawings, Product Data and Samples with reasonable promptness so as to cause no delay, but only for conformance with the design concept of the project and with the information given in the Contract Documents. The Architect's approval of a separate item shall not indicate approval of an assembly in which the item functions.
- 4.12.7 The Contractor shall make any corrections required by the Architect and shall resubmit the required number of corrected copies of Shop Drawings, Product Data or new Samples until approved. The Contractor shall direct specific attention in writing or on resubmitted Shop Drawings to revisions other than the corrections requested by the Architect on previous submissions.
- 4.12.8 The Architect's approval of Shop Drawings, Product Data or samples shall not relieve the Contractor of responsibility for any deviation from the requirements of the Contract Documents unless the Contractor has informed the Architect in writing of such deviation at the time of submission and the Architect has given written approval to the specific deviation, nor shall the Architect's approval relieve the Contractor from responsibility for errors or omissions in the Shop Drawings, Product Data or Samples.
- 4.12.9 No portion of the work requiring a Shop Drawing, Product Data, or Sample submission shall be commenced until the submission has been approved by the Architect. All such work shall be in accordance with approval submittal.
- 4.12.10 The Contractor shall submit to the Architect and Owner for approval, within thirty-five(35) days after the signing of the Contract, a complete list setting forth the brand name and manufacturer of all materials and/or equipment proposed for use under this Contract. The list shall include all items required under the Contract, although the brand name or manufacturer may not be specifically included in the specifications. Where specific brands are specified, substitutions therefore shall be clearly indicated on the material equipment list.

4.12.11 Wherever samples are called for in the specifications, or where it is desired to substitute another material or article for the specified, the Contractor shall submit samples in triplicate to the Architect with all freight charges prepaid. One sample will be returned to him at his expense, with letter stating that it is approved or rejected, and one sample will be returned to the Owner for his records. All materials delivered on the site or placed in the building shall be equal to the sample in every respect.

4.12.12 Where special makes or brands are called for, they are mentioned as a "Standard." Others of equal quality may be used, provided approval is first obtained in writing from the Architect. Unless substitutions are requested, no deviation from the plans and specifications will be allowed. Substitutions shall be requested or offered for investigation in ample time, as no delay or extra time will be allowed on account thereof.

Requests for substitution will only be considered when offered by the General Contractor and such requests must be made within thirty-five (35) days after the award of the Contract.

4.12.13 All materials shall be delivered as to insure a speedy and uninterrupted progress of the work. All materials shall be stored so as to cause no obstruction and so as to prevent overloading of any portion of the structure, and the Contractor shall be entirely responsible for damage or loss by weather or other cause.

4.13 USE OF SITE

4.13.1 The Contractor shall confine operations at the site to areas permitted by law, ordinances, permits and the Contract Documents and shall not unreasonably encumber the site with any materials or equipment.

4.14 CRIMINAL HISTORY CLEARANCE/SITE PROTECTION CERTIFICATION

4.14.1 The Criminal History Clearance/Site Protection Certification form, see Article 21 of the General Conditions, is required from all successful bidders pursuant to the requirements mandated by California Education Code Sections 33192 and 45124.1 et seq., the Michelle Montoya School Safety Act of 1997. This provides that a school district may require a construction contractor that has a contract with the district to obtain a criminal history clearance from the Department of Justice of all employees working on a school site under that contract.

4.15 CUTTING AND PATCHING OF WORK

4.15.1 The Contractor shall be responsible for all cutting, fitting, or patching that may be required to complete the work or to make its several parts fit together properly.

4.15.2 The Contractor shall not damage or endanger any portion of the work or the work of the Owner or any separate contractors by cutting, patching, or otherwise altering any work, or by excavation. The Contractor shall not cut or otherwise alter the work of the Owner or any separate contractor except with the written consent of the Owner and of such separate contractor. The Owner shall not unreasonably withhold from the Contractor or any separate contractor his consent to cutting or otherwise altering the work.

4.16 CLEANING UP

4.16.1 The Contractor at all times shall keep the premises free from accumulation of waste materials or rubbish caused by his operations.

At the completion and during the work he shall remove all his waste materials and rubbish from and about the Project as well as all his tools, construction equipment, machinery and surplus materials, and shall clean all glass surfaces and leave the work "broom clean" or its equivalent, except as otherwise specified. The Contractor cannot use the Owner's trash bins.

4.16.2 If the Contractor fails to clean up, the Owner may do so and the cost thereof shall be charged to the Contractor as provided in Paragraph 7.6.

4.17 COMMUNICATIONS

4.17.1 The Contractor shall forward all communications to the Owner through the Architect.

4.18 INDEMNIFICATION

4.18.1 To the fullest extent permitted by law, the Contractor shall indemnify and hold harmless the Owner and the Architect and their agents and employees from and against all claims, damages, losses, and expenses including attorney's fees arising out of or resulting from the performance of the work, or the failure, neglect or refusal of the Contractor to perform the work provided that any such claim, damage, loss or expenses (a) is attributable to bodily injury, sickness, disease or death, or in injury to or destruction of tangible property (other than the work itself) including the loss of use resulting there from, and (b) is caused in whole or in part by any negligent act or omission of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless or whether or not it is caused in part by a party indemnified hereunder. Such obligation shall not be construed to negate, abridge, or otherwise reduce any other right or obligation of indemnity which would otherwise reduce any other right or obligation of indemnity which would otherwise exist as to any party described in this Paragraph 4.18.

- 4.18.2 In any and all claims against the Owner or the Architect or any of their agents or employees by an employee of the Contractor, any Subcontractor, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, the indemnification obligation under this Paragraph 4.18 shall not be limited in any way by any limitation on the amount or type of damages, compensation or benefits payable by or for the contractor or any Subcontractor under worker's compensation acts disability benefits acts or other employee benefit acts.

ARTICLE 5 - SUBCONTRACTORS

5.1 DEFINITION

- 5.1. A Subcontractor is a person or organization who has a direct contract with the Contractor to perform any of the work at the site. The term Subcontractor is referred to throughout the Contract Documents as if singular in number and masculine in gender, and means a Subcontractor or his authorized representatives. The term Subcontractor does not include any separate contractor or his subcontractors.
- 5.1.2 A Sub-subcontractor is a person or organization who has a direct or indirect contract with the Subcontractor to perform any of the work at the site. The term Sub-subcontractor is referred to throughout the contract Documents as if singular in number and masculine in gender and means a Sub-subcontractor or an authorized representative thereof.
- 5.1.3 Nothing contained in the Contract Documents shall create any contractual relation between the Owner or the Architect and any Subcontractor or Sub-subcontractor.

5.2 AWARD OF SUBCONTRACTS AND OTHER CONTRACTS FOR PORTIONS OF THE WORK

- 5.2.1 The Contractor shall include with his Bid Proposal the names of each Subcontractor who will perform work or labor or render service to the Contractor in or about the work in an amount in excess of 1/2 of 1% of the bidder's total bid. The Contractor shall not, without written consent of the Owners, make any substitution thereto, or permit any subcontract to be assigned or transferred or performed by anyone other than the original Subcontractor listed in the Bid Proposal. The Contractor agrees that he is as fully responsible to the Owners for the acts and omissions of his Subcontractors and for the persons directly employed by him. The Owner will deal only through the General Contractor, who shall be responsible for the proper execution of the entire work.

Subletting the whole or any part of the Contract, if approved, shall be done only in accordance with the provisions of Sections 4100 to 4114 inclusive of the public Contract Code of the State of California, which are hereby incorporated by reference and made a part hereof.

- 5.2.2 If, prior to the award of the Contract, the Owner or Architect has a reasonable and substantial objection to any person or organization on such list, and refuses in writing to accept such person or organization, the successful bidder may, prior to the award, withdraw his bid without forfeiture of bid security. If the successful bidder submits an acceptable substitute, the Owner shall accept such substitute without any increase in bid price. If no satisfactory substitute is submitted, the Owner may disqualify the bid. If, after the award, the Owner or Architect refuses to accept any person or organization on such list, the Contractor shall submit an acceptable substitute and the Contract Sum shall be increased or decreased by the difference in cost occasioned by such substitution and an appropriate Change Order shall be issued; however, no increase in the Contract Sum shall be allowed for any such substitution unless the Contractor has acted promptly and responsively in submitting a name with respect thereto prior to the award.
- 5.2.3 The Contractor shall not contract with any Subcontractor or any person or organization proposed for portions of the work designated in the bidding requirements or, if none is so designated, with any Subcontractor proposed for the principal portions of the work who has not been accepted by the Owner and the Architect. The Contractor will not be required to contract with any subcontractor or person or organization against whom he has a reasonable objection.
- 5.2.4 If the Owner and the Architect requires a change of any proposed Subcontractor or person or organization previously accepted by them, the Contract Sum shall be increased or decreased by the difference in cost occasioned by such change and an appropriate Change Order shall be issued.
- 5.2.5 The Contractor shall not make any substitution for any Subcontractor or person or organization who has been accepted by the Owner and Architect, unless the substitution is acceptable to the Owner and the Architect.

5.3 SUBCONTRACTUAL RELATIONS

- 5.3.1 All work performed for the Contractor by a Subcontractor shall be pursuant to an appropriate agreement between the Contractor and the Subcontractor (and where appropriate between Subcontractors and Sub-subcontractors) which shall contain provisions that:
1. Preserve and protect the rights of the Owner and the Architect under the Contract Documents with respect to the work to be performed under the subcontract so that the subcontracting thereof will not prejudice such rights;
 2. Require that such work be performed in accordance with the requirements of the Contact Documents;

3. Require submission to the Contractor of applications for payment under such subcontract to which the contractor is a party, in reasonable time to enable the Contractor to apply for payment in accordance with Article 9;
4. Require that all claims for additional costs, extensions of time, damages for delays or otherwise with respect to subcontracted portions of the work shall be submitted to the Contractor (via any Subcontractor or Sub-subcontractor where appropriate) in the manner provided in the Contract Documents for like claims by the Contractor upon the Owner;
5. Waive all right the contracting parties may have against one another for damages caused by fire or other perils covered by the property insurance described in Paragraph 11.2, except such rights as they may have to the proceeds of such insurance help; and
6. Obligate such Subcontractor specifically to consent to the provisions of this Paragraph 5.3, and identify to each Subcontractor any terms and conditions of each proposed Subcontract which may be a variance with the Contract Documents.

5.4 CLAIMS FOR EXTRA WORK / FOR EXTENSIONS OF TIME

- 5.4.1 The Contractor shall not be entitled to the payment of any additional compensation or any extension of time for any cause, including any act, or failure to act by the Architect, or happening of any event, thing or occurrence, unless the Contractor shall have given the Architect due written notice of potential claims as hereinafter specified. It is the intention of this Section 5.4 that the differences between the parties, arising under and by virtue of the Contract be brought to the attention of the Architect at the earliest possible time in order that such matters may be settled, if possible, or other appropriate action promptly taken. It is also the intention of this Section 5.4 to implement the provisions of Article 1.5 (commencing with Section 20104) of Chapter 1 of Part 3 of the Public Contract Code of California. The Contractor hereby agrees that he or she shall have no right to additional compensation or an extension of item for any claim that may be based on any act, failure to act, event, thing or occurrence for which no written notice of potential claim as hereby required was filed.

All claims shall be filed in writing on or before the times prescribed herein, but in no event later than the date of final payment. Claims shall be filed with the Architect prior to the time that the Contractor commences performance of the work giving rise to the potential claim for additional compensation, if based on any act or failure to act by the Architect, or in all other cases within ten (10) days after the happening of event, thing or occurrence giving rise to the potential claim. All claims shall set forth clearly and in detail, for each item of additional compensation or extension of

time claimed, the reasons for the specifications, the nature and the amount of the cost involved, the computations used in determining such costs, and all pertinent factual data necessary to substantiate the claim.

ARTICLE 6 - WORK BY OWNER OR BY SEPARATE CONTRACTORS

6.1 OWNER'S RIGHT TO PERFORM WORK AND TO AWARD SEPARATE CONTRACTS

6.1.1 The Owner reserves the right to perform work related to the Project with his own forces, and to award separate contracts in connection with other portions of the Project or other work on the site under these or similar Conditions of the Contract. If the Contractor claims that delay or additional cost is involved because of such action by the Owner, he shall make such claim as provided elsewhere in the Contract Documents.

6.1.2 When separate contracts are awarded for different portions of the Project, "the Contractor" in the Contract Documents in each case shall be the contractor who signs each separate contract.

6.2 MUTUAL RESPONSIBILITY OF CONTRACTORS

6.2.1 The Contractor shall afford the Owner and separate contractors reasonable opportunity for the introduction and storage of their materials and equipment and the execution of their work, and shall properly connect and coordinate his work with theirs.

6.2.2 If any part of the Contractor's work depends for proper executioner results upon the work of the Owner or any separate contractor, the Contractor shall inspect and promptly report to the Architect and Inspector any discrepancies or defects in such other work that render it unsuitable for such proper execution and results. Failure of the Contractor to so inspect and report shall constitute an acceptance of the Owner's or the separate Contractor's work as fit and proper to receive his work, except as to defects which may develop in the other separate contractor's work after the execution of the Contractor's work.

6.2.3 Should the Contractor cause damage to the work or property of any separate contractor on the Project, the Contractor shall, upon due notice, settle with such other contractor by agreement or arbitration, if he will so settle. If such separate contractor sues the Owner on account of any damage alleged to have been so sustained, the Owner shall notify the Contractor and the Contractor shall defend such proceedings at the Contractor's expense and, if any judgment against the Owner arises therefrom, the Contractor shall pay or satisfy it and shall reimburse the Owner for all attorneys fees and court cost which the Owner has incurred.

6.2.4 Any cost caused by defective or ill-timed work shall be borne by the party responsible therefore.

6.3 OWNER'S RIGHT TO CLEAN UP

6.3.1 If a dispute arises between the separate contractors as to their responsibility for cleaning up as required by paragraph 4.15, the Owner may clean up and charge the cost thereof to the several contractors as the Architect shall determine to be just.

ARTICLE 7 - MISCELLANEOUS PROVISIONS

7.1 LAW OF THE PLACE

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

7.2 SUCCESSORS AND ASSIGNS

7.2.1 The Owner and the Contractor each binds himself, his partners, successors, assigns and legal representatives to the other party hereto and to the partners, successors, assigns and legal representatives of such other party in respect to all covenants, agreements and obligations contained in the Contract Documents. Neither party to the Contract shall assign the Contract or sublet it as a whole without the written consent of the other, nor shall the Contractor assign any monies due or to become due or to become due to him hereunder, without the previous written consent of the Owner.

7.3 WRITTEN NOTICE

7.3.1 Written notice shall be deemed to have been duly served if delivered in person to the individual or member of the firm or to an officer of the corporation for whom it was intended, or if delivered at or sent by registered or certified mail to the last business address known to him who gives the notice.

7.4 CLAIMS FOR DAMAGES

7.4.1 Should either party to the Contract suffer injury or damage to person or property because of any act or omission of the other party or if any of his employees, agents or others for whose acts he is legally liable, claim shall be made in writing to such other party within a reasonable time after the first observance of such injury or damage.

7.5 PERFORMANCE BOND AND LABOR AND MATERIAL PAYMENT BOND

7.5.1 The Owner shall require the Contractor to furnish bonds covering the faithful performance of the Contract and the payment of all obligations arising thereunder in such form and amount as the Owner may prescribe and with such sureties as may be agreeable to the parties. If such bonds are stipulated in the bidding requirements, the premiums shall be paid by the Contractor; if required subsequent to the submission of quotations or bids, the cost shall be reimbursed by the Owner. The Contractor shall deliver the required bonds to the Owner not later than the date of execution of the Contract, or if the work is commenced prior thereto in response to a notice to proceed, the Contractor shall, prior to commencement of the work, submit evidence satisfactory to the Owner that such bonds will be issued.

7.6 OWNER'S RIGHT TO CARRY OUT THE WORK

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

7.7 ROYALTIES AND PATENTS

7.7.1 The Contractor shall pay all royalties and license fees. He shall defend all suits or claims for infringement of any patent rights and shall save the Owner harmless from loss on account thereof, except that the Owner shall be responsible for all such loss when a particular design, process or the product of a particular manufacturer or manufacturers is specified, but if the Contractor has reason to believe that the design, process or product specified is an infringement of a patent, he shall be responsible for such loss unless he promptly gives such information to the Architect.

7.8 TESTS

7.8.1 If the Contract Documents, Laws, ordinances, rules, regulations or orders of any public authority having jurisdiction require any work to be inspected, tested, or approved, the Contractor shall give the Architect timely notice of its readiness and of the date arranged so the Architect may observe such inspection, testing or approval. The Owner shall bear all costs of such inspection, tests, and approvals unless otherwise provided.

- 7.8.2 If, after the commencement of the work, the Architect determines that any work requires special inspection, testing, or approval which Subparagraph 7.8.1 does not include, he will, upon written authorization from the Owner, instruct the Contractor to order such special inspection, testing, or approval, and the Contractor shall give notice as in Subparagraph 7.8.1. If such special inspection or testing reveals a failure of the work to comply (1) with the requirements of the Contract Documents or, (2) with respect to the performance of the work, with laws, ordinances, rules, regulations or orders of any public authority having jurisdiction, the Contractor shall bear all cost thereof, including the Architect's and the Owner's inspectors, additional service made necessary by such failure; otherwise the Owner shall bear such costs, and an appropriate Change Order will be issued.
- 7.8.3 All sampling and tests shall be made by a properly qualified person or testing laboratory, approved by the Division of the State Architect, who shall furnish copies of the test results to the Contractor, Architect, Owner, and the Division of the State Architect. All tests as well as sampling and preparation of samples where applicable shall be in accordance with Standards as latest adopted by A.S.T.M.
- 7.8.4 If the Architect wishes to observe the inspections, tests or approvals required by this Paragraph 7.8, he will do so promptly and, where practicable, at the source of supply.
- 7.8.5 Neither the observations of the Architect in his administration of the Contract, nor inspections, tests or approvals by persons other than the Contractor shall relieve the Contractor from his obligations to perform the work in accordance with the Contract Documents.
- 7.8.6 Payment for Tests and Inspection will be made as follows:
- A. District will pay cost of testing and inspection except the following for which the Contractor shall reimburse the District:
 - 1. Any retesting and sampling required due to failure of original test.
 - 2. Concrete design mix.
 - 3. Bacteriological Water Analysis testing for new relocatable buildings.
- 7.8.7 The Inspector of Record is to be employed by the Owner and approved by the Architect and DSA.

ARTICLE 8 - TIME - LIQUIDATED DAMAGES

8.1 DEFINITIONS

- 8.1.1 Unless otherwise provided, the Contract Time is the period of time allotted in the Contract Documents for substantial completion of the work as defined in Subparagraph 8.1.3, including authorized adjustments thereto.

- 8.1.2 The date of commencement of the work is the date established in a Notice to Proceed. If there is no Notice to Proceed, it shall be the date of the Contract or such other date as may be established therein.
- 8.1.3 The Date of Substantial Completion of the work or designated portion thereof is the Date certified by the Architect when construction is sufficiently completed, in accordance with the Contract Documents, so the Owner may occupy the work or designated portion thereof for the use for which it is intended.
- 8.1.4 The term "day" as used in the Contract Documents shall mean calendar day unless specifically designated.

8.2 PROGRESS AND COMPLETION

- 8.2.1 All time limits stated in the Contract Documents are of the essence of the Contract.
- 8.2.2 The Contractor shall begin the work on the date of commencement as defined in Subparagraph 8.1.2. He shall carry the work forward expeditiously with adequate forces and shall complete it within the contract time.

8.3 DELAYS AND EXTENSIONS OF TIME - TIME LIMIT

- 8.3.1 The project shall be completed in the manner provided for in the Contract on or before the completion date as set forth in the Supplementary General Conditions (hereinafter called the "Fixed Completion Date"), unless extensions of time are granted in accordance with the Contract for delays caused by the perils covered by the insurance required by Article 1 hereof or by any are declared by an enactment of the Congress of the United States of America as set forth herein. Failure to complete the work within such time and in the manner provided for by the Contract shall subject the Contractor to liquidated damages in accordance with Paragraph 8.4 "Liquidated Damages." Time is and shall be of the essence.
- 8.3.2 The Contractor shall commence work on the Project on or before five (5) calendar days from and after receipt of written "Notice to Proceed" from the Owner to the Contractor, and will diligently prosecute the work to completion. Said Notice to Proceed shall be issued following execution of Contract and the filing by the Contractor of the required bonds and insurance. The Contractor agrees to complete all of the work on or before the Estimated Completion Date. The continuous prosecution of the work within such time shall be subject only to delays caused by any changes in the work or by any default, act or omission of the Owner, or by any other contractor employed by the Owner on the work or by riots, strikes, lock-outs, fire, earthquake, flood and conditions resulting therefrom or by the inability to obtain material, equipment or labor due to Federal Government restrictions or requirements arising out of any defense or war program. Such delays, if any, shall operate only to extend the Estimated Completion Date above specified (not in excess of the period of such delay).

- 8.3.3 In the event it is deemed necessary by the Owner and the Contractor to extend the time of completion of the work to be done under these specifications beyond the dates of required completion herein specified, such extensions as shall be granted by the Owner shall in no way release any guarantee given by the Contractor pursuant to the provisions of the Contract, or to relieve or release the sureties on the bonds executed pursuant to said provision. The sureties in executing the bonds on the Contract shall be deemed to have expressly agreed to any such extension of time. The Owner shall not be required to pay extended overhead cost to the Contractor for allowing an extension of time to the Contract.
- 8.3.4 All claims for extension of time shall be made in writing to the Architect no more than fifteen days after the occurrence of the delay; otherwise they shall be waived. In the case of a continuing cause of delay, only one claim is necessary.
- 8.3.5 If no schedule or agreement is made stating the dates upon which written interpretations as set forth in Subparagraph 1.2.5 shall be furnished, then no claim for delay shall be allowed on account or failure to furnish such interpretations until fifteen days after demand is made for them, and not then unless such claim is reasonable.
- 8.3.6 This Paragraph 8.3 does not exclude the recovery of damages for delay by either party under other provisions of the Contract Documents.

8.4 LIQUIDATED DAMAGES

- 8.4.1 The actual fact of the occurrence of damages and the actual amount of the damages which the Owner would suffer if the work were not completed within the specified times set forth are dependent upon many circumstances and conditions and could prevail in various combinations, and, from the nature of the case, it is impracticable and extremely difficult to fix the actual damages. Damages which the Owner would suffer in the event of delay include loss of the use of the project, and, in addition, include, but are not limited to, expenses of prolonging employment of an engineering staff, costs of administration, inspection, supervision and the loss suffered by the public within the District by reason of the delay in the construction of the project to serve the public at the earliest possible time. Accordingly, the parties hereto agree that the amounts herein set forth shall be presumed to be the amount of damages sustained by the failure of the Contractor to complete the project within the respective times specified.
- 8.4.2 The amount of liquidated damages to be paid by the Contractor to the Owner for failure to complete the work specified will be **\$500.00 for each calendar day** by which completion of the project is delayed beyond the Fixed Completion Date and continuing thereafter to the time at which the Project is completed such amount being in each case the actual cash value agreed upon as the loss to the Owner resulting from the Contractor's default.

- 8.4.3 In the event the Contractor shall become liable for liquidated damages under this section, the Owner, in addition to all other remedies provided by law, shall have the right to withhold any and all retained payments which would otherwise be or become due the Contractor until the liability of the Contractor under this section has been finally determined.

The Owner shall have the right to use and apply such retained amounts, in whole or in part, to reimburse the Owner for all damages due to or to become due to the Owner. Any remaining balance of such retained amounts shall be paid to the Contractor only after discharge in full of all liability incurred by the Contractor under this article. If the retained amount is not sufficient to discharge all liabilities of the Contractor incurred under this article the Contractor and its sureties shall continue to remain liable to the Owner until all such liabilities are satisfied in full.

- 8.4.4 In addition to any other rights it may have, the Owner may terminate the Contract at any time after the Fixed Completion Date unless the Contractor shall have been granted an extension of time for delay pursuant to this Article 8. Upon such termination the Contractor shall not be entitled to any compensation for services rendered by before or after such termination, and he shall be liable to the Owner for liquidated damages for all periods of time beyond such date until the project is fully completed.

ARTICLE 9 - PAYMENTS AND COMPLETION

9.1 CONTRACT SUM - DEFINITION

- 9.1.1 The Contract Sum is stated in the Contract, or is as may be modified by duly executed change orders, and is the total amount payable by the Owner to the Contractor for their performance of the work under the Contract Documents.

9.2 SCHEDULE OF VALUES

- 9.2.1 Before the first Application for Payment, the Contractor shall submit to the Architect a schedule of values allocated to the various portions of the work, including quantities if required by the Architect, aggregating the total Contract Sum, divided by section as enumerated in the Project Manual's "Table of Contents", so as to facilitate payments to Subcontractors. Prepare schedule of values on AIA Documents G702 and G703, and supported by such data to substantiate its correctness as the Architect may require. Each item in the schedule of values shall include its proper share of overhead, and profit. This schedule, when approved by the Architect, shall be used as a basis for the Contractor's Applications for Payment.

9.3 PROGRESS PAYMENTS

- 9.3.1 At least ten days before each progress payment falls due, the Contractor shall submit to the Architect an itemized Application for Payment, supported by such data substantiating the Contractor's right to payment as the Owner or the Architect may require.
- 9.3.2 If payments are to be made on account of materials or equipment not incorporated in the work but delivered and suitable stored at the site, or at some other location agreed upon in writing, such payments shall be conditioned upon submission by the Contractor of bills of sale or such other procedures satisfactory to the Owner to establish the Owner's title to such materials or equipment or otherwise protect the Owner's interest including applicable insurance and transportation to the site.
- 9.3.3 The Contractor warrants and guarantees that title to all work, materials, and equipment covered by an application for payment, whether incorporated in the project or not, will pass to the Owner upon the receipt of such payment of the Contractor, free and clear of all liens, claims, security interests or encumbrances, hereinafter referred to in this Article 9 as "liens" and that no work, materials, or equipment covered by an Application for Payment will have been acquired by the Contractor, or by any other person performing the work at the site or furnishing materials and equipment for the Project, subject to an agreement under which an interest therein or an encumbrance thereon is retained by the seller or otherwise imposed by the contractor or such other person.
- 9.3.4 SUBMISSION OF CERTIFIED PAYROLL RECORDS: For all on-site work only, HUGHSON UNIFIED SCHOOL DISTRICT requires weekly submission of certified payroll certificates. In addition to the weekly payroll records for your company, you are required to submit the weekly payroll records for all subcontractors.

9.4 CERTIFICATES FOR PAYMENTS

- 9.4.1 If the Contractor has made Application for Payment as above, the Architect will, with reasonable promptness but not more than seven (7) days after the receipt of the Application, issue a Certificate for Payment to the Owner with a copy to the contractor for such amount as he determines to be properly due or state in writing his reasons for withholding a Certificate as provided in Subparagraph 9.5.1.
- 9.4.2 The issuance of a Certificate for Payment will constitute a representation by the Architect to the Owner, based on his observations at the site as provided in Subparagraph 2.2.4 and the data comprising the Application for Payment, that the work has progressed to the point indicated; that, to the best of his knowledge, information and belief, the quality of the work is in accordance with the Contract Documents (subject to an evaluation of the work as a functioning whole upon substantial Completion, to the results of any subsequent tests required by the Contract Documents, to minor deviations from the Contract Documents correctable

prior to completion, and to any specific qualifications stated in his Certificate and that the Contractor is entitled to payment in the amount certified). In addition, the Architect's final Certificate for Payment will constitute a further representation that the conditions precedent to the Contractor's being entitled to final payment as set forth in Subparagraph 9.7.2 have been fulfilled. However, by issuing a Certificate for Payment, the Architect shall not thereby be deemed to represent that he has made exhaustive or continuous on-site inspections to check the quality or quantity of the work or that he has reviewed construction means, methods, techniques, sequences, or procedures, or that he has made any examination to ascertain how or for what purpose the Contractor has used the monies previously paid on account of the Contract sum.

9.4.3 After the Architect has issued a Certificate for Payment, the Owner shall make payment in the manner provided in the Contract.

9.4.4 No Certificate for a progress payment, nor any progress payment, nor any partial or entire use or occupancy of the project by the Owner, shall constitute an acceptance of any work not in accordance with the Contract Documents.

9.5 PAYMENTS WITHHELD

9.5.1 The Architect may decline to approve an Application for Payment and may withhold his Certificate in whole or in part if in his opinion he is unable to make representations to the Owner as provided in Subparagraph 9.4.2. The Architect may also decline to approve any Applications for Payment or, because of subsequently discovered evidence or subsequent inspections, he may nullify the whole or any part of any Certificate for payment previously issued to such extent as may be necessary in his opinion to protect the Owner from loss because of:

1. Defective work not remedied;
2. Claims filed or reasonable evidence indicating probably filing of claims;
3. Failure of the Contractor to make payments properly to Subcontractors or for labor, materials, or equipment;
4. Reasonable doubt that the work can be completed for the unpaid balance of the Contract Sum;
5. Damage to another contractor;
6. Reasonable indication that the work will not be completed within the Contract Time; or,
7. Unsatisfactory prosecution of the work by the Contractor.

9.5.2 When the above grounds in Subparagraph 9.5.1 are removed, payment shall be made for amounts withheld because of them.

9.5.3 The Contractor may, in accordance with the provisions of Public Contract Code, Section 22300, substitute securities for any monies which the Owner may withhold to insure performance under the Contract.

9.6 FAILURE OF PAYMENT

9.6.1 If the Architect should fail to issue any Certificate for Payment, through no fault of the Contractor, within ten days after receipt of the Contractor's Application for Payment, or if the Owner would fail to pay the Contractor within twenty days after the date of payment established in the Contract any amount certified by the Architect, then the Contractor may, upon seven (7) additional days written notice to the Owner and the Architect, stop the work until payment of the amount owing has been received.

9.7 SUBSTANTIAL COMPLETION AND FINAL PAYMENT

9.7.1 When the Contractor determines that the work or a designated portion thereof acceptable to the owner is substantially complete, the Contractor shall prepare for submission to the Architect a list of items to be completed or corrected. The failure to include any items on such list does not alter the responsibility of the Contractor to complete all work in accordance with the Contract Documents.

When the Architect on the basis of an inspection determines that the work is substantially complete he will then prepare a Certificate of Substantial Completion, which shall establish the Date of Substantial Completion, which shall state the responsibilities of the Owner and the Contractor for maintenance, heat, utilities, and insurance, and shall fix the time listed therein, said time to be within the Contract Time unless extended pursuant to Paragraph 8.3.

The Certificate of Substantial Completion shall be submitted to the Owner and the Owner and the Contractor for their written acceptance of the responsibilities assigned to them in such Certificate.

9.7.2 Upon receipt of written notice that the work is ready for final inspection and acceptance, and upon receipt of a final Application for Payment, the Architect will promptly make such inspection and, when he finds that work acceptable under the Contract Documents and the Contract fully performed, he will promptly issue a final Certificate for Payment stating that to the best of his knowledge, information, and belief, and on the basis of his observations and inspections, the work has been completed in accordance with the terms and conditions of the Contract Documents and that the entire balance found to be due the Contractor, and noted in said final Certificate, is due and payable.

- 9.7.3 Neither the final payment nor the remaining retained percentage shall become due until the Contractor submits to the Architect (1) and Affidavit that all payrolls, bills for materials and equipment, and other indebtedness connected with the work for which the Owner or his property might in any way be responsible, have been paid or otherwise satisfied, (2) consent of surety, if any, to final payment and (3) if required by the Owner, other data establishing payment or satisfaction of all such obligations, such as receipts, releases and waivers of liens, claims or stop notices, arising out of the Contract, to the extent and in such form as may be designated by the Owner. If any Subcontractor refuses to furnish a release or waiver required by the Owner, the contractor may furnish a bond satisfactory to the Owner to indemnify him against any such lien, claim, or stop notice. If any such lien, claim, or stop notice remains unsatisfied after all payments are made, the Contractor shall refund to the Owner all monies that the alter may be compelled to pay in discharging such lien, claim, or stop notice, including all costs and reasonable attorneys fees.
- 9.7.4 If after Substantial Completion of the work final completion thereof is materially delayed through no fault of the Contractor, and the Architect so confirms, the Owner shall, upon certification by the Architect, and without terminating the Contract, make payment of the balance due for that portion of the work fully completed and accepted. If the remaining balance for work not fully completed or corrected is less than the retainage stipulated in the Contract, and if bonds have been furnished as required in Subparagraph 7.5.1, the written consent of the surety to the payment of the balance due for that portion of the work fully completed and accepted shall be submitted by the Contractor to the Architect prior to certification of such payment. Such payment shall be made under the terms and conditions governing final payment, except that it shall not constitute a waiver of claims.
- 9.7.5 The making of final payment shall constitute a waiver of all claims by the Owner except those arising from:
1. Unsettled liens;
 2. Faulty or defective work appearing after Substantial Completion;
 3. Failure of the work to comply with the requirements of the Contract Documents; or,
 4. Terms of any special guarantees required by the Contract Documents.
- 9.7.6 The acceptance of final payment shall constitute a waiver of all claims by the Contractor except those previously made in writing and still unsettled.

ARTICLE 10 - PROTECTION OF PERSONS AND PROPERTY

10.1 SAFETY PRECAUTIONS AND PROGRAMS

10.1.1 The Contractor shall be responsible for initiating, maintaining and supervising all safety precautions and programs in connection with the work.

10.2 SAFETY OF PERSONS AND PROPERTY

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

1. Employees on the work and all other persons who may be affected thereby;
2. All the work and all materials and equipment to be incorporated therein whether in storage on or off the site, under the care, custody or control of the Contractor or any of his Subcontractors; and,
3. Other property at the site or adjacent thereto, including trees, shrubs, lawns, walks, pavements, roadway, structures and utilities not designated for removal, relocation or replacement in the course of construction.

10.2.2 The Contractor shall give all notices and comply with all applicable laws, ordinances, rules, regulations, and orders of any public authority having jurisdiction for the safety of persons or property or to protect them from damage, injury or loss. He shall erect and maintain, as required by existing conditions and progress of the work, all reasonable safeguards for safety and protection, including posting danger signs and other warnings against hazards, promulgating safety regulations and notifying owners and users of adjacent utilities.

10.2.3 When the use or storage of explosives or other hazardous material or equipment is necessary for the execution of the work, the Contractor shall exercise the utmost care and shall carry on such activities under the supervision of properly qualified personnel.

10.2.4 Shoring and Trench Safety Plan - Attention is directed to Section 832 of the Civil Code of the State of California relating to lateral and subjacent support, and the Contractor shall comply with this law.

10.2.5 In accordance with Section 6705 of the State Labor Code, the Contractor shall submit to the District specific plans to show details of provisions for worker protection from caving ground. Not less than thirty (30) days before beginning excavation for any trench or trenches five feet or more in depth required under this Contract, the Contractor shall furnish to the Architect working drawings of his trench

safety plan. The trench safety plan working drawings shall be detailed plans showing the design of shoring, bracing, sloping or other provisions to be made for worker protection from the hazard of caving ground.

If such plan varies from the shoring system standards established by the Construction Safety Orders of the California Division of Industrial Safety or the Federal safety standards of the Department of Health, Education and Welfare, the plan shall be prepared by a registered civil or structural engineer. In no event shall the Contractor use a shoring, sloping, or protective system less effective than that required by said Construction Safety Orders, or less effective than that required by said Federal Safety Standards. Submission of this plan in no way relieves the Contractor from the requirement to maintain safety in all operations performed by him or his Subcontractors.

- 10.2.6 All damage or loss to any property referred to in Clauses 10.2.1.2 and 10.2.1.3 caused in whole or in part by the Contractor, any Subcontractor, any Sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, shall be remedied by the Contractor, except damage or loss attributable to faulty Drawings or Specifications or to the acts or omissions of the Owner or Architect or anyone employed by either of them or for whose acts either of them may be liable, and not attributable to the fault or negligence of the Contractor.
- 10.2.7 The Contractor shall designate a responsible member of his organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated in writing by the Contractor to the Owner and the Architect.
- 10.2.8 The Contractor shall not load or permit any part of the work to be loaded so as to endanger its safety.
- 10.2.9 Should the Contractor encounter material reasonably believed to be asbestos or polychlorinated biphenyl (PCB) on the site which has not been rendered harmless, the Contractor shall immediately stop work in the affected area and notify the District and the Architect of the condition in writing. Work in the affected area shall not be resumed except by written agreement of the District and Contractor if the material is asbestos or PCB, or when it has been rendered harmless.
- 10.2.10 The Contractor shall not be required to perform without consent any work relating to asbestos or PCB.

10.3 EMERGENCIES

10.3.1 In any emergency affecting the safety of persons or property, the Contractor shall act, at his discretion, to prevent threatened damage, injury or loss. Any additional compensation or extension of time claimed by the Contractor on account of emergency work shall be determined as provided in Article 12 for Changes in the work.

ARTICLE 11 - INSURANCE

11.1 PROJECT INSURANCE

11.1.1 Scope - Contractor shall procure prior to commencing any activities and maintain for the duration of the contract insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors. The cost of such insurance shall be included in the Contractor's bid.

11.1.2 Minimum Limits of Insurance - Contractor shall maintain coverage and limits no less than:

Liability - Comprehensive General Liability Insurance or Commercial General Liability Insurance including coverage for premises and operation, contractual liability, personal injury liability, products/completed operations liability, broad form property damage and owners/contractors protective liability in an amount not less than one million dollars (\$1,000,000) per occurrence, combined aggregate single limit for bodily injury, personal injury and property damage written on as occurrence form. For protection of the aggregate a separate liability policy must be used for this Contract or an endorsement issued to reserve the required aggregate for this specific contract.

Automobile - Comprehensive Automobile Liability Insurance, including as applicable owned, non-owned, and hired automobile in an amount not less than one million dollars (\$1,000,000) per occurrence combined single limit for bodily injury and property damage written on an occurrence form.

Workers' Compensation - The Contractor shall submit proof that Workers' Compensation Insurance as required by the Labor Code of the State of California is secured. The insurance shall include Employers Liability limits of one million dollars (\$1,000,000) per accident.

11.1.3 Builder's Risk Insurance: The contractor shall take out and maintain until final acceptance of the project, Builder's Risk Insurance against all perils on a special form basis with the customary exclusions. The District shall be named as an additional insured and the policy shall be in sufficient amount to cover fully the replacement cost of structures constituting any part of the project excluding excavation, grading and land filling.

11.2 GENERAL CONDITIONS

11.2.1 Deductibles and Self-Insured Retention - Any deductible or self-insured Retention must be declared to and approved by the District. At the option of the District either the insurer shall reduce or eliminate such deductibles or self-insured Retention as respects the District, its officials and employees; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

11.2.2 Other Provisions - The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverage:

- a. The District, its officials, employees and volunteers are to be covered as additional insured as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor.
- b. The Contractor's insurance coverage shall be primary insurance as respects the District, its officials, employees and volunteers. Any insurance or self-insurance maintained by the district, its officials, employees and volunteers shall be excess of the Contractor's insurance and shall not contribute with it.
- c. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the District, its officials, employees or volunteers.
- d. Coverage shall state that the contractor's insurance shall apply separately to each insured against who claim is made or suit is brought, except with respect to the limits of the insurer's liability.

ARTICLE 12 - CHANGES IN THE WORK

12.1 ADDENDA

12.1.1 Addenda are to be signed by the Architect and approved by DSA.

12.2 CONSTRUCTION CHANGE DOCUMENTS (CCD)

12.2.1 Construction Change Documents (CCD) shall be the process for documenting changes to the approved Plans or Specifications after the contract has been awarded. CCD's shall comply with DSA Interpretation of Regulations IR A-6. All CCD's shall be signed by the Architect and approved by DSA.

12.3 CHANGE ORDERS

12.3.1 A Change Order is a written order to the Contractor signed by the Owner and the Architect, issued after the execution of the Contract, authorizing a Change in the work or an adjustment in the Contract Sum or the Contract Time. The Contract Sum and the Contract Time may be changed only by Change Order. A Change Order signed by the Contractor indicates his agreement therewith, including the adjustment in the Contract Sum or the Contract Time. Change Orders must include CCD that have been approved by DSA

12.3.2 The Owner, without invalidating the Contract, may order changes in the work within the general scope of the Contract consisting of additions, deletions or other revisions, the Contract Sum and the Contract Time being adjusted accordingly. All such changes in the work shall be authorized by Change Order, and shall execute under the applicable conditions of the Contract Document. Change Orders shall be approved by the Division of the State Architect and signed by the Contractor, in addition to the Owner and Architect.

12.3.3 The cost or credit to the Owner resulting from a change in the work shall be determined in one or more of the following ways:

1. By mutual acceptance of a lump sum properly itemized and supported by sufficient substantiating data to permit evaluation;
2. By unit prices stated in the Contract Documents, Form of Proposal or subsequently agreed upon;
3. By costs to be determined in a manner agreed upon by the parties and a mutually acceptable fixed or percentage fee; or,
4. By the method provided in Subparagraph 12.2.4.
5. For all changes in the work, the allowance for overhead, profit and bond combined, included in the total cost to the Owner, shall be based upon the following schedule:

For the Contractor, for any work performed by his own force, twelve percent (12%) of the cost;

For each subcontractor involved, work performed by his own forces, twelve percent (12%) of the cost;

For the Contractor, for work performed by his subcontractor, six percent (6%) of the amount due the subcontractor.

Cost shall be limited to the following: cost of materials, including sales tax and cost of delivery, cost of labor, including Social Security, Old Age and Unemployment Insurance (labor cost may include a prorated share of foreman charge); worker's Compensation Insurance; Rental cost of power tools and equipment.

12.3.4 If none of the methods set forth in Clauses 12.2.3.1, 12.2.3.2 or 12.2.3.3 is agreed upon, the Contractor, provided he receives a written order signed by the Owner, shall promptly proceed with the work involved. The cost of such work shall then be determined by the Architect on the basis of the reasonable expenditures and savings of those performing the work attributable to the change, including, in the case of an increase in the Contract Sum, an allowance for overhead and profit in accordance with the schedule set forth above in paragraph 12.2.3.5.

In such case, and also under Clauses 12.2.3.3 and 12.2.3.4 above, the Contractor shall keep and present, in such form as the Architect may prescribe, an itemized accounting together with appropriate supporting data for inclusion in a Change Order. Unless otherwise provided in the Contract Documents, cost shall be limited to the following:

1. Cost of materials, including sales tax and cost of delivery.
2. Cost of labor, including social security, old age and unemployment insurance and fringe benefits required by collective bargaining agreement or custom.
3. Worker's compensation insurance.
4. Bond premiums.
5. Rental cost of equipment and machinery
6. Additional cost of supervision and field office personnel directly attributable to the change.
7. As-Builts.

Pending final determination of cost to the Owner, payments on account shall be made on the Architect's Certificates for Payment. The amount of credit to be allowed by the Contractor to the Owner for any deletion or change which results

in a net decrease in the Contract Sum will be the amount of the actual net cost as confirmed by the Architect. When both additions and credits covering related work or substitutions are involved in any one change, the allowance for overhead and profit shall be figured on the basis of the net increase, if any with respect to that change.

12.4 CONCEALED CONDITIONS

12.4.1 Should concealed conditions encountered in the performance of the work below the surface of the ground be at variance with the conditions indicated by the Contract Documents or, should unknown physical conditions below the surface of the ground of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work of the character provided for in this Contract, be encountered, the Contract Sum shall be equitably adjusted by Change Order upon claim by either party made within a reasonable time after the first observance of the conditions.

12.5 CLAIMS FOR ADDITIONAL COST OR TIME

12.5.1 If the Contractor wishes to make a claim for an increase in the Contract Sum or an extension in the Contract Time, he shall give the Architect and the Construction Manager written notice thereof within ten (10) days time after the occurrence of the event giving rise to such claim. This notice shall be given by the Contractor before proceeding to execute the work except in an emergency endangering life or property in which case the Contractor shall proceed in accordance with Subparagraph 12.5.1. No such claim shall be valid unless so made.

If the Owner and the Contractor cannot agree on the amount of the adjustment in the Contract Sum or the Contract Time, it shall be determined by the Architect. Any change in the Contract Sum or Contract Time resulting from such claim shall be authorized by Change Order.

12.5.2 If the Contractor claims that additional cost or time is involved because of (1) any written interpretation issued pursuant to Subparagraph 1.2.5, (2) any order by the Architect to stop the work pursuant to Subparagraph 2.2.11 where the Contractor was not at fault, or (3) any written order for a minor change in the work issued pursuant to Paragraph 12.5, the Contractor shall make such claim as provided in this Paragraph 12.4.1.

12.6 MINOR CHANGES IN THE WORK

12.6.1 The Architect shall have authority to order minor changes in the work not involving an adjustment in the Contract Sum or an extension of the Contract Time and not inconsistent with the intent of the Contract Documents. Such changes may be effected by Field Order or by other written order. Such changes shall be binding on

the Owner and the Contractor. The Owner shall be notified in writing by the Architect of such changes. The Contractor shall carry out such written orders promptly.

12.7 FIELD ORDERS

12.7.1 The Architect may issue written Field Orders which interpret the Contract Documents in accordance with Subparagraph 1.2.5 or which order minor changes in the work in accordance with Paragraph 12.5 without change in Contract Sum or Contract Time. The Contractor shall carry out such Field Orders promptly.

ARTICLE 13 - UNCOVERING AND CORRECTION OF WORK

13.1 UNCOVERING OF WORK

13.1.1 If any work should be covered contrary to the request of the Architect, or to requirement specifically expressed in the Contract Document, it must if required in writing by the Architect, be uncovered for his observation and replaced, at the Contractor's expense.

13.1.2 If any other portion of the work has been covered which the Architect has not specifically requested to observe prior to being covered, the Architect may request to see such work and it shall be uncovered by the Contractor.

If such work be found in accordance with the Contract Documents, the cost of uncovering and replacement shall be by appropriate Change Order, be charged to the Owner. If such work be found not in accordance with the Contract Document, the Contractor shall pay such costs unless it be found that this condition was caused by the Owner or a separate contractor employed as provided in Article 6, and in that event the Owner shall be responsible for the payment of such costs.

13.2 CORRECTION OF WORK

13.2.1 The Contractor shall promptly correct all work rejected by the Architect as defective or as failing to conform to the Contract Documents whether observed before or after substantial completion and whether or not fabricated, installed or completed. The Contractor shall bear all costs of correcting such rejected work, including the cost of the Architect's additional services thereby made necessary.

13.2.2 If, within one year after the Date of Substantial Completion or within such longer period of time as may be prescribed by law or by the terms of any applicable special guarantee required by the Contract Documents, any of the work is found to be defective or not in accordance with the Contract Documents, the Contractor shall correct it promptly after receipt of a written notice from the Owner to do so unless

the Owner has previously given the Contractor a written acceptance of such condition. The Owner shall give such notice promptly after discovery of the condition.

- 13.2.3 The Contractor shall remove from the site all portions of the work which are defective or non-conforming and which have not been corrected under Subparagraphs 4.5.1, 13.2.1 and 13.2.2, unless removal is waived by the Owner.
- 13.2.4 If the Contractor fails to correct defective or non-conforming work as provided in Subparagraphs 4.5.1, 13.2.1 and 13.2.2, the Owner may correct it in accordance with Paragraph 7.6.
- 13.2.5 If the Contractor does not proceed with the correction of such defective or non-conforming work within a reasonable time fixed by written notice from the Architect, the Owner may remove it and may store the materials or equipment at the expense of the Contractor.

If the Contractor does not pay the cost of such removal and storage within ten days thereafter, the Owner may upon ten additional days written notice sell such work at auction or at private sale and shall account for the net proceeds thereof, after deducting all the cost that should have been borne by the Contractor, including compensation for additional architectural services. If such proceeds of sale do not cover all cost which the Contractor should have borne, the difference shall be charged the Contractor and an appropriate Change Order shall be issued. If the payments then or thereafter due the Contractor are not sufficient to cover such amount, the Contractor shall pay the difference to the Owner.

- 13.2.6 The Contractor shall bear the cost of making good all work of the Owner or separate contractors destroyed or damaged by such correction or removal.
- 13.2.7 Nothing contained in this Paragraph 13.2 shall be construed to establish a period of limitation with respect to any other obligation which the Contractor might have under the Contract Documents, including Paragraph 4.5 hereof. The establishment of the time period of one year after the Date of Substantial Completion or such long period of time as may be prescribed by law or by the terms of any warranty required by the Contract Documents relates only to the specific obligation of the Contractor to correct the work, and has no relationship to the time within which his obligation to comply with the Contract Documents may be sought to be enforced, not to the time within which proceedings may be commenced to establish the Contractor's liability with respect to his obligations other than specifically to correct the work.

13.3 ACCEPTANCE OF DEFECTIVE OR NON-CONFORMING WORK

13.3.1 If the Owner prefers to accept defective or non-conforming work, he may do so instead of requiring its removal and correction, in which case the Change Order will be issued to reflect an appropriate reduction in the Contract Sum, or, if the amount is determined after final payment, it shall be paid by the Contractor.

ARTICLE 14 - TERMINATION OF THE CONTRACT

14.1 TERMINATION BY THE CONTRACTOR

14.1.1 If the work is stopped for a period of thirty (30) days under an order of any court or other public authority having jurisdiction, through no act or fault of the Contractor or a Subcontractor or their agents or employees or any other persons performing any of the work under a contract with the Contractor, or if the work should be stopped for a period of thirty days by the Contractor because the Architect has not issued a Certificate for Payment as provided in Paragraph 9.6 or because the Owner has not made payment thereon as provided in Paragraph 9.6, then the Contractor may, upon fifteen days written notice to the Owner and the Architect, terminate the Contract and recover from the Owner payment for all work executed and for any proven loss sustained upon any materials, equipment, tools, construction equipment and machinery, including reasonable profit and damages.

14.2 TERMINATION BY THE OWNER

14.2.1 If the Contractor is adjudged bankrupt, or if he makes general assignment for the benefit of his creditors, or if a receiver is appointed on account of his insolvency, or if he persistently or repeatedly refuses or fails, except in cases for which extension of time is provided, to supply enough property skilled workmen or proper materials, or if he fails to make prompt payment to Subcontractors or for materials or labor, or persistently disregards laws, ordinances, rules, regulations or order of any public authority having jurisdiction, or otherwise is guilty of a substantial violation of a provision of the Contract Documents, the Owner, upon certification by the Architect that sufficient cause exists to justify such action, may, without prejudice to any right or remedy and after giving the Contractor and his surety, if any, seven days written notice, terminate the employment of the Contractor and take possession of the site, and of all materials, equipment, tools, construction, equipment and machinery thereon owned by the Contractor and may finish the work by whatever method he may deem expedient. In such case the Contractor shall not be entitled to receive any further payment until the work is finished.

14.2.2 If the unpaid balance of the Contract Sum exceeds the costs of finishing the work, including compensation for the Architect's and the Owner's inspectors, additional services, such excess shall be paid to the Contractor. If such costs exceed such unpaid balance, the Contractor shall pay the difference to the Owner.

The costs incurred by the Owner as herein provided shall be certified by the Architect.

ARTICLE 15 - GUARANTEE OF WORK

15.1.1 In addition to guarantees called for elsewhere in these specifications, the Contractor shall guarantee all of his work for a period of one (1) year after the date of filing of the Notice of Completion against defective material or faulty workmanship that may arise within that period. All guarantees must be submitted to the Owner in the form attached hereto.

ARTICLE 16 - USE OF ASBESTOS

16.1.1 The use of asbestos or asbestos containing materials in this project is absolutely forbidden.

ARTICLE 17 - CHECK-IN AT SCHOOL OFFICE

17.1.1 California State Law requires that anyone, other than District personnel, must check-in at a school office before beginning work on a school site. Field crews, foremen and sub-contractors must check-in at the school office daily, must give location of work area, must describe work to be performed and must give an estimate of time required to complete the work. Compliance with these requirements will facilitate timely response from District staff including assistance to the Contractor to gain site access.

ARTICLE 18 - DIVISION OF THE STATE ARCHITECT REQUIREMENTS

18.1 All addenda shall be signed by the Architect, in compliance with Title 24, Part 1, Section 4-338 and approved by D.S.A.

18.2 All work shall be in compliance with Title 24, parts 1 through 6, 9 and 12 and copies kept on job site at all times by the Contractor. Copies shall be 2025 editions.

18.3 The Project Inspector shall be employed by the Owner and approved by the Architect and DSA. The Inspector must be present during all work proceedings.

- 18.4 The Testing Laboratory shall be employed by the Owner and approved by the Architect and D.S.A.
- 18.5 Changes, deletions or additions shall be documented by the Architect by means of Construction Change Documents, per DSA IR A-6 and approved by the Division of the State Architect.

ARTICLE 19 - ASBESTOS NOTIFICATION

- 19.1 Asbestos Hazard Emergency Response Act (AHERA) B regulations require that every firm doing contract work on a school site be informed of the presence of asbestos in the areas where they would be working. The attached “Short Term Worker Notification” provides that information. Contractors are hereby advised that their work must not disturb the asbestos and that certain health hazards are associated with exposure to asbestos fibers. Short Term Worker Notification form will be completed and signed by LEA Designee and Contractor at the Pre-Construction Conference.

**ARTICLE 20
CONTRACTOR'S GUARANTEE**

GUARANTEE FOR _____

We hereby guarantee the _____

Which we have installed in the _____

at _____ for _____ years from date of final payment.

We Agree to repair or replace to the satisfaction of the Owner any and all such work that may prove defective in workmanship or materials within that period, ordinary wear and tear and unusual abuse or neglect excepted, together with any other work which may be damaged or displaced in so doing. In the event of our failure to comply with the above mentioned conditions within a reasonable time after being notified in writing, we collectively and separately do hereby authorize the Owner to proceed to have the defects repaired and made good at our expense, and we will pay the costs and charges therefore immediately upon demand.

(Signature of Subcontractor)

(Signature of Subcontractor)

Date _____

**ARTICLE 21
CRIMINAL HISTORY CLEARANCE/
SITE PROTECTION CERTIFICATION**

In accordance with statutory, regulatory and constitutional restrictions governing the use and dissemination of criminal offender record information, the above mentioned Education Code sections allow for exceptions from obtaining a criminal history clearance of all employees under the following conditions:

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 contractor by an employee of the contractor whom the Department of Justice has ascertained has not been convicted of a violent or serious felony.

Construction contractors are not required to comply with the backgrounding requirements set forth in the Michelle Montoya School Safety Act if one or more of the above mentioned conditions exist.

I, the undersigned, agree to fulfill the terms and requirements of Education Code Sections 33192 and 45125.1 listed above and required that the 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 Sections 33192 and 45125.1,

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 Michelle Montoya Safety Act of 1997, I may be subject to punishment in accordance with the requirements of Sections 33192 and 45125.1 et seq.

I acknowledge that I am aware of the provision of Education Code Sections 33192 and 4512.1 et seq., and hereby certify that I will adhere to the requirements of the Michelle Montoya School Safety Act of 1997.

Signature

Date

END OF SECTION

SUPPLEMENTAL GENERAL CONDITIONS

ARTICLE 1 - DEFINITIONS

- 1.1 MATERIALS - Materials incorporated in the project, or used, or consumed, in the performance of the work.
- 1.2 BUILDING - Includes the entire structure, drives, walks, steps, approaches, and site.
- 1.3 SIMILAR - Shall be taken in its general sense and not meaning identical, and all details of such work shall be in proper relation to the location and connection of other parts of the work.
- 1.4 PROVIDE - Shall mean, "Furnish and install in place".
- 1.5 (As Directed) Or others of similar meaning which authorize any exercise of judgment shall (Acceptable) be distinctly understood to mean that such power to direct, accept, reject, and (Rejected) approve shall be vested Only in the Owner and/or Architect.
- 1.6 N.I.C. - Where the indication, "N.I.C." is noted on the drawings or listed in the specifications, such item is shown or listed for the purpose of general information is, "Not in Contract." Installation and connection to services for such work are not in the contract.
- 1.7 O.F.C.I. - Where the indication, "O.F.C.I." is noted on the drawings or listed in the specifications, such item is shown or listed for information and will be, "Owner **furnished**, Contractor **installed**." The Contractor shall verify all dimensions and details necessary for the proper installation of this item.
- 1.8 TIME LIMITS - All time limits stated in the contract documents are of the essence of the contract.
- 1.9 CALLED FOR - As called for, shown, noted, and/or indicated in the specifications and/or drawings.

ARTICLE 2 - COMPLETION DATES AND LIQUIDATED DAMAGES

- 2.1 FIXED COMPLETION AND ESTIMATED COMPLETION DATE: The Work shall be commenced on the date stated in the Owner's, "Notice to Proceed" (which date will not be less than five (5) consecutive calendar days from and after the date of execution of the Contract) and shall be completed within ninety (90) calendar days. Reference Paragraph 8.3 of the General Conditions. This fixed completion date is defined as the Estimate Completion Date.

END OF SECTION

CONTRACT FORM

This agreement made on the _____, at
RIPON UNIFIED SCHOOL DISTRICT, in San Joaquin County, California, by and between:
_____ and
RIPON UNIFIED SCHOOL DISTRICT, 304 N Acacia Avenue, Ripon, CA 95366,
hereinafter called the Owner.

WITNESSETH: That the Contractor and the Owner for the consideration hereinafter named agree as follows:

ARTICLE I. The Contractor agrees to furnish all labor and materials, including tools, implements, and appliances required, and to perform all the Work in a good and worker-like manner, free from any and all liens and claims of mechanics, material suppliers, subcontractors, artisans, machinists, teamsters, drayers, and laborers required for:

RIPON HIGH SCHOOL SHADE STRUCTURES

for

RIPON UNIFIED SCHOOL DISTRICT

all in strict compliance with the plans, drawings and specifications therefore prepared by Timothy P. Huff, Architect, and other Contract Documents relating thereto.

ARTICLE II. The contractor and the Owner agree that the Advertisement (Notice to Contractors), the Wage Scale, the General Conditions of the Contract, the Supplemental General Conditions of the Contract, Instructions to Bidders, the Specifications, the Drawings and the Addenda and Bulletins thereto, together with this Agreement, form the Contract, and they are as fully a part of the Contract as if thereto attached or therein repeated. The specifications and drawings are intended to cooperate, so that any work exhibited in the drawings and not mentioned in the specifications, or vice versa, is to be executed the same as if both mentioned in the specifications and set forth in the drawings, to the true intent and meaning of the said drawings and specifications when taken together. But no part of said specifications that is in conflict with any portion of this Contract, or that is not actually descriptive of the work to be done thereunder, or of the manner in which the said work is to be executed, shall be considered as any part of this Contract, but shall be utterly null and void, and anything that is expressly stated, delineated or shown in or upon the specifications or drawings shall govern and be followed, notwithstanding anything to the contrary in any other source of information or authority to which reference may be made.

ARTICLE III. The Owner agrees to pay to the Contractor in current funds for the performance of the Contract:

(\$ _____) Dollars

and to make payments or account thereof as provided for in the Contract Documents.

ARTICLE IV. In the event of a dispute between the Owner or Architect and the Contractor as to an interpretation of any of the specifications or as to the quality or sufficiency of material or workmanship, the decision of the Architect shall for the time being prevail and the Contractor without delaying the job, shall proceed as directed by the Architect without prejudice to a final determination by negotiation, arbitration by mutual consent or litigation, and should the Contractor be finally determined to be either wholly or partially correct, the Owner shall reimburse him for any added costs he may have incurred by reason of work done or material supplied beyond the terms of the Contract as a result of complying with the Architect's directions as aforesaid.

ARTICLE V. Pursuant to the provisions of Sections 1773 et seq. of the Labor Code of the State of California, which are hereby incorporated by reference and made a part thereof, the Director of the Department of Industrial Relations has determined the general prevailing rate of per diem wages and the general prevailing rate for holiday and overtime work in the locality of which the Work is to be performed, for each craft, classification or type of workman needed to execute this contract. Per diem wages shall be deemed to include employer payments for health and welfare, pension, vacation, apprenticeship or other training programs, and similar purposes. The director of the Department of Industrial Relations has further determined that the rate of prevailing wage for any craft, classification or type of worker to be employed on the Project is the rate established by the applicable collective bargaining agreement on file at the Director of the Department of Industrial Relations principal office at San Francisco, phone, (415) 972-8846, which rate so provided is hereby adopted by reference and shall be effective for the life of this agreement or until the Director of Department of Industrial Relations determines that another rate be adopted. It shall be mandatory upon the Contractor and on any subcontractor to pay not less than the said specified rates to all workmen employed in the execution of this agreement.

There shall be paid to each worker needed to execute the work to be performed hereunto such travel and subsistence payments as are defined in the applicable collective bargaining agreements filed in accordance with the provision of Labor Code Section 1773.8.

The Contractor as a penalty to the Owner shall forfeit Twenty-five Dollars (\$25.00) for each calendar day or portion thereof for each worker paid less than the stipulated prevailing rates for such work or craft in which such worker is employed.

The difference between such stipulated prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the stipulated prevailing wage rate shall be paid to each worker by the Contractor.

The Contractor and each subcontractor shall keep or cause to be kept an accurate record showing the names and occupations of all laborers, workers, and mechanics employed by him in connection with the extension of this Contract or any subcontract thereunder, and showing also the actual per diem wage paid to each of such workers, which records shall be open at all reasonable hours to inspection by the Owner, its officers and agents and to the representatives of the Division of Labor Law Enforcement of the State Department of Industrial Relations.

ARTICLE VI. It is further understood and agreed that in accordance with the provision of Sections 1810 to 1815, inclusive, of the Labor Code of the State of California, which are hereby incorporated and made a part hereof, the time of service of any worker employed by the Contractor or subcontractor doing or contracting to do any part of the work contemplated by this agreement is limited and restricted to eight hours during any one calendar day and forty hours during any one calendar week, provided, however, work may be performed by such employee in excess of said eight hour per day and forty hours per week provided that compensation for all hours worked in excess of eight hours per day and forty hours per week, is paid at a rate not less than one and one-half times the basic rate of pay. Every Contractor and subcontractor shall keep an accurate record showing the name of and the actual hours worked each calendar day and each calendar week by each worker employed by him in connection with the work. The records shall be kept open at all reasonable hours to inspection by representatives of the Owner and the Division of Labor Law Enforcement. The Contractor shall as a penalty to the Owner forfeit Twenty-five Dollars (\$25.00) for each worker employed in the execution of this Contract by the Contractor or by any subcontractor for each calendar day during which such worker is required or permitted to work more than eight hours in any one calendar day and forty hours in any one calendar week, except as herein provided.

ARTICLE VII. Contractor agrees to comply with Chapter 1, Part 7, Division 2, Section 1777.5 and 1777.6 of the California Labor Code, which are hereby incorporated and made a part hereof. These sections require that contractors and subcontractors employ apprentices in apprenticeable occupations in a ratio of not less than one apprentice for each five journeymen (unless an exemption is granted in accordance with Section 1777.5) and that contractors and subcontractors shall not discriminate among otherwise qualified employees as indentured apprentices on any public works solely on the ground of sex, race, religious creed, national origin, ancestry or color.

Only apprentices as defined in Section 3077, who are in training under apprenticeship standards and who have signed written apprentice agreements will be employed on public works in apprenticeable occupations. The responsibility for compliance with these provisions is fixed with the prime contractor for all apprenticeable occupations.

ARTICLE VIII. The Contractor will indemnify the Owner against and hold it harmless of all and any liability for damages on account of injury to persons or damage to property resulting from or arising out of or in any way connected with the performance by the Contractor of his Contract and reimburse the Owner for all cost, expenses and loss incurred by it in consequence of any claims, demands, and causes of action which may be brought against it arising out of the performance by the Contractor of this Contract.

This indemnity shall be in addition to the other indemnification provisions contained in the Contract Documents.

By this statement the Contractor represents that he has secured the payment of Workers Compensation in compliance with the provisions of the Labor Code of the State of California and during the performance of the work contemplated herein will continue so to comply with said provision of said Code. The Contractor shall supply the Owner with certificates of insurance evidencing that Workers Compensation Insurance is in effect and providing that the Owner will receive 30 days notice of cancellation.

_____	<u>RIPON UNIFIED SCHOOL DISTRICT</u>
Contractor	Owner
By _____	By _____
Signature	Signature
_____	_____
Print Name	Print Name
_____	_____
Title	Title

Federal I.D.#

Department of Industrial Relations #

Note: If a corporation is the contractor, state the capacity (i.e., President) of the corporate office signing and affix the corporation seal; if a partnership, all partners should sign under the partnership name.

END OF SECTION

SUBMITTALS
SECTION 01 3300

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of Contract, including General and Supplementary Conditions and other Division-1 Specification Sections, apply to this Section.
- B. Related Work:
 - 1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications.

1.2 SUMMARY

- A. This Section specifies administrative and procedural requirements for submittals required for performance of the Work, including:
 - 1. Contractor's construction schedule.
 - 2. Shop Drawings.

1.3 SUBMITTAL PROCEDURES

- A. Coordination: Coordinate preparation and processing of submittals with performance of construction activities. Transmit each submittal sufficiently in advance of performance of related construction activities to avoid delay.
 - 1. Coordinate each submittal with fabrication, purchasing, testing, delivery, other submittals and related activities that require sequential activity.
- B. Processing: Allow sufficient review time so that installation will not be delayed as a result of the time required to process submittals, including time for resubmittals.
 - 1. Allow two weeks for initial review. Allow additional time if processing must be delayed to permit coordination with subsequent submittals. The Architect will promptly advise the Contractor when a submittal being processed must be delayed for coordination.
 - 2. If an intermediate submittal is necessary, process the same as the initial submittal.

3. Allow one week for reprocessing each submittal.
 4. No extension of Contract Time will be authorized because of failure to transmit submittals to the Architect sufficiently in advance of the Work to permit processing.
- C. Submittal Preparation: Place a permanent label or title block on each submittal for identification. Indicate the name of the entity that prepared each submittal on the label or title block. The Contractor shall stamp the submittals acknowledging that they have been reviewed.
- D. Submittal Transmittal: Package each submittal appropriately for transmittal and handling. Transmit each submittal from Contractor to Architect using a transmittal form. Submittals not stamped as listed and received from sources other than the contractor will be returned without action.

1.4 CONTRACTORS CONSTRUCTION SCHEDULE

- A. Bar-Chart Schedule: Prepare a fully developed, horizontal bar-chart type Contractor's construction schedule.
1. Provide a separate time bar for each significant construction activity. Provide a continuous vertical line to identify the first working day of each week. Use the same breakdown of units of the Work as indicated in the "Schedule of Values."
 2. Indicate completion in advance of the date established for Substantial Completion. Indicate Substantial Completion on the schedule to allow time for the Architect's procedures necessary for certification of Substantial Completion.

1.5 SHOP DRAWINGS

- A. Submit newly prepared information, drawn to accurate scale. Highlight, encircle, or otherwise indicate deviations from the Contract Documents. Do not reproduce Contract Documents or copy standard information as the basis of Shop Drawings. Standard information prepared without specific reference to the Project is not considered Shop Drawings.
- B. Shop Drawings include fabrication and installation drawings, setting diagrams, schedules, patterns, templates and similar drawings.
- C. Do not use Shop Drawings without an appropriate final stamp indicating action taken in connection with construction. Architect's action stamp is defined in paragraph 18 of this Section.

1.6 ARCHITECT'S ACTION

- A. Except for submittals for record, information or similar purposes, where action and return is required or requested, the Architect will review each submittal and shop drawing, mark to indicate action taken, and return promptly.
- B. Compliance with specified characteristics is the Contractor's responsibility.
- C. Action Stamp: The Architect will stamp each submittal and shop drawing with a uniform, self-explanatory action stamp. The stamp will be appropriately marked.

END OF SECTION

**PROJECT CLOSEOUT
SECTION 01 7000**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and other Division-1 Specification sections, apply to the work of this section.

1.2 DESCRIPTION OF REQUIREMENTS:

- A. Definitions: Project closeout is the term used to describe certain collective project requirements, indicating completion of the Work that are to be fulfilled near the end of the Contract time in preparation for final acceptance and occupancy of the Work by the Owner, as well as final payment to the Contractor and the normal termination of the Contract.
 - 1. Specific requirements for individual units of work are included in the appropriate sections in Divisions 2 through 22.
 - 2. Time of closeout is directly related to "Substantial Completion"; therefore, the time of closeout may be either a single time period for the entire Work or a series of time periods for individual elements of the Work that have been certified as substantially complete at different dates. This time variations, if any, shall be applicable to the other provisions of this section.

1.3 PREREQUISITES TO SUBSTANTIAL COMPLETION:

- A. General: Complete the following before requesting the Architect's inspection for certification of substantial completion, either for the entire Work or for portions of the Work. List known exceptions in the request.
 - 1. Submit specific warranties, workmanship/maintenance bonds, maintenance agreements, final certifications and similar documents.
 - 2. Submit record drawings and maintenance manuals.
- B. Give particular attention to concealed work that would be difficult to measure and record at a later date.
 - 1. Complete final cleaning up requirements, including touch-up painting of marred surfaces.

2. Touch-up and otherwise repair and restore marred exposed finishes.
- C. Inspection Procedures: Upon receipt of Contractor's request for inspection, the Architect will either proceed with inspection or advise Contractor of unfulfilled prerequisites.
1. Results of the completed inspection will form the initial "punch-list" for final acceptance.

1.4 PREREQUISITES TO FINAL ACCEPTANCE:

- A. General: Complete the following before requesting the Architect's final inspection for certification of final acceptance, and final payment as required by the General Conditions. List known exceptions, if any, in request.
1. Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.
 2. Submit a copy of the Architect/Engineer's final punch-list of itemized work to be completed or corrected, stating that each item has been completed or otherwise resolved for acceptance and has been endorsed and dated by the Architect/Engineer.
 3. Submit the final payment request with final releases and supporting documentation not previously submitted and accepted. Include certificates of insurance for products and completed operations where required.

END OF SECTION

CUTTING AND PATCHING
SECTION 01 7329

PART 1 - GENERAL

1.1 SUMMARY

- A. Work included: Cutting and patching for this work includes, but is not necessarily limited to:
1. Sawcutting;
 2. Removal of existing asphalt and concrete;
 3. Trenching and trench backfilling;
 4. Final patching;
- B. Related work described elsewhere:
1. Documents affecting work of this Section include, but are not necessarily limited to, General Conditions, Supplementary Conditions, and Sections in Division 1 of these Specifications
 2. Division 26 Electrical

1.2 JOB CONDITIONS

- A. Dust Control: use all means necessary to control dust on and near the Work and on and near all areas if such dust is caused by the Contractor's operations during performance of the Work or if resulting from the condition in which the Contractor leaves the site.
1. Thoroughly moisten all surfaces as required to prevent being a nuisance to the public, neighbors, and concurrent performance of other work on the site.
- B. Protection: Use all means necessary to protect all materials of this section before, during, and after installation and to protect all objects designed to remain.
1. In the event of damage, immediately make all repairs and replace necessary to the approval of the Architect and at no additional cost to the Owner.

PART 2 - PRODUCTS

2.1 MATERIALS, GENERAL

- A. Use materials identical to existing materials. For exposed surfaces, use materials that visually match existing adjacent surfaces to the fullest extent possible if identical materials are unavailable or cannot be used. Use materials whose installed performance will equal or surpass that of existing materials.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Examine surfaces to be cut and patched and conditions under which cutting and patching is to be performed before cutting. If unsafe or unsatisfactory conditions are encountered, take corrective action before proceeding.
 - 1. Before proceeding, meet at the project site with parties involved in cutting and patching, including mechanical and electrical trades. Review areas of potential interference and conflict. Coordinate procedures and resolve potential conflicts before proceeding.

3.2 PREPARATION

- A. Temporary Support: Provide temporary support of work to cut.
- B. Protection: Protect existing construction during cutting and patching to prevent damage. Provide protection from adverse weather conditions for portions of the Project that might be exposed during cutting and patching operations.
- C. Avoid interference with use of adjoining areas or interruption of free passage to adjoining areas.
- D. Avoid cutting existing pipe, conduit or ductwork serving the building but scheduled to be removed or relocated until provisions have been made to bypass them.

3.3 PERFORMANCE

- A. General: Employ skilled workmen to perform cutting and patching. Proceed with cutting and patching at the earliest feasible time and complete without delay.
 - 1. Cut existing construction to provide for installation of other components or performance of other construction activities and the subsequent fitting and patching required to restore surfaces to their original condition.

- B. Cutting: Cut existing construction using methods least likely to damage elements retained or adjoining construction. Where possible, review proposed procedures with the original Installer; comply with the original Installer's recommendations.
- C. Patching: Patch with durable seams that are as invisible as possible. Comply with specified tolerances.
 - 1. Where feasible, inspect and test patched areas to demonstrate integrity of the installation.
 - 2. Restore exposed finishes of patched areas and extend finish restoration into retained adjoining construction in a manner that will eliminate evidence of patching and refinishing.
 - 3. All concrete or asphalt to be removed and patched shall be sawcut in a straight and true line. Replace existing asphaltic concrete with minimum 2" A.C. over minimum 4" aggregate base, over 90% compacted grade. Replace existing concrete with 4" minimum concrete over 90% compacted grade. Finish shall match that of existing.
 - 4. Compaction of trenches shall be done by mechanical means and all lines shall be inspected for proper inspection by the Inspector prior to backfilling of trenches.
 - 5. All round holes through concrete slabs or walls shall be core drilled with a diamond drill bit. In no case shall any concrete beam or column be cut.
 - 6. Asphalt trenches which are to be patched shall be prepped by cleaning the existing surfaces so to be free of debris and dust. Area shall be primed prior to asphalt being applied.
 - 7. Patching which shows evidence of settling shall be removed and replaced at the Contractors expense. The Contractor shall provide appropriate means to protect asphalt and concrete from acts of vandalism until material is cured.

3.4 CLEANING

- A. Clean areas and spaces where cutting and patching are performed. Completely remove paint, mortar, oils, putty and similar items. Thoroughly clean piping, conduit and similar features before applying paint or other finishing materials. Restore damaged pipe covering to its original condition.

END OF SECTION

**CLEANING
SECTION 01 7423**

PART 1 - GENERAL

1.1 SUMMARY

- A. Throughout the construction period, maintain the site in a standard of cleanliness as described in this Section.

1.2 PROGRESS CLEANING

- A. Site:
1. Daily, and more often if necessary, inspect the site and pick up all scrap, debris, and waste material. Remove such items to the place designated for their storage.
 2. Maintain the site in a neat and orderly condition at all times.

1.3 FINAL CLEANING

- A. Site:
1. Unless otherwise specifically directed by the Architect, broom clean paved areas on the site and public paved areas adjacent to the site.
 2. Completely remove resultant debris.

END OF SECTION

**SHADE STRUCTURE PLACEMENT
SECTION 01 9050**

PART 1 - GENERAL

1.1 SUMMARY

- A. The work includes sitework for the installation of shade structure as shown on the drawings and as specified herein.

1.2 QUALITY ASSURANCE

- A. Contractor should be experienced in DSA (Division of the State Architect) approved projects, with knowledge and procedures as such. Contractor shall be familiar with on-site inspection procedures and documentation as required by the Division of the State Architect and shall provide required documents to the Architect upon request.

1.3 RELATED SECTIONS

- A. The following sections contain requirements that relate to this section:
 - 1. Division 32, Section 32 1313 - Portland Cement Concrete Paving.

PART 2 - PRODUCT

2.1 MATERIALS AND WORKMANSHIP

- A. All workmen and trades shall be skilled and qualified for work which they perform. All materials used unless otherwise specified shall be new and of the types and grade specified.
- B. Site preparation, which must be completed prior to installation of shade structure includes layout, clearing, and site prep per the Contract Documents.

PART 3 - EXECUTION

3.1 COORDINATION

- A. Site work contractor is to mark out building corners for proper building placement and alignment, as well as coordinating with vendor on building set height. Any additional concrete removal and replacement needed to meet code required ADA slopes shall be borne by the contractor.

3.2 SECURITY

- A. Security of the structures against vandalism is the sole responsibility of the contractor until installation of the building, according to the terms of this contract, has been completed and the buildings have been accepted by the District.

3.2 CLEAN-UP

- A. Because of the nature of the sites, i.e., school grounds, the contractor shall lock up all materials and equipment at the end of the day's work. All scrap material shall be removed from the site at the end of each day's work, no exceptions.
- B. The building site shall be clean and ready for occupancy prior to acceptance by the District.

END OF SECTION

SEALANTS AND CAULKING
SECTION 07 9200

PART 1 - GENERAL

1.1 SUMMARY

- A. The work includes the furnishing and installing of all caulking and sealing work required to weatherproof the building, including exterior caulking and sealing, as shown and noted on the drawings and specified herein. The conditions of the contract and Division 1 apply to this section as fully as if repeated herein.

1.2 SUBMITTALS

- A. Prior to ordering materials or their installation, submit for selection, samples indicating the color range available for each caulking and sealant material intended for installation in exposed locations. Materials installed prior to selection of color will be subject to removal and replacement with approved materials. Color of finished caulking and sealant shall match approved samples.
- B. See section 01 3300 for number and manner of submittals.

1.3 DELIVERY, STORAGE AND HANDLING

- A. Do not expose caulking and sealants to excessive heat, cold or other conditions that would adversely affect the serviceability of the materials. Do not store caulking and sealants past the shelf-life recommended by the manufacturer.

1.4 JOB CONDITIONS

- A. Apply caulking and sealants only when weather conditions are within the manufacturer's recommended limits for satisfactory installation.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Caulking and Sealant Compounds: Compounds shall be products and manufacturers listed herein or equal products approved in accordance with section 01630.
 - 1. Exterior Vertical Applications: One part low modulus silicone sealant; Dow Corning No. 790, General Electric "Silpruf" or equal.

2. Exterior Horizontal Applications: Two component, self leveling, polyurethane base sealant, Mameco "Vulkem 245", Pecora, "NR200 Urexpan", Sonneborn "Sonolastic Paving Joint Sealer" or equal.
- B. Primers: Primers shall be quick-drying, colorless, non-staining sealer of type of consistency as recommended by the manufacturer of the caulking and sealant material for the particular surfaces to be caulked or sealed.
 - C. Packing: Sealant backup and packing for caulking and sealant compounds shall be non-staining resilient material, such as glass fiber rope, or neoprene, butyl, polyurethane, or other open cell foams, compatible with the compound used.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Inspect joint sizes and surfaces prior to start of work. Do not start work until deficiencies or other conditions that would adversely affect performance, installation or quality of the application have been corrected. Start of work constitutes acceptance of joint surfaces.

3.2 SURFACE PREPARATION

- A. Joints and spaces to be caulked or sealed shall be completely cleaned of dirt, dust, mortar, oil, and other foreign materials which might adversely affect the caulking and sealant work. Where necessary, degrease with an approved solvent or commercial degreasing agent. Surfaces shall be thoroughly dry before application of caulking compounds.
- B. If recommended by manufacturer, remove paint and other protective coatings from surfaces to be caulked or sealed prior to priming and caulking or sealant application.
- C. All joints shall be enclosed on three sides. Where grooves for adequate caulking or sealing have not been provided, suitable grooves shall be cleaned out to the depth required or as indicated on drawings and ground to a minimum width of 1/4 inch without damage to the adjoining work. No grinding shall be required on metal surfaces.
- D. Preparation of surfaces to receive caulking or sealant compound shall conform to the compound manufacturer's specifications. Use air pressure or other approved methods to achieve required results. Use masking tape to keep compound off surfaces that will be exposed in the finished work.

3.3 APPLICATION

- A. Caulk and seal around all openings in exterior walls, and other locations shown or required for waterproofing the building. Caulk and seal all other joints as herein specified, shown on drawings, and required to properly complete the building.
- B. Caulking and sealants shall be applied by experienced mechanics using specified materials and proper tools. Preparatory work (cleaning etc.) And application of caulking and sealants shall be as specified herein and in accordance with the manufacturer's printed instruction and recommendations.
- C. Plaster and other porous surfaces, and other surfaces if recommended by the manufacturer, shall be primed before applying caulking and sealants. Primer shall be applied with a brush that will reach all parts of joints to be filled with compound.
- D. Joints and spaces deeper than ½ inch shall be filled with packing as specified to within ½ inch of the surface.
- E. Caulking and sealants shall not be used when they become too jelled to be discharged in a continuous flow from the gun. Modification of compounds by addition of liquids, solvents, or powders will not be permitted.
- F. Compounds shall be applied with guns having proper size nozzles. Sufficient pressure shall be used to fill all voids and joints solid. In caulking and sealing around openings, include entire perimeter of each impracticable, suitable hand tools shall be used.
- G. Caulked and sealed joints shall be neatly pointed on flush surfaces with beading tool and internal corners with eaving tool. Excess material shall be cleanly removed. Caulking and sealant where exposed, shall be free of wrinkles and uniformly smooth. Caulking and sealing shall be complete before final coat of paint are applied.

3.4 MISCELLANEOUS CAULKING AND SEALING WORK

- A. The entire extent of caulking and sealing work is not necessarily fully or individually described herein. Caulking and sealing shall be provided wherever required to prevent light leakage as well as moisture leakage. Refer to drawings for conditions and related parts of the work.

3.5 CLEANING

- A. Clean surfaces of materials adjoining caulked and sealed joints of smears of compound or other soiling due to caulking and sealing application.

END OF SECTION

ELECTRICAL GENERAL REQUIREMENTS
SECTION 26 0000

PART 1 - GENERAL

1.1 RELATED DOCUMENTS:

- A. The General Conditions, Supplementary Conditions, and Division 1 - General Requirements are hereby made a part of this Section as fully as if repeated herein.
- B. The requirements of this Section apply to all the Work of Division 26.
- C. The entire Project Specifications and all Drawings shall be checked in connection with the requirements of this Section.
- D. Failure on the part of the Contractor to make such an investigation of the Drawings and Specifications governing the work of other trades shall not relieve him of the responsibility to meet all the requirements of the Contract to provide all materials and labor necessary for complete and operable systems.

1.2 SCOPE OF WORK:

- A. Furnish all labor, materials, and tools, and perform all operations necessary for the scope of work as shown on the Drawings and as specified herein, including that which is reasonably inferred.
- B. Documents do not undertake to show or list every item to be provided. When an item not shown is clearly required for proper operation to the system or is required by code, such item shall be provided at no increase in contract price.
- C. Items identified by manufacturer's type or catalog reference shall be understood to include all fittings, accessories, and optional features necessary to meet the intended design requirements.
- D. The Work shall include, but not be limited to, the following general headings:
 - 1. Work includes:
 - a. Power wiring including disconnect switches and final connection to all equipment furnished under this Section and other Sections of the Specifications, including new 120v GFI outlets.
 - b. Cutting and patching for electrical work.
 - 2. Related Work Specified Elsewhere or Not in Contract:
 - a. General: Refer to other Sections to determine the extent of electrical work to be performed in connection therewith.
 - b. Control wiring and interlocks, both line voltage and low voltage.

1.3 TITLE 24 COMPLIANCE:

- A. The entire electrical installation shall comply with all the requirements of Title 24 of the California Code of Regulations
- B. During the inspection period, the Work shall be subject to periodic inspection to verify compliance with Title 24.

1.4 QUALITY ASSURANCE:

- A. Requirements of Regulatory Agencies:
 - 1. Provide work in accordance with appropriate standards, codes and recommendations, all applicable local codes and ordinances, industry standards, and utility company regulations and standard, including the following:
 - a. County.
 - b. City.
 - c. Rules and regulations of the State Fire Marshal and the Local Fire Marshal.
 - d. California Administrative Code.
 - e. The Division of the State Architect
 - 2. Nothing in the Contract Documents shall be construed as permitting work not conforming to the applicable laws, ordinances, rules, and regulations.
 - 3. When requirements of the Contract Documents exceed the requirements of applicable laws, ordinances, rules or regulations, the Contract Documents shall take precedence.
 - 4. It is not the intent of the Contract Documents to repeat requirements of codes except where necessary for completeness or clarity.
 - 5. Reference Standards: All materials and equipment shall comply with applicable standards and requirements of the following:
 - a. American National Standards Institute - ANSI.
 - b. Institute of Electrical & Electronic Engineers -IEEE.
 - c. Institute of Power Cable Engineers Association -IPCEA.
 - d. National Bureau of Standards - NBS.
 - e. National Electric Manufacturers Association - NEMA.
 - f. National Fire Protection Association - NFPA.
 - g. Underwriters' Laboratories - UL.
 - 6. If any of the requirements of the above are in apparent conflict with one another, or with the requirements of these Specifications, the more stringent requirement shall govern.

1.5 PERMITS AND FEES:

- A. The Owner shall pay for all utility company fees required for this Project.

1.6 SUBMITTAL:

- A. Submit shop drawings and supplemental data for all materials and equipment intended for use on the Project, including specified materials.
- B. Prior to submittal of any shop drawings or manufacturer's data, the Contractor shall thoroughly check it out to verify that it complies fully with the requirements of the Contract with regard to quality, function, electrical characteristics, dimensions, and suitability for the intended application, and, furthermore, that it complies with all applicable codes.
- C. All submittals shall be forwarded for approval under the name of the Contractor, who shall take full responsibility for their content, even if the original submittal material has been prepared and assembled by a manufacturer or agent. The intention of this requirement is to ensure that the Contractor will not assume the role of merely transferring information but will accept full responsibility for the material submitted.
- D. Submit dimensioned shop drawings, plans and elevations of electrical equipment rooms showing layout of all submitted equipment dimensions, clearances, and access.
- E. Submittals shall be specific for this project. General catalog data or typical wiring diagrams are not acceptable. Submittals shall define accurately which product and, where applicable, which options are proposed for use on the job.
- F. Forward all submittals to the Architect, at one time. Organize submittals by systems, e.g. lighting, switchgear, basic materials. Each system shall be bound separately and independently. Individual or incomplete submittals will not be acceptable.
- G. Identify each item by manufacturer, brand, trade name, number, size, rating or whatever other data are necessary to identify properly and to check materials and equipment. Words "as specified" are not sufficient identification.
- H. Identify each substitute item by reference to the Specification Section paragraph in which the item is specified or the applicable Drawing and detail reference.
- I. Organize the submittals in the same sequence in which they are specified.
- J. Any mechanical, electrical, structural, or other changes required for the installation of any approved substitute equipment provided all or in part under the Work of this Division shall be made at the expense of the Contractor. Approval of the substituted equipment and/or dimensional drawings or other data does not waive these requirements. Submit drawings of electrical equipment spaces showing clearance and required access prior to installation.

- K. Approval of equipment shall not be construed as authorizing any deviations from the Contract Documents unless the attention of the Architect has been directed to the specific deviations and approval has been granted in writing.
- L. Upon request, furnish complete installation data and instructions on all material and equipment to be provided as part of the Work of this Division before commencing installation.

1.7 OPERATING AND MAINTENANCE INSTRUCTIONS:

- A. Subsequent to completion of the installation, part of the Work of this Division shall be the responsibility of the Contractor to instruct the Owner's Representative in the operation, adjustment, and maintenance of the electrical equipment.
- B. Before Owner's personnel assume control of the electrical systems, submit three (3) sets of operating and maintenance instructions, manuals, and parts lists on all equipment.
- C. Submit three (3) copies of certificate, signed by the Owner's Representative, confirming that the instruction has been received.

1.8 PRODUCT DELIVERY, STORAGE, AND HANDLING:

- A. Identify materials and equipment delivered to the site to provide a check against materials list and shop drawings.
- B. Protect materials from loss or damage. Replace lost or damaged materials with new materials at no increase in Contract Price.

1.9 AS-BUILT DRAWINGS AND OPERATION MANUALS:

- A. As-built drawings of record shall be maintained at all times and corrected daily to show the exact locations of all equipment installed under this Contract. Within fifteen (15) days after completion, and before Work will be considered for acceptance, Contractor shall deliver to the Architect reproducible drawings for each contract "E" drawings (obtained from the Architect at cost), accurately revised to show the as-built installation. Underground lines shall be fully dimensioned as to location and depth of burial. As-built drawings shall be prepared by a competent draftsman equal to the Contract Drawings.
- B. On completion of the Work, the Contractor shall furnish three (3) sets of operations manuals to the Owner.
 - 1. Manuals shall be bound in hardcover ring binders, properly indexed and titled.
 - 2. Service manuals shall include complete operating, repair servicing data, wiring diagrams, and complete lists of replacement parts for all power distribution, including panelboards and motor control equipment.

3. Technical data, wiring diagrams, etc., furnished with the manual shall be specific for this Project. Copies of general catalog data and typical wiring diagrams will not be sufficient to meet this requirement.

1.10 GROUNDING:

- A. Provide a complete system of electrical and equipment grounding in accordance with code requirements.

PART 2 - PRODUCTS

2.1 MATERIALS:

- A. Identify all material and equipment by manufacturer's name and nameplate data. Remove unidentified materials and equipment from the site.
- B. Equipment specified by manufacturer's number shall include all accessories, fittings, controls, and other components, listed in the catalog as standard with equipment. Furnish optional or additional accessories as specified or shown on the Drawings.
- C. Equipment and materials damaged during transportation, installation, or operation shall be considered as totally damaged and shall be replaced with new. Variance from this requirement will be permitted only with written approval by the Architect.
- D. Provide an authorized representative to constantly supervise the Work of this Division.

PART 3 - EXECUTION

3.1 INSTALLATION:

- A. Follow manufacturer's directions for installation of equipment where such directions cover points not covered by the Contract Documents.
- B. Install all equipment neatly placed and properly anchored. Comply with all applicable codes for the correct method of mounting all equipment for earthquake conditions. No allowance will be made for failure to foresee actual jobsite conditions.
- C. During the course of installation, protect the Work of other Divisions, as well as the Work of this Division, from damage.

3.2 PERFORMANCE:

- A. Sleeves, Chases, and Inserts: Provide as part of the Work of this Division, and in such a manner as to cause no delay to the progress of the work of other Divisions, all required sleeves, chases, inserts, anchor bolts, and similar items.
- B. Cutting and Patching:
 - 1. Perform all cutting and patching necessary for the Work of this Division.
 - 2. Cutting, drilling, boring, or notching of structural members shall not be done except where approved in writing by the Architect. Where approved, such cutting shall be done in strict accordance with the California Administrative Code.
 - 3. Repair damage done by cutting and patching to the approval of the Architect.

3.3 TESTING AND ADJUSTING:

- A. Furnish all labor and test equipment required for the Work of this Division.
- B. Should any equipment or material fail or show defects during testing, it shall be removed immediately and replaced with new, and the system shall be retested.
- C. Perform all tests in accordance with standard practices and with code requirements and under the supervision of authorities having jurisdiction.
- D. After completion of testing and adjustment, operate the system to demonstrate proper functioning of all components. If in the opinion of the Architect the performance of the system is not in accordance with the specified requirements, the deficiency shall be corrected at no increase in Contract Price and the system operated again to demonstrate that the correction has been properly made.
- E. At completion of Work, provide written certification that all systems have been installed according to the Contract requirements and are functioning satisfactorily without any defects.

3.4 CLEANING AND PAINTING:

- A. Prepare for painting all Work of this Division that will be finish painted.
- B. All equipment furnished finish painted as part of the Work of this Division shall be refinished to the satisfaction of the Architect if damaged.
- C. Thoroughly clean all equipment, panelboards, switches, and other materials provided as part of the Work of this Division free from all rust, scale, dirt, and other foreign material, before such equipment is covered up, painted, or put in service.

3.5 EQUIPMENT IDENTIFICATION:

- A. Properly identify each piece of equipment and all switches which control remote equipment.
- B. Panelboards shall be identified by engraved 3/32" laminated plastic nameplates secured with round head machine screws or contact cement.
- C. Identify remote-control switches for equipment such as exhaust fans, HVAC equipment, etc., with nameplates as specified for panel boards.
- D. Install typewritten circuit directory in framed glass or plastic holder mounted behind panelboard door.
- E. Label all service disconnects, etc. for all the services.
- F. Provide additional labels as may be required by the Authority having jurisdiction.

END OF SECTION

**GROUNDING AND BONDING FOR ELECTRICAL SYSTEMS
SECTION 26 0526**

PART 1 - GENERAL

1.01 SUMMARY

- A. Section Includes:
1. Wire.
 2. Mechanical connectors.

1.02 REFERENCES

- A. International Electrical Testing Association:
1. ANSI/NETA ATS - Acceptance Testing Specifications for Electrical Power Equipment and Systems.
- B. Part 3, Title 24, - California Electrical Code (CEC).

1.03 SYSTEM DESCRIPTION

- A. Grounding systems use the following elements as grounding electrodes:
1. Existing Metal underground water pipe.
 2. Concrete-encased electrode.
 3. Existing Metal underground gas piping system.

1.04 QUALITY ASSURANCE

- A. Provide grounding materials conforming to requirements of CEC, IEEE 142, and UL labeled.

PART 2 - PRODUCTS

2.01 WIRE

- A. Material: Stranded copper.
- B. Bonding Conductor: Copper conductor insulated.

2.02 MECHANICAL CONNECTORS

- A. Description: Bronze connectors, suitable for grounding and bonding applications, in configurations required for particular installation.

PART 3 - EXECUTION

3.01 PREPARATION

- A. Remove paint, rust, mill oils and surface contaminants at connection points.

3.02 EXISTING WORK

- A. Modify existing grounding system to maintain continuity to accommodate renovations.
- B. Extend existing grounding system using materials and methods as specified.

3.03 INSTALLATION

- A. Install grounding and bonding conductors concealed from view.
- B. Equipment Grounding Conductor: Install separate, insulated conductor within each feeder and branch circuit raceway. Terminate each end on suitable lug, bus, or bushing.
- C. Permanently ground entire light and power system in accordance with CEC, including service equipment, distribution panels, lighting panelboards, switch and starter enclosures, motor frames, grounding type receptacles, and other exposed non-current carrying metal parts of electrical equipment.
- D. Accomplish grounding of electrical system by using insulated grounding conductor installed with feeders and branch circuit conductors in conduits. Size grounding conductors in accordance with CEC. Install from grounding bus of serving panel to ground bus of served panel, grounding screw of receptacles, lighting fixture housing, light switch outlet boxes or metal enclosures of service equipment.
- E. Ground conduits as necessary by means of grounding bushings on terminations at panelboards and switchboards to grounding bus.
- F. Permanently attach equipment and grounding conductors prior to energizing equipment.

END OF SECTION

RACEWAY AND BOXES FOR ELECTRICAL SYSTEMS
SECTION 26 0533

PART 1 - GENERAL

1.01 SUMMARY

- A. Section includes conduit, surface raceways, outlet boxes, pull and junction boxes, and handholes.

1.02 REFERENCES

- A. American National Standards Institute:
1. ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
 2. ANSI C80.3 - Specification for Electrical Metallic Tubing, Zinc Coated.
- B. National Electrical Manufacturers Association:
1. NEMA 250 - Enclosures for Electrical Equipment (1000 Volts Maximum).
 2. NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.
 3. NEMA OS 1 - Sheet Steel Outlet Boxes, Device Boxes, Covers, and Box Supports.
 4. NEMA OS 2 - Nonmetallic Outlet Boxes, Device Boxes, Covers, and Box Supports.
 5. NEMA TC 2 - Electrical Polyvinyl Chloride (PVC) Tubing and Conduit.
 6. NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing.
- C. Part 3, Title 24, - California Electrical Code (CEC).

1.03 SYSTEM DESCRIPTION

- A. Underground outside Foundation Wall: Use nonmetallic conduit. Terminate with rigid steel conduit out of concrete or soil. Use cast metal boxes or nonmetallic handhole.
- B. Outdoor Locations, Above Grade: Provide rigid steel conduit, intermediate metal conduit and electrical metallic tubing with compression type fittings. Provide cast metal or nonmetallic outlet, pull, and junction boxes.
- C. Below Slab on Grade: Use Schedule 40 nonmetallic conduit. Terminate with rigid steel elbows and short length of rigid steel conduit out of concrete.
- D. Wet and Damp Locations: Provide rigid steel conduit, electrical metallic tubing with compression type fittings, Schedule 40 nonmetallic conduit. Provide cast metal or nonmetallic outlet, junction, and pull boxes. Provide flush mounting outlet box in finished areas.

- E. Concealed Dry Locations: Provide rigid steel conduit intermediate metal conduit or electrical metallic tubing. Provide sheet-metal boxes. Provide flush mounting outlet box in finished areas.
- F. Exposed Interior Dry Locations: Use rigid steel conduit or intermediate metal conduit below eight feet or where subject to damage. Use rigid steel conduit, intermediate metal conduit, or electrical metallic tubing above eight feet or in electrical, mechanical, elevator or telecommunication rooms. Use sheet-metal or cast metal boxes. Use flush mounting outlet box in finished areas. Provide hinged enclosure for large pull boxes.

1.04 DESIGN REQUIREMENTS

- A. Minimum Raceway Size:
 - 1. 1/2 inch.
 - 2. 3/4 inch. for homeruns.
 - 3. 1 inch outside foundation line.

PART 2 - PRODUCTS

2.01 METAL CONDUIT

- A. Rigid Steel Conduit: ANSI C80.1.
- B. Intermediate Metal Conduit (IMC): Rigid steel.
- C. Fittings and Conduit Bodies: NEMA FB 1. Fittings shall be steel or malleable iron with threaded fittings. Use insulated metallic bushings with lug where ground connections are required. Use plastic bushing for non-bonding applications.

2.02 FLEXIBLE METAL CONDUIT

- A. Product Description: Interlocked steel construction.
- B. Fittings: NEMA FB 1; steel or malleable iron squeeze type with insulated throat.

2.03 LIQUIDTIGHT FLEXIBLE METAL CONDUIT

- A. Product Description: Interlocked steel construction with PVC jacket.
- B. Fittings: NEMA FB 1; steel or malleable iron fitting with insulated throat.

2.04 ELECTRICAL METALLIC TUBING (EMT)

- A. Product Description: ANSI C80.3; galvanized tubing.
- B. Fittings: NEMA FB 1; steel or malleable iron couplings and connectors. Box connectors shall have with insulated throat.

2.05 NONMETALLIC CONDUIT (MAY NOT BE USED)

2.06 SURFACE METAL RACEWAY (NOT USED)

2.07 OUTLET BOXES

- A. Sheet Metal Outlet Boxes:
 - 1. NEMA OS 1, galvanized steel.
 - 2. Boxes for shall be 1-1/2 inch deep by 4 inch square minimum.
- B. Cast Boxes: NEMA FB 1, Type FD, cast fer alloy. Furnish gasketed cover by box manufacturer. Furnish threaded hubs.
- C. Wall Plates for Finished Areas: As specified in Section 26 27 26.
- D. Wall Plates for Unfinished Areas: Furnish gasketed cover.

2.08 PULL AND JUNCTION BOXES

- A. Sheet Metal Boxes: NEMA OS 1, galvanized steel.
- B. Concrete composite Handholes: Die-molded, concrete composite hand holes:
 - 1. Cable Entrance: Pre-cut cable entrance at center bottom of each side.
 - 2. Extension: 12" reinforced concrete below box.
 - 3. Cover: Concrete composite cover with nonskid finish. Covers shall be marked "ELECTRIC", "SIGNAL", "GROUND" or as indicated on drawings.

PART 3 - EXECUTION

3.01 EXISTING WORK

- A. Remove exposed abandoned raceway, including abandoned raceway above accessible ceiling finishes. Cut raceway flush with walls and floors, and patch surfaces.
- B. Remove concealed abandoned raceway to its source.

- C. Disconnect abandoned outlets and remove devices. Remove abandoned outlets when raceway is abandoned and removed. Install blank cover for abandoned outlets not removed.
- D. Maintain access to existing boxes and other installations remaining active and requiring access. Modify installation or provide access panel.
- E. Extend existing raceway and box installations using materials and methods as specified.
- F. Clean and repair existing raceway and boxes to remain or to be reinstalled.

3.02 INSTALLATION

- A. Ground and bond raceway and boxes in accordance with Section 26 05 26.
- B. Fasten raceway and box supports to structure and finishes in accordance with Section 26 05 29.
- C. Identify raceway and boxes in accordance with Section 26 05 53.

3.03 INSTALLATION CONCRETE COMPOSITE HANDHOLES

- A. Install boxes flush with finished grade or surface material.
- B. Provide hold down bolts for all covers.
- C. Provide minimum 12” depth of crushed rock or pea gravel below boxes for drainage. Ground bond steel cover plate with insulated green grounding conductor.

3.04 CLEANING

- A. Clean interior of boxes to remove dust, debris, and other material.
- B. Clean exposed surfaces and restore finish.

END OF SECTION

**EARTHWORK
SECTION 31 0000**

PART 1 - GENERAL

1.1 INCLUSION OF OTHER CONTRACT DOCUMENTS

- A. The General Conditions, Supplementary Conditions and Division 1 are fully applicable to this Section, as if repeated herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 31 2333, Trenching and Backfilling.
B. Section 32 1313, Portland Cement Concrete Paving.

1.3 QUALITY ASSURANCE

- A. Use only new materials and products, unless existing materials or products are specifically shown otherwise on the Drawings to be salvaged and re-used.
- B. All materials, components, assemblies, workmanship and installation are to be observed by the Owner's Inspector of Record. Work not so inspected is subject to uncovering and replacement.
- C. The representatives of the Owner's testing lab will not act as supervisor of construction, nor will they direct construction operations. Neither the presence of the Owner's testing lab representatives nor the testing by the Owner's testing lab shall excuse the contractors or subcontractors for defects discovered in their work during or following completion of the project. Correcting of inadequate compaction or moisture content is the sole responsibility of the contractor.
- D. Tests (See Part 3 for Compaction Testing).
- E. Contractor shall be solely responsible for all subgrade built. Failure resulting from inadequate compaction or moisture content are the responsibility of the contractor. Contractor shall be solely responsible for any and all repairs.

1.4 SUBMITTALS

- A. Refer to Section 01 3300.

- B. Manufacturer's Data: Submit list and complete descriptive data of all products proposed for use. Include manufacturer's specifications, published warranty or guarantee, installation instructions, and maintenance instructions.

1.5 WARRANTY

- A. Refer to General Conditions and Section 01 3300.

1.6 REFERENCE AND STANDARDS

- A. Site Visitation: All bidders interfacing with existing conditions shall visit the site prior to bid to verify general conditions of improvements. Discrepancies must be reported prior to the bid for clarification.
- B. ANSI/ASTM D698-00 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- C. ANSI/ASTM D1556-00 - Test Method for Density of Soil in Place by the Sand-Cone Method.
- D. ANSI/ASTM D1557-02e2 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10lb. (4.54.Kg) Rammer and 18 inch (457 mm) Drop.
- E. ANSI/ASTM D3017-05 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixture by Nuclear Methods (Shallow Depth).
- F. ANSI/ASTM D422-63(2007) e1 Test Method for Particle Size Analysis of Soil.
- G. ANSI/ASTM D4318-05 - Test Method for Liquid Limit, Plastic Limit, and Plasticity Limit.
- H. CALTRANS Standard Specifications Section 17.
- I. CAL-OSHA, Title 8, Section 1590 (e).
- J. Any work within the street, highway or right-of-way shall be performed in accordance with the requirement of the governmental agencies having jurisdiction, and shall not begin until all of those governing authorities have been notified.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Transport, store and handle in strict accord with the local jurisdiction.

- B. Make delivery to job when notified by Contractor verifying that the job is ready to receive the work of this Section and that arrangements have been made to properly store, handle and protect such materials and work.

1.8 PROJECT CONDITIONS

- A. Existing civil, mechanical and electrical improvements are shown on respective site plans to the extent known. Should the Contractor encounter any deviation between actual conditions and those shown, he is to immediately notify the Architect before continuing work.
- B. Excavation dewatering may be necessary. Contractor shall provide any and all tools, equipment and labor necessary for excavation dewatering no matter what the source. Dewatering shall be continuous until all site utilities are installed and backfilled.

1.9 EXISTING SITE CONDITIONS

- A. Contractor shall acquaint himself with all site conditions. If unknown active utilities are encountered during work, notify Architect promptly for instructions. Failure to notify will make Contractor liable for damage to these utilities arising from Contractor's operations subsequent to discovery of such unknown active utilities.

1.10 ON SITE UTILITY VERIFICATION AND REPAIR PROCEDURES

- A. Ground-breaking requirements:
 - 1. All underground work performed by a Contractor must be authorized by the District's Construction Manager or the Low Voltage Consultant prior to start of construction.
 - 2. The Contractor is to obtain and keep the original School's construction utility site plans on site during all excavation operations. Contractor can contact the District's Construction Manager, Facilities Manager, or the Low Voltage Consultant to procure the drawings.
- B. Underground Utility Locating:
 - 1. The contractor shall hire an Underground Utility Locating Service to locate existing underground utility pathways in areas effected by the scope of work for excavation.
 - 2. Contractor must use an underground utility locator service with a minimum of 3 years experience. The equipment operator must have demonstrated experience.
 - 3. The Underground Utility Locator Service must have the use of equipment with the ability to locate by means of inductive clamping, induction, inductive metal detection, conductive coupling, or TransOnde (Radiodetection) to generate signals, passive locating (free scoping) for "hot" eclectic, and metal detector.

4. The Underground Utility Locator Service must be able to locate existing utilities at a depth of a least 72".
5. The Underground Utility Locator Service must be able to locate but are not limited to locating the following types of utility pathways:
 - a) All conduit pathways containing 110 volt or greater 50-60Hz electrical wire.
 - b) All conduit pathways containing an active cable TV system.
 - c) All conduit pathways containing wire or conductor in which a signal can be attached and generated without damaging or triggering the existing systems.
 - d) All empty conduit pathways or pipe in which a signal probe or sonde (miniatures transmitter) can be inserted.
 - e) All conduit pathways containing non-conductive cables or wires in which a signal probe or sonde (miniature transmitter) can be inserted.
 - f) All plastic and other nonconductive water lines in which a TransOnde (Radiodetection) or other "transmitter" can be applied to create a low frequency pressure waive (signal) without damaging or triggering the existing systems.
 - g) All copper or steel waterlines and plastic or steel gas lines.
6. All markings made by the Underground Utility Locator Service or other shall be clear and visible.
7. The contractor shall maintain all markings made by Underground Utility Locator Service or other throughout the entire length of the project.
8. The Underground Utility Locator Service shall provide the contractor with two sets of maps showing the locations of utilities and average depth. They will be referenced to permanent buildings. Contractor will deliver one copy to the district at no additional charge.
9. Contractor is responsible to contract Underground Service Alert (U.S.A. 800/227-2600) and receive clearance prior to any excavation operations.
10. Contractor shall inform the Architect no later than five (5) days prior to the date scheduled for the utility locator service to be on site.

1.11 PROTECTION

- A. Adequate protection measures shall be provided to protect workmen and passers-by-on and off the site. Adjacent property shall be fully protected throughout the operations. Blasting will not be permitted. Prevent damage to adjoining improvements and properties both above and below grade. Restore such improvements to original condition should damage occur. Replace trees and shrubs outside building area disturbed by operations.
- B. In accordance with generally accepted construction practices, the Contractor shall be solely and completely responsible for working conditions at the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and shall not be limited to normal working hours.

- C. Provide shoring, sheeting, sheet piles and or bracing to prevent caving, erosion or gullyng of sides of excavation.
- D. Surfaces Drainage: Provide for surface drainage during period of construction in manner to avoid creating nuisance to adjacent areas. The contractor shall make a reasonable effort on a daily basis to keep all excavations and the site free from water during entire progress of work, regardless of cause, source, or nature of water.
- E. Adjacent streets and sidewalks shall be kept free of mud, dirt or similar nuisances resulting from earthwork operations.
- F. The site and adjacent influenced areas shall be watered as required to suppress dust nuisance. Dust control measures shall be in accordance with the local jurisdiction.
- G. Trees: Carefully protect existing trees that are to remain. Provide temporary irrigation as necessary to maintain health of trees.
- H. ENVIRONMENTAL PROTECTION
 1. No ground-disturbing activities shall be allowed outside of the project construction boundary. Construction fencing shall be placed at the boundary of the project site to clearly mark the limits of ground-disturbing activities.
 2. All project-related traffic shall be restricted to designated access roads, routes, and construction areas within the project boundary. No vehicular or pedestrian traffic shall be allowed outside the designated project boundary.
 3. To prevent sediment, hazardous materials, and other pollutants from washing or running off into the vernal swale and vernal pools outside of the project site, the contractor shall implement best management practices as identified in a Storm Water Pollution Prevention Plan (SWPPP).
 4. Dirt roadways or other areas of disturbed bare ground within 100 feet of elderberry shrubs will be watered at least twice a day to minimize dust emissions.
 5. A worker awareness training program for construction personnel will be conducted by a qualified biologist prior to beginning construction activities. The program will inform all construction personnel about the life history and status of the beetle, requirements to avoid damaging the elderberry plants, and the possible penalties for not complying with these requirements. Written documentation of the training will be submitted to USFWS within 30 days of its completion.
 6. Contractor to avoid and protect all protected species.

1.12 SEASONAL LIMITS

- A. No fill material shall be placed, spread or rolled during unfavorable weather conditions. When work is interrupted by rains, fill operations shall not be resumed until field tests indicate that moisture content and density of fill are satisfactory.

B. Excessively wet fill material shall be bladed and aerated per section 3.08, B.

1.13 **TESTING**

A. Geotechnical Engineer: Owner is retaining a Geotechnical Engineer to determine compliance of building pad preparation with Plans and spec's, and to direct adjustments in moisture conditioning. Costs of Geotechnical Engineer will be borne by Owner; except those costs incurred for re-tests or re-inspection will be paid by Owner and back charged to Contractor.

PART 2 - PRODUCTS

2.1 **MATERIALS**

A. Engineered Fill Materials: All fill shall be of approved local materials supplemented by imported fill if necessary. "Approved" local materials are defined as local soils tested and approved by Geotechnical Engineer free from debris, and concentrations of clay and organics; and contain rocks no larger than 4 inches in greater dimension. The soil and rock should be thoroughly blended so that all rock is surrounded by soil. This may require mixing of the soil and rock with a dozer prior to placement and compaction. Clods, rocks, hard lumps or cobbles exceeding 1 inch in final size shall not be allowed in the upper 6 inches of any fill. Native clay or clayey soils will not be permitted within the upper 24 inches of building pad areas or paved areas.

B. Imported Engineered Fill Material: Imported fill may be required to complete work. Proposed import fill material shall meet the above requirements; shall be similar to the native soils. Import fill shall meet the above requirements; shall have plasticity index of 4 or less; be free of particles greater than 4 inches in largest dimension; be free of contaminants have corrosion characteristics within the acceptable limits. All import fill material shall be tested and approved by Soils Engineer prior to transportation to the site. Proposed fill material shall comply with DTSC guidelines to include Phase 1 environmental site assessment and related tests. Refer to the October 2001 DTSC Information Advisory for clean imported fill material.

1. DTSC TESTING: Site work contractor is to coordinate testing with an analytical lab, hired by the owner, licensed by the State of California of the DTSC testing. The costs associated with testing will be paid by the contractor.
2. DTSC testing shall include documentation as to the previous land use, location, and history. Soils shall be analyzed for all compounds of concern to ensure the imported soil is uncontaminated and acceptable. Testing shall be performed per the recommendations included in DTSC Imported Fill Advisory (http://www.dtsc.ca.gov/Schools/upload/SMP_FS_Cleanfill-Schools.pdf). Soils shall be tested prior to import to the project site.
3. Lab shall determine geographically which tests and analysis comparison will be appropriate for the testing. (CAM 17 / Title 22); (RWQCB) Regional Water Quality

- Control Board; or (OEHHA) Office of Environmental Health Hazard Assessment.
4. Frequency of testing shall be conducted in accordance with DTSC's Imported Fill Advisory as follows;

Fill Material Sampling Schedule

Area of Individual Borrow Area

- 2 Acres or Less
- 2 to 4 Acres
- 4 to 10 Acres
- Greater than 10 Acres

Sampling Requirements

- Minimum of 4 Samples
- Minimum of 1 Sample every ½ Acre
- Minimum of 8 Samples
- Minimum of 8 locations with 4 subsamples per location

Volume of Borrow Area Stockpile

- Up to 1,000 Cubic Yards
- 1,000 to 5,000 Cubic Yards
- Greater than 5,000 Cubic Yards

- 1 sample per 250 cubic yards
- 4 samples for the first 1,000 cubic yards + 1 sample per each additional 500 cubic yards
- 12 samples for the first 5,000 cubic yards + 1 sample per each additional 1,000 cubic yards

5. Reports/ Documentation
- a. Results of the testing analysis shall be sent to the Owner; Architect; Project Inspector, Project Civil Engineer, DTSC, and DSA. Letter shall reference DSA file and application numbers.

D. Landscape Backfill Material:

- 1. The top 4" of native topsoil stripped from the site may be used for landscape backfill material provided it meets the requirements as specified in Section 32 9000.
- 2. Imported Topsoil may be required to complete work. See Section 32 9000 for requirements. Proposed Topsoil material shall comply with DTSC guidelines to include Phase 1 environmental site assessment and related tests. Refer to the October 2001 DTSC Information Advisory for clean imported fill material.

E. Water: Furnish all required water for construction purposes, including compaction and dust control.

F. Aggregate Base: Provide Class, 2, 3/4" Aggregate Base Conforming to standard gradation as specified in Caltrans Standard Specifications, Section 26, -1.02A.

G. Decomposed Granite: Decomposed Granite shall be well graded mixture of fine to 1/8" particle in size with no clods. The material shall be free of vegetation, other soils, debris and rock. The material shall be reddish-tan to tan in color.

H. Decomposed Granite Solidifier: PolyPavement or Equal.

PART 3 - EXECUTION

3.1 INSPECTION LAYOUT AND PREPARATION

- A. Prior to installation of the work of this Section, carefully inspect and verify by field measurements that installed work of all other trades is complete to the point where this installation may properly commence.
- B. Layout all work, establish grades, locate existing underground utilities, set markers and stakes, setup and maintain barricades and protection facilities; all prior to beginning actual earthwork operations. Layout and staking shall be done by a licensed Land Surveyor or Professional Civil Engineer.
- C. Verify that specified items may be installed in accordance with the approved design.
- D. In event of discrepancy, immediately notify Owner and the Architect. Do not proceed in discrepant areas until discrepancies have been fully resolved.

3.2 PERFORMANCE

- A. GENERAL:
 - 1. General: Do all grading, excavating and cutting necessary to conform finish grade and contours as shown. All cuts shall be made to true surface of subgrade.
 - 2. Archaeological Artifacts: Should any artifacts of possible historic interest be encountered during earthwork operations, halt all work in area of discovery and immediately contact the Architect for notification of appropriate authorities.
 - 3. Degree of Compaction: Percentage of maximum density, hereinafter specified as degree of compaction required, means density equivalent to that percentage of maximum dry density determined by ASTM D1557 Compaction Test method, and such expressed percentage thereof will be minimum acceptable compaction for specified work.
 - 4. Optimum Moisture Content: Optimum moisture content will be determined by Soils Engineer and this information supplied to Contractor. Optimum moisture content shall be maintained until subgrade is covered by surfacing materials.

3.3 DEMOLITION, DISPOSAL AND DISPOSITION OF UNDESIRABLE MAN-MADE FEATURES

- A. All other obstructions, such as abandoned utility lines, septic tanks, concrete foundations, and the like shall be removed from site. Excavations resulting from these removal activities shall be cleaned of all loose materials, dish shaped, and widened as necessary to permit access for compaction equipment. Areas exposed by any required over-excavation should be scarified to a depth of 6", moisture-conditioned to near optimum moisture content, and re-compacted to at least 95% of the maximum dry density.

3.4 TESTING AND OBSERVATION

- A. All grading and earthwork operations shall be observed by the Geotechnical Engineer or his representative, serving as the representative of the Owner.
- B. Field compaction tests shall be made by the Geotechnical Engineer or his representative. If moisture content and/or compaction are not satisfactory, Contractor will be required to change equipment or procedure or both, as required to obtain specified moisture or compaction. Notify Geotechnical Engineer at least 48 hours in advance of any fill operation.
- C. Earthwork shall not be performed without the notification or approval of the Geotechnical Engineer or his representative. The Contractor shall notify the Geotechnical Engineer at least two (2) working days prior to commencement of any aspect of the site earthwork.
- D. If the Contractor should fail to meet the compaction or design requirements embodied in this document and on the applicable plans, he shall make the necessary readjustments until all work is deemed satisfactory, as determined by the Geotechnical Engineer or Architect/Engineer.
- E. After each rain event Geotechnical Engineer shall test fill material for optimum moisture. Do not place any fill material until desired moisture is achieved.

3.5 CLEARING AND GRUBBING

- A. Prior to grading, remove all debris off-site. Remove trees and brush including the root systems. Holes resulting from tree and brush removal should be prepared and backfilled in accordance with paragraphs 3.07, 3.08, 3.09, and 3.10. This may require deepening and/or widening the holes to adequately remove disturbed soil and provide room for compaction equipment. Strip the surface of all organics.

3.6 CUTTING

- A. Building pads that are located within a cut/fill transition area will have to be over-excavated to provide a semi-uniform fill beneath the building pad. The portions of building pads located in cut areas shall be over-excavated to provide no more than 1 foot difference in fill placed in the same building pad.
- B. Do all cutting necessary to bring finish grade to elevations shown on Drawings.
- C. When excavation through roots is necessary, cut roots by hand.
- D. Carefully excavate around existing utilities to avoid unnecessary damage. The contractor shall anticipate and perform hand work near existing utilities as shown on the survey, without additional claims or cost.

3.7 NOT USED

3.8 SUBGRADE PREPARATION

- A. Grade compact and finish all subgrades within a tolerance of 0.10' of grades as indicated on Drawings and so as not to pool water. Subgrade within building pads and concrete walks shall be within 0.05' of grades indicated.
- B. After clearing, grubbing and cutting, subgrade shall be plowed or scarified to a depth of at least 6", until surface is free from ruts, hummocks or other uneven features. Moisture condition to 3 to 5% above optimum moisture content and re-compact to 95% of the maximum dry density as determined by ASTM Test Method D1557.

- D. Subgrade in areas to receive landscaping shall be compacted to (90%).

3.9 PLACING, SPREADING AND COMPACTING FILL MATERIAL IN BUILDING PAD AND PAVEMENT AREAS

- A. Selected fill material shall be placed in compacted layers and geogrid reinforcement.
 - 1. Each layer shall be spread evenly and thoroughly mixed to insure uniformity in moisture content. Compaction of rocky fill materials should be achieved by at least successive passes with a compactor or an equivalent self-propelled sheepfoot compactor. Compactive effort should be applied uniformly across the full width of the fill. Large rocks that cannot be properly incorporated into the engineered fill should be removed.
- B. Selected fill material shall be moisture-conditioned to specified moisture content. Selected fill material shall be unfrozen. When moisture content of fill material is below that specified, add water until proper moisture content is achieved. When moisture content is above that specified aerate by blading or other methods mentioned in 3.08 B until moisture content is satisfactory.
- C. After each layer has been placed, mixed and spread evenly, it shall be thoroughly compacted to a minimum of **90%** as determined by the ASTM D1557 Compaction Test. Compact each layer over its entire area until desired density has been obtained.
- D. Re-compaction of Fill in Trenches and Compaction of Fill Adjacent to Walls: Where trenches must be excavated, backfill with material excavated. Place in lifts that when compacted do not exceed 6", moisture conditioned to (optimum)(2% above optimum) moisture content, and compact to a minimum of **95%** relative compaction in building pad and paved area, and to 90% relative compaction in landscape areas.
- E. Jetting of fill materials will not be allowed.

3.10 FINAL SUBGRADE COMPACTION

- A. Slab on grade: Upper **18"** of all final court pad subgrades shall be uniformly compacted at specified moisture content to at least **95%** of maximum dry density, as determined by ASTM D1557 Compaction Test, regardless of whether final subgrade elevation is attained by filling, excavation, or is left at existing grade. After acceptance of final compaction test, contractor shall maintain the required moisture content of subgrade until concrete flatwork is placed.

- B. Paved Areas: Upper **12"** of all final subgrades supporting pavement sections and all other flatwork shall be brought to specified moisture content and shall be uniformly compacted to not less than **95%** of maximum dry density, regardless of whether final subgrade elevation is attained by filling, excavation, or is left at existing grade. After acceptance of final compaction test, contractor shall maintain the required moisture content of subgrade until concrete flatwork is placed.
- C. Other Fill and Backfill: Upper **12"** of all other final subgrades or finish grades shall be compacted to **90%** of maximum dry density.
- D. Gravel Fill: Do not place compacted gravel fill until after underground work and foundations are in place. Compact gravel fill with vibratory plate or similar equipment to preclude settlement.

3.11 PLACING, SPREADING, AND COMPACTION OF LANDSCAPE BACKFILL MATERIALS

- A. All landscaped areas shall receive topsoil. After subgrade under landscape area has been scarified and brought to **85%** maximum dry density, top soil shall be placed evenly to depth of **6"** at 85% of maximum dry density.
- B. Project Inspector must verify that materials are uniformly spread to minimum depth specified.

3.12 SLOPE CONSTRUCTION

- A. Cut slopes shall be constructed to no steeper than **2:1** (horizontal:vertical). Fill slopes shall be constructed to no steeper than **3:1** (horizontal:vertical). Prior to placement of fill on an existing slope the existing slope shall be benched. The benches shall be in a ratio of **1** horizontal to **1** vertical. The face of the fill slopes shall be compacted as the fill is placed, or the slope may be overbuilt and then cut back to the design grade. Compaction by track walking will not be allowed.

3.13 FINISH GRADING

- A. At completion of project, site shall be finished graded, as indicated on Drawings. Finish grades shall be "flat graded" to grades shown on the drawing. Mounding of finish grades will not be allowed unless otherwise directed on the landscape drawings. Tolerances for finish grades. Leave all landscaped areas in finish condition for lawn seeding. Landscaped planters shall be graded uniformly from edge of planter to inlets. If sod is used for turf areas the finish grade on which it is placed shall be lowered to allow for sod thickness.
- B. All landscape areas shall be left free of rock or foreign material.

C. All landscape areas shall be approved by Architect prior to any planting.

3.14 SURPLUS MATERIAL

A. Excavated material not required for grading or backfill shall be removed from site at contractor's expense.

3.15 CLEANING

A. Refer to Section 01 7423.

B. Remove from fill all vegetation, wood, form lumber, casual lumber, and shavings, in contact with ground; buried wood will not be permitted in any fill.

END OF SECTION

**SITE CLEARING AND REMOVAL
SECTION 31 0505**

PART 1 - GENERAL

1.1 REQUIREMENTS

- A. All applicable portions of Division 1 - General Requirements are to be considered as included with this section.

1.2 CODES

- A. The following are minimum requirements and shall govern, except that all local, state and/or federal codes and ordinances shall govern when their requirements are in excess hereof.

1.3 DESCRIPTION

- A. Furnish all materials, labor, equipment, services, etc., necessary and incidental for the completion of all site clearing and removal work as shown on the drawings and as specified herein.
- B. All onsite and offsite work included consists of but is not limited to the following:
1. Removal of existing sidewalks, drives, curbs, pavements, etc. per plans. Trees, shrubs, irrigation. See Abatement Report.
 2. Removal and capping off or relocation of existing underground utilities, underground structures, etc. per plans.
 3. Removal from site and disposal of all waste, debris and unusable material.
 4. Backfill all open excavations created by the removal of underground utilities, underground structures, etc.

1.4 RELATED SECTIONS

- A. Related work specified elsewhere:
1. Section 31 0000 - EARTHWORK

1.5 QUALITY ASSURANCE

- A. Obtain and pay for any permits, bonds, licenses, etc., required for Site Clearing and Removal work.
- B. All clearing and removal work shall be accomplished in strict accordance with all local and state building codes, requirements and regulations including but not limited to noise abatement, dust control, classification of disposal materials, etc.

- C. Any work within street or highway right-of-way shall be done in accordance with the requirements of the governmental agencies having jurisdiction and shall not begin until these governing authorities have been notified.

1.6 JOB CONDITIONS

- A. An attempt has been made to show all existing structures, utilities, drives, pavements, curbs, walks, etc. in their approximate location on the survey and/or working drawings. However, others that are not shown may exist and may be found upon visiting the site or during the clearing and removal work. It will be the responsibility of this contractor to accurately locate all existing facilities and to determine their extent. If such facilities obstruct the progress of the work and are not indicated to be removed or relocated, they shall be removed or relocated only as directed by the Owner.
 - 1. Report any existing site element not shown on the working drawings to the Architect of Record so that the proper dispensation of that element may be made.
- B. Natural features, existing structures, existing landscaping, existing utilities, etc. which are indicated to remain on the drawings and specifications shall be protected and shall not be defaced or damaged in any manner.
- C. Restore to their present conditions any pavement in the public right-of-way that is disturbed by the work under this section. All pavement restoration work in public rights-of-way shall be performed to the full satisfaction of the governmental agencies having local jurisdiction.

1.7 ENVIRONMENTAL REQUIREMENTS

- A. Noise producing activities shall be held to a minimum. Internal combustion engines and compressors, etc., shall be equipped with mufflers to reduce noise to a minimum. Comply with all noise abatement ordinances.
- B. Keep all areas within the clearing and removal area sufficiently dampened to prevent dust from rising due to clearing or removal operations. Complying with all anti-pollution ordinances.
 - 1. This contractor shall see to it that trucks leaving the site shall do so in such a manner that debris, vegetation, mud and earth will not be deposited on adjacent street pavements. Any debris, vegetation, mud or earth deposited on street pavements shall be promptly removed by this contractor.
- C. All clearing and removal operations shall be performed in a manner such as to prevent any wash-off of soils from the site into streams and/or storm drainage systems. Appropriate sedimentation ponds, dikes, silt fences, collars, and filter media shall be employed to insure compliance with these requirements. Where a specific statute governs these procedures, such statute shall be complied with in its entirety.

1.8 PROTECTION AND SHORING

- A. Protect all existing structures, utilities and landscaping indicated to remain on the drawings.
 - 1. All trees, shrubs, and other items, indicated to remain shall be protected during the entire progress of the work. This includes protection of the root system. The trees shall be fenced if they are located in or near an area being used for material storage or subject to damage by traffic during construction. Low hanging branches and unsound or unsightly branches on trees or shrubs designated to remain shall be removed. All trimmings shall be done by skilled workmen and in accordance with good tree surgery practices.
- B. Any damage done by this contractor to existing structures, pipe lines, utilities, landscaping, etc., indicated to remain shall be repaired by him at his expense in a manner acceptable to the Owner of the damaged property. This contractor shall report any existing damage prior to the beginning of this work.
- C. All temporary shoring, bracing, etc., and maintenance there to required for the completion of clearing and removal work shall be provided by the Contractor whose work requires protection.
 - 1. This contractor shall work in concert per local and state codes to insure the provisions of adequate bracing, shoring, temporary cross over for pedestrian and vehicular traffic including guard rails, lamps, warning signs and flags as required by agencies having jurisdiction as directed by the Owner. Remove same when necessity for protection ceases.

1.9 DRAINAGE MAINTENANCE

- A. During the entire course of clearing and removal operations, all existing drainage ways, both into and from the project area shall be rerouted as required and/or maintained in a functional condition.
- B. At all times during the clearing and removal operation, the exposed areas of subgrade shall be maintained in a condition compatible with positive drainage of the work area. Failure to maintain such drainage shall be considered adequate cause for the District Representative to order temporary suspension of the work.
- C. If it should become necessary to stop work for indefinite periods, take every precaution to prevent damage or deterioration of the work already performed. Provide suitable and functional drainage by installing ditches, filter drains, temporary cut-off lines, etc., and erect temporary protective structures where necessary. All embankments shall be back-bladed and suitable sealed to protect against adverse weather conditions.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. All materials used to backfill excavations, trenches, holes, pits, etc. caused by utility, underground structure, or underground storage tank removal shall meet the requirements for fill material and compaction indicated in Section 02200 and 02210.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Visit the site so that a full understanding of the difficulties and restrictions attending complete clearing of the site and removal of underground tanks and utilities is obtained. Verify the location of all pertinent items.
- B. Verify with sewer department, water department, gas company, electric company, etc. that all existing utilities, services and overhead lines have been deactivated and abandoned prior to beginning removal work. Notify affected utility department or company prior to beginning removal work.
 - 1. Contact the local **Underground Service Alert (USA)** prior to beginning clearing and removal work.

3.2 PREPARATION

- A. Cut drainage swales and provide temporary grading to carry storm water away from clearing area. No storm water will be permitted to stand in open excavations.
- B. Provide, erect and maintain temporary barriers and security devices as required. Protect all existing landscaping, structures, utilities and site elements which are not to be demolished.
- C. Notify all affected utility companies and local authorities and agencies prior to beginning the work.
- D. Identify and tag all existing trees and other landscaping designated to remain.
- E. Identify and locate a permanent stockpile area for topsoil. Verify with District Representative and see plans for fill soil stockpile area. Coordinate with Landscape Contractor.
- F. Identify and locate a waste area for temporary storage of removed materials and a permanent topsoil stockpile area.
 - 1. No materials may be buried or burned on the site as a means of disposal.

3.3 PERFORMANCE

- A. This contractor shall be responsible for all clearing, grubbing, removing and disposing of trash and debris and for clearing and stockpiling all topsoil which are within the designated limits of the property, easements and roadway right-of-way, unless otherwise indicated on the drawings.
- B. Prior to rough grading, storage of construction materials or the installation of any temporary construction facilities, strip areas per plans to be occupied by site improvements.
- C. This contractor shall be responsible for removal of sidewalks, pavements, curbs and gutters, exterior slabs and sidewalks indicated to be removed on plans.
- D. This contractor shall be responsible for removal of all underground utilities, underground structures, etc., according to plans.
- E. Protect any existing structures, utilities and all appurtenances to remain. Prevent movement or settling. Provide bracing and shoring as required.
 - 1. Cease cleaning and removal operations immediately if any existing structure or utility appears in danger. Notify the District Representative and Civil Engineer of Records. Do not resume operations until directed.
- F. All broken construction material, trash and debris, tree slash, sidewalks, curbs, etc. will be considered “waste” and shall be removed from the site.
- G. “Waste” material shall be removed from the site as soon as possible and shall not be allowed to accumulate. Short-term storage of removed material shall be restricted to previously designated “waste” areas or as directed by the District Representative.
 - 1. No burning or burying of “waste” material will be permitted.
- H. Continuously dampen all clearing and removal areas to prevent dust from rising during the operation. Provide hoses and/or water trucks as required.

3.4 FIELD QUALITY CONTROL

- A. The Owner shall retain an independent inspection firm or contact local officials and inspectors at locations where local building codes require special inspections.

3.5 CLEAN UP

- A. Material designated for removal shall become the property of this contractor, and any salvage value therefrom will accrue to this contractor.

- B. Remove from the site and make legal disposition of all waste and debris. No waste or debris shall be burned or buried on the site as a means of disposal.

END OF SECTION

**FINISH GRADING
SECTION 31 2219**

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SECTION INCLUDES

- A. Weeding and finish grading of planting areas.
- B. Preparing subgrades for planting areas.
- C. Excavating and backfilling trenches for buried irrigation and associated electrical utilities and pits for buried irrigation components.

1.3 MEASUREMENT AND PAYMENT

- A. Payment of the various Construction Items described in the Schedule of Values shall be considered full compensation for work of this Section.

1.4 DEFINITIONS

- A. Backfill: Soil materials used to fill an excavation.
 - 1. Initial Backfill: Backfill placed beside and over pipe in a trench, including haunches to support sides of pipe.
 - 2. Final Backfill: Backfill placed over initial backfill to fill a trench.
- B. Bedding Course: Layer placed over the excavated subgrade in a trench before laying pipe.
- C. Borrow: Satisfactory soil imported from off-site for use as fill or backfill.
- D. Excavation: Removal of material encountered above subgrade elevations.
 - 1. Additional Excavation: Excavation below subgrade elevations as directed by Landscape Architect. Additional excavation and replacement material will be paid for according to Contract provisions for changes in the Work.
 - 2. Unauthorized Excavation: Excavation below subgrade elevations or beyond indicated dimensions without direction by Landscape Architect. Unauthorized excavation, as well as remedial work directed by Landscape Architect, shall be without additional compensation.

- E. Fill: Soil materials used to raise existing grades.
- F. Structures: Buildings, footings, foundations, retaining walls, slabs, tanks, curbs, mechanical and electrical appurtenances, or other man-made stationary features constructed above or below the ground surface.
- G. Subgrade: Surface or elevation remaining after completing excavation, or top surface of a fill or backfill immediately below subbase, drainage fill, or topsoil materials.
- H. Utilities include on-site underground pipes, conduits, ducts, and cables, as well as underground services within buildings.
- I. Finish Grading: Finish grading shall consist of finishing surfaces by raking smoothly and evenly, removing, and disposal of extraneous matter to facilitate natural run-off water.

1.5 SUBMITTALS

- A. Samples: For the following:
 - 1. 12-by-12-inch (300-by-300-mm) sample of separation fabric.

1.6 PROJECT CONDITIONS

- A. Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted in writing by Landscape Architect and then only after arranging to provide temporary utility services according to requirements indicated:
 - 1. Notify Landscape Architect not less than two days in advance of proposed utility interruptions.
 - 2. Do not proceed with utility interruptions without Landscape Architect's written permission.
 - 3. Contact utility-locator service for area where Project is located before excavating.
- B. Demolish and completely remove from site existing underground utilities indicated to be removed. Coordinate with utility companies to shut off services if lines are active.

PART 2 - PRODUCTS

2.1 SOIL MATERIALS

- A. General:
 - 1. Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.

- B. Satisfactory Soils: ASTM D 2487 soil classification groups GW, GP, GM, SW, SP, and SM, or a combination of these group symbols; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
- C. Unsatisfactory Soils: ASTM D 2487 soil classification groups GC, SC, ML, MH, CL, CH, OL, OH, and PT, or a combination of these group symbols.
 - 1. Unsatisfactory soils also include satisfactory soils not maintained within 2 percent of optimum moisture content at time of compaction.
- D. Backfill and Fill: Satisfactory soil materials.
- E. Drainage Fill: Washed, narrowly graded mixture of crushed stone, or crushed or uncrushed gravel; ASTM D 448; coarse-aggregate grading Size 57; with 100 percent passing a 1-1/2-inch (38-mm) sieve and 0 to 5 percent passing a No. 8 (2.36-mm) sieve.

2.2 ACCESSORIES

- A. Separation Fabric: Woven geotextile, specifically manufactured for use as a separation geotextile: made from polyolefins, polyesters, or polyamides: and with the following minimum properties determined according to ASTM D 4759 and referenced standard test methods:
 - 1. Grab Tensile Strength: 200 lbf (890 N); ASTM D 4632.
 - 2. Tear Strength: 75 lbf (333N); ASTM D 4533.
 - 3. Puncture Resistance: 90 lbf (400N); ASTM D 4833.
 - 4. Water Flow Rate: 4 gpm per sq. ft. (2.7 L/s per sq. m); ASTM D 4491.
 - 5. Apparent Opening Size: No. 30 (0.6 mm); ASTM D 4751.

PART 3 - EXECUTION

3.1 GENERAL

- A. Conform to the Geotechnical (Soils) Report prepared for the project.

3.2 PREPARATION

- A. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by settlement, lateral movement, undermining, washout, and other hazards created by earthwork operations.
- B. Provide erosion-control measures to prevent erosion or displacement of soils and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways.

3.3 EXPLOSIVES

- A. Explosives: Do not use explosives.

3.4 EXCAVATION, GENERAL

- A. Unclassified Excavation: Excavation to subgrade elevations regardless of the character of surface and subsurface conditioned encountered, including rock, soil materials, and obstructions.
 - 1. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials.

3.5 EXCAVATION FOR IRRIGATION TRENCHES

- A. Excavate trenches to indicated gradients, lines, depths, and elevations.
- B. Excavate trenches to uniform widths to provide a working clearance on each side of pipe or conduit. Excavate trench walls vertically.
- C. Trench Bottoms: Excavate and shape trench bottoms to provide uniform bearing and support of pipes and conduit. Shape subgrade to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits. Remove projecting stones and sharp objects along trench subgrade.

3.6 STORAGE OF SOIL MATERIALS

- A. Stockpile borrow materials and satisfactory excavated soil materials. Stockpile soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
 - 1. Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.

3.7 IRRIGATION TRENCH BACKFILL

- A. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
- B. Place and compact initial backfill free of particles larger than 1 inch to a height of 4 inches over the utility pipe or conduit.
 - 1. Carefully compact material under pipe haunches and bring backfill evenly up on both sides and along the full length of irrigation piping or conduit to avoid damage or displacement of utility system.

- C. Coordinate backfilling with utilities testing.
- D. Place and compact final backfill of satisfactory soil material to finish grade.

3.8 FILL AND LANDSCAPE MOUNDING

- A. Preparation: Remove vegetation, topsoil, debris, unsatisfactory soil materials, obstructions, and deleterious materials from ground surface before placing fills.
- B. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
- C. Place and compact fill material in layers to required elevations. Mounding to be installed in natural undulating form and to the heights and extents as indicated on the drawings. Contractor to notify Landscape Architect when mounding has been completed for review and approval of mounding.

3.9 COMPACTION OF BACKFILLS AND FILLS

- A. Place backfill and fill materials in layers not more than 6 inches in loose depth for material compacted by hand-operated tampers.
- B. Place backfill and fill materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
- C. Compact soil to not less than the following percentages of maximum dry unit weight according to ASTM D 698:
 - 1. Under structures, steps, and pavements, scarify and re-compact top 12 inches of existing subgrade and each layer of backfill or fill material at 95 percent.
 - 2. Under walkways, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 92 percent.
 - 3. Under lawn or unpaved areas, scarify and re-compact top 6 inches below subgrade and compact each layer of backfill or fill material at 85 percent.

3.10 LANDSCAPE GRADING

- A. General: Uniformly grade areas to a smooth surface, free from irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
 - 1. Provide a smooth transition between adjacent existing grades and new grades.
 - 2. Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.

- B. Landscape Grading: Slope grades to direct water away from buildings and to prevent ponding. Provide positive drainage swales from all buildings, walkways, etc. to drainage catch basins or site drainage swales. No ponding is to be allowed. Finish subgrades to required elevations within the following tolerances:
 - 1. Lawn or Unpaved Areas: Plus or minus 1 inch.
 - 2. Walks: Plus or minus 1 inch.
 - 3. Pavements: Plus or minus 1/2 inch.
- C. Grading for Shrubs and Ground Cover: The finish grade of shrubbery and ground cover areas shall be 1½ inches below grade of adjacent pavement, walks, curbs, or headers and 3 inches below adjacent walls, except when drainage conditions may require flush grades, as directed by Landscape Architect.
- D. Lawn Areas: The finish grade of lawn areas shall be 1½ inches below grade of adjacent pavement walks, curbs or headers, except when drainage conditions may require flush grade as directed by Landscape Architect. Roll lawn areas with 300 pound roller until a uniformly compact and even surface is obtained.
- E. Immediately prior to planting operations, planting areas shall be cleaned of weeds, debris, rocks over 1 inch in diameter, and clumps of earth that will not break up. Adjust any areas disturbed by installation of sprinkler irrigation system.

3.11 PROTECTION

- A. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
- B. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
- C. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
 - 1. Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to the greatest extent possible.

3.12 DISPOSAL OF SURPLUS AND WASTE MATERIALS

- A. Disposal: Remove surplus satisfactory soil and waste material, including unsatisfactory soil, trash, and debris, and legally dispose of it off Owner's property.

END OF SECTION

TRENCHING AND BACKFILLING
SECTION 31 2333

PART 1 - GENERAL

1.1 INCLUSION OF OTHER CONTRACT DOCUMENTS

- A. The general conditions, supplementary conditions and Division 1 are fully applicable to this section as if repeated herein.

1.2 RELATED WORK SPECIFIED ELSEWHERE

- A. Section 31 0000, Earthwork.

1.3 QUALITY ASSURANCE

- A. Use only new materials and products, unless existing materials or products are specifically shown otherwise on the Drawings to be salvaged and re-used.
- B. All materials, components, assemblies, workmanship and installation are to be observed by the Owner's Inspector of Record. Work not so inspected is subject to uncovering and replacement.
- C. Contractor/ Installer shall have been in business for five (5) years providing/finishing similar size projects and complexity.

1.4 SUBMITTALS

- A. Refer to Section 01 3300.
- B. Submit Manufacturers data and shop drawings.

1.5 WARRANTY

- A. Submit fully executed warranty for work and materials in this section per 01 3300.

1.6 REFERENCES AND STANDARDS

- A. California Building Code current edition.
- B. California Plumbing Code current edition.

1.7 DELIVERY, STORAGE AND HANDLING

- A. Transport, store and handle in strict accord with the local jurisdiction.
- B. Make delivery to job when notified by Contractor verifying that the job is ready to receive the work of this Section and that arrangements have been made to properly store, handle and protect such materials and work.

1.8 PROJECT CONDITIONS

- A. Contractor shall acquaint himself with all existing site conditions. If unknown active utilities are encountered during work, notify Architect promptly for instruction. Failure to notify will make Contractor liable for damage to these utilities arising from Contractor's operations subsequent to discovery of such unknown active utilities.
- B. Field verify that all components, backing, etc. by others are installed correctly to proceed with installation of products as herein specified.
- C. Trench dewatering may be necessary. Contractor shall provide any and all tools, equipment and labor necessary for trench dewatering no matter what the source. Dewatering shall be continuous until all site utilities are installed and backfilled.

1.9 PROTECTION

- A. Adequate protection measures shall be provided to protect workers and passers-by on and off site. Adjacent property shall be fully protected throughout the operations. Blasting will not be permitted. Prevent damage to adjoining improvements and properties both above and below grade. Restore such improvements to original condition should damage occur. Replace trees and shrubs outside building area disturbed by operations. Repair all trenches in grass areas with new sod (seeding not permitted) and "stake-off" for protection.
- B. Contractor shall be solely and completely responsible for working conditions at the job site, including safety of all persons and property during performance of the work. This requirement shall apply continuously and shall not be limited to normal working hours.
- C. Any construction review of the Contractor's performance conducted by the Architect or Owner is not intended to include review of the adequacy of the Contractor's safety measures, in, on or near the construction site.
- D. Provide shoring, sheeting, sheet piles and or bracing to prevent caving, erosion or gulying of sides of excavation.

- E. Surface Drainage: Provide for surface drainage during period of construction in manner to avoid creating nuisance to adjacent areas. Keep all excavations free from water during entire progress of work, regardless of cause, source or nature of water.
- F. Adjacent streets and sidewalks shall be kept free of mud, dirt or similar nuisances resulting from earthwork operations.
- G. The site and adjacent influenced areas shall be watered as required to suppress dust nuisance.
- H. Trees: Carefully protect existing trees which are to remain.

1.10 TRENCH SAFETY PROVISIONS

- A. General Contractor shall be solely responsible for safety design, construction and coordination with agencies having jurisdiction. If such plan varies from shoring system standards established by Construction Safety Orders, plan shall be prepared by registered civil or structural engineer.
- B. Nothing herein shall be deemed to allow use of shoring, sloping or protective system less effective than that required by Construction Safety Orders of California State Division of Industrial Safety.
- C. When trenching through paved surface, provide steel trench plates to cover open trenches daily until trenches are backfilled.

1.11 SEASONAL LIMITS

- A. No backfill material shall be placed, spread or rolled during unfavorable weather conditions. When work is interrupted by heavy rains, full operations shall not be resumed until field tests indicate that moisture content and density of fill are satisfactory.
- B. Material above optimum moisture shall be processed per section 02200, 3.08, B.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Backfill materials: Pipeline and conduit trench backfill as shown on the plans and as specified below.
 - 1. 3/4 inch crush rock as specified on the plans.
 - 2. Native Materials: Soil native to Project Site, free of wood, organics, and other deleterious substances. Rocks shall not be greater than 2-inches.
 - 3. Sand: Fine granular material, free of organic matter, mica, loam or clay.
 - 4. Lean Mix Concrete: 3 sacks of cement per yard plus sand.

5. Class 2 aggregate base, 3/4" rock, per Caltrans section 26-1.02B.
 6. Controlled Density Fill: 3 sack slurry backfill.
 7. Provide continuous warning tape.
- B. Water: Furnish all required water for construction purposes, including compaction and dust control.
- C. Provide other bedding and backfill materials as described and specified in Section 33 1000, Division 26.

PART 3 - EXECUTION

3.1 INSPECTION

- A. Verification of Conditions:
1. Examine areas and conditions under which work is to be performed.
 2. Identify conditions detrimental to proper or timely completion of work and coordinate with General Contractor to rectify.

3.2 COORDINATION

- A. General Contractor shall coordinate work as herein specified, in accordance with drawings and as required to complete scope of work with all related trades.

3.3 INSTALLATION

- A. Perform work in accordance with pipe manufacturer's recommendations, as herein specified and in accordance with drawings.

3.4 TRENCHING

- A. Make all trenches open vertical construction with sufficient width to provide free working space at both sides of trench around installed item as required for caulking, joining, and backfilling and compacting; not less than 12 inches wider than pipe or conduit diameter, unless otherwise noted.
- B. Carefully excavate around existing utilities to avoid unnecessary damage. The contractor shall anticipate and perform hand work near existing utilities as shown on the survey, without additional claims or cost.
- C. Trench straight and true to line and grade with bottom smooth and free of edges or rock points.
- D. Where depths are not shown on the plans, trench to sufficient depth to give minimum fill

above top of installed item measured from finish grade above the utility as follows:

1. Sewer pipe: Depth to vary
2. Storm drain pipe: Depth to vary
3. Water pipe - Fire Supply: 36 inches
4. Water pipe - Domestic Supply: 30 inches

3.5 BACKFILL

- A. Pipe Trench Backfill is divided into three zones:
 1. Bedding: Layer of material directly under the pipe upon which the pipe is laid.
 2. Pipe Zone: Backfill from the top of the bedding to 6 inches (compacted) over the top of the pipe.
 3. Upper Zone: Backfill between top of Pipe Zone and to surface of subgrade.
- B. Bedding: Type of material and degree of compaction for bedding backfill shall be as defined in the Details and Specifications.
- C. Pipe Zone and Upper Zone Backfill:
 1. Type of material and degree of compaction Pipe Zone and Upper Zone Backfill shall be as required by Drawings, Details, & Specifications.
 2. Upper Zone Backfill shall not be placed until conformance of Bedding and Pipe Zone Backfill with specified compaction test requirements has been confirmed.
 3. Backfill shall be brought up at substantially the same rate on both sides of the pipe and care shall be taken so that the pipe is not floated or displaced. Material shall not be dropped directly on pipe.
- D. Backfill Compaction:
 1. Backfill shall be placed in layers which, when compacted shall not exceed 6 inches in thickness. Each layer shall be spread evenly and thoroughly mixed to insure uniformity. Do not backfill over, wet, frozen or soft subgrade surfaces. Employ a placement method that does not disturb or damage foundation walls, perimeter drainage, foundation, damp-proofing, waterproofing or protective cover.
 2. When moisture content of fill material is below that required to achieve specified density, add water until proper moisture content is achieved. When moisture content is above that required, aerate by blading or other methods until specified moisture content is met, see section 02200, 3.08, B.
 3. After each layer has been placed, mixed and spread evenly, it shall be thoroughly compacted to 90% of maximum dry density while at specified moisture content. Compact each layer over its entire area until desired density has been obtained.
 4. Compaction: All backfill operations shall be observed by the Inspector of Record and/or Geotechnical Engineer. Field density tests shall be made to check compaction of fill material. If densities are not satisfactory, Contractor will be required to change equipment or procedure or both, as required to obtain specified densities. Notify Inspector and Architect at least 24 hours in advance of any operation.

- E. Backfill in Areas Previously Lime or Cement Treated
 - 1. Where trenching occurs in areas that have been lime or cement treated, class 2 aggregate bases or approved controlled density backfill material shall be used for the top 12-inches minimum of the trench or thickness shall match the depth of treated material.

3.6 TRENCH AND SITE RESTORATION

- A. Finished surface of trenches shall be restored to a condition equal to, or better than the condition as existed prior to excavation work.

3.7 PROTECTION

- A. Protect existing surfaces, structures, and utilities from damage. Protect work by others from damage. In the event of damage, immediately repair or replace to satisfaction of Owner.
- B. Repair existing landscaped areas to a new condition. Replant trees, shrubs or groundcover with existing materials if not damaged or with new materials if required. Replace damaged lawn areas with sod, no seeding will be permitted.
- C. Replace damaged pavement with new compatible matching materials Concrete walks to be removed to nearest expansion joint and entire panel replaced. Asphalt to be cut neatly and replaced with new materials.

3.8 SURPLUS MATERIAL

- A. Remove excess excavated material, unused materials, damaged or unsuitable materials from site.

3.9 CLEANING

- A. Refer to Section 01 7423.
- B. Contractor will keep the work areas in a clean and safe condition so his rubbish, waste, and debris do not interfere with the work of others throughout the project and at the completion of work.
- C. After completion of work in this section, remove all equipment, materials, and debris. Leave entire area in a neat, clean, acceptable condition.

END OF SECTION

**PORTLAND CEMENT CONCRETE PAVING
SECTION 32 1313**

PART 1 - GENERAL

1.1 SUMMARY

- A. Work included: The work includes the furnishing and installing of all concrete walks and seat walls as shown and noted on the drawings and as specified. The Conditions of the Contract and Division 1 apply to this section as fully as if repeated herein.

1.2 SUBMITTALS

- A. Provide cement and reinforcing steel certifications, mix designs, and weighmaster certificates.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Portland cement: Type II and shall conform to the specifications for portland cement, ASTM C 150 and ACI 318-19.
- B. Aggregates: Concrete aggregates shall conform to specifications for concrete aggregates ASTM C 33 except as modified by ACI 318-19 grading to conform to CBC.
- C. Reinforcing Bars: New, deformed, billet steel bars, meeting the requirements of ASTM A 615, Grade 40. Deliver bars new and free from rust and mill scale in original bundles with mill tags intact.
- D. Welded Wire Fabric: New, welded steel wire fabric, meeting the requirements of ASTM A 185. Provide gauge and center-to-center spacing as indicated.
- E. Forms: Steel, wood, or other suitable material of size and strength to resist movement during concrete placement.
 - 1. Use flexible spring steel forms or laminated boards to form radius bends.
 - 2. Coat forms with a non-staining form release agent.

2.2 MIXING

- A. Provide mix designs for each class of concrete used. The exact proportions of the mix, including amounts of admixture (if any) and water, will be determined by the Testing Laboratory or Mill, based on cement and aggregate submitted by the Contractor. The Concrete Supplier may utilize an established mix design by supplying at least twenty (20)

break sample results by testing lab and supplying weigh master certificate.

- B. Use ready-mixed concrete mixed and delivered in accordance with the requirements of ASTM C 94 , and ACI 318-19. In the event concrete is mixed at a central batching plant, arrange delivery so intervals between batches are kept at a minimum, and in any event not more than 30 minutes. Do not add water during transit or at the Project Site without the Architect's approval. Place concrete within 90 minutes after cement has been mixed with aggregate or 45 minutes after addition of water and admixtures.

2.3 PROPERTIES AND PROPORTIONS

- A. Proportion concrete to provide a minimum compressive strength at 28 days of 2,500 psi, per Drawings, for all site work concrete.
- B. Slump: 4 inches maximum.
- C. Aggregate Size: Maximum 1 inch.

PART 3 - EXECUTION

3.1 INSTALLATION OF SIDEWALKS AND OTHER FLATWORK

- A. Placing: Place concrete in accordance with ACI 318-19. Strike off and compact the fresh concrete until a layer of mortar has been brought to the surface. Float the surface to grade and cross section with a float not less than 10 feet in length and not less than 6 inches in width. Trowel surfaces to a uniform smooth texture free of trowel marks ready to receive final finish as specified below.
- B. Joints: Tool the surfaces of flatwork to provide weakened plane joints in accordance with patterns indicated. Where no pattern is shown, mark flatwork into rectangles - minimum 12 square feet, maximum 20 square feet. Use a scoring tool that will leave the corners rounded. Form expansion joints 1/4 inch wide at all returns and opposite expansion joints in curbs. Where curb is not adjacent, form expansion joints at intervals of 60 feet. Fill expansion joints with pre-molded expansion joint filler as specified.
- C. Tolerances: The surface of flatwork shall not vary more than 0.02 foot from a 10 foot straight edge except at grade changes.
- D. Finish: Concrete is to be medium broom finish, 0.6 coefficient of friction at typical locations. Provide heavy broom finish at locations where slopes are over 6%.

END OF SECTION