

CITY OF CRESCENT CITY PUBLIC WORKS DEPARTMENT

NOTICE INVITING SEALED BIDS, SPECIAL PROVISIONS, PROPOSAL AND CONTRACT

CRESCENT CITY MEASURE S STREET IMPROVEMENTS FALL 2025

CRESCENT CITY, DEL NORTE COUNTY, CALIFORNIA

For Use in Connection with CALTRANS 2024 Standard Specifications and Standard Plans, and

Current Labor Surcharge and Equipment Rental Rates.

CONTRACT NUMBER 2025-1074.1

Bids Open: September 23, 2025

Dated: August 25, 2025

IMPORTANT SPECIAL NOTICES

The Bidder's attention is directed to the following:

- There is a Base Bid with 15 bid items listed. There are no Alternatives. A bid
 must be submitted for <u>all</u> bid items. The Contract award will be based on the
 lowest Base Bid.
- Plans for this project include a Google Map screenshot of the approximate locations of asphalt mill and inlay work. Exact locations to be marked during a pre-construction kickoff meeting after contract award. Locations and type of striping are defined in a table attached to the plans.
- Spoils of demolition including asphalt grinding and removal, base rock removal and/or replacement and compaction, and unsuitable material removal to be included in bid items 4 through 10.
- No cross sections are available for the roadwork other than typical plan sheets provided.

The Engineering Cost Estimate is \$582,500.

The above special notices do not relieve the Bidder of his/her responsibility to become fully familiar with the Contract Documents including the Plans and Specifications.

CRESCENT CITY MEASURE S STREET IMPROVEMENTS FALL 2025

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SECTION 00 10 00

INVITATION TO BID

CRESCENT CITY MEASURE S STREET IMPROVEMENTS FALL 2025

CONTRACT 2025-1074.1

Sealed bids for the construction of the Measure S Street Improvements Fall 2025 will be received by the Owner, the City of Crescent City at the Crescent City Public Works Department office until **2:00 PM on 23 September 2025**. The bids will be opened publicly and read aloud at 2:00 PM on the same day in the Public Works Office. Bids must be addressed to:

City of Crescent City
Public Works Department
377 J Street
Crescent City, CA 95501

and labeled "Bids for the MEASURE S STREET IMPROVEMENTS FALL 2025."

The work includes the furnishing of the labor, materials, and equipment for mill and inlay asphaltic concrete repairs on Seventh Street, Eighth Street, C Street, D Street, and E Street per the drawings and specifications. The project is located at various locations in Crescent City, CA.

There is no mandatory pre-bid meeting.

The project manual may be inspected at the following locations:

City of Crescent City Public Works Department 377 J Street Crescent City CA 95531

Humboldt Builders Exchange 624 C Street Eureka, CA 95501 (707) 442-3708

Shasta Builders Exchange 2985 Innsbruck Drive Redding, CA 96003 (530) 221-5556

Medford Builders Exchange 2330 Crater Lake Ave. Medford, OR 97504 (541) 773-5327

San Francisco Builders Exchange 850 S Van Ness Ave San Francisco, CA 94110 (925) 324-2727

Placer County Contractors Association 10656 Industrial Ave #160 Roseville, CA 95678 (916) 771-7229

Dodge Data & Analytics www.construction.com (800) 393-6343

Construction Bidboard 11622 El Camino Real #100 San Diego, CA 92130 (619) 688-0588

Full-size and half-size copies of the project manual may be obtained at City of Crescent City Public Works Department 377 J Street, Crescent City, CA 95531 ((707) 464-9506), upon payment of postage fees.

Bidders must correctly prepare and submit the documents listed in Section 00 40 00, Bid.

Each bid must be accompanied by a bid guaranty bond, or a certified or cashier's check payable to the order of the Owner in an amount not less than ten percent (10%) of the amount of the bid as a guaranty that the bidder will execute the contract if it is awarded in conformity with the bid form. The successful bidder will be required to furnish performance and payment bonds, each in an amount not less than one hundred percent (100%) of the contract price.

At the successful Bidder's option, securities may be substituted for the required retention, in accordance with the provisions of Section 22300 of the State of California Public Contract Code.

The Owner reserves the right to reject any or all bids and to determine which bid is, in the Owner's judgment, the lowest responsive bid of a bidder or group of bidders. The Owner also reserves the right to waive any informalities in any bid and to delete items listed in the bid.

Bids received after the time established for receiving bids will not be considered. Except as provided in paragraph 00 20 10-1.04(A), no bidder may withdraw his bid after the time established for receiving bids or before the award and execution of the contract, unless the award is delayed for a period exceeding ninety (90) calendar days.

Bidders are hereby notified that pursuant to Section 1773 et seq. of the Labor Code of the Statutes of the State of California, the Owner has obtained from the Director of the Department of Industrial Relations the general prevailing rate of wages and employer payments for health and welfare, vacation, pension, and similar purposes for work to be done within Del Norte County, California. Regulations regarding the application of these wage rates are given in paragraph 00 20 00-1.12.

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)].

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.

Bidders on this work must comply with all applicable governmental and local agency requirements.

Date: August 25, 2025 By: David Yeager

SECTION 00 20 00

INSTRUCTIONS TO BIDDERS

1.01 INSPECTION OF SITE

Bidders are required to inspect the site of the work to satisfy themselves by personal examination or by such other means as they may prefer, of the location of the proposed work, and of the actual conditions of and at the site of work. Bidders should plan to inspect the site of the work during the pre-bid meeting and can schedule additional time by special arrangement with the Owner.

Entrance by bidders to the site of the work for purposes of making exploratory excavations shall be by special arrangement with the Owner and under conditions established by the Owner. If, during the course of his examination, a bidder finds facts or conditions which appear to him to be in conflict with the letter or spirit of the project manual, he may apply to the Owner, in writing, for additional information and explanation before submitting his bid.

Submission of a bid by the bidder is an acknowledgment that, if awarded the contract, bidder has relied and is relying on bidder's own examination of (1) the site of the work, (2) access to the site, and (3) all other data and matters requisite to the fulfillment of the work and on his own knowledge of existing facilities on and in the vicinity of the site of the work to be constructed under the contract.

The information provided by the Owner is not intended to be a substitute for, or a supplement to the independent verification by the bidder to the extent such independent investigation of site conditions is deemed necessary or desirable by the bidder. Bidder acknowledges that he has not relied upon Owner-furnished information regarding site conditions in preparing and submitting a bid.

1.02 EXAMINATION OF PROJECT MANUAL

Each bidder must thoroughly examine and be familiar with those contract documents contained in the project manual. Submission of a bid constitutes acknowledgment, upon which the Owner may rely, that the bidder has thoroughly examined and is familiar with the project manual. Failure or neglect of a bidder to examine any of the contract documents contained in the project manual in no way relieves bidder from any obligation with respect to his bid or to the contract. No claim for additional compensation will be allowed that is based upon a lack of knowledge of the contract documents or the work.

1.03 INTERPRETATION OF PROJECT MANUAL

Bidders, prospective subcontractors, manufacturers and suppliers may request interpretation of the project manual prior to bid opening. Requests for interpretation must be directed in writing to David Yeager, Public Works Director, 377J Street, Crescent City, CA 95531 (707) 951-3275. Requests to clarify the source of materials, equipment, suppliers, or any other matter that does not modify, change, increase, or decrease the scope of work, requires no action by the Owner other than a response to the bidder requesting the clarification. Requests to clarify possible ambiguous, conflicting or incomplete statements or designs, or any other clarification that

modifies, changes, increases or decreases the scope of work, requires issuance of an addendum by the Owner for the interpretation to become effective.

1.04 BID DOCUMENTS

A. BID FORMS:

- 1. GENERAL: Bids must be made on the blank bid forms prepared and provided by the Owner. Bids must give the prices proposed, both in writing and in figures, must give all other information requested, and must be signed by the bidder or his authorized representative, with his address.
- 2. BID PRICES: Bid prices must include everything necessary for the completion of the work including but not limited to providing the materials, equipment, tools, plant and other facilities, and the management, superintendence, labor and services, and bonds. Bid prices must include allowance for federal, state, and local taxes. Bid prices shall be guaranteed by the Contractor for 90 days.

In the event of a difference between a price quoted in words and a price quoted in figures for the same quotation, the words are the amount bid. In the event that the product of a unit price and an estimated quantity does not equal the extended amount quoted, the unit price governs, and the correct product of the unit price and the estimated quantity is deemed to be the amount bid. If the sum of two or more items in a bidding schedule does not equal the total amounts quoted, the individual item amounts govern and the correct total is deemed to be the amount bid.

- 3. BIDDER'S SIGNATURE AND AUTHORITY: If the bid is made by an individual, his name, signature, and post office address must be shown; if made by a firm or partnership, the name and post office address of the firm or partnership, a list of the partners, and the signature of at least one of the general partners must be shown; if made by a corporation, the bid must show the name of the state under the laws of which the corporation is chartered, the name and post office address of the corporation, and the title of the person who signs on behalf of the corporation. If the bid is made by a joint venture, the bid must be signed by a representative of one of the joint venture firms.
- 4. BID IRREGULARITIES: Each bid and the information requested, bound in the project manual, shall be enclosed in a sealed envelope and labeled as specified in the Invitation to Bid. Bidders are warned against making erasures or alterations of any kind, and bids containing omissions, erasures, or irregularities of any kind may be rejected. No oral, telegraphic, or telephonic bids or modifications will be considered.
- 5. MODIFICATION OF BID: Modification of a bid already received will be considered only if the modification is received prior to the time established for receiving bids. Modifications must be made in writing, executed, and submitted in the same form and manner as the original bid.
- 6. WITHDRAWAL OF BIDS: Within five days after the opening of bids, a bidder may withdraw his bid, if he establishes to the Owner's satisfaction that a mistake was made in preparing the bid. A bidder who wants to withdraw must give written notice to the Owner, specifying, in detail, how the mistake occurred and how the mistake made the bid materially

different than it was intended to be. Withdrawal is not permitted for mistakes resulting from errors in judgment or carelessness in inspecting the site of the work or in reading the project manual.

7. MAJOR EQUIPMENT ITEMS: Certain items of major equipment to be provided under this contract are shown on the plans. The bidder shall provide the name of the manufacturer of the equipment to be provided for all major equipment. Only one manufacturer shall be indicated for each item. By so indicating, the bidder warrants that equipment manufactured and/or supplied by the named manufacturer will be provided on the project unless review of submittal information or performance under tests reveals that the manufacturer is unresponsive to the contract. Failure to indicate a manufacturer for any equipment may render the bid unresponsive to the invitation to bid and may be a basis for rejection of the bid.

The arrangements specified on the drawings are based on a particular manufacturer's equipment. Where the Contractor selects a manufacturer whose equipment arrangement is different than specified, the total amount listed in the bid shall provide for a complete operating installation for each equipment item listed, including any and all changes and additions in structure, piping, buildings, mechanical, electrical and control systems and accessories required to accommodate the listed manufacturer's equipment. The bid shall also include the preparation and submission of detailed drawings, calculations and manufacturer's data to allow evaluation of the proposed equipment and to show all modifications to the work as necessary to accommodate the proposed manufacturer's equipment.

In the event that the Owner, at its sole discretion, determines that the equipment of the manufacturer listed by the Contractor and submitted for review does not meet the requirements of the contract, the Contractor shall select and submit for review equipment of another manufacturer which does meet the contract, and no increase in the total amount of the contract shall be allowed.

B. ALTERNATIVE MATERIALS AND EQUIPMENT:

The bidder may offer a deductive price to the Owner for supplying alternative or substitute equipment or material for items specified or shown in the plans by listing the specification section, item description, manufacturer, and deductive amount as a supplement to the bid. The bid shall be based on supplying equipment or material from manufacturers or suppliers specified or shown on the plans. Alternative or substitute equipment or material will be considered by the Owner after contract award and shall not be used in determining the basis of award. Selection of any offered alternate or substitution shall be at the Owner's sole discretion and will be accomplished by issuing a deductive change order for an amount agreed upon.

Manufacturers or suppliers of materials and equipment may offer an alternative product to the Contractor and request that alternatives to specified products be considered equal. Inclusion of such alternatives in the bid is the responsibility of the Contractor. Inclusion should only be considered if the Contractor believes the offered alternative is equal in quality to the specified product. After award of contract, such offers of alternative products will be reviewed and processed as a substitution provided under paragraph 00 72 00-4.05.

C. BID GUARANTY:

The bid form must be accompanied by a bid guaranty bond provided by a guaranty company authorized to carry on business in the State of California for payment to the Owner in the sum of at least ten (10) percent of the total amount of the bid price, or, alternatively, by a certified or cashier's check, payable to the Owner in the sum of at least ten (10) percent of the total amount of the bid price. The bonds must be executed by a duly licensed surety company, listed in the latest Circular 570 of the United States Treasury Department as being acceptable as surety on federal bonds. The bid guaranty bond must be provided on the form included in Section 00 43 13 of this project manual. The amount payable to the Owner under the bid guaranty bond or the certified or cashier's check, as the case may be, must be forfeited to the Owner as liquidated damages in case of a failure or neglect of the bidder to furnish, execute, and deliver to the Owner the required performance and payment bonds provided respectively in Sections 00 61 05 and 00 61 10, the evidences of insurance, and to enter into, execute, and deliver to the Owner the agreement on the form provided in Section 00 52 00, within ten (10) calendar days after receiving written notice from the Owner that the award has been made and the agreement is ready for execution.

D. LIST OF SUBCONTRACTORS:

Each bidder must have listed, on the form provided in Section 00 43 36, the name, address, and description of the work, of each subcontractor to whom the bidder proposes to sublet portions of the work in excess of 0.5 percent of the total amount of his bid. For the purpose of this paragraph, a subcontractor is defined as one who contracts with the Contractor to provide materials and labor, labor only, or who specially fabricates and installs a portion of the work or improvement according to drawings contained in the project manual. Listings and subsequent substitutions, if any, must be done in conformance with the Subletting and Subcontracting Fair Practices Act, commencing at Section 4100 of the Public Contract Code of the State of California. Failure to list subcontractors may render a bid nonresponsive and may be grounds for rejection of the bid.

1.05 BIDDER'S CERTIFICATIONS

A. QUALIFICATION OF BIDDER:

Bidder must certify that he is, at the time of bidding, and will be, throughout the period of the contract, licensed under the provisions of Chapter 9, Division 3 of the Business and Professions Code of the State of California to do the type of work contemplated in the project manual. Bidder must further certify that he is skilled and regularly engaged in the general class and type of work called for in the project manual.

The bidder must also certify that he is knowledgeable of the unusual and peculiar hazards associated with the general class and type of work required to construct the specified project within the terms given in the project manual. Bidder must be competent and skilled in the protective measures necessary for the safe performance of the construction work with respect to such unusual and peculiar hazards.

B. ADDENDA:

Each bid form must include specific acknowledgment, in the space provided, of receipt of all addenda issued and mailed by the Owner during the bidding period. Failure to so acknowledge may result in the bid being rejected as not responsive.

C. NONCOLLUSION AFFIDAVIT:

Pursuant to Section 7106 of the California Public Contract Code, a noncollusion affidavit is required on any public works contract of a public entity. The noncollusion affidavit must be executed by the bidder and notarized on the form provided in Section 00 45 19 of this project manual.

1.06 POSTPONEMENT OF OPENING

The Owner reserves the right to postpone the date and time for receiving and/or opening of bids at any time prior to the date and time established in the Invitation to Bid. Postponement notices will be transmitted via email or mailing service to bidders in the form of addenda.

1.07 REJECTION OF BIDS

A. IRREGULAR BIDS:

The Owner reserves the right to reject bids which are incomplete, obscure, or irregular; bids which omit a bid on any one or more items for which bids are required; bids which omit unit prices if unit prices are required; bids in which unit prices are unbalanced in the opinion of the Owner; bids accompanied by insufficient or irregular bid security; and bids from bidders who have previously failed to perform properly or to complete on time contracts of any nature.

B. COLLUSION:

If the Owner has reason to believe that collusion exists among bidders, the Owner will reject the bids of the known participants in such collusion and may, at its option, require that all bidders certify under penalty of perjury that no collusion has occurred or exists. The Owner also, at its option, may reject all bids received.

1.08 RETURN OF BID GUARANTIES

Within 15 calendar days after the bids are opened, the Owner will return the bid guaranties accompanying the bids which are not to be considered in making the award. All other bid guaranties will be held until the contract has been fully executed. After that time, they will be returned to the respective bidders whose bids they accompanied.

1.09 AWARD OF CONTRACT

Within ninety (90) calendar days after the date of opening bids, the Owner will act either to accept a bid or to reject all bids. Acceptance of a bid will be evidenced by a notice of award of contract in writing, delivered in person, or by certified mail, to the bidder whose bid is accepted. No

other act of the Owner constitutes acceptance of a bid. The award of contract obligates the bidder whose bid is accepted to furnish performance and payment bonds and evidences of insurance, and to execute the agreement set forth in the project manual. The Owner will award a contract to the lowest responsive bidder on the basis of lowest total bid.

The Owner may initially Award the Contract for a portion of the work and reserves the right to add or remove any Bid Item or Alternative during the course of the Contract. Owner expects to receive additional funding in February that will affect selected scope of the final project. Items added or deleted after the Award will be completed as Change Orders at the Bid Price.

1.10 BASIS OF AWARD

The award will be made by the Owner to the lowest responsive and responsible bidder. Inclusion of bid items and alternatives in the final contract awarded will be at the Owner's sole discretion.

If, at any time the contract is to be awarded, the total of the lowest acceptable Proposal exceeds the funds then estimated by the Owner as available, the Owner may reject all bids or take such other action as best serves the Owner's interests.

The Owner, reserves the right to accept or reject any or all proposals, and to waive any informalities and irregularities in said proposals, delete certain items from the proposal and postpone the award decision date to one that is mutually agreeable to the Owner and the low bidder.

1.11 EXECUTION OF CONTRACT

Within 10 calendar days after receiving written notice of the award of the contract, the contract agreement as provided in Section 00 52 00 must be executed in quadruplicate by the successful bidder and returned with the performance and payment bonds and evidences of insurance. After execution by the Owner, one copy of the agreement will be returned to the Contractor

1.12 LABOR REQUIREMENTS

A. WAGE DETERMINATION:

Wages to be paid laborers and mechanics on this project must be no less than the minimum as determined by the Director of Industrial Relations in accordance with California Labor Code, Part 7, Chapter 1, Article 2, Sections 1770, 1773 and 1773.1. Copies of the applicable prevailing rate of per diem wages must be posted at each job site.

B. SAFETY AND HEALTH REGULATIONS FOR CONSTRUCTION:

The Contractor must comply with all state and federal laws and county and local ordinances and regulations which in any manner affect those engaged or employed in the work.

C. EMPLOYMENT PERMITS:

The Contractor shall provide an employment permit prior to the initiation of any practices, work, method, or operation in accordance with Labor Code Section 6500.

1.13 SOIL INFORMATION

Subsoil investigations have been conducted at the site of the work, and the corresponding
reports are included as a reference document attached to these specifications (on CD). Soil
investigations were conducted for design purposes, and the data shown in the reports are for
subsurface conditions found at the time of the investigation.
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The Owner disclaims responsibility for the interpretation by bidders of data, such as projecting or extrapolating from the test holes to other locations on the site of the work soil bearing values and profiles, soil stability and the presence, level and extent of underground water for subsurface conditions during construction operations.

1.14 SHEETING, SHORING AND BRACING

In accordance with the provisions of Section 6707 of the California State Labor Code, each bidder must list, in the bid item indicated, the amount included in his bid for trench and excavation, adequate sheeting, shoring and bracing, or equivalent method for the protection of life and limb, work which must conform to applicable State of California Construction Safety Orders. By listing this sum in his bid, the bidder warrants that his action does not convey tort liability to the Owner, the Owner's employees, or the Construction Manager.

1.15 OFFER OF ASSIGNMENT OF ANTITRUST ACTIONS

As provided by Sections 4550 and 4552 of the California Government Code, in submitting a bid to a public purchasing body, the bidder offers and agrees that if the bid is accepted, it will assign to the Owner all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, materials, or services by the bidder for sale to the purchasing body pursuant to the bid. Such assignment is made and becomes effective at the time the purchasing body tenders final payment to the bidder.

1.16 SALES AND USE TAX

Bidder shall refer to General Conditions paragraph 00 72 00-2.04 K for sales and use tax requirements for this project.

1.17 BID PROTEST PROCEDURE

Bid protest procedures are contained in Chapter 14.24 of the Crescent City Municipal code:

14.24.0190 Application

The protest procedures contained in this chapter apply to formal sealed bids and competitive proposals only. For purposes of this chapter any person who submitted either a bid or proposal is referred to as a "bidder" and any submitted big or proposal is referred to as a "bid."

14.24.020 Eligibility to protest

Only a bidder who has actually submitted a bid is eligible to submit a bid protest against another bidder. Subcontractors are not eligible to submit big protests. A bidder may not rely on the bid protest submitted by another bidder, but must timely pursue its own protest.

14.20.030 Bid protest deadline

Any bid protest must be in writing and received by the City before 5:00 p.m. no later than two business days following the bid opening (the "Bid Protest Deadline"). The protesting bidder may submit the bid protest by personal delivery, courier, or facsimile transmission.

14.24.040 Bid protest - contents and procedure

- A. Protest contents. The bid protest must contain a complete statement of the basis for the protest and all supporting documentation. Material submitted after the Bid Protest Deadline will not be considered. The protest must refer to the specific portion or portions of the contract documents upon which the protest is based. The protest must include the name, address, email address and telephone number of the person representing the protesting bidder if different from the protesting bidder.
- B. Copy to protested bidder. A copy of the protest and all supporting documents must be concurrently transmitted by facsimile transmission or electronic mail (email), before the Bid Protest Deadline, to the protested bidder.

14.24.50 Response to bid protest – contents

- A. Response to protest. The protested bidder may submit a written response to the protest, provided the response is received by City before 5:00 p.m., within two business days after the Bid Protest Deadline or after actual receipt of the bid protest, whichever is sooner (the "Response Deadline"). The protested bidder may submit the response to bid protest by personal delivery, courier, or facsimile transmission. The response must include all supporting documentation. Material submitted after the Response Deadline will not be considered. The response must include the name, address, email address, and telephone number of the person representing the protested bidder if different from the protested bidder
- B. Copy to protesting bidder. A copy of the response and all supporting documents must be concurrently transmitted by facsimile transmission or electronic mail (email), before the Bid Protest Deadline, to the protesting bidder.

14.24.060 Decision

Within five business days of the Response Deadline, the City Manager will issue a Decision on the bid protest. The decision of the City Manager is final.

14.24.070 Exclusive remedy

The procedure and time limits set forth in this section are mandatory and are the bidder's sole and exclusive remedy in the event of bid protest. A bidder's failure to comply with these procedures will constitute a waiver of any right to further pursue a bid protest, including filing a Government Code claim or initiation of legal proceedings.

SECTION 00 31 46

PERMITS

PART 1 – GENERAL

- 1.01 The following permits for this project must be obtained and paid for by the Contractor:
 - A. City Business License
- PART 2 PRODUCTS (NOT USED)
- PART 3 EXECUTION (NOT USED)

SECTION 00 40 00

BID

City of Crescent City	Date:
377 J Street	
Crescent City, CA 95531	

The undersigned, as bidder, declares that we have received and examined the project manual entitled "Measure S Street Improvements Fall 2025" and will contract with the Owner, on the form of agreement provided herewith, to do everything required for the fulfillment of the contract for the construction on the project at the prices and on the terms and conditions herein contained.

We agree that the contract documents include Parts A, B, and C and Appendix A and B of this project manual as well as the referenced federal, state and local agency requirements.

We agree that the following are part of this bid:

Section	Title
00 40 00	Bid
00 41 00	Bidding Schedule
00 43 13	Bid Guaranty Bond
00 43 36	Proposed Subcontractors
00 45 13	Certification of Bidder's Experience and Qualifications
00 45 19	Non-Collusion Affidavit

We acknowledge that addenda numbers _____ through _____ have been received and have been examined as part of the project manual.

Attached is a bidder' security in the amount of at least ten (10) percent of the total amount of our bid in one of the following acceptable forms: (i) a guaranty bond duly completed by a guaranty company authorized to carry on business in the State of California; (ii) a certified or cashier's check payable to the Owner; or (iii) cash.

If our bid is accepted, we agree to sign the agreement without qualifications and to furnish the performance and payment bonds and the required evidences of insurance within 10 calendar days after receiving written notice of the award of the contract.

We further agree, if our bid is accepted and a contract for performance of the work is entered into with the Owner, to so plan work and to prosecute it with such diligence that the work shall be completed within the time stipulated.

Name of Bidder

Contractor's License No.

License Expiration Date

Signature of Bidder

Title of Signatory

Witness

Address of Bidder

Title of Witness

State of Incorporation

The bidder declares that the Contractor's license number and expiration date and representations made therein are stated under penalty of perjury under the laws of the State of

California.

SECTION 00 41 00

BIDDING SCHEDULE

PROJECT IDENTIFICATION: Measure S Street Improvements Fall 2025

THE BID IS SUBMITTED TO: City of Crescent City

BID SCHEDULE

BID 3CHEDOLE					
ITEM NO.	ITEM DESCRIPTION	UNIT	QTY.	UNIT PRICE	TOTAL PRICE
1	Mobilization	LS	1		
2	Water Pollution Prevention Best Management Practices	LS	1		
3	Traffic Control	LS	1		
4	7th Street H to I Asphalt Mill Removal - 0.25'	SF	2,880		
5	7th Street K to L Asphalt Mill Removal - 0.25'	SF	8,640		
6	8 th Street A to D Asphalt Mill Removal - 0.25'	SF	20,800		
7	8 th Street D to E west half Asphalt Mill Removal - 0.25'	SF	3,640		
8	C Street 9 th to 10 th Asphalt Mill Removal - 0.42'	SF	8,640		
9	D Street 9 th to 10 th NB Asphalt Mill Removal - 0.25'	SF	3,380		
10	E Street 4 th to 5 th Asphalt Mill Removal - 0.25'	SF	8,640		
11	Asphalt Concrete Placement	TON	1,320		
12	White "STOP" thermoplastic	EA	17		
13	White 12" Thermoplastic – Bars & (1) solid bar crosswalk	LF	198		
14	Yellow 12" Thermoplastic – (1) solid bar crosswalk	LF	72		
15	Yellow thermoplastic "SLOW SCHOOL XING"	EA	1		
		Total (It	ems 1 - 1	5)	\$

TOTAL BID AMOUNT:		 ,	•
' \$,		

The cost of all work in the Contract Documents not specifically identified as an item or described as an item shall be included in the items and no additional compensation shall become due the

Contractor by nature of compliance with the Contract Documents except as provided for in the provisions relating to extra work or changes in the work.

Bid award will be based on the lowest aggregate of the Total Bid Amount.

Actual contract amount will include all items and alternatives selected by the Owner in accordance with paragraph 00 20 00-1.10.

SECTION 00 43 13

BID GUARANTY BOND

KNOW ALL MEN BY THESE PRESENTS:

THAT	, hereinafte
called the Principal, and	, hereinafter called the
Surety, are jointly and severally held and	I firmly bound unto the City of Crescent City, hereinafter
called the Obligee, each in the penal sun	m of ten (10) percent of the total amount of the bid of the
Principal for the work, this sum not to exc	ceed
dollars (\$	S) of lawful money of the United
States for the payment thereof unto the 0	Obligee, the Principal and Surety jointly and severally bind
themselves forever firmly by these prese	ents.
MUCDEAS the Dringing is here	with authoriting its offer for the fulfillment of Obligacia

WHEREAS, the Principal is herewith submitting its offer for the fulfillment of Obligee's contract for construction of the Measure S Street Improvements Fall 2025.

NOW, THEREFORE, the condition of this obligation is such that if the Principal is awarded the contract, and if the Principal, within the time specified in the bid for such contract, enters into, executes, and delivers to the Obligee an agreement in the form provided herein complete with evidences of insurance, and if the Principal within the time specified in the bid gives to the Obligee the performance and payment bonds on the form provided herein, then this obligation shall be void; otherwise, the Principal and Surety will pay unto the Obligee the difference in money between the total amount of the bid of the Principal and the amount for which the Obligee legally contracts with another party to fulfill the contract if the latter amount be in excess of the former, but in no event shall the Surety's liability exceed the penal sum hereof.

AND IT IS HEREBY DECLARED AND AGREED that the Surety shall be liable under this obligation as Principal, and that nothing of any kind or nature whatsoever that will not discharge the Principal shall operate as a discharge or a release of liability of the Surety.

IT IS HEREBY FURTHER DECLARED AND AGREED that this obligation shall be binding upon and inure to the benefit of the Principal, the Surety, and the Obligee and their respective heirs, executors, administrators, successors and assigns.

	SIGNED AND SEALED this	_ day of _	, 20
(SEAL	_)		Principal
			Signature for Principal
			Title of Signatory
(SEAL	_)		Surety
			Signature for Surety
			 Title of Signatory

SECTION 00 43 36

PROPOSED SUBCONTRACTORS

The following information gives the name, the location of the place of business, the California contractor license number, and public works contractor registration number issued pursuant to Section 1725.5 of the Labor Code of each subcontractor who will perform work or labor or render service to the prime contractor in or about the construction of the work or improvement, or a subcontractor licensed by the State of California who, under subcontract to the prime contractor, specially fabricates and installs a portion of the work or improvement according to detailed drawings contained in the plans and specifications, in an amount in excess of one-half of 1 percent of the prime contractor's total bid or, in the case of bids or offers for the construction of streets or highways, including bridges, in excess of one-half of 1 percent of the prime contractor's total bid or ten thousand dollars (\$10,000), whichever is greater. No subcontractor who is not listed may be used without the written approval of the Owner in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. (Additional supporting data may be attached to this page. Each page must be sequentially numbered, e.g., 00 43 36-2, and headed "Proposed Subcontractors" and shall be signed.)

Contractor shall attach verification sheet from Department of Industrial Relations (DIR) showing that all subcontractors are registered in accordance with Labor Code Section 1725.5.

Name	Location Place of Business	Description of Work	DIR

END OF SECTION

Signature of Bidder

SECTION 00 45 13

CERTIFICATION OF BIDDER'S

EXPERIENCE AND QUALIFICATIONS

The undersigned bidder certifies that he or she is, when the bid is submitted and will be, throughout the period of the contract, licensed by the State of California to do the type of work required under terms of the contract documents. Bidder further certifies that he or she is skilled and regularly engaged in the general class and type of work called for in the contract documents.

In accordance with the requirements of paragraph 00 20 00-1.05 A, the bidder represents that he is competent, knowledgeable and has special skills with respect to the nature, extent, and inherent conditions of the work to be performed. Bidder acknowledges that there are certain peculiar and inherent conditions existent in the construction of the particular facilities he is bidding on that may create, during the construction program, unusual or peculiar unsafe conditions that will be hazardous to persons or property. Bidder expressly acknowledges that he is aware of these peculiar risks and that he has the skill and experience to foresee them, assess them, and to adopt protective measures to adequately and safely perform the construction work with respect to the hazards.

Signed this day	f, 20
	Name of Bidder
	Contractor's License No. and State
	Contractor's DUNS Number
	Signature of Bidder
	Title of Signatory

SECTION 00 45 19

NON-COLLUSION AFFIDAVIT

NONCOLLUSION AFFIDAVIT TO BE EXECUTED BY **BIDDER AND SUBMITTED WITH BID FOR PUBLIC WORKS**

STATE OF CALIFORNIA)
COUNTY OF)ss
COUNTY OF	,
(name)	being first duly sworn, deposes and says
,	•
that he or she is	of (Position Title)
	(i conton mac)
	(the Bidder)
undisclosed person, partnership genuine and not collusive or sha any other bidder to put in a fals connived, or agreed with any be refrain from bidding; that the agreement, communication, or other bidder, or to fix any overholder, or to secure any advainterested in the proposed cont that the bidder has not, directly thereof, or the contents thereof, pay, any fee to any corporation,	oid; that the bid is not made in the interest of, or on behalf of, ar company, association, organization, or corporation; that the bid am; that the bidder has not directly or indirectly induced or solicite e sham bid, and has not directly or indirectly colluded, conspired idder or anyone else to put in a sham bid, or that anyone shaped before has not in any manner, directly or indirectly, sought be conference with anyone to fix the bid price of the bidder or aread, profit, or cost element of the bid price, or of that of any other tage against the public body awarding the contract of anyor act; that all statements contained in the bid are true; and, further or indirectly, submitted his or her bid price or any breakdow or divulged information or data relative thereto, or paid, and will not partnership, company, association, organization, bid depository, of the effectuate a collusive or sham bid.
DATED:	By
	By(Person signing for Bidder)
	Subscribed and sworn to before me on
(Notarial Seal)	
	(Notary Public)

END OF SECTION

SECTION 00 52 00

AGREEMENT

THIS AGREEMENT, made this day of, 20, by and between the City of Crescent City, a California municipal corporation, hereinafter called the "Owner," and
, hereinafter called the "Contractor."
WITNESSETH:
WHEREAS, the Owner has caused a project manual to be prepared comprised of one volume of bidding and contract requirements and technical specifications and one volume of drawings for the construction of the Measure S Street Improvements Fall 2025 as described therein, and
WHEREAS, the Contractor has offered to perform the proposed work in accordance with the terms of the contract as defined in Section 00 72 00 of the specifications.
NOW, THEREFORE, in consideration of the mutual covenants and agreements of the parties contained in the contract and to be performed, the Contractor hereby agrees to complete the work at the price and on the terms and conditions therein contained, and the Owner agrees to pay the Contractor the contract price provided therein for the fulfillment of the work and the performance of the covenants set forth herein.
The further terms, conditions, and covenants of this agreement are set forth in the contract documents, each of which is attached hereto and by this reference made a part hereof:
Volume one containing Part A, Bidding and Contract Requirements (including Addenda numbers through); Part B, Technical Specifications; and Part C, a set of drawings consisting of one volume.

ment has been executed on this day
Signature for Owner
Title of Signatory
Attest:Signature
Signature
Title of Signatory
The of dignatory
Name of Contractor
Signature for Contractor
Title of Signatory
Attest:Signature
Signature
Title of Signatory

SECTION 00 61 05

FAITHFUL PERFORMANCE BOND

KNOW ALL MEN BY THESE PRESENTS, THAT,

WHEREAS, the City of Crescent City hereinafter designated the "Owner," has, on
WHEREAS, said Principal is required under the terms of said contract to furnish a bond for the faithful performance of said contracts.
NOW, THEREFORE, WE, the Principal, and, as Surety, are held and firmly bound unto the Owner the penal sum of dollars (\$) lawful money of the United States, for the payment of which sum well and truly to be 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 if the above bounden Principal, his or her or its heirs, executors, administrators, successors, or assigns, shall in all things stand to and abide by, and well and truly keep and faithfully perform the covenants, conditions, and agreements in the said contract and any alterations made as therein provided, on his or her or their part, to be kept and performed at the time and in the manner therein specified, and in all respects according to their true intent and meaning, and shall indemnify and save harmless, the Owner, its officers and agents as therein stipulated, then this obligation will become null and void; otherwise it will be and remain in full force and virtue and Principal and Surety, in the event suit is brought on this bond, will pay to the Owner such reasonable attorney's fees as fixed by the court.
As a condition precedent to the satisfactory completion of the said contract, the above obligation in the said amount will hold good for a period of one (I) year after the completion and acceptance of the said work, during which time if the above bounden Principal, his or her or its heirs, executors, administrators, successors or assigns shall fail to make full, complete, and satisfactory repair and replacements or totally protect the said Owner from loss or damage made evident during said period of one year from the date of acceptance of said work, and resulting from or caused by defective materials and/or faulty workmanship in the prosecution of the work done, the above obligation in the said amount will remain in full force and effect. However, anything in this paragraph to the contrary notwithstanding, the obligation of the Surety hereunder will continue so long as any obligation of the Principal remains.
And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition to the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same will, in any way, affect its obligations on this bond, and it does hereby waive notice of any such change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications. Said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.
IN WITNESS WHEREOF, the above bounden parties have executed this instrument under their seals this day of, 20, the name and corporate seal of each

	Principal
(Seal)	
	Signature for Principal
	Title of Signatory
	Surety
(Seal)	
	Signature for Surety
	Title of Signatory

corporate party being hereto affixed and these presents duly signed by its undersigned representative, pursuant to authority of its governing body.

SECTION 00 61 10

PAYMENT BOND

KNOW ALL MEN BY THESE PRESENTS, THAT,

WHEREAS, the City of Crescent City, hereinafter designated the "Owner," has, on, 20 , awarded to
hereinafter designated as the "Principal," a contract for the construction of the Measure S Street Improvements Fall 2025; and
WHEREAS, said Principal is required to furnish a bond in connection and with said contract, providing that if said Principal, or any of his or her or its subcontractors, should fail to pay for any materials, provisions, or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor done thereon of any kind, the Surety of this bond will pay the same to the extent hereinafter set forth:
NOW, THEREFORE, WE, the Principal, and, as Surety, are held and firmly bound unto the Owner the penal sum of dollars (\$) lawful money of the United States, for the payment of which sum well and truly to be 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 if said Principal, his or its heirs, executors, administrators, successors, or assigns, should fail to pay for any materials, provisions, or other supplies used in, upon, for, or about the performance of the work contracted to be done, or for any work or labor thereon of any kind or for amount due under the Unemployment Insurance Act with respect to such work or labor, or for any amounts due, or to be withheld pursuant to Sections I8806 of the Revenue and Taxation Code of the State of California with respect to such work or labor, as required by the provisions of Chapter III, Division V, Title I, of the Government Code of the State of California, and provided that the persons, companies, or corporations so furnishing said materials, provisions, or other supplies, appliances, or power use, in, upon, for, or about the performance of the work contracted to be executed or performed, or any person who performs work or labor upon same, or any person who supplies both work and materials, thereto, shall have complied with the provisions of said Government Code, then said surety will pay the same in or to an amount not exceeding the amount hereinabove set forth, and also will pay in case suit is brought upon this bond, such reasonable attorney's fees to the Owner as fixed by the court.

This bond will inure to the benefit of any and all persons, companies, and corporations entitled to file claims under said Government Code, so as to give a right of action to them or their assigns in any suit brought upon this bond.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration, or addition of the terms of the contract or to the work to be performed thereunder or the specifications accompanying the same will, in any way, affect its obligations of this bond, and it does hereby waive notice of any change, extension of time, alteration, or addition to the terms of the contract or to the work or to the specifications. Said Surety hereby waives the provisions of Sections 2819 and 2845 of the Civil Code of the State of California.

IN WITNESS WHEREOF, the above bound			
their seals this day of, 20, 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	g body.		
	Principal		
	·		
(Seal)			
	Signature for Principal	Title	
	Surety		
	,		
(Seal)			
	Signature for Surety	Title	

SECTION 00 62 00

CERTIFICATES AND OTHER FORMS

The forms listed below and included in this Section shall be used for this project and may be referenced from other Sections of the project manual:

Form No.	Title
01300-A	Submittal Transmittal Form

Contractor may use electronic versions of these forms.

01300-A	. Si	UBMIT	ΓTAL TRA	NSMITTAL FORM:	SI	J BMITT .	AL TRA	NSMITTA
Submittal	l Descript	ion:			Submittal No: Spec Section:			
					Routing	Sent	F	Received
OW	NER:				Contractor/CM			
PRO	JECT:				CM/Engineer			
					Engineer/CM			
CON	NTRACT(OR:			CM/Contractor			
Remarks:			□Product da	Under separate cover via for review and comment ta for information only Description		Review action ^a	Reviewer initials	Review comments attached
aNote: NET	= No except	ions takei	n; MCN = Make	e corrections noted; A&R = Amend and resubm	it; R = Rejected Attach addition	onal sheets if no	ecessary.	
□B. v	ther A or We have vectorinations We have vectorinated	verified on with verified	all related v that the mat	erial or equipment contained in this s work, specified (no exceptions). erial or equipment contained in this s		-		

Contractor's Signature

Certified by: _

 $^{^{1}\}mathrm{See}$ paragraph 00 33 00-4.0 A, Transmittal Procedure.

- 1. Drawings in Part C of the project manual.
- 2. Modifying drawings issued by addenda.
- Drawings submitted by the Contractor during the progress of the work and accepted by the Owner either as attachments to change orders or as nonmodifying supplements to drawings in Part C and drawings issued by addenda.
- 4. Drawings submitted by the Owner to the Contractor during the progress of the work either as attachments to the change orders or as explanatory supplements to drawings in Part C and drawings issued by addenda.

<u>Contract Price</u>. Amount payable to the Contractor under the terms and conditions of the contract based on the price given on the bidding schedule, with adjustments made in accordance with the contract. The base amount given in the bidding schedule must be either a lump sum bid or the summation of the unit price bids multiplied by the estimated quantities set forth in the bid form.

<u>Contract Time</u>. Number of calendar days stated in the contract for the completion of the work or portions thereof.

<u>Contractor</u>. The individual, partnership, corporation, or combination thereof, including joint venturers who enter into the contract with the Owner for the performance of the work. The term covers subcontractors, equipment and material suppliers, and their employees.

<u>Contractor's Plant and Equipment</u>. Equipment, material, supplies, and all other items, except labor, brought onto the site by the Contractor to carry out the work, but not to be incorporated in the work.

Day. Calendar day.

Department. Department of Housing and Community Development.

<u>Design Professional</u>. Professional Engineer licensed to practice in the State of California retained by the Contractor.

<u>Direct</u>. Action of the Owner or Construction Manager by which the Contractor is ordered to perform or refrain from performing work under the contract.

<u>Directive</u>. Written documentation of the actions of the Owner or Construction Manager in directing the Contractor.

<u>Equipment</u>. Mechanical, electrical, instrumentation, or other device with one or more moving parts, or devices requiring an electrical, pneumatic, electronic, or hydraulic connection.

<u>Furnish</u>. To deliver to the job site or other specified location any item, equipment or material.

Herein. Refers to information presented in the project manual.

<u>Holidays</u>. Legal holidays designated by the state or specifically identified in the supplementary conditions.

<u>Install</u>. Placing, erecting, or constructing complete in place any item, equipment, or material.

May. Refers to permissive actions.

Owner. A public or quasi-public agency or authority, corporation, association, partnership, or individual for whom the work is to be performed. Under this contract, the Owner is identified by name in the agreement.

Owner's Representative. The person other than the Construction Manager designated in writing by the Owner to act as its agent on matters relating to this contract.

<u>Paragraph</u>. For reference or citation purposes, paragraph shall refer to the paragraph, or paragraphs, called out by section number and alphanumeric designator. For example, this definition is found in paragraph 00 72 00-1.01; permits and licenses are discussed in paragraph 00 72 00-1.05 B.

<u>Person</u>. The term, person, includes firms, companies, corporations, partnerships, and joint ventures.

<u>Project</u>. The undertaking to be performed under the provisions of the contract.

<u>Project Manual</u>. Those contract documents prepared for bidding and as amended by addenda.

Provide. Furnish and install, complete in place.

<u>Punch List</u>. List of incomplete items of work and of items of work that are not in conformance with the contract. The list will be prepared by the Construction Manager when the Contractor (1) notifies the Construction Manager in writing that the work has been completed in accordance with the contract and (2) requests in writing that the Owner accept the work.

<u>Shall</u>. Refers to actions by either the Contractor or the Owner and means the Contractor or Owner has entered into a covenant with the other party to do or perform the action.

<u>Shown</u>. Refers to information presented on the drawings, with or without reference to the drawings.

<u>Specifications</u>. That part of the contract documents consisting of written descriptions of the technical features of materials, equipment, construction systems, standards, and workmanship.

<u>Specify</u>. Refers to information described, shown, noted or presented in any manner in any part of the contract.

<u>Submittals</u>. The information which is specified for submission to the Construction Manager in accordance with Division 1 of the project manual.

<u>Substantial Completion</u>. Sufficient completion of the project or the portion thereof to permit utilization of the project, or portion thereof for its intended purpose. Substantial completion requires not only that the work be sufficiently completed to permit utilization, but that the Owner can effectively utilize the substantially completed work. Determination of substantial completion is solely at the discretion of the Owner. Substantial completion does not mean complete in accordance with the contract nor shall substantial completion of all or any part of the project entitle the Contractor to acceptance under the contract.

<u>Substantial Completion Date</u>. Date when the Owner puts into service the project, or that portion of the project that has been determined to be substantially complete.

<u>Will</u>. Refers to actions entered into by the Contractor or the Owner as a covenant with the other party to do or to perform the action.

<u>Work</u>. The labor, materials, equipment, supplies, services, and other items necessary for the execution, completion and fulfillment of the contract.

Working Day. Refers to definition as outlined in Section 8-1.06 of the State of California, Department of Transportation, Standard Specifications, 2006 edition.

1.02 JOINT VENTURE CONTRACTOR

If Contractor is a joint venture of two or more contractors, the grants, covenants, provisos and claims, rights, power, privileges and liabilities of the contract are joint and several. Any notice, order, direct request or any communication required to be or that may be given by the Owner or the Construction Manager to the Contractor under this contract, is sufficiently given to all persons in the joint-venture Contractor if it is given to any one or more of such persons. Any notice, request or other communication given by any one of such persons to the Owner or the Construction Manager under this contract is deemed to have been given by and binds all persons in the joint-venture Contractor.

1.03 CONTRACT REQUIREMENTS

A. SUCCESSORS' OBLIGATIONS:

The grants, covenants, provisos and claims, rights, powers, privileges and liabilities obtained in the contract documents must be read and held as made by and with, and granted to and imposed upon, the Contractor and the Owner and their respective heirs, executors, administrators, successors, and assigns.

B. ASSIGNMENT OF CONTRACT:

The contract must not be assigned in whole or in part without the written consent of the Owner. Involuntary assignment of the contract as caused by the Contractor being adjudged bankrupt, assignment of the contract for the benefit of Contractor's creditors or appointment of a receiver on account of Contractor's insolvency is considered as failure to comply with the provisions of the contract and subject to the termination provisions contained herein.

C. WAIVER OF RIGHTS:

Except as herein provided, no action or want of action on the part of the Contractor, Owner, Owner's Representative, or Construction Manager at any time with respect to the exercise of any right or remedies conferred upon them under this contract is a waiver on the part of the Contractor and Owner of any of their rights or remedies. No waiver is effective except in writing by the party to be charged. No waiver of one right or remedy acts as a waiver of any other right or remedy or as a subsequent waiver of the same right or remedy.

D. OFFER OF ASSIGNMENT OF ANTITRUST ACTIONS:

As provided by Sections 4550 and 4551 of the Government Code, in entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor or subcontractor offers and agrees to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 [commencing with Section 16700] of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment is effective at the time the awarding body tenders final payment to the Contractor, without further acknowledgment by the parties.

E. AMENDMENT OF GENERAL CONDITIONS:

These general conditions may be amended only by mutual consent of the Owner and the Contractor in writing.

1.04 LABOR STANDARDS

A. WAGES:

- 1. GENERAL: The Contractor and each subcontractor engaged in the work must pay each employee an amount not less than the rate established for each trade or occupation listed by the Director of the Department of Industrial Relations, State of California, or the Secretary of Labor, whichever is greater. An employee whose type of work is not covered by any of the classified wage rates must be paid not less than the rate of wage listed for the classification which most nearly corresponds to the type of work to be performed.
- 2. STATE: The Contractor is directed to the Department of Industrial Relations website for the general prevailing rate of wages in the vicinity of the work to be performed under this contract.

The Contractor must forfeit, as penalty, to the Owner twenty-five dollars (\$25.00) for each laborer, worker, or mechanic employed for each calendar day or portion thereof such laborer, worker, or mechanic is paid less than the general prevailing rate of wages for any work done under this contract, by him or by a subcontractor under him, in violation of the provisions of the California Labor Code, and, in particular, Sections 1770 and 1780 thereof.

B. PREFERENCE FOR RESIDENT LABOR:

In the employment of labor for performance of the work, the Contractor must give preference to qualified persons residing within the general area of the work.

C. HOURS OF LABOR:

Pursuant to the California Labor Code, eight hours of labor constitutes a legal day's work. The Contractor or any subcontractor may not require any more than eight hours of labor in a day from any person employed in the performance of the work under this contract. Failure of the Contractor to perform the work in accordance with this policy of the State of California is a failure on his part to comply with the provisions of this contract.

D. OVERTIME WORK:

Overtime and shift work may be established as a regular procedure by the Contractor with reasonable notice and written permission of the Owner. No work other than overtime and shift work established as a regular procedure will be performed between the hours of 6:00 p.m. and 7:00 a.m. nor on Saturdays, Sundays or holidays except such work as is necessary for the proper care and protection of the work already performed or in case of an emergency.

Contractor agrees to pay the costs of overtime inspection except those occurring as a result of overtime and shift work established as a regular procedure. Overtime inspection includes inspection required during holidays, Saturdays, Sundays and weekdays between the hours of 6:00 p.m. and 7:00 a.m. Costs of overtime inspection will cover engineering, inspection, general supervision and overhead expenses that are directly chargeable to the overtime work. Contractor agrees that Owner will deduct such charges from payments due the Contractor.

E. APPRENTICES:

The Contractor and subcontractors under him must comply with the requirements of Sections 1777.5 and 1777.6 of the Labor Code in the employment of apprentices.

Information relative to apprenticeship standards, wage schedules, and other requirements may be obtained from the Director of Industrial Relations, ex-officio the Administrator of Apprenticeship, San Francisco, California, or from the Division of Apprenticeship Standards and its branch offices.

F. TRAVEL AND SUBSISTENCE PAY:

The Contractor and subcontractors under him must comply with the requirements of Section 1773.8 of the Labor Code in the payment of travel and subsistence payments to each workman needed to execute the work, as such travel and subsistence payments are defined in the applicable collective bargaining agreements filed in accordance with Section 1773.8.

1.05 LAWS, REGULATIONS AND PERMITS

A. GENERAL:

The Contractor must give the notices required by law and comply with all laws, ordinances, rules, and regulations pertaining to the conduct of the work. The Contractor is liable for violations of the law in connection with any work provided by the Contractor. If the Contractor observes that the drawings, specifications or other portions of the project manual are at variance with any laws, ordinances, rules or regulations, he must promptly notify the Construction Manager in writing of such variance. The Owner must promptly review the matter and, if necessary, issue a change order or take any other action necessary to bring about compliance with the law, ordinance, rule or

regulation in question. Contractor agrees not to perform work known to be contrary to any laws, ordinances, rules or regulations.

B. PERMITS AND LICENSES:

Unless otherwise specified herein, permits and licenses from governmental agencies that are necessary only for and during the prosecution of the work and the subsequent guarantee period must be secured and paid for by the Contractor. Permits and licenses of regulatory agencies that are necessary to be maintained after completion of the guarantee period must be secured and paid for by the Owner.

C. PATENTS AND ROYALTIES:

The costs involved in fees, royalties or claims for any patented invention, article, process or method that may be used upon or in a manner connected with the work under this contract or with the use of completed work by the Owner, must be paid by the Contractor. The Contractor and his or her sureties must protect and hold the Owner, the design engineer, and the Construction Manager, together with their officers, agents and employees, harmless from any and all loss, defense costs and expenses, including attorneys fees, and against any and all demands made for such fees or claims brought or made by the holder of any invention or patent. Before final payment is made on the account of this contract, the Contractor must, if requested by the Owner, furnish acceptable proof of a valid release from all such fees or claims.

Should the Contractor, his or her agent, employee or any of them be enjoined from furnishing or using any invention, article, material or plans supplied or required to be supplied or used under this contract, the Contractor must promptly pay such royalties and secure the requisite licenses; or, subject to acceptance by the Owner, substitute other articles, materials or appliances in lieu thereof which are of equal efficiency, quality, finish, suitability, and market value to those planned or required under the contract. Descriptive information of these substitutions must be submitted to the Construction Manager for determination of general conformance to the design concept and the construction contract. Should the Owner elect to refuse the substitution, the Contractor agrees to pay such royalties and secure such valid licenses as may be requisite for the Owner, his or her officers, agents and employees or any of them, to use such invention, article, material or appliance without being disturbed or in any way interfered with by any proceeding in law or equity arising from that use.

1.06 HEADINGS

Headings to parts, divisions, sections, paragraphs, subparagraphs and forms are inserted for convenience of reference only and do not affect the interpretation of the contract documents.

1.07 SUBCONTRACTS

The Contractor must perform with his or her own organization not less than one-half of the work and must not sublet to one subcontractor more than one-third of the work without the prior written consent of the Owner.

1.08 CONFLICT OF INTEREST

A. GENERAL:

If Contractor violates any provisions of the following Sections, such actions by the Contractor will render this Agreement void. (Public Contracts Code Section 10420).

- B. CURRENT STATE EMPLOYEES: (Public Contracts Code Section10410)
 - No officer or employee shall engage in any employment, activity or enterprise from which the officer or employee receives compensation or has a financial interest and which is sponsored or funded by any state agency, unless the employment, activity or enterprise is required as a condition of regular State employment.
 - 2. No officer or employee shall contract on his or her own behalf as an independent contractor with any State agency to provide goods or services.
- C. FORMER STATE EMPLOYEES: (Public Contracts Code Section 10411)
 - 1. For the two-year period from the date he or she left State employment, no former state officer or employee may enter into a contract in which he or she engaged in any of the negotiations, transactions, planning, arrangements or any part of the decision-making process relevant to the contract while employed in any capacity by any State agency.
 - 2. For the twelve-month period from the date he or she left State employment, no former State officer or employee may enter into a contract with any State agency if he or she was employed by the State agency in a policy-making position in the same general subject area as the proposed contract within the 12-month period prior to his or her leaving State service.

1.09 NON-DISCRIMINATION

Contractor, subcontractors, manufacturers and suppliers shall not unlawfully discriminate, harass, or allow harassment against any employee or applicant for employment because of sex, race, color, ancestry, religious creed, national origin, physical disability (including HIV and AIDS, mental disability, medical condition (cancer), age (over 40), marital status, or request for pregnancy disability or family care leave. Contractor, subcontractors, manufacturers and suppliers shall ensure that the evaluation and treatment of their employees and applicants for employment are free from such discrimination and harassment. Contractor, subcontractor, manufacturers and suppliers shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12990 (a-f) et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990 (a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations, are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Contractor, subcontractors, manufacturers and suppliers shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other Agreement.

Contractor shall include the nondiscrimination and compliance provisions of this clause in all subcontracts to perform work under the Agreement.

1.10 EQUAL OPPORTUNITY

A. The Civil Rights, Housing and Community Development, and Age Discrimination Act Assurances:

The Contractor, subcontractor, manufacturers and suppliers assures that no otherwise qualified person shall be excluded from participation or employment, denied program benefits, or be subjected to discrimination based on race, color, national origin, sex, age, handicap, religion, familial status, or religious preference, under any grant activity funded by this Agreement, as required by Title VI of the Civil Rights Act of 1964, Title I of the Housing and Community Development Act of 1974, as amended, the Age Discrimination Act of 1975, the Fair Housing Amendment Act of 1988, and all implementing regulations.

B. Rehabilitation Act of 1973 and the "504 Coordinator":

The Contractor, subcontractors, manufacturers and suppliers further agrees to implement the Rehabilitation Act of 1973, as amended, and its regulations, 24 CFR Part 8, including, but not limited to, for Contractors, subcontractors, manufacturers and suppliers with fifteen (15) or more permanent full or part time employees, the local designation for a specific person charged with local enforcement of this Act, as the "504 Coordinator."

PART 2--OWNER-CONTRACTOR RELATIONS

2.01 AUTHORITY OF OWNER

A. GENERAL:

The Owner, acting through the Owner's Representative and the Construction Manager, has the authority to act as the sole judge of the work and materials with respect to both quantity and quality as set forth in the contract. It is expressly stipulated that the drawings, specifications and other contract documents establish the requirements as to the nature of the completed work and, except in those instances where the nature of the completed work is dependent on the method of performance, do not purport to control the method of performing work.

B. AUTHORITY OF OWNER'S REPRESENTATIVE:

- 1. GENERAL: Except for those decisions expressly reserved to the City Council of the City of Crescent City, the Owner's Representative has the authority to act on behalf of the Owner on change orders, progress payments, contract decisions, and acceptability of the Contractor's work.
- 2. CHANGE ORDERS: Up to an aggregate limit of 10% of the Contract price, the Owner's Representative has the authority to accept or reject change orders proposed by either the Construction Manager or the Contractor.
- 3. PROGRESS PAYMENTS: The Owner's Representative has the authority to accept or reject requests for progress payments which have been submitted by the Contractor and recommended by the Construction Manager.

- 4. CONTRACT DECISIONS: Should the Contractor disagree with the Construction Manager's decision with respect to the contract, the Contractor may request that the Owner's Representative review the Construction Manager's decision and make a determination on behalf of the Owner in the manner provided under paragraph 00 72 00-2.05 F.2.
- 5. ACCEPTABILITY OF WORK: The Owner's Representative has the authority to make the initial determination of the acceptability of the work as provided under paragraph 00 72 00-7.05. The Owner's Representative also has the authority to accept or reject initially the Construction Manager's recommendations regarding retention of defective work as provided in paragraph 00 72 00-4.09 B. Each of these determinations is made subject to the authority of the City Council of the City of Crescent City.
- 6. EARLY POSSESSION: The Owner's Representative has the authority to take early possession in accordance with paragraph 00 72 00-7.06.

C. AUTHORITY OF CONSTRUCTION MANAGER:

- 1. GENERAL: The Construction Manager is the construction site representative of the Owner, employed to act as advisor and consultant to the Owner in construction matters related to the contract. The Owner has delegated his authority to the Construction Manager to make initial decisions regarding questions which may arise as to the quality or acceptability of materials furnished and work performed and as to the manner of performance and rate of progress of the work under the contract. The Construction Manager interprets the intent and meaning of the contract and makes initial decisions with respect to the Contractor's fulfillment of the contract and the Contractor's entitlement to compensation. The Contractor must look initially to the Construction Manager in matters relating to the contract. The Construction Manager's decisions are subject to review by the Owner's Representative in accordance with paragraph 00 72 00-2.05 F.2.
- 2. INSPECTION OF CONSTRUCTION: The Construction Manager has access to the work and to the site of the work and to the places where work is being prepared or where materials, equipment, and machinery are being obtained for the work. If requested by the Construction Manager, the Contractor must provide the assistance necessary for obtaining such access, and must provide information related to the inspection of construction.
- 3. CHANGE ORDERS: The Construction Manager has the authority to initiate or recommend change orders. Change orders are subject to review and approval by the Owner.

D. USE OF CONTRACTOR'S PLANT AND EQUIPMENT:

Contractor agrees to make available to the Owner his plant and equipment for the performance of work at the project site. The Owner agrees that the use of such plant and equipment is extra work and will be paid for accordingly.

2.02 RESPONSIBILITIES OF OWNER

A. ATTENTION TO WORK:

The Owner will notify the Contractor in writing of the name of the Owner's Representative and of the Construction Manager. The Construction Manager normally will be at the site of the

work. During his absences, the Contractor may contact a previously designated representative of the Construction Manager.

B. OWNER'S EMPLOYEES:

The Owner is responsible for the adequacy, efficiency, and sufficiency of his employees and of any consultant, supplier or subcontractor employed by the Owner.

2.03 AUTHORITY OF CONTRACTOR

A. CONTRACTOR'S REPRESENTATIVE:

The Contractor must notify the Owner in writing of the name of the person who will act as the Contractor's representative and will have the authority to act in matters relating to this contract. This person must have authority to carry out the provisions of the contract and to supply materials, equipment, tools, and labor without delay for the performance of the work.

B. CONSTRUCTION PROCEDURES:

The Contractor will supervise and direct the work. He has the authority to determine the means, methods, techniques, sequences and procedures of construction, except in those instances where the Owner, to define the quality of an item of work, specifies in the contract, a means, method, technique, sequence or procedure for construction of that item of work.

C. SUBCONTRACTORS:

Subcontractors do not have a direct relationship with the Owner. The persons engaged in the work, including employees of subcontractors and suppliers, are considered employees of the Contractor and their work is subject to the provisions of the contract. References in the project manual to actions required of subcontractors, manufacturers, suppliers, or any person other than the Contractor, the Owner or the Construction Manager require the Contractor in turn to require that subcontractor, manufacturer, supplier or person to perform the specified action.

2.04 RESPONSIBILITIES OF CONTRACTOR

A. SUBCONTRACTORS, MANUFACTURERS AND SUPPLIERS:

The Contractor is responsible for the adequacy, efficiency and sufficiency of subcontractors, manufacturers, suppliers and their employees. The Contractor shall perform, with Contractor's own organization, contract work amounting to not less than 50 percent of the original total contract price.

B. CONTRACTOR'S EMPLOYEES:

The Contractor is responsible for the adequacy, efficiency, and sufficiency of his employees. Workers must have sufficient knowledge, skill, and experience to perform properly the work assigned to them.

C. PAYMENT FOR LABOR AND MATERIALS:

The Contractor must pay and require his subcontractors to pay any and all accounts for labor including Workers Compensation premiums, State Unemployment and Federal Social Security payments and other wage and salary deductions required by law. The Contractor also must pay and require his or her subcontractors to pay any and all accounts for services, equipment, and materials used by him and by his subcontractors during the performance of work under this contract. These accounts must be paid as they become due and payable. If requested by the Owner, the Contractor must furnish to the Owner proof of payment of these accounts.

D. ATTENTION TO WORK:

The Contractor, acting through his or her representative, must give personal attention to and manage the work so that it is prosecuted faithfully. When his or her representative is not personally present at the project site, his designated alternate must be available and have the authority to act on the contract.

E. EMPLOYEE SAFETY:

The Contractor alone is responsible for the safety of his or her own employees and his or her subcontractor's employees. The Contractor must maintain the project site and perform the work in a manner that meets the Owner's responsibility under statutory and common law for the provision of a safe place to work.

F. PUBLIC SAFETY AND CONVENIENCE:

The Contractor must conduct his or her work so as to insure the least possible obstruction to traffic and inconvenience to the general public and the residents in the vicinity of the work. Work will be performed so as to insure the protection of persons and property. No road or street will be closed to the public except with the permission of the Construction Manager and the proper governmental authority. Fire hydrants on or adjacent to the work must be accessible to fire fighting equipment. Temporary provisions must be made by the Contractor to insure the use of sidewalks, private and public driveways and proper functioning of gutters, sewer inlets, drainage ditches and culverts, irrigation ditches, and natural water courses.

G. COOPERATION WITH CONSTRUCTION MANAGER:

The Contractor, when requested, must assist the Construction Manager in obtaining access to work which is to be inspected. The Contractor must provide the Construction Manager with information requested in connection with the inspection of the work.

H. RECORDS RETENTION

The Contractor shall retain all books, records, accounts, documentation, and all other materials relevant to this Agreement for a period of five (5) years from date of termination of this Agreement, or five (5) years from the conclusion or resolution of any and all audits or litigation relevant to this Agreement and any amendments, whichever is later.

I. WORK SITE SECURITY

The Owner has limited security at the area the work is to take place; therefore the Contractor shall not rely upon the Owner's security to protect the work site from theft or vandalism. The Contractor is responsible for providing necessary security measures to prevent theft or vandalism of material and equipment stored on site, work that has been completed, and work that is in the process of being completed. The Contractor shall repair or replace any damage or theft that occurs throughout the course of the work at no additional cost to the Owner.

J. CONTRACTOR AND SUBCONTRACTORS DAILY WORK REPORTS

The Contractor shall submit a daily report to the Construction Manager at the end of each shift worked. Daily reports shall include the following:

- 1. List all personnel working on the project and their classification,
- 2. Equipment utilized,
- 3. Shift and hours worked,
- 4. Accident report(s) if applicable,
- 5. Material/Equipment deliveries,
- 6. Production report covering day's activities.

K. SALES AND USE TAX REQUIREMENTS

During the performance of this Agreement, Contractor, for itself, its assignees and successors in interest, must:

- 1. USE TAX DIRECT PAYMENT PERMIT: For all leases and purchases of materials, equipment, supplies or other tangible property used to perform the Contract and shipped from outside California, the Contractor and any subcontractor leasing or purchasing the materials, equipment, supplies or other tangible personal property must obtain a Use Tax Direct Payment Permit from the California State Board of Equalization (SBE) in accordance with the applicable SBE criteria and requirements.
- 2. SELLER'S PERMIT: Contractor and any construction subcontractor whose subcontract is for \$5,000,000 or more must elect to allocate the local sales and use tax derived from the Contract directly to the local jurisdiction (Del Norte County) where the jobsite is located. For this purpose, the Contractor and such subcontractors must obtain a seller's permit or a sub-permit of their seller's permit for the specific jobsite and allocate the local tax to the jobsite on Schedule C of their sales and use tax return.

2.05 OWNER-CONTRACTOR COORDINATION

A. SERVICE OF NOTICE:

Notice, order, direction, request or other communication given by the Construction Manager or Owner to the Contractor is well and sufficiently given to the Contractor if left at any office used by the Contractor or delivered to any of his officers, clerks or employees or posted at the site of the work or mailed to the Contractor at the address given in the contract document or mailed to the Contractor's last known place of business. If mailed by first-class mail, any form of communication is deemed to have been given to and received by the Contractor a day after the day of mailing.

B. SUGGESTIONS TO CONTRACTOR:

A plan or method of work suggested by the Owner or the Construction Manager to the Contractor but not specified or required, if adopted or followed by the Contractor in whole or in part, is used at the risk and responsibility of the Contractor. The Owner and the Construction Manager assume no responsibility for the decision to use that plan or method of work and they are not liable for any defects in the work that result from or are caused by use of such plan or method of work.

C. COOPERATION:

The Contractor agrees to permit entry to the site of the work by the Owner or other contractors performing work on behalf of the Owner. The Contractor must afford to the Owner and other contractors and their employees, reasonable facilities and cooperation and must arrange his or her work and dispose of his or her materials so as not to interfere with the activities of the Owner or of others upon the site of the work. The Contractor must promptly make good any injury or damage that may be sustained by other contractors or employees of the Owner at his or her hands. The Contractor must join his work to that of others and perform his work in proper sequence in relation to that of others.

If requested by the Contractor, the Owner will arrange meetings with other contractors performing work on behalf of the Owner to plan coordination of construction activities. The Owner must keep the Contractor informed of the planned activities of other contractors.

Differences or conflicts arising between the Contractor and other contractors employed by the Owner or between the Contractor and the workers of the Owner with regard to their work must be submitted to the Construction Manager for his decision in the matter. If the work of the Contractor is affected or delayed because of any act or omission of other contractors or of the Owner, the Contractor may submit for the Owner's consideration, a documented request for a change order.

D. DEVIATION FROM CONTRACT:

Neither the Contractor nor the Owner may make an alteration or variation in, addition to, or deviation or omission from the terms of this contract without the written consent of the other party.

E. DIFFERING SITE CONDITIONS:

Pursuant to Public Contract Code Section 7104, the Contractor shall promptly, and before such conditions are disturbed, notify the Owner in writing of:

- Material that the Contractor believes may be material that is hazardous waste, as defined in Section 25117 of the Health and Safety Code, that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law.
- 2. Subsurface or latent physical conditions at the site differing from those indicated by information about the site made available to bidders prior to the deadline for submitting bids

3. Unknown physical conditions at the site of an unusual nature, differing materially from those both ordinarily encountered and generally recognized as inhering in work of the character provided for in this contract.

The Owner shall promptly investigate the conditions, and if it finds that the conditions do materially so differ, or do involve hazardous waste, and cause a decrease or increase in the contractor's cost of, or the time required for, performance of any part of the work under this contract, whether or not the work is changed as a result of such conditions, an equitable adjustment will be made and the contract modified in writing accordingly.

In the event that a dispute arises between the Owner and the Contractor whether the conditions materially differ, or involve hazardous waste, or cause a decrease or increase in the contractor's cost of, or time required for, performance of any part of the work, the contractor shall not be excused from any scheduled completion date provided for by the contract, but shall proceed with all work to be performed under the contract. The contractor shall retain any and all rights provided either by contract or by law which pertain to the resolution of disputes and protests between the contracting parties.

No claim by the Contractor under this clause is allowed unless the Contractor has given the notice required, except that the Owner may extend the prescribed time.

No claim by the Contractor for an equitable adjustment under this clause will be allowed if it is asserted after final payment under this contract.

F. CLAIMS:

- 1. DETERMINATION BY CONSTRUCTION MANAGER: Questions regarding the meaning and intent of the contract documents must be referred by the Contractor in writing to the Construction Manager for his decision. The Construction Manager must respond to the Contractor in writing with his decision. If the Contractor disagrees with the Construction Manager's decision or considers that the decision requires extra work, he must, within five calendar days, notify the Construction Manager in writing of the disagreement or of the claimed extra work involved and of the estimated cost of said work.
- 2. APPEALS TO THE OWNER'S REPRESENTATIVE: In the event the Contractor disagrees with any determination or decision of the Construction Manager, the Contractor may, within 15 calendar days of the date of such determination or decision, appeal the determination or decision to the Owner's Representative. The Owner's Representative must review the appeal and transmit his decision in writing to the Contractor within 30 calendar days from the receipt of the appeal. Any failure of the Contractor to appeal the decision or the determination of the Construction Manager within the 15-day period is a waiver of the Contractor's right thereafter to assert a claim resulting from such determination or decision.
- 3. ARBITRATION: All claims, counterclaims, disputes and other matters in question between the Owner and the Contractor that are not resolved between the Owner's Representative and the Contractor will be decided by arbitration if the parties mutually agree, or in a court of competent jurisdiction within the state in which the Owner is located.

PART 3--SPECIFICATIONS AND DRAWINGS

3.01 INTERPRETATION OF SPECIFICATIONS AND DRAWINGS

A. GENERAL:

The specifications and drawings are intended to be explanatory of each other. Work specified on the drawings and not in the specifications, or vice versa, must be executed as if it were specified in both.

B. REQUEST FOR CLARIFICATION:

In the event the work to be done or matters related to the work are not sufficiently detailed or explained in the contract documents, the Contractor must apply to the Construction Manager for further explanations as may be necessary and must conform thereto so far as may be consistent with the terms of the contract. In the event of doubt or question arising respecting the true meaning of the specifications or drawings, reference must be made to the Construction Manager for his decision. Should the Contractor disagree with the Construction Manager's decision, he may appeal to the Owner's Representative in accordance with paragraph 00 72 00-2.05 F.2.

3.02 DIVISION OF SPECIFICATIONS AND DRAWINGS

Specifications and drawings are divided into groups for the convenience of the Owner and Construction Manager. These divisions are not for the purpose of apportioning work or responsibility for work among subcontractors, suppliers and manufacturers.

3.03 DISCREPANCIES IN SPECIFICATIONS AND DRAWINGS

A. ERRORS AND OMISSIONS:

If the Contractor, in the course of the work, becomes aware of any claimed errors or omissions in the contract documents or in the Owner's field work, he must immediately inform the Construction Manager in writing. The Construction Manager must promptly review the matter and if he finds an error or omission has been made, he must determine the corrective actions and advise the Contractor accordingly. If the corrective work associated with an error or omission increases or decreases the amount of work called for in the contract, the Owner must issue an appropriate change order. After discovery of an error or omission by the Contractor, related work performed by the Contractor is done at his risk unless authorized by the Construction Manager. In the event the Contractor disagrees with the determination of the Construction Manager under this provision, he may appeal to the Owner's Representative in accordance with paragraph 00 72 00-2.05 F.2.

B. CONFLICTING PROVISIONS:

In cases of conflict between the specifications and drawings, the more stringent governs. Figure dimensions on drawings govern over scale dimensions and detail drawings govern over general drawings. In the event an item of work is described differently in two or more locations on the drawings and in the specifications, the Contractor must request a clarification from the Construction Manager.

C. UTILITIES:

The Owner has endeavored to determine the existence of utilities at the site of the work from the records of the owners of known utilities in the vicinity of the work. The positions of these utilities as derived from such records are shown on the drawings. No excavations were made to verify the locations shown for underground utilities. The service connections to these utilities are not shown on the drawings. It is the responsibility of the Contractor to determine the exact location of utilities and service connections thereto. The Contractor must make his own investigations, including exploratory excavations, to determine the locations and type of existing utilities, including service connections, prior to commencing any work that could result in damage to those utilities. The Contractor must immediately notify the Construction Manager as to any utility discovered by him in a different position than shown on the drawings or that is not shown on the drawings.

Work on utilities must be performed and paid for as follows:

- 1. <u>Known utilities</u>. The Contractor must provide all labor, equipment, materials, and services necessary to remove, relocate or maintain utilities specified on the drawings. The work on each utility must be performed in a manner satisfactory to the utility owner. The utility owner has the option of doing such work with his own forces at the Contractor's expense, or permitting the work to be performed by the Contractor.
- 2. <u>Service connections</u>. Locations of service connections are not specified on the drawings. The Contractor must provide all labor, equipment and material to remove, relocate or maintain service connections. The work on service connections must be performed in a manner satisfactory to the service connection owner. The service connection owner has the option of doing such work with his own forces at the Contractor's expense, or permitting the work to be performed by the Contractor.
- 3. <u>Unknown utilities</u>. When a utility is not specified on the drawings, or it is located in a position different from that specified on the drawings, and interferes with the work, a change order based on changed site conditions will be issued in accordance with paragraph 00 72 00-7.02. Interference with the work is defined as a utility that crosses or projects into the plane of the work at an elevation between the top and bottom of the work. If it is necessary to remove, relocate, or temporarily maintain the utility, that work shall be included in the change order. The utility owner has the option of doing such work at the Contractor's expense, or permitting the work to be performed by the Contractor. In either case, the cost of the work will be included in the change order.

No representations are made that the obligations to move or temporarily maintain the utility and to pay the cost thereof is or is not required to be borne by the owner of such utility, and it is the responsibility of the Contractor to investigate to find out whether or not the cost is required to be borne by the owner of the utility.

The right is reserved to governmental agencies and to owners of utilities to enter upon streets, alleys, rights-of-way or easements for the purpose of making changes in their property made necessary by the work and for the purpose of maintaining and making repairs to their property.

3.04 SUBMITTALS

Where required by the specifications, the Contractor must submit specified information that will enable the Construction Manager to advise the Owner whether the Contractor's proposed materials, equipment or methods of work are in general conformance to the design concept and in compliance with the drawings and specifications. The requirements for submittals are specified in Part B.

3.05 CONTRACTOR'S COPIES OF PROJECT MANUALS

Within 10 days after notice to proceed, the Owner will furnish to the Contractor 4 sets of project manuals including half-size drawings, and 2 sets of full-size drawings. The Contractor is advised that revisions incorporating changes by addenda will not be incorporated into the reduced or full-size drawings furnished under the provisions of this paragraph. Additional copies of the project manual, if required by the Contractor, will be furnished by the Owner at cost. The Contractor must keep at the construction site at least one set of the project manual and one set of full-size drawings.

PART 4--MATERIAL, EQUIPMENT AND WORKMANSHIP

4.01 GENERAL

Unless otherwise specifically stated in the contract documents, the Contractor must provide and pay for materials, labor, tools, equipment, water, light, power, transportation, supervision, and temporary construction of any nature, and other services, and facilities of any nature, to execute, complete and deliver the work within the specified time. Material and equipment must be new and of a quality at least equal to that specified. Equipment offered must be current modifications which have been in successful regular operation under comparable conditions. This requirement does not apply to minor details, nor to thoroughly demonstrated improvements in design or in materials of construction. All construction work must be executed in conformity with the standard practice of the relevant trade.

4.02 PRODUCT DATA

Where required by the specifications, the Contractor must provide product data, which is a submittal furnished for information only. The information and data furnished is required by the Owner for inspecting, testing, operating and maintaining parts of the work. The requirements for product data are specified in Part B.

4.03 QUALITY

Where the contract requires that materials or equipment be provided or that construction work be performed, and detailed specifications of such materials, equipment or construction work are not set forth, the Contractor must perform the work using materials and equipment of the best grade in quality and workmanship obtainable in the market, from firms of established good reputations, and must follow standard practices in the performance of construction work. The work performed must be in conformity and harmony with the intent to secure the highest standard of construction and equipment of work as a whole and in part.

4.04 MATERIAL AND EQUIPMENT SPECIFIED BY NAME

When material or equipment is specified by reference to two or more patents, brand names, or catalog numbers, it is understood that this is referenced for the purpose of defining the performance or other salient requirements, and that other materials or equipment, of equal capacities, quality and function will be considered by the Owner upon the Contractor's request for substitution. Requests for substitution must be made in accordance with paragraph 00 72 00-4.05.

4.05 REQUESTS FOR SUBSTITUTION

The Contractor may offer material or equipment of equal or better quality and performance in substitution for those specified. The Owner will consider offers for substitution only from the Contractor and will not acknowledge or consider such offers from suppliers, distributors, manufacturers, or subcontractors. The Contractor's offers of substitution must be made in writing to the Construction Manager and must include sufficient data to enable the Construction Manager to assess the acceptability of the material or equipment for the particular application and requirements.

If the offered substitution necessitates changes to or coordination with other portions of the work, the data submitted must include drawings and details showing such changes. Contractor agrees to perform these changes as part of the substitution of material or equipment at no additional cost to the Owner. Within 30 calendar days after receipt of the offer of substitution, the Construction Manager will review the material submitted by the Contractor and advise the Contractor of objections, if any, to the proposed substitution or if further information is required. Upon notification by the Construction Manager, the Contractor must either provide material or equipment that complies with project specifications or if requested, furnish additional information. Although the Construction Manager may not take any objections to the proposed substitution, that will not relieve the Contractor from responsibility for the efficiency, sufficiency, quality and performance of the substitute material or equipment, in the same manner and degree as the material and equipment specified by name. Any cost difference associated with a substitution must be reflected in the offer and the contract documents must be modified by a change order.

4.06 DEMONSTRATION OF COMPLIANCE WITH CONTRACT REQUIREMENTS

A. INSPECTION:

To demonstrate his or her compliance with the contract requirements, the Contractor must assist the Construction Manager in his or her performance of inspection work. The Contractor must grant the Construction Manager access to the work and to the site of the work, and to the places where work is being prepared, or whence materials, equipment or machinery are being obtained for the work. The Contractor must provide information requested by the Construction Manager in connection with inspection work.

If the contract documents, laws, ordinances, or any public regulatory authority require parts of the work to be specially inspected, tested or approved, the Contractor will give the Construction Manager adequate prior written notice of the availability of the subject work for examination.

If parts of the work are covered in contravention of the Construction Manager's directive, the cost of exposing the work for inspection and closing must be borne by the Contractor regardless of whether or not the work is found to be in compliance with the contract.

If any work is covered in the absence of the Construction Manager's directive to the contrary, the Contractor must, if directed to do so by the Construction Manager, uncover, expose or otherwise make available for inspection, portions of covered work. If it is found that such work is defective, the Contractor must bear the expense of uncovering and reconstructing. If the work is found to be in compliance with the contract, the Contractor will be allowed an increase in the contract price, or an extension in the contract time, or both. A change order will be issued to document the increase, extension or both.

B. SAMPLES OF MATERIALS:

In cases where compliance with contract requirements for materials to be incorporated in the work requires laboratory examination or special testing, the Contractor must provide samples or specimens as requested by the Construction Manager. Such samples or specimens must be provided in ample time to permit making proper test analysis and examinations before incorporating the material into the work. Tests of material will be conducted in accordance with the technical specifications. In the absence of a specific test requirement, the Construction Manager will determine the appropriate standard test to be used.

C. CERTIFICATION:

In cases where compliance of materials or equipment to contract requirements is not readily determinable through inspection and tests, the Construction Manager will request that the Contractor provide properly authenticated documents, certificates or other satisfactory proof of compliance. These documents, certifications, and proofs must include performance characteristics, materials of construction and the physical or chemical characteristics of materials.

D. INSPECTION AT POINT OF MANUFACTURING:

If Owner's inspection and testing of materials or equipment in the vicinity of the work is not practicable, the specifications may require that the inspection and testing or witnessing of tests take place at the point of manufacture. In this case and in the event the remote inspection and testing is not specified and is requested by the Owner, the required travel, subsistence, and labor expenses will be paid by the Owner. If the Contractor requests the Owner to inspect and test material or equipment at the point of manufacture, then the additional cost to the Owner for travel, subsistence, and labor expenses must be paid by the Contractor.

4.07 STORAGE OF MATERIALS AND EQUIPMENT

Materials and equipment must be stored so as to insure the preservation of their quality and fitness for the work. Stored equipment and materials must be located so as to facilitate inspection. The Contractor is responsible for damages that occur in connection with the care and protection of materials and equipment until final acceptance of the work.

4.08 MANUFACTURER'S DIRECTIONS

Manufactured articles and materials and equipment must be applied, installed, connected, erected, adjusted, tested, operated and maintained as recommended by the manufacturer, unless otherwise specified. Manufacturer's installation instructions and procedures must be provided or obtained prior to installation of the manufactured articles, material, and equipment.

4.09 DEFECTIVE WORK

A. CORRECTION OF DEFECTIVE WORK:

When, and as often as the Construction Manager determines through his or her inspection procedures to be the case, material, equipment or workmanship incorporated in the project do not meet the requirements of the contract, the Construction Manager will give written notice of the noncompliance to the Contractor. Within five days from the receipt of the notice, the Contractor must undertake the work necessary to correct the deficiencies, and to comply with the contract. If the Contractor disagrees with the Construction Manager's determination and believes that the corrective work should be covered by a change order, he or she must immediately notify the Owner's Representative, in writing, setting forth his position. Within five days after receipt of the Contractor's notification, the Owner's Representative will review the matter and notify the Contractor, in writing, of his determination. If the Owner's Representative determines that the corrective work is required to comply with the contract, the Contractor must proceed with that work. As a condition precedent to the Contractor's request for either additional compensation or time extension, or both, resulting from the performance of the corrective work, the Contractor must, within 15 calendar days after receipt of the Owner's Representative's determination, notify the Owner's Representative in writing of his intent to claim additional compensation, time or both. The Contractor must document the cost information associated with the corrective work with daily records in accordance with paragraph 00 72 00-7.02 F and provide that information to the Construction Manager monthly. Receipt of the cost data by the Construction Manager will not be construed to be an acceptance of the corrective work, or an authorization for a change order to cover the corrective work.

B. RETENTION OF DEFECTIVE WORK:

Prior to acceptance of the project, the Owner may, at his option, retain work which is not in compliance with the contract if the Owner determines that such defective work is not of sufficient magnitude or importance to make the work dangerous or undesirable. The Owner also may retain defective work, if, in the opinion of the Construction Manager, and with concurrence of the Owner's Representative, removal of that work is impractical or will create conditions that are dangerous or undesirable. Just and reasonable value for such defective work will be judged by the Owner and appropriate deductions will be made in the payments due, or to become due to the Contractor. Final acceptance does not act as a waiver of the Owner's right to recover from the Contractor an amount representing the deduction for retention of defective work.

4.10 GUARANTEE

The guarantee period is 365 days from the Notice of Completion. During the guarantee period, the Contractor must, upon the receipt of notice in writing from the Owner, promptly make all repairs arising out of defective materials, workmanship or equipment. The Owner is hereby authorized to make such repairs, if ten days after giving of such notice to the Contractor, the Contractor has failed to make or undertake the repairs with due diligence. In case of an emergency where, in the opinion of the Owner, delay could cause serious loss or damage, repairs may be made without notice to the Contractor and the expenses in connection with those repairs are chargeable to the Contractor.

For the purpose of this paragraph, "acceptance of the work" means the acceptance of the project by the Owner, in accordance with paragraph 00 72 00-7.07. "Acceptance of the work" does not extinguish any covenant or agreement on the part of the Contractor to be performed or fulfilled

under this contract that has not, in fact, been performed or fulfilled at the time of such acceptance. All covenants and agreements continue to be binding on the Contractor until they have been fulfilled.

The Owner and the Contractor agree that guarantee on the equipment possessed and used by the Owner in accordance with paragraph 00 72 00-7.06 will commence on the date that the Owner takes possession of the equipment and so notifies the Contractor in writing. Owner and Contractor further agree that such taking possession and use may not be deemed as substantial completion or acceptance of any part of the work. Takeover of equipment will be at the Owner's option and will not be made until the equipment can be put into routine service on a permanent basis.

PART 5--LIABILITY AND INSURANCE

5.01 LIABILITY OF CONTRACTOR

The Contractor is liable for any and all losses or damages from whatever cause that, prior to final acceptance, may occur on or to any part of the work. The Contractor is not liable for losses or damages caused solely by the act of the Owner.

The Contractor is liable for damages and injury to persons owning property, on or in the vicinity of the work, or which occur to a person, persons or any property whatsoever, arising out of the Contractor's performance of this contract. The Contractor's liability is not dependent upon whether or not such damage or injury be caused by the negligence of the Contractor, and whether or not such damage or injury is caused by the inherent nature of the work as specified.

The Contractor must indemnify and hold the Owner, the Construction Manager, the design engineer, and their officers, principals, agents, subcontractors, and employees, harmless from any and all loss, defense cost, expense, claims, demand or liability whatsoever, arising from allegations of injuries to persons or damage to property related to the performance of this contract, regardless of concurrent negligence on the part of such indemnitees. This indemnification obligation is not 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 workers compensation acts, disability benefit acts, or another employee benefit act.

In case any suit or legal proceeding is brought against the Owner, the Construction Manager, the design engineer, or their officers, principals, agents, subcontractors, or employees, on account of loss or damage sustained by a person, or persons, or property, as a result of the performance of the work covered by this contract, the Contractor agrees to assume the cost of defense of that action, and to pay the expenses connected therewith, and the judgments that may be obtained against the Owner, the Construction Manager, the design engineer, or their officers, principals, agents, subcontractors, or employees, in such suits. In the event that a lien is placed against the property of the Owner, the Construction Manager, the design engineer, or their officers, principals, agents, subcontractors, or employees, as a result of such suits, the Contractor agrees immediately to cause the same to be dissolved and discharged by giving bond or otherwise. This agreement to defend and to pay the related expenses exists whether or not the alleged injuries or damage are due to the negligence of the Contractor, and whether or not the alleged injuries or damage are caused by the inherent nature of the work, as specified.

The mention of specific duties or liabilities imposed on the Contractor are not a limitation or restriction of general duties or liabilities imposed upon the Contractor by the contract. Reference to specific duties or liabilities is made herein, merely for the purpose of explanation.

5.02 **BONDS**

The Contractor must provide two bonds, each in the amount of 100 percent of the contract price. One bond will serve as security for the faithful performance of the work and the other as security for the faithful payment and satisfaction of the persons furnishing materials and performing labor on the work. The bonds must be issued by a corporation duly and legally licensed to transact surety business in the State of California. The two bonds must remain in force throughout the period required to complete the work, and thereafter for a period of 365 calendar days after final acceptance of the work. The bonds must be executed by a duly licensed surety company that is listed in the latest Circular 570 of the United States Treasury Department as being acceptable as surety on federal bonds. No surety's liability on the bonds may exceed the underwriting limitations for the respective surety specified in Circular 570. The scope of the bonds or the forms thereof prescribed in these contract documents in Sections 00 61 05 and 00 61 10 in no way affect or alter the liabilities of the Contractor to the Owner.

5.03 INSURANCE

A. GENERAL:

1. EVIDENCE OF INSURANCE: Prior to execution of the contract, the Contractor must file, with the Owner, evidences of insurance from the insurer, certifying to the coverage of the insurance required herein. The evidences of insurance must be certified by a properly authorized officer, agent, general agent or qualified representative of the insurer, and must certify the names of the insured, the type and amount of insurance, the location and operations to which the insurance applies, and the expiration date. The evidences must include the agreement of the insurer to give, by registered mail, notice to the Owner at least 30 calendar days prior to the effective date of cancellation, lapse, or material change in the policy.

This Certificate of Insurance is not an insurance policy and does not amend, extend or alter the coverage afforded by the policies listed herein. Notwithstanding any requirement, term, or condition of the contract with respect to which this certificate is issued, the insurance afforded by the policies described herein is subject to the terms, exclusions, and conditions of such policies.

2. CANCELLATION OF INSURANCE: The Contractor must deliver to the Owner policies of insurance and the receipts for payment of premiums thereon. Should the Contractor neglect to obtain and maintain in force such insurance, and deliver such policy or policies and receipts to the Owner, then Owner may obtain and maintain such insurance. The Contractor hereby appoints the Owner his true and lawful attorney, to do the things necessary for this purpose. Money expended by the Owner under the provisions of this paragraph for insurance premiums will be charged to the Contractor. Failure of the Owner to obtain such insurance in no way relieves the Contractor of his responsibilities under this contract.

B. PUBLIC LIABILITY:

The Contractor must provide public liability insurance covering bodily injury, in an amount of not less than a combined single limit of four million dollars (\$4,000,000) for one or more persons injured in each occurrence. This insurance must cover bodily injuries or death suffered, or alleged

to have been suffered by any person or persons by reason of or in the course of operations under this contract, whether occurring by reason of acts or omissions of the Contractor, or any subcontractor, or both. The required insurance must be maintained until final acceptance of the work and must include completed-operations and products-liability insurance, with aggregate limit in the amount specified above, and must continue for a period of 365 calendar days after final acceptance of the work.

The Contractor must provide property damage insurance in an amount of not less than a combined single limit of one million dollars (\$1,000,000) for property damaged in each occurrence. The insurance must cover damages to property suffered or alleged to have been suffered, by person, or persons, by reason of, or in the course of, the operations under the contract, whether occurring by reason of acts or omissions of the Contractor or any subcontractor or both. The required insurance must be maintained until final acceptance of the work, and must include completed operations and products liability insurance, and must continue for a period of 365 calendar days after the final acceptance of the work.

The required liability insurance must indemnify the Contractor and his subcontractors against loss from liability, imposed by law upon or assumed under contract by the Contractor or his subcontractors, for damages on account of bodily injury and property damage. The insurance must also indemnify the Contractor and his subcontractors against losses related to completed operations and products. The insurance must be contained in a comprehensive, broad-form, occurrence, bodily injury and property damage liability policy written by licensed underwriters. The policies must cover operations, owned- and nonowned-vehicles and equipment, contractors' protective coverage blanket, contractual liability, and completed operations liability. The liability insurance must not exclude explosion, collapse, underground excavation, or removal of lateral support and must include cross liability. The Owner, the Construction Manager, the design engineer, and their officers, principals, agents, subcontractors, and employees must be named as insured on the liability policies.

C. WORKERS COMPENSATION INSURANCE:

The Contractor and each subcontractor must cover or insure under applicable laws relating to workers compensation or employers liability insurance, their employees, working on or about the construction site, regardless of whether such coverage or insurance is mandatory or merely elective under the law. The Contractor must defend, protect, save harmless the Owner from and against claims, suits and actions arising from failure of the Contractor or the subcontractors to maintain such insurance.

D. BUILDERS RISK:

Contractor must secure an all-risk type of builders risk insurance covering work performed under the contract and the materials, equipment or other items to be incorporated therein, while the same are located at the construction site, stored off site, or at the place of manufacture. The policy must cover not less than losses due to fire, flood, explosion, hail, lightning, vandalism, malicious mischief, wind, collapse, riot, aircraft, and smoke until the date of final acceptance of the work. The policy may exclude loss or damage caused by or resulting from errors in design or from the use of substandard materials or supplies used knowingly by or at the direction of the insured, but must not exclude results, physical loss, or damage to other property covered hereunder. Neither exclusion will apply in the event of fire, explosion, or acts of God. The maximum deductible allowable under this policy is \$50,000. The policies providing this insurance must name the Owner, the Construction Manager, the design engineer, and their subconsultants as additional insureds as

their respective interests appear. The making of progress payments to the Contractor does not create an insurable interest by or for the Owner or relieve the Contractor or his subcontractors of responsibility for loss or direct physical loss, damage or destruction occurring prior to final acceptance.

Consistent with California Public Contracts Code, Section 7105, builders risk insurance is not required for coverage of losses in excess of five percent of the contract price for damages resulting from earthquakes in excess of magnitude of 3.5 on the Richter scale or from tidal waves. Coverage in the amount of five percent of the contract price for such losses must be provided by the Contractor.

PART 6--PROGRESS AND COMPLETION

6.01 NOTICE TO PROCEED

After execution of the contract by the Owner, written notice to proceed will be given by the Owner to Contractor. Notwithstanding other provisions of the contract, the Contractor is not obligated to perform work and the Owner is not obligated to accept or pay for work performed by the Contractor prior to date of the notice to proceed. The Owner's knowledge of work being performed prior to date of the notice to proceed does not obligate the Owner to accept or pay for such work.

6.02 CONTRACT TIME

A. GENERAL:

Time is of the essence of the contract. The Contractor must promptly start the work after the date of the notice to proceed and must prosecute the work so that the project is complete within the time specified in Section 01 11 05. During periods when weather or other conditions are unfavorable for construction, the Contractor will pursue only such portions of the work as will not be damaged thereby. No portions of the work where acceptable quality or efficiency will be affected by unfavorable conditions may be constructed while those conditions exist. It is expressly understood and agreed by and between the Contractor and the Owner that the contract time for completion of the work is reasonable, taking into consideration the average climatic and economic conditions and other factors prevailing in the locality of the work.

B. CONSTRUCTION SCHEDULE:

The Contractor shall provide a construction schedule and reports for scheduling and coordinating the work within the contract time. Contract time extensions must be incorporated into updated schedules, reflecting their effect at the time of occurrence. Failure of the Contractor to comply with these requirements for submittal of the construction schedule and reports will be cause for delay in review of progress payments by the Construction Manager.

C. CONSTRUCTION PROGRESS:

The Contractor must furnish such manpower, materials, facilities, and equipment as may be necessary to insure the prosecution and completion of the work in accordance with the accepted schedule. If work falls behind the accepted construction schedule, the Contractor agrees that he or she will take some or all of the following actions to return the project to the accepted schedule. These actions may include the following:

- 1. Increase manpower in quantities and crafts;
- 2. Increase the number of working hours per shift, shifts per working day, working days per week, or the amount of equipment, or any combination of the foregoing; and/or
- 3. Reschedule activities.

If requested by the Construction Manager, the Contractor shall prepare a proposed schedule revision demonstrating a plan to make up the lag in progress and insure completion of the work within the contract time. The proposed revision must be submitted to the Construction Manager in accordance with Section 01 33 00. Upon receipt of an acceptable proposed schedule, the revision to the construction schedule will be made in accordance with paragraph 01 33 00-4. All actions to return the project to the accepted schedule are at the Contractor's expense.

The Contractor must pay all costs incurred by the Owner that result from the Contractor's action to return the project to its accepted schedule. Contractor agrees that Owner may deduct such charges from payments due the Contractor. It is further understood and agreed that none of the services performed by the Construction Manager in monitoring, reviewing, and reporting project status and progress operate to relieve the Contractor of responsibility for planning and managing construction work in conformance with the construction schedule.

D. DELAYS:

- 1. NOTICE OF DELAYS: When the Contractor foresees a delay in the prosecution of the work and, in any event, immediately upon the occurrence of a delay that the Contractor regards as unavoidable, he must notify the Construction Manager in writing of the probability of the occurrence of the delay, the extent of the delay, and its probable cause. The Contractor must take immediate steps to prevent, if possible, the occurrence or continuation of the delay. If this cannot be done, the Construction Manager must determine how long the delay is likely to continue and to what extent the prosecution and completion of the work are being delayed. The Contractor must also determine whether the delay is to be considered avoidable or unavoidable and notify the Contractor of his determination. The Contractor agrees that no claim is allowed for delays the causes of which are not called to the attention of the Construction Manager at the time of their occurrence or as soon thereafter as Contractor becomes aware of them.
- 2. AVOIDABLE DELAYS: Avoidable delays in the prosecution of the work include delays that could have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or his subcontractors. Avoidable delays include:
 - a. Delays which may in themselves be unavoidable but which affect only a portion of the work and do not necessarily prevent or delay the prosecution of other parts of the work nor the completion of the whole work within the contract time.
 - b. Time associated with the reasonable interference of other contractors employed by the Owner which do not necessarily prevent the completion of the whole work within the contract time.
- 3. UNAVOIDABLE DELAYS: Unavoidable delays in the prosecution or completion of the work include delays that result from causes beyond the control of the Contractor

and could not have been avoided by the exercise of care, prudence, foresight, and diligence on the part of the Contractor or his subcontractors. Delays in completion of the work of other contractors employed by the Owner will be considered unavoidable delays insofar as they interfere with the Contractor's completion of the work. Delays due to normal weather conditions are not regarded as unavoidable because the Contractor agrees to plan his work with prudent allowances for interference by normal weather conditions. Delays caused by acts of God, fire, unusual storms, floods, tidal waves, earthquakes, strikes, labor disputes, freight embargoes and shortages of materials are considered unavoidable delays if they prevent the Contractor from proceeding with at least seventy-five percent (75%) of the normal labor and equipment force for at least five hours per day toward completion of the current controlling item on the accepted critical path schedule.

If abnormal conditions prevent the work from beginning at the usual starting time, or prevent the Contractor from proceeding with seventy-five percent (75%) of the normal labor and equipment force for a period of at least five hours per day, and the crew is dismissed as a direct consequence, Contractor will not be charged for a working day whether or not conditions change so that the major portion of the day could be considered to be suitable for work on the controlling item.

E. EXTENSION OF TIME:

1. AVOIDABLE DELAYS: If the work is not completed in the accepted construction schedule, including any extension of time that may have been granted for unavoidable delays, the Contractor will be assessed damages for those costs incurred by the Owner that are attributable to the fact that the work was not completed on schedule.

The Owner may grant an extension of time for avoidable delay if he deems it in his best interest. If the Owner grants an extension of time for avoidable delay, the Contractor agrees to pay actual costs, including charges for engineering, inspection, and administration, as specified in paragraph 00 72 00-7.04, incurred during the extension.

- 2. UNAVOIDABLE DELAYS: For delays that the Contractor considers to be unavoidable, he must submit to the Construction Manager complete information demonstrating the effect of the delay on the controlling operation in the accepted construction schedule. The submission must be made within 30 calendar days of the occurrence that is claimed to be the cause of the unavoidable delay. The Construction Manager will review the Contractor's submission and determine the number of days of unavoidable delay and the effect of any unavoidable delay on controlling operations of the work. The Owner agrees to grant an extension of time to the extent that unavoidable delays affect controlling operations in the construction schedule. During such extension of time, neither extra compensation, nor engineering inspection and administration, nor damages for delay will be charged to the Contractor. It is understood and agreed by the Contractor and Owner that time extensions due to unavoidable delays will be granted only if such unavoidable delays involve controlling operations which would prevent completion of the whole work within the specified contract time.
- 3. LIQUIDATED DAMAGES: It is agreed by the parties to the contract that in case all the work called for under the contract in all parts and requirements is not finished or completed within the number of working days as set forth in Section 01 11 05, damage will be sustained by the Owner, and that it is and will be impracticable and extremely difficult to ascertain and determine the actual damage which the Owner will sustain in the event of and by reason of the delay; and it is therefore agreed that the Contractor will pay to the Owner, the sum of Four Hundred dollars (\$400.00) per day for each and every calendar day's delay in finishing

the work in excess of the number of working days prescribed; and the Contractor agrees to pay the liquidated damages herein provided for, and further agrees that the Owner may deduct the amount thereof from any moneys due or that may become due the Contractor under the contract.

6.03 SUSPENSION PROCEDURES

The Owner may, at his convenience and at any time and without cause, suspend, delay, or interrupt all or any part of the work for a period of not more than 90 days by notice in writing to the Contractor. The Owner must specify the date on which the work must be resumed. The work must be resumed by the Contractor within 10 days after receiving written notice from the Owner to do so. The Contractor will be allowed an increase in the contract price or an extension of contract time, or both, directly attributable to any suspension if he makes a claim therefore as provided in the paragraphs related to change of contract price and change of contract time.

6.04 TERMINATION PROCEDURES

A. TERMINATION BY OWNER FOR DEFAULT:

The Owner may terminate the contract upon 7 days written notice to Contractor and his surety whenever the Contractor is deemed to be in default or if Contractor fails to fulfill, in a timely and proper manner, the contract obligations, or is in violation of any provisions or covenants of the contract.

For purposes of this paragraph, the Contractor is in default if any one or more of the following events occurs:

- 1. Contractor is bankrupt or insolvent.
- 2. Contractor makes a general assignment for the benefit of creditors.
- 3. A trustee or receiver is appointed for Contractor, or for any of Contractor's property.
- 4. Contractor files a petition to take advantage of any debtor's act, or to reorganize under any bankruptcy chapter or law.
- 5. Contractor repeatedly fails to make prompt payments to subcontractors or others for labor, materials, or equipment.
- 6. Contractor disregards laws, ordinances, rules, regulations, or orders of any public body having jurisdiction.
- 7. Contractor disregards the authority of Construction Manager.
- 8. Contractor violates in any substantial way the provisions of the contract documents by failing, neglecting, or refusing to proceed according to and in full compliance with the provisions and covenants of the contract documents.

After termination of the Contract for default, the Owner may exclude the Contractor from the site and take possession of the work and all of the Contractor's tools, appliances, construction equipment, and machinery at the site and use the same to the full extent they could be used by the Contractor. The Owner may incorporate in the work all materials stored at the site or for which the Owner has paid the Contractor that are stored elsewhere. In such case, the Contractor is not entitled to receive any further payment until the work is finished.

If the unpaid balance of the contract price exceeds the direct and indirect cost of the completed work, including compensation for additional professional services, the excess must 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 will be verified by the Construction Manager and incorporated into a change order, but in finishing the work, the Owner will not be required to obtain the lowest figure for work performed.

Where the Contractor's services have been so terminated by the Owner, the termination does not affect any rights of the Owner against the Contractor then existing or that may thereafter accrue. Any retention or payment of monies due the Contractor by the Owner will not release the Contractor from liability.

If the Owner terminates this agreement for default, and it is thereafter determined that the Contractor had not so failed to perform its obligations or defaulted in any way, the termination will then be deemed to have been effected for the convenience of the Owner. In that event, any adjustment of compensation to Contractor must be in accordance with paragraph 00 72 00-6.04 B.

B. TERMINATION BY OWNER FOR OTHER THAN DEFAULT:

The Owner may, without prejudice to any other remedy it may have under the provisions of the contract, terminate this contract, in whole or in part, at any time by giving written notice to Contractor or its representative by certified mail, return receipt requested. Termination is effective upon receipt of the notice by Contractor. Contractor must immediately discontinue work and take all reasonable steps with its suppliers and subcontractors to minimize cancellation charges and other costs.

In the event of termination for reasons other than default of Contractor, Contractor is entitled to recover all reasonable costs incurred in connection with performance of the work, plus any cost and expense reasonably and necessarily incurred in connection with the termination, plus a percentage of the profit based on the percentage of completion of the work.

C. TERMINATION BY CONTRACTOR:

If the work is stopped by order of a court, a public authority or the Owner for a period of 90 calendar days or more, through no act or fault of the Contractor or anyone employed by him or his subcontractors, then the Contractor may terminate the contract upon 10 calendar days written notice to the Owner. Upon receipt of the written notice, the Owner must implement procedures as set forth in paragraph 00 72 00-6.04 B.

PART 7--MEASUREMENT AND PAYMENT

7.01 PAYMENTS TO CONTRACTOR

A. BREAKDOWN OF CONTRACT PRICES:

Except in cases where unit prices form the basis for payment under the contract, the Contractor must, within 20 days of receipt of the notice to proceed, submit a breakdown of the contract price showing the value assigned to each part of the work including an allowance for profit and overhead. In submitting the breakdown, the Contractor certifies that it is not unbalanced and that the value assigned to each part of the work represents his estimate of the actual cost, including profit and overhead, of performing that part of the work. The breakdown must be sufficiently detailed to permit its use by the Construction Manager as one of the bases for evaluating requests for payment.

B. PROJECT STATUS REVIEW:

Contractor and Construction Manager shall meet each month prior to the Contractor submitting the progress payment request for the previous month. The purpose of the meeting is to review project status in relation to the construction schedule; review value of work completed during the previous month; and, if applicable, review Contractor's plans to return project status to that required by the schedule. Within 5 days following this meeting, the Contractor shall submit a written progress report comprising:

- A copy of the current construction schedule marked up to indicate percent complete, actual completion or start dates since the previous review, and the estimated remaining duration for each activity in progress.
- 2. Reasons any activities are behind schedule and a description of the corrective steps being taken.

C. PROGRESS PAYMENTS:

- 1. PAYMENT REQUEST PROCEDURES: By the 5th day of each month, the Contractor must submit to the Construction Manager a partial-payment estimate, filled out and signed by the Contractor, covering acceptable work performed during the previous month or since the last partial payment estimate was submitted. If requested by the Construction Manager, the Contractor must provide additional data to support the payment estimate. Additional data may include satisfactory evidence of payment for equipment, materials, and labor including payments to subcontractors and suppliers. Requests for payment for delivered equipment and material must be accompanied by certified invoices by the suppliers. Such equipment and material must be suitably and safely stored at the site of the work.
- 2. REVIEW PROCEDURES: Within 7 days after receipt of the partial payment estimate, the Construction Manager will review the estimate and either (a) indicate in writing to the Owner's Representative his concurrence with the estimate and his recommendation that payment be made or (b) indicate in writing to the Contractor his reasons for not concurring with the estimate. If the Construction Manager recommends payment and the Owner's Representative concurs, the Owner will, within 30 calendar days after receipt of the Construction Manager's recommendation, pay the Contractor a progress payment on the basis of the approved partial-payment estimate. The payments will take into account the retention provisions provided for herein.

In the event the Construction Manager does not concur with the estimate, the Contractor may make the changes necessary to obtain the Construction Manager's concurrence and resubmit the partial-payment estimate, or submit the original progress-payment estimate directly to the Owner's Representative, indicating in writing his reasons for refusing to make the changes necessary to obtain concurrence.

3. RETENTION: The Owner will retain a percentage of each payment except as specified below in accordance with Public Contract Code Section 7201. The retained amount is available for the protection and payment of the person, or persons, mechanics, subcontractors, or materialmen who perform labor or work under the contract, and persons who supply such person, persons or subcontractors with components and supplies for carrying on such work.

The Owner will retain 5 percent of each progress payment.

Under no circumstances shall any provision of this section be construed to limit the ability of the Owner to withhold 150 percent of the value of any disputed amount of work from the final payment, as provided for in Section 7107 of the Public Contract Code. In the event of a good faith dispute, nothing in this section shall be construed to require the Owner to pay for work that is not approved or accepted in accordance with the proper plans or specifications.

- 4. WITHHOLDING: The Construction Manager may refuse to recommend the whole or any part of any payment if in the Construction Manager's opinion it would be incorrect to make such recommendation to the Owner. The Construction Manager may also refuse to recommend any payment, or because of subsequently discovered evidence or the result of any tests, may nullify any payment previously recommended to such extent as may be necessary in the Construction Manager's opinion to protect the Owner from loss as a result of:
 - a. Defective or damaged work.
 - b. A deductive change order.
 - c. Persistent failure of the Contractor to perform the work in accordance with the contract documents, including failure to maintain the progress of the work in accordance with the construction schedule. Persistent failure to maintain the progress of the work means that for a period of two consecutive months following a written notice from the Construction Manager, the Contractor fails to correct a behind-schedule condition at a rate that would reasonably indicate that he will finish the project on schedule.
 - d. Disregard of authority of the Construction Manager or the laws of any public agency having jurisdiction.

The Owner may refuse to make payment of the full amount recommended by the Construction Manager because of claims made against the Owner on account of Contractor's performance or furnishing of the work or because liens have been filed in connection with the work or because there are other items entitling Owner to reduce the amount recommended. In such case, the Owner will give Contractor prompt written notice with a copy to the Construction Manager stating the reasons for each action.

- 5. STOP PAYMENT NOTICES: The Owner, by and through the Construction Manager or other authorized officers, may at its option and at any time retain out of any amounts due the Contractor, sums sufficient to cover claims filed pursuant to Section 3179, et seq., of the Civil Code of the State of California.
- 6. PROMPT PAYMENT: Prompt payment for partial-payment estimates will be made in accordance to Public Contracts Code Section 20104.50.

D. FINAL PAYMENT:

On the condition that no liens or claims are outstanding, Owner will make final payment to the Contractor in the manner provided by law following the expiration of 35 calendar days after acceptance of the work and filing of the notice of completion by the Owner. Final payment must include the entire sum found to be due under this contract after deducting previous payments and such other lawful amounts as the terms of this contract describe. Prior estimates and payments, including those relating to extra work or work omitted, are subject to correction by the final payment.

Acceptance by the Contractor of final payments as acts as a release to the Owner of all claims by and all liability to the Contractor other than claims in stated amounts that may be specifically excepted by the Contractor for things done or furnished in connection with this work and for every act and neglect of the Owner and others relating to or arising out of this work. Payment by the Owner does not release the Contractor or his surety from any obligation under the contract or under the performance bond and payment bonds.

7.02 CHANGE ORDERS

A. GENERAL:

The Owner may, at any time, without notice to the sureties, by written order designated or indicated to be a change order, make any change in the work within the general scope of the contract, including but not limited to the following changes:

- 1. In the specifications (including drawings and designs).
- 2. In the method or manner of performance of the work.
- 3. In the Owner-furnished facilities, equipment, materials, services, or site.
- 4. Directing acceleration in the performance of the work.

Any other written order or an oral order (which terms as used in this paragraph shall include direction, instruction, interpretation, or determination) from the Owner, that causes any such change, must be treated as a change order under this clause, if the Contractor gives the Owner written notice stating the date, circumstances, and source of the order and if the Contractor regards the order as a change order.

Except as provided in this clause, no order, statement, or conduct of the Owner is or may be treated as a change order under this clause nor does it entitle the Contractor to an equitable adjustment.

If any change under this clause causes an increase or decrease in the Contractor's cost of, or the time required for, the performance of any part of the work under this contract, whether or not changed by any order, an equitable adjustment must be made and the contract modified in writing accordingly. However, except for claims based on defective specifications, claims will not be allowed for any costs incurred more than 20 days before the Contractor gives written notice as required. Also, in the case of defective specifications for which the Owner is responsible, the equitable adjustment includes any increased cost reasonably incurred by the Contractor in attempting to comply with such defective specifications.

If the Contractor intends to assert a claim for an equitable adjustment under this clause, he must, within 30 days after receipt of a written change order or the furnishing of a written notice, submit to the Owner a written statement setting forth the general nature and monetary extent of such claim, unless the Owner extends this period. The statement of claim hereunder may be included in the notice.

A claim by the Contractor for an equitable adjustment will not be allowed if it is asserted after final payment under this contract.

B. EXTRA WORK:

Extra work means providing materials and equipment and performing work not directly or by implication called for by the contract. Changes in measured quantity under a unit price contract or item are not extra work. If the Owner requires extra work he may (1) do it himself, (2) employ others to do it, (3) direct the Contractor to perform the extra work at unit bid price or a combination of such items, (4) direct the Contractor to perform the extra work at a mutually agreed upon lump sum, or (5) direct the Contractor to perform the extra work on a time and expense basis.

C. OMITTED WORK:

The Owner may, by written order to the Contractor, omit work, equipment, and material to be provided under the contract, and the value of the omitted work, equipment and material will be deducted from the contract price. The deducted value will be a lump sum or unit bid price agreed upon in writing by the Contractor and Owner based on the breakdown and cost information submitted by the Contractor.

D. UNIT BID PRICE CHANGE:

Increases or decreases in the quantity of a contract item of work that was bid on a unit basis will be made by comparing the total pay quantity of such item of work with the Construction Manager's estimate. When changes in quantities exceed 25 percent of the original bid quantity and the total dollar change of that bid item is significant, the Owner will review the unit price to determine if a new unit price should be negotiated. Methods for Changed Quantity Payment Adjustments shall be those specified in the Caltrans Standard Specifications, latest edition.

E. LUMP SUM CHANGES:

Whenever the Contractor is directed to perform extra work on a lump-sum basis, changes in contract price resulting from the extra work will be based on a mutually agreed upon lump-sum price. The Contractor's proposal for such changes must include a detailed breakdown of labor and materials costs for the extra work to be performed by his forces and the forces of his subcontractors or material suppliers as may be required. The breakdown must include any labor

surcharge and any sales- or use-tax cost. Whenever the Owner requests that the Contractor prepare a lump-sum price in connection with a change order, the Contractor is entitled to the costs incurred in the preparation of that price whether or not the lump-sum amount is finally accepted by the Owner. Those costs will be incorporated in the lump-sum amount.

Compensation for the extra work will be based on the direct costs as listed in the detailed proposal, plus a mutually agreed upon percent of direct costs for overhead and profit, plus one percent (1%) of those direct costs for bond. The allowance for overhead and profit must include full compensation for overhead, including superintendence, and additional overhead attributable to a time extension granted because of the change order and no separate charge may be made for overhead.

When the change order involves work omitted, the reduction of the contract price will be based on the direct costs listed in the detailed proposal submitted by the Contractor. An additional reduction may be made of an amount that is identified as reduced overhead costs attributable to the work omitted. No reduction will be made for profit originally attributable to the omitted work.

F. TIME AND EXPENSE CHANGES:

1. GENERAL: Whenever the Contractor is directed to perform extra work on a time and expense basis, he or she will maintain accurate records. Each day a record of labor, materials, and equipment costs will be submitted to the Construction Manager for verification. These records will reflect the actual and necessary expenses pertaining to the extra work and will be available for audit. Audits conducted under this provision must be in accordance with generally accepted auditing standards and established procedures and guidelines of the reviewing or audit agency(ies).

Payment to the Contractor for extra work performed on a time-and-expense basis will consist of the actual necessary expense for doing the extra work, plus an allowance of 15 percent of labor, material and equipment rental for overhead, general superintendence and profits, plus one percent (1%) of those direct costs for bond. This basis of payment applies to work done directly by the Contractor and to work done by a subcontractor, except the one percent (1%) allowance for bond does not apply to work performed by a subcontractor. When the work is done by a subcontractor, the Contractor may add five percent (5%) to the subcontractor's charges to cover overhead and profit and one percent (1%) for bond.

In determining time-and-expense compensation, the term "actual necessary expense" means the sum of (1) materials and equipment, (2) labor, (3) supervision, (4) construction equipment, (5) professional services, and (6) other costs. "Charges" for such items means the actual cost whether incurred by the Contractor, a subcontractor or others. The items making up "actual necessary expense" are defined as follows:

- 2. MATERIALS AND EQUIPMENT: Materials and equipment means costs for materials and equipment provided by the Contractor and necessarily used in the work includes applicable taxes.
- 3. LABOR: The cost of labor will be the sum of actual wages paid, labor surcharge, and subsistence and travel allowances. Actual wages paid include employer payments to or on behalf of the worker for health and welfare, pension, vacation and similar purposes. The labor surcharge includes applicable labor-related taxes, Workers Compensation Insurance premiums, public liability and property damage insurance premiums, and other legally required

costs directly related to labor. Where subsistence and travel allowance are required for performance of extra work, the charges include the actual amount paid to each worker for these items.

- 4. SUPERVISION: If, in the Owner's judgment, full-time supervision of the extra work is required, it will be authorized in writing by the Construction Manager and charges for that supervision will be included as an actual necessary expense. Charges for supervision of the extra work by the Contractor's representative are not part of actual necessary expense.
- 5. CONSTRUCTION EQUIPMENT: Charges for the use of construction equipment required in the performance of extra work will be based on rental rates set forth in the State of California then-current official published document covering rental of equipment used on force account work. For equipment not listed in that document, the rental rate will be as listed by the local section of the Associated General Contractors. If the equipment is not listed by the Associated General Contractors, the rental rate will be mutually agreed upon in writing between the Contractor and Owner prior to the use of the unlisted equipment. The reasonable cost of moving equipment onto and off the job site will be included, but equipment rental will not be paid when the equipment is inoperative due to breakdowns. Individual pieces of equipment or small tools having a replacement value of \$100 or less are considered expendable and no payment will be made for these.

When equipment is used on the extra work for less than five days, hourly rates will be used. Less than 30 minutes of operation is considered one-half hour of operations. When equipment is used on the extra work for more than five days, daily rates apply. In that case, less than four hours of operation is considered to be one-half day of operation.

- 6. PROFESSIONAL SERVICES: Professional services are included in "actual necessary expense" provided both that the Owner has determined that such services are necessary and the Construction Manager has authorized in writing the provision of such services.
- 7. OTHER COSTS: Charges for items not included in paragraphs 7.02 F.1 through 6 may be included as "actual necessary expense" if such additional items are authorized in advance and in writing by the Construction Manager.

7.03 CHARGES TO CONTRACTOR

Everything charged to the Contractor under the terms of this contract must be paid by the Contractor to the Owner on demand. Such charges may be deducted by the Owner from money due or to become due to the Contractor under the contract. The Owner may recover such charges from the Contractor or from his surety.

7.04 COMPENSATION TO OWNER FOR TIME EXTENSION

The Owner, in exchange for granting an extension of time for avoidable delay, must be compensated by the Contractor for the actual costs to the Owner of engineering, inspection, general supervision, and overhead expenses that are directly chargeable to the work and accrue during the period of such extension. The actual costs do not include charges for final inspection and preparation of the final estimate by the Owner.

7.05 SUBSTANTIAL COMPLETION

The Contractor, on considering the work to be substantially complete and ready for its intended use, shall so notify the Construction Manager in writing. The notification must include an itemized list of remaining incomplete work. If the Construction Manager determines that the work is not substantially complete, he or she will so notify the Contractor in writing identifying the reasons for such a determination. If the Construction Manager finds the work substantially complete, he or she will meet with the Contractor to (1) prepare a punch list of incomplete items of work; (2) define the division of responsibility between Owner and Contractor with respect to security, operation, maintenance, utilities, insurance, and warranties; and (3) describe any other issues related to acceptance of the substantially completed work. Upon reaching agreement with the Contractor, the Construction Manager will write to the Owner, certifying that the work is substantially complete, listing the items of incomplete work, stating the date for completion of incomplete work, defining the division of responsibilities, and setting forth any other terms related to acceptance.

The Owner, who has sole discretion for determination of substantial completion, will review the Construction Manager's certification that the work is substantially complete and concurring with that certification, will notify the Contractor, in writing, that the work is accepted as substantially complete. Except for any portion(s) of work specified for early completion or required by the Owner for early possession (paragraph 00 72 00-7.06), substantial completion will not occur for any work until the entire project is ready for possession and use. The acceptance notice will include a punch list of incomplete work items, set the date for their completion, describe the division of responsibility between the Owner and Contractor, and describe any other terms of acceptance. The Contractor will acknowledge receipt of the acceptance notice in writing, indicating acceptance of all of its terms and provisions.

Upon receipt of the Contractor's acknowledgment letter, the Owner may take possession of the work or portion of the work and put it into its intended service. The date that the work or portion of the work is put into service will become the date of substantial completion. Unless otherwise specified, warranties will begin on the date of substantial completion.

Subsequent to the substantial completion date, the Owner may exclude the Contractor from the work during such periods when construction activities might interfere with the operation of the project. The Owner, however, shall allow the Contractor reasonable access for completion or correction of incomplete punch list items.

7.06 POSSESSION OF PORTIONS OF THE PROJECT

Should the Contractor fail to meet any date specified for substantial completion of the work or any portion of the work requiring early possession and use by the Owner, the Owner may, after a 10-day written notice to the Contractor, take over such portion or all of the work that is behind schedule. In such case, the Construction Manager will prepare a punch list of incomplete work. The Owner may allow the Contractor reasonable access to the work at such times that the operation of the project will not be affected or the Owner may complete the work itself after giving the Contractor notice of his intention to do so. The cost of Owner's work will be charged to and deducted from amounts due to the Contractor. The substantial completion date will be established as the date when the Owner actually begins using the project or a portion of the project for its intended purpose. Division of responsibilities between Owner and Contractor, beginning of warranties, and any other issues relating to substantial completion will be as specified in paragraph 00 72 00-7.05.

7.07 ACCEPTANCE OF THE PROJECT

Upon completion of the work, including portions of the work previously accepted as substantially complete, the Contractor must notify the Construction Manager, in writing, that the work is complete. Upon receipt of the notification, the Construction Manager will determine if the work conforms to the terms of the contract. If the Construction Manager finds materials, equipment, or workmanship that do not meet the terms of the contract, he or she will prepare a punch list of non-conforming items and submit it to the Contractor. Following completion of the corrective work by the Contractor, the Construction Manager must notify the Owner that the work has been completed in accordance with the contract. Final determination of the acceptability will be made by the Owner. Upon acceptance of the project, the Owner will immediately file a notice of completion. For portions of the project not previously accepted as substantially complete, the conditions of guarantee commence on the date that the Owner files a notice of completion.

The final application for payment must be accompanied by all required documentation called for in the contract, including complete and legally effective releases or waivers of liens in a form acceptable to Owner. Subject to prior approval of Owner, Contractor may submit in lieu of the lien releases and waivers: (1) receipts of releases in full; (2) an affidavit that the releases and receipts cover all labor, services, materials, and equipment for which a lien could be filed and that all payrolls, materials, and equipment bills and other indebtedness connected with the work for which Owner or Owner's property might in any way be responsible have been paid or otherwise satisfied; and (3) consent of the surety, if any, to final payment. If any subcontractor or supplier fails to furnish a release or receipt in full, Contractor may furnish a bond or other collateral satisfactory to Owner to indemnify Owner against any lien.

If, after reviewing the Contractor's final application for payment, including all documentation required, the Construction Manager determines that the work is complete, he or she will recommend that final payment, including all retainages, be made by the Owner. The final payment will be due and payable by the Owner within 30 days after any legal notice periods have expired.

END OF SECTION

SECTION 01 03 00

SPECIAL PROJECT PROCEDURES

PART 1 — GENERAL

1.01 SECTION INCLUDES

A. This section includes responsibilities and requirements of the Contractor specific to this project.

PART 2 — PRODUCTS (Not Used)

PART 3 - EXECUTION

3.01 INSTALLATION

- **A.** Provide labor, equipment and material including, but not limited to the following:
 - 1. Daily containment and removal of all sanitary debris, work debris and trash resulting from any work activities.
 - a. Disposal locations for sanitary debris and/or hazardous materials shall be legally certified to accept these materials. Disposal locations for any sanitary debris and/or hazardous materials shall be approved prior to disposal.
 - b. Manifests of hauling and disposal of such material shall be submitted to the Owner's Representative by the Contractor. Hauling and disposal costs will be borne by the Contractor.
 - 2. The following shall apply regarding Contract Documents:
 - a. The Contract Documents are complementary; what is required by one is as binding as if required by all.
 - b. Bring any discrepancies between the drawings and specifications to the attention of the Owner's Representative immediately.
 - c. Except as may be otherwise specifically stated in the Contract Documents, or as otherwise directed by the Owner's Representative, the provisions of the Contract Documents shall take precedence in resolving any conflict, error, ambiguity, or discrepancy between the provisions of the Contract Documents and the provisions of any standard, other specification, manual, code, or instruction (whether or not specifically incorporated by reference in the Contract Documents).
 - d. The Contractor shall assume that the most stringent shall apply

- 3. Coordinate with all trades the work by other utility Owners and jurisdictional agencies, as well as other Owner's work occurring at or near the project location.
 - a. Advise the Owner's Representative as to any discrepancies in the work of others that could affect the work in this project and cooperate with the direction provided.
- 4. Complete field engineering and layout required.
- 5. Protect work in progress and finished work until the project is completed and final acceptance is granted by the Owner.
 - a. Protect work by others when it affects work in this project or becomes part of this project.
- 6. Meetings:
 - a. Arrive on time
 - b. Bring:
 - 1) Authorized field representative(s)
 - 2) Authorized office representative(s)
 - 3) Each authorized, capable and responsible for committing to delivery, manpower and completion dates for their work.
- 7. Complete and submit to Owner's Representative:
 - a. Forms, schedules, narratives and reports (including technical data reports and forms) as required by these specifications or as directed in accordance with the project Documents.
 - 1) Failure to submit these in an acceptable and completed manner, and on time could result in a delay in payment.
- 8. Change Order work will be agreed upon in writing and signed by the Owner before the applicable work will begin.
- 9. To properly monitor and protect all materials and Owner assets from damage resulting from Contractor's work activities or weather.
 - a. Damaged materials or assets will be replaced at Contractor's cost.
 - b. Cost will be assessed by back charge or other means allowed by the Contract Documents.

10. Work Hours:

- a. Work within defined work hours typically 8:00 am to 5:00 pm Monday through Friday, except for defined holidays.
 - 1) Other hours may be directed by the Owner or Owner's Representative or may be negotiated with the Contractor.
 - 2) Work within a public Right-of-Way.
 - a) Comply with local jurisdiction and State DOT requirements for defined work hours and days.
 - 3) To perform all necessary overtime as ordered, to get their work back on schedule, if necessary.
 - a) If premium time is required by any other Contractor(s) to bring the project back to the original schedule, the cost of such premium time shall be borne solely by this Contractor. Contractor is subject to repayment of additional cost incurred by the Owner due to Owner's staff's overtime or premium time necessary to monitor the Contractor's efforts to bring the Work back on schedule or complete a task that requires work outside of normal work hours.
 - b) Such overtime shall be governed by the requirements and restrictions of the Contract Documents and any applicable jurisdictional permits, and shall not violate any noise ordinances or pose any danger or undue nuisance to the public.
- 11. Perform punch list work in a timely manner or be subject to Owner overhead costs. Punch list items, and completion of such items, will be created and completed as stipulated in this Specification.
 - a. Contractor shall first review the Work and develop a punch list.
 - b. Contractor shall provide a copy to the Owner's Representative
 - c. Contractor shall complete the work on his punch list and provide the Owner's Representative with a signed off copy
 - d. Owner's Representative will review the Work and if determined to be reasonably complete will develop a punch list - If in the opinion of the Owner's Representative, the Work is determined not to be reasonably complete, the Contractor shall be advised to bring the Work closer to a point of completion that warrants a punch list by the Owner's Representative.

- e. Contractor shall complete the items on the list provided by the Owner's Representative. At an agreed upon schedule the Owner's Representative and the Contractor shall review the progress and the completion of each punch list item.
- f. Owner overhead costs will be established and provided to the Contractor.
- g. Owner overhead costs will be assessed if punch list items are not completed on the agreed upon schedule and reoccurring inspections are required.
- h. Overhead cost will be based on total job related costs of the Owner and will be assessed against the retainage.
- 12. Provide certificates of insurance prior to mobilization to the job site.
- 13. Provide a current copy of the workman's compensation and liability insurance certificate prior to commencing work. Maintain insurance current and provide proof throughout project. Provide insurance coverage on all Contractor's equipment and tools against theft and damage.
 - a. No claims will be registered against the Owner for loss or damage of same.
 - b. The Contractor will not lien the project for payment of any claims on equipment loss or damage due to vandalism of any other form.

14. Workplace Safety:

- a. OSHA requirements to be the minimum safety level accepted.
- b. Safety requirements from Owner's Representative, supervising or Field personnel will be considered only if the instructions are stricter than those in OSHA requirements.
- c. The Contractor shall maintain all responsibility for initiating, maintaining, and supervising all safety precautions and programs in connection with the Work.

15. Contractor Vehicles:

- a. Personal vehicles shall not be parked at the specific work sites.
- b. All vehicles at the work site be the property of the Contractor and marked with an identifiable company sign.
- 16. Respond to all change notifications within 24 hours

- a. Provide the Owner's Representative with the complete and detailed change estimate cost data within 7 calendar days of notification.
- 17. Contractor shall provide fulltime onsite dedicated qualified and suitable supervision of their work.
 - a. Notify Owner's Representative of name, qualifications and contact information for person designated to perform onsite supervision
 - b. Notify Owner's Representative of change of onsite supervisor immediately. No change shall be permitted without Owner's written permission.
 - c. Person designated to perform onsite supervision shall have no other responsibilities.
- 18. Perform work in accordance with agreed upon Schedule:
 - a. Provide any necessary measures required to achieve and maintain this schedule at no additional cost to the Owner, Program Manager and Owner's Representative.
- **B.** Overflows/Spills And Damage To Property And Utilities:
 - Schedule and perform the Work in a manner not causing or contributing to incidences of sanitary sewer overflows (SSOs) as defined in the latest Consent Decree.
 - 2. If Contractor's activities cause or contribute to spills or SSOs
 - a. Immediately take appropriate action to contain and/or stop the overflow;
 - 1) Cleanup the spillage,
 - 2) Disinfect the area affected by the SSO or spill.
 - b. Simultaneously, notify the Owner's Dispatch Center, the Program Manager, and the Owner's Representative
 - 1) Provide information concerning location, cause, volume of the SSO,
 - 2) Assessment whether the spill entered a stream or storm drain.
 - c. The Contractor will be familiar with the details of spill response plan
 - 1) Detailed in the Sanitary Sewer Overflow Contingency and Emergency Response Plan (CERP) approved by Owner's Representative.

- Document can be found on Department of Watershed Management website under the Consent Decree Program or upon request to the Owner or Program Manager.
- 3. Indemnify and hold harmless the Owner, the Program Manager and the Owner's Representatives for any fines or third-party claims for personal or property damage arising out of an SSO or spill fully or partially the responsibility of the Contractor,
- 4. Including the legal, engineering, and administrative expenses of the Owner, Program Manager, and Owner's Representatives in defending such fines and claims.
- 5. Any damage to public or private property due to the work performed by the Contractor is the sole responsibility of the Contractor.
 - a. Damage to municipal or private utilities shall be repaired in a manner approved by the Owner/Program Manager at the Contractor's expense.
 - b. Damage to utilities or property belonging to other entities shall be repaired by the Contractor to the satisfaction of the utility/property owner at the Contractor's sole expense.
 - c. Equipment stuck or left in the sewer line/lateral shall be retrieved by the Contractor immediately at the sole expense of the Contractor. All necessary precautions to avoid a spill or SSO shall be employed immediately and maintained until safe service is provided.
 - d. Notify the Owner, Program Manager, and Owner' Representative prior to initiating retrieval.
 - e. Damage to the Contractor's equipment is the Contractor's sole responsibility.
 - f. Equipment stuck or left in the sewer line/lateral that causes a SSO or spill,
 - 1) Contractor is liable for the SSO or spill and all associated damages.
- 6. The Owner and/or the Program Manager reserves the right to make any repairs or retrieve any equipment and charge the Contractor accordingly.

C. Relocations

- 1. Relocate (including all associated work) structures, such as:
 - a. light poles,
 - b. fences,

- c. piping,
- d. conduits,
- e. and drains interfering with the positioning and execution of the Work.
- Work so ordered will be paid for at the Contract unit prices, if applicable, or as extra work under the Allowance Bid Item. Reference Section 01015 Part 3

 Execution Installation 3.01 G. Protection and Relocation of Existing Structures and Utilities.
- **D.** Effective and suitable temporary provisions necessary for public safety resulting from such relocations, shall be provided by the Contractor at no additional cost to the Owner.
- E. Existing Underground Piping, Structures, And Utilities
 - 1. Existing water, gas, telephone, electrical, cable or other utility lines may be existing and may not be indicated on the drawings.
 - a. Exercise extreme care before and during any excavation activity to locate, preserve, protect and flag these lines so as to avoid damage to the existing lines.
 - b. Should damage occur to an existing line, the Contractor shall repair or pay for repairs to the line to the satisfaction of the utility owner and at no cost to the Owner.
 - 1) If the Owner of the utility requires the use of his own forces to repair the damaged lines Contractor shall pay for all repair costs.
 - 2. Locations of existing underground piping and utilities shown on the Drawings:
 - a. Are shown without express or implied representation, assurance, or guarantee they are complete or correct.
 - b. Or that they represent a true picture of underground piping to be encountered.
 - c. Existing piping and utilities interfering with any assessment or construction shall be rerouted.
 - 1) Prior to rerouting notify the Owner's Representative of the location of the pipeline or utility
 - 2) Reroute or relocate the pipeline or utility as directed.
 - 3. Carefully protect existing utilities that do not interfere with project work.

a. Existing utilities damaged in any way by the Contractor shall be restored or replaced by the Contractor at its expense as directed by the utility owner and the Owner's Representative.

F. WATER FOR CONSTRUCTION PURPOSES

- 1. Water required for the work identified in the Contract:
 - a. May be furnished by the Owner if readily available connections are present
 - b. Only as approved by the Owner's Representative.
 - c. Installed in each and every connection to the Owner's potable water supply,
 - A backflow preventer and calibrated metering device meeting the requirements of the Owner shall be installed in each and every connection to the Owner's potable water supply

SECTION 01 11 00

SUMMARY OF WORK

1.01 GENERAL

- A. The following Summary of Work is not meant to be an all-inclusive description of every item of Work necessary for a complete project. This Summary of Work is meant to aid the Contractor in developing an accelerated understanding of the basic project requirements.
- B. Descriptions that are included in this Summary of Work will be considered part of the Specifications and Contract.

1.02 WORK COVERED BY CONTRACT DOCUMENTS

A. DESCRIPTION OF WORK:

- Generally, the Work consists of furnishing all labor, materials, equipment and incidentals, and performing all work required to complete the project. Where Owner supplies equipment, Contractor is responsible for all other items to create a fully functional system. The work includes, but is not limited to:
 - a. Milling removal of existing asphalt concrete per depth provided on the bid schedule. Asphalt removal areas to be painted out by City staff prior to removal. All areas to have a minimum of 3 inches removed except for "C Street", where the plans dictate removal of 5 inches of asphalt and/or subgrade. Milling removal to paid on a square foot basis.
 - b. Asphalt replacement to occur on compacted subgrade prior to new asphalt placement. Existing asphalt edges to be tacked before placing hot asphalt. Temperatures and compaction of new asphalt shall comply with Caltrans specifications. Asphalt concrete to be paid for by the placed ton of asphalt as recorded by delivery scale tickets.
 - c. Replace striping where removed by milling process, listed in plan drawings, or directed by City. All striping areas are within the asphalt replacement zones, adjoining them at either the end of the repair work or perpendicular side streets. No removal of existing prior to new striping placement is included within this bid item. Striping items paid either by the linear foot or each as described in the Bid Schedule.
 - d. Provide Traffic Control as needed
- 2. Work is located in Crescent City, California. The location of the project is shown on the Plans.

B. DESIGN/BUILD INTENT OF CONTRACT (NOT USED)

C. CONTRACTOR'S DUTIES:

1. Except as specifically noted, provide and pay for:

- a. Labor, materials, and equipment;
- b. Tools, construction equipment, and machinery;
- c. Water, heat, and utilities required for construction; and
- d. All other facilities and services necessary for proper execution and completion of work, including commissioning.
- Conform to and comply with the California Green Building Code.
- Building demolition as needed and indicated on the plans. Obtain all necessary permits and perform asbestos and lead paint removal and disposal conforming to all regulations.
- 4. Pay legally required sales, consumer, and use taxes.
- 5. Prepare a Construction Schedule and Schedule of Values and receive approval from the Owner as required by these Contract Documents.
- 6. Procure and maintain all insurance and bonds required by these Contract Documents.
- 7. Secure and pay for proper execution and completion of the Work, and applicable permits and licenses, as necessary.
- 8. Give required notices.
- 9. Comply with codes, ordinances, rules, regulations, orders, and other legal requirements of public authorities which bear on performance of the Work.
- 10. Promptly submit written notice to Engineer of observed variance of contract documents from legal requirements.
- 11. Enforce strict discipline and good order of the employees. Do not employ on work:
 - a. Unfit persons; or
 - b. Persons not skilled in assigned tasks.
- 12. Prepare a shoring plan specific to the construction demolition and sequencing performed on this project.

D. PERMITS AND AGREEMENTS:

Obtain and comply with all permits not specifically obtained by Owner.

SECTION 01 11 05

CONTRACT TIME

1.0 COMPLETION SCHEDULE

Work must be completed within 100 calendar days from the Notice to Proceed.

SECTION 01 20 00

MEASUREMENT AND PAYMENT

1.0 GENERAL

A. LUMP SUM PAYMENT ITEMS:

Payment items for the work of this contract for which contract lump sum payments will be made are listed in the Bid Schedule and described below. All costs for items of work, which are not specifically mentioned to be included in a particular lump sum or unit price payment item, shall be included in the listed lump sum item most closely associated with the work involved. The lump sum price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for which separate payment is not otherwise provided.

B. UNIT PRICE PAYMENT ITEMS:

Payment items for the work of this contract on which the contract unit price payments will be made are listed in the Bid Schedule and described below. The unit price and payment made for each item listed shall constitute full compensation for furnishing all plant, labor, materials, and equipment, and performing any associated Contractor quality control, environmental protection, meeting safety requirements, tests and reports, and for performing all work required for each of the unit price items.

2.0 BID ITEMS

- Mobilization: Mobilization is as described in Section 9-1.16D, "Mobilization" of the Standard Specifications. Mobilization will be paid on a lump sum basis in accordance with Public Contract Code as follows provided that total mobilization cost does not exceed 10 percent of the total bid: 50 percent when 5 percent of the project is earned. 75 percent when 10 percent is earned. 95 percent when 20 percent is earned. 100 percent when 50 percent is earned. Where mobilization exceeds 10 percent of the contract, see Public Contract Code.
- 2. <u>Water Pollution Prevention Best Management Practices:</u> This item includes all additional work necessary for water pollution prevention related to the work covered under this item in accordance with Specification Section 01 57 23. This lump sum item will be paid based on the percent of the project earned, rounded down to the nearest 10 percent, until 90 percent is earned. The final 10 percent will be paid with the final payment.
- 3. <u>Traffic Control:</u> Traffic Control is as described in Specification Section 01 55 26, "Temporary Traffic Control". This lump sum item will be paid based on the percent the project earned, rounded down to the nearest 10 percent, until 90 percent is earned. The final 10 percent will be paid with the final payment.

- 4. <u>7th Street H to I Asphalt Mill Removal 0.25':</u> This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 5. <u>7th Street K to L Asphalt Mill Removal 0.25':</u> This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 6. 8th Street A to D Asphalt Mill Removal 0.25': This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 7. 8th Street D to E (west half) Asphalt Mill Removal 0.25': This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 8. <u>C Street 9th to 10th Asphalt Mill Removal 0.42':</u> This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 9. <u>D Street 9th to 10th Asphalt Mill Removal 0.25':</u> This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 10. E Street 4th to 5th Asphalt Mill Removal 0.25': This item includes all work necessary to grind and remove existing asphalt, compact subgrade, and place tack oil on vertical edges of remaining asphalt prior to new asphalt placement. Contractor is responsible for proper grinding/milling, grading and compaction of subgrade to achieve lines and grades. This item to be paid based on Owner's estimate of the square footage of removal and preparation during each billing cycle.
- 11. Hot Mix Asphalt Concrete Placement: This item includes all work necessary to

provide and place hot mix asphaltic concrete. This item will be paid on the bid unit price per ton. The Owner will only pay for Hot Mix Asphalt quantities identified in the bid schedule. Contractor is responsible for proper grading and placement of subgrade and rock to achieve lines and grades as detailed in Bid Items 4 through 10. This item will be paid based on Owner's estimate of the number of tons of hot mix asphalt placed during each billing cycle.

- 12. White "STOP" Thermoplastic Striping: This item includes all work necessary to place Thermoplastic striping with reflective glass powder. This item will be paid on the bid unit price per each. Contractor is responsible for proper grinding, preparation, and placement to achieve text. This item to be paid based on Owner's estimate of the number of installations on the project during each billing cycle.
- 13. White 12" Thermoplastic Striping Bars and solid bar crosswalk: This item includes all work necessary to place Thermoplastic striping with reflective glass powder. This item will be paid on the bid unit price per linear foot. Contractor is responsible for proper grinding, preparation, and placement to achieve lines. This item to be paid based on Owner's estimate of the linear footage of striping installed on the project during each billing cycle.
- 14. Yellow 12" Thermoplastic Striping Bars and solid bar crosswalk: This item includes all work necessary to place Thermoplastic striping with reflective glass powder. This item will be paid on the bid unit price per linear foot. Contractor is responsible for proper grinding, preparation, and placement to achieve lines. This item to be paid based on Owner's estimate of the linear footage of striping installed on the project during each billing cycle.
- 15. Yellow "SLOW SCHOOL XING" Thermoplastic Striping: This item includes all work necessary to place Thermoplastic striping with reflective glass powder. This item will be paid on the bid unit price per each. Contractor is responsible for proper grinding, preparation, and placement to achieve text. This item to be paid based on Owner's estimate of the number of installations on the project during each billing cycle.

2.1 ADDITIVE ALTERNATIVES

1. NONE

SECTION 02 00 00

EXISTING CONDITIONS

PART 1 – GENERAL

1.01 RELATED INFORMATION

Related information and requirements are included in the individual Sections of the Specifications and the project Permits.

1.02 INFORMATION ON SITE CONDITIONS

Information obtained by the Engineer regarding site conditions, existing facilities, and similar data are shown on the Plans.

1.03 CONTRACTOR'S RESPONSIBILITIES

- A. The Contractor shall satisfy himself as to the nature and location of the work, the general and local conditions, particularly those bearing upon availability of transportation, disposal, handling, and storage of materials, availability of labor, water, electric power, roads, work in sensitive environment and uncertainties of weather, or similar physical conditions at the site, the conformation and conditions of the ground, the character of equipment facilities needed preliminary to and during the prosecution of the work and all other matters which can in any way affect the work or the cost thereof under this contract.
- B. The Contractor further shall satisfy himself as to the character, quality, and quantity of surface and subsurface materials to be encountered from inspecting the site, any exploratory work done by the City, as well as from information presented by the Plans and Specifications made a part of this contract. Any failure by the Contractor to acquaint himself with all the available information will not relieve him from responsibility for properly estimating the difficulty or cost of successfully performing the work.
- C. The Contractor shall anticipate underground obstructions such as utility lines, concrete, water table, soil conditions and debris. No extra payment will be allowed for the removal, replacement, repair, or possible increased cost caused by underground obstructions. Any such lines or obstructions indicated on the map show only the approximate location and must be verified in the field by the Contractor. The District and Engineer will endeavor to familiarize the Contractor with all known underground obstructions, but this will not relieve the Contractor from full responsibility in anticipating and locating all underground obstructions.
- D. The Contractor shall note that heavy truck and equipment operations may cause roadway and parking lot damage in excess of normal usage.

Damage caused to the streets by Contractor's operations shall be repaired by the contractor at no additional cost to the City. A series of photographs shall be logged by the Contractor for approval by the Engineer to establish existing conditions prior to construction.

SECTION 01 33 00

SUBMITTALS

1.0 GENERAL

Submittals covered by these requirements include manufacturers' information, shop drawings, test procedures, test results, samples, requests for substitutions, and miscellaneous work-related submittals. Submittals also include, but are not limited to, all mechanical, electrical and electronic equipment and systems, materials, reinforcing steel, fabricated items, and piping and conduit details. The Contractor shall furnish all drawings, specifications, descriptive data, certificates, samples, tests, methods, schedules, and manufacturer's installation and other instructions as specifically required in the contract documents to demonstrate fully that the materials and equipment to be furnished and the methods of work comply with the provisions and intent of the contract documents.

2.0 CONTRACTOR'S RESPONSIBILITIES

The Contractor will be responsible for the accuracy and completeness of the information contained in each submittal and must assure that the material, equipment or method of work will be as described in the submittal. The Contractor must verify that all features of all products conform to the specified requirements. Submittal documents must be clearly edited to indicate only those items, models, or series of equipment, which are being submitted for review. All extraneous materials must be crossed out or otherwise obliterated. The Contractor must ensure that there is no conflict with other submittals and notify the Construction Manager in each case where his submittal may affect the work of another contractor or the Owner. The Contractor must coordinate submittals among his subcontractors and suppliers including those submittals complying with unit responsibility requirements specified in applicable technical sections.

The Contractor must coordinate submittals with the work so that work will not be delayed. The Contractor shall coordinate and schedule different categories of submittals, so that one will not be delayed for lack of coordination with another. No extension of time will be allowed because of failure to properly schedule submittals. The Contractor must not proceed with work related to a submittal until the submittal process is complete. This requires that submittals for review and comment must be returned to the Contractor stamped "No Exceptions Taken" or "Make Corrections Noted."

The Contractor shall certify on each submittal document that he has reviewed the submittal, verified field conditions, and complied with the contract documents.

The Contractor may authorize in writing a material or equipment supplier to deal directly with the Construction Manager or with the Owner with regard to a submittal. These dealings will be limited to contract interpretations to clarify and expedite the work.

3.0 CATEGORIES OF SUBMITTALS

A. GENERAL:

Submittals fall into two general categories; submittals for review and comment, and submittals which are primarily for information only. Submittals that are for information only are generally specified as <u>PRODUCT DATA</u> in Part 2 of applicable specification sections.

A copy of each specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. Check marks (✓) denote full compliance with a paragraph as a whole. If deviations from the specifications are indicated, and therefore requested by the Contractor, each deviation must be underlined and denoted by a number in the margin to the right of the identified paragraph, referenced to a detailed written explanation of the reasons for requesting the deviation. The Construction Manager will be the final authority for determining acceptability of requested deviations. The remaining portions of the paragraph not underlined will signify compliance on the part of the Contractor with the specifications. Failure to include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal will be sufficient cause for rejection of the entire submittal with no further consideration.

The Contractor shall submit a submittal schedule listing all submittals and associated submittal dates. Two separate lists must be provided: submittals for review and comment and product data (submittals) for information only. No submittals will be reviewed without a submittal schedule. Three (3) copies of the submittal schedule must be provided to the Construction Manager within 15 days of the pre-construction meeting. The schedule must be updated weekly with approval or rejection notes and dates, re-submittals with associated dates, and any additional information as required by the Construction Manager.

The Contractor shall maintain an accurate submittal log in a form acceptable to the Construction Manager, for the duration of the Contract. Show current status of all submittals at all times. Make the submittal log available for the Construction Manager's review upon request and with each submittal.

B. SUBMITTALS FOR REVIEW AND COMMENT:

All submittals except where specified to be submitted as product data for information only must be submitted by the Contractor to the Construction Manager for review and comment.

C. SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY:

Where specified, the Contractor shall furnish submittals (product data) to the Construction Manager for Information only. If the Construction Manager is dissatisfied with any submittal, submitted as Product Data, or for information only, they may be reviewed and commented upon.

4.0 TRANSMITTAL PROCEDURE

A. GENERAL:

Unless otherwise specified, submittals regarding material and equipment must be accompanied by Transmittal Form 01300-A specified in Section 00 62 00. A separate form must be used for each specific item, class of material, equipment, and items specified in separate, discrete sections, for which the submittal is required. Submittal documents common to more than one piece of equipment must be identified with all the appropriate equipment numbers. Submittals for various items may be made with a single form when the items taken together constitute a manufacturer's package or are so functionally related that expediency indicates checking or review of the group or package as a whole.

A unique number, sequentially assigned, must be noted on the transmittal form accompanying each item submitted. Original submittal numbers will have the following format: "XXX"; where "XXX" is the sequential number assigned by the Contractor. Resubmittals will have the following format: "XXX-Y"; where "XXX" is the originally assigned submittal number and "Y" is a sequential letter assigned for resubmittals, i.e., A, B, or C being the 1st, 2nd, and 3rd resubmittals, respectively. Submittal 25B, for example, is the second resubmittal of submittal 25.

B. DEVIATION FROM CONTRACT:

If the Contractor proposes to provide material, equipment, or method of work that deviates from the project manual, he or she must so indicate under "deviations" on the transmittal form accompanying the submittal copies.

C. SUBMITTAL COMPLETENESS:

Submittals which do not have all the information required to be submitted, including deviations, are not acceptable and will be returned without review.

5.0 REVIEW PROCEDURE

A. GENERAL:

Submittals are specified for those features and characteristics of materials, equipment, and methods of operation which can be selected based on the Contractor's judgment of their conformance to the specified requirements. Other features and characteristics are specified in a manner that enables the Contractor to determine acceptable options without submittals. The review procedure is based on the Contractor's guarantee that all features and characteristics not requiring submittals conform as specified. Review will not extend to means, methods, techniques, sequences or procedures of construction, or to verifying quantities, dimensions, weights or gages, or fabrication processes (except where specifically indicated or required by the project manual) or to safety precautions or programs incident thereto. Review of a separate item, as such, will not indicate approval of the assembly in which the item functions.

When the contract documents require a submittal, the Contractor shall submit the specified information as follows:

1. Three (3) copies of all submitted information plus one reproducible original of all information must be transmitted with submittals for review and

comment. The reproducible original must be submitted in a three ring binder with spine identification, cover identification, and table of contents and index tabs to indentify the various items. Contractor is also advised to submit these documents in electronic (pdf) format, to expedite Engineer's approval process.

2. Unless otherwise specified, 4 copies of all submitted information must be transmitted with submittals (Product Data) for information only.

B. SUBMITTALS FOR REVIEW AND COMMENT:

Unless otherwise specified, within 30 calendar days after receipt of a submittal for review and comment, the Construction Manager shall review the submittal and return 2 copies of the marked-up reproducible original noted in 1 above. The reproducible original will be retained by the Construction Manager. The returned submittal will indicate one of the following actions:

- 1. If the review indicates that the material, equipment or work method complies with the project manual, submittal copies will be marked "NO EXCEPTIONS TAKEN." In this event, the Contractor may begin to implement the work method or incorporate the material or equipment covered by the submittal.
- 2. If the review indicates limited corrections are required, copies will be marked "MAKE CORRECTIONS NOTED." The Contractor may begin implementing the work method or incorporating the material and equipment covered by the submittal in accordance with the noted corrections.
- 3. If the review reveals that the submittal is insufficient or contains incorrect data, copies will be marked "AMEND AND RESUBMIT." Except at his own risk, the Contractor may not undertake work covered by this submittal until it has been revised, resubmitted and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."
- 4. If the review indicates that the material, equipment, or work method does not comply with the project manual, copies of the submittal will be marked "REJECTED - SEE REMARKS." Submittals with deviations that have not been identified clearly may be rejected. Except at his own risk, the Contractor may not undertake the work covered by such submittals until a new submittal is made and returned marked either "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED."

C. SUBMITTALS (PRODUCT DATA) FOR INFORMATION ONLY:

Such information is not subject to submittal review procedures and will be provided as part of the work under this contract and its acceptability determined under normal inspection procedures.

6.0 EFFECT OF REVIEW OF CONTRACTOR'S SUBMITTALS

Review of contract drawings, methods of work, or information regarding materials or equipment the Contractor proposes to provide, will not relieve the Contractor of his or her responsibility for errors therein and may not be regarded as an assumption of risks or liability by the

Construction Manager or the Owner, or by any officer or employee thereof, and the Contractor will have no claim under the contract on account of the failure, or partial failure, of the method of work, material, or equipment so reviewed. A mark of "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED" means that the Owner has no objection to the Contractor, upon his own responsibility, using the plan or method of work proposed, or providing the materials or equipment proposed.

SECTION 01 41 00

REGULATORY REQUIREMENTS

PART 1--GENERAL

1.01 PERMITS

- A. The following permit shall be obtained at City Hall at Contractor's expense:
 - 1. City Business License

Contractor shall conform to all requirements stated in these permits and shall make all necessary corrections to the installation that may be directed by agency engineers and inspectors. Once a permit has been acquired, the Contractor shall review the conditions of the permit and assess if they are consistent with the executed Contract. If not, Contractor shall within 10 working days provide notice in writing of changed items not originally included in the Contractor's Bid or subsequent contract.

- B. Contractor shall secure all other permits or licenses required to complete the project and any that may be required to construct the project, including, but not limited to the following:
 - 1. Post at the work site copies of Construction Safety Orders and General Safety Orders issued by the California State Division of Industrial Safety.
 - 2. Submit to the Construction Manager a detailed plan showing the design of shoring, bracing, sloping or other provisions as required in Section 31 40 00 of these specifications. No excavation shall start until the Engineer or Construction Manager has accepted the plan and the Contractor has obtained a permit from the State Division of Industrial Safety. A copy of the permit shall be submitted to the Construction Manager.
 - Any permits required by the appropriate Air Quality Management District to operate construction equipment. For information concerning permits contact North Coast Unified Air Quality Management District (AQMD), Permit/Application Receiving at (707) 443-3093.
 - 4. Requirements of the Energy Star Program, Enterprise Green Communities, and the California Green Building Code. Not Required
 - Caltrans Encroachment Permit. Not Required
- C. Contractor shall be responsible for payment of any additional costs or fines due to re-inspection and approval of the work or other related problems deemed necessary by an agency inspector.

1.02 FIRE SAFETY

A. Contractor is to be especially careful in all welding and cutting operations to avoid fire.

- B. Onsite inspection shall be required for all hot work. Prior to starting hot work notify the Owner and any adjacent tenants of the property within 100 feet of the hot work location, 48 hours prior to the work.
- C. Furnish all safety devices, extinguishers, and fire watch personnel, as necessary to protect the public, the work and the Owner.

1.03 TRAFFIC CONTROL

Provide all traffic control signs, barricades, and warning devices necessary to control traffic from all directions. Land traffic shall be in accordance with the Manual of Uniform Traffic Control Devices (MUTCD) as required in Section 01 55 26 of these Specifications; and water traffic shall be in accordance with the requirements of the U.S. Coast Guard. Traffic control plans shall be submitted within 15 days of the pre-construction meeting.

1.04 SHEETING, SHORING, & BRACING

Pursuant to Labor Code Section 6705, the excavation of any trench or trenches five feet or more in depth requires the submission by the Contractor and acceptance by the Owner or by a registered civil or structural engineer, employed by the Owner, to whom authority to accept has been delegated, in advance of excavation, of a detailed plan showing the design of shoring, bracing, sloping, or other provisions to be made for worker protection from the hazard of caving ground during the excavation of such trench or trenches. If such plan varies from the shoring system standards, the plan shall be prepared by a registered civil or structural engineer.

Nothing in this clause shall be deemed to allow the use of a shoring, sloping, or protective system less effective than that required by the Construction Safety Orders.

PART 2--NOT USED

PART 3--EXECUTION

3.01 EQUIPMENT (NOT USED)

SECTION 01 45 00

QUALITY CONTROL

PART 1--GENERAL

1.01 DESCRIPTION

This section specifies administrative and procedural requirements for quality control services, field inspections, and field testing of civil and structural constructs required for this project. Contractor is responsible for the quality assurance and quality control of their respective work.

1.02 DEFINITIONS

Quality Control System (QCS): The quality control, assurance, and inspection system established and carried out to ensure compliance with the Plans and Specifications.

QCS Supervisor: That person in responsible charge of the work occurring, as designated by the Contractor in the QCS Plan.

QCS Inspector: Responsible, certified personnel inspecting the various constructs at specified milestones and during the project overall and designated by the Construction Manager. The Special Inspector is part of the QCS Inspector team.

Factory Test: Tests made on various materials, products and component parts prior to shipment to the job site.

Field Tests: Tests and analyses made at or in the vicinity of the job site in connection with the actual construction.

Certified Inspection Report: Reports signed by approved inspectors attesting that the items inspected meet the specification requirements other than any exceptions included in the report

Certificate of Compliance: Certificate from the manufacturer of the material or equipment identifying said manufacturer, product and referenced standard, and shall be signed by a designated officer of the manufacturer.

Standard Compliance: Condition whereby specified materials or equipment must conform to the standards of organizations such as the American National Standard Institute (ANSI), American Society for Testing and Materials (ASTM), Underwriters Laboratories (UL) or similar organization.

Quality Assurance: The day-to-day, in-process supervisory observations of work and materials conducted by the Contractor to assure that the proper methods and materials are being used and installed by tradesmen.

Source Quality Control: The in-process testing and inspections conducted by the QCS Inspector(s) to verify that the materials, equipment, workmanship and shop manufactured constructs are in compliance with the Contract Documents, applicable Codes and standards.

Field Quality Control: The testing and inspections conducted by the QCS Inspector(s) in the field during and at the completion of each construct to verify that the in-process and completed construction is in compliance with the Contract Documents, applicable Codes and standards.

Energy Star Inspector/Certifier: Designated and paid for by the Owner.

Building Official/Building Inspector: As defined by the IBC and California Code of Regulations Title 24. This project is not in the jurisdiction of the Humboldt County Building Department. The Owner has retained the services of the Project Designers to perform that role on this project.

1.03 REFERENCES

This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization, or if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued, or replaced.

Reference	Title
ASTM C102	Practice for Laboratories Engaged in the Testing of Building Sealants.
ASTM C802	Practice for Conducting an Inter-Laboratory Test Program to Determine the Precision of Test Methods for Construction.
ASTM D3740	Practice for Evaluation of Agencies Engaged in Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction.
ASTM D4561	Practice for Quality Control Systems for an Inspection and testing Agency for Bituminous Paving Materials.
ASTM E329	Practice for Use in the Evaluation of Inspection and Testing Agencies as Used in Construction.
IBC	2016 California Building Code

1.04 CONTRACTOR'S RESPONSIBILITIES

Contractor's responsibilities shall be as follows:

- Monitor quality assurance over suppliers, manufacturers, products, services, site conditions, and workmanship, to produce work of specified quality.
- 2. Coordinate with, schedule specified inspections by, and provide normal and customary assistance to the QCS Inspectors.
- 3. Comply fully with manufacturers' instructions, including each step in sequence.
- 4. Should manufacturers' instructions conflict with Contract Documents, request clarification before proceeding from Construction Manager.
- 5. Comply with specified standards as a minimum quality for the work except when more stringent tolerances, codes, or specified requirements indicate higher standards or more precise workmanship.
- 6. Perform work by persons qualified to produce workmanship of specified quality.
- 7. Notify Building Inspector with 48-hour notice to observe all construction elements related to the project, regardless of trade, prior to covering. No work elements shall be covered prior to written acceptance by the Building Inspector. If so, the work shall be exposed and recovered by and at the sole expense of the Contractor.
- 8. To demonstrate his compliance with the contract requirements, the Contractor must assist the Construction Manager in his performance of inspection work. The Contractor must grant the Construction Manager access to the work and to the site of the work, and to the places where work is being prepared, or whence materials, equipment or machinery are being obtained for the work. The Contractor must provide information requested by the Construction Manager in connection with inspection work.

If the contract documents, laws, ordinances, or any public regulatory authority require parts of the work to be specially inspected, tested or approved, the Contractor will give the Construction Manager adequate prior written notice of the availability of the subject work for examination.

If parts of the work are covered in contravention of the Construction Manager's directive, the cost of exposing the work for inspection and closing must be borne by the Contractor regardless of whether or not the work is found to be in compliance with the contract.

If any work is covered in the absence of the Construction Manager's directive to the contrary, the Contractor must, if directed to do so by the

Construction Manager, uncover, expose or otherwise make available for inspection, portions of covered work. If it is found that such work is defective, the Contractor must bear the expense of uncovering and reconstructing. If the work is found to be in compliance with the contract, the Contractor will be allowed an increase in the contract price, or an extension in the contract time, or both. A change order will be issued to document the increase, extension or both.

1.05 REGULATORY REQUIREMENTS

A. GENERAL:

Comply with all Federal, State, and local Codes as referenced herein. Such regulations apply to activities including, but not limited to, sitework and zoning, building practices and quality, on and offsite disposal, safety, sanitation, nuisance, and environmental quality.

B. SPECIAL INSPECTION:

Special Inspection shall be performed by the Special Inspector under contract with the Construction Manager in conformance with the IBC. Special Inspection is in addition to, but not replacing, other inspections and quality control requirements herein. Where sampling and testing required herein conforms to Special Inspection standards, such sampling and testing need not be duplicated.

C. STRUCTURAL OBSERVATION:

Engineer shall make visual inspections of the work to assess general conformance with the Contract Documents at significant construction stages and at completion of the structural system. The QCS shall include a preliminary set of Structural Observations and what items are expected to be observed. Contractor shall request this preliminary set from Engineer through Construction Manager and submit as part of their QCS submittal.

The following structural milestones shall be considered significant construction stages:

(NONE)

1.06 FIELD SAMPLE PROCEDURES

When field samples are specified in a unit of work, construct each field sample to include work of all trades required to complete the field sample prior to starting related field work. Field samples may be incorporated into the project after acceptance by Construction Manager. Remove unacceptable field samples when directed by Construction Manager. Acceptable samples represent a quality level for the work.

1.07 CONTRACTOR DESIGNED STRUCTURAL SYSTEMS

A. DESIGN ENGINEERING:

Contractor shall employ and pay for engineering services from a Professional Engineer registered in the State of California for structural design of Contractor designed structural systems including but not limited to temporary shoring and bracing, formwork support, and

support systems for fire protection, plumbing, mechanical, and electrical systems and equipment.

B. TESTS AND INSPECTIONS OF CONTRACTOR DESIGNED STRUCTURAL SYSTEMS:

Contractor shall pay for preliminary testing of concrete, grout, and mortar mix designs where required by Code or the submittal process prior to start of such work. Contractor shall pay for required shop and site inspection of Contractor designed structural systems where required by Code or these specifications, to the extent such testing and inspection exceeds that required for the structural system on the drawings and in these specifications.

1.08 MANUFACTURERS' FIELD SERVICES AND REPORTS

When specified in individual specification Sections, product suppliers or manufacturers shall provide qualified staff personnel to observe site conditions, conditions of surfaces and installation, quality of workmanship, start-up of equipment, test, adjust, and balance of equipment as applicable, and to provide instructions when necessary. Contractor shall submit qualifications of observer to Construction Manager 30 days in advance of required observations. QCS Inspector shall record observations and site decisions or instructions given to applicators or installers that are supplemental or contrary to manufacturers' written instructions.

1.09 JOB SITE CONDITIONS

Schedule to ensure all preparatory work has been accomplished prior to proceeding with current work. Proceeding with the work constitutes acceptance of conditions. Allow adequate time for materials susceptible to temperature and humidity to "stabilize" prior to installation.

1.10 SUBMITTALS

The following information shall be provided in accordance with Section 01 33 00:

A copy of this specification section, with addendum updates included, and 1. all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. Check marks (✓) shall denote full compliance with a paragraph as a whole. If deviations from the specifications are indicated. and therefore requested by the Contractor, each deviation shall be underlined and denoted by a number in the margin to the right of the identified paragraph, referenced to a detailed written explanation of the reasons for requesting the deviation. The Construction Manager shall be the final authority for determining acceptability of requested deviations. The remaining portions of the paragraph not underlined will signify compliance on the part of the Contractor with the specifications. Failure to include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal shall be sufficient cause for rejection of the entire submittal with no further consideration.

- 2. Written description of Contractor's proposed QCS plan in sufficient detail to illustrate understanding and approach. The QCS plan and submittal shall include a log showing anticipated inspections, Special Inspections, and source and field Quality Assurance procedures. Preliminary submittal of the QCS plan may be made prior to commencing field work. The preliminary submittal will illustrate the project's initial three (3) month's work and be followed one month later by a final QCS plan submittal.
- 3. Contractor's proposed QCS Supervisor, qualifications, and if requested, references.
- 4. Preliminary structural observation set as described in paragraph 1.05 C.
- 5. Complete structural system information describing Contractor designed structural systems, including sealed calculations, shop and erection drawings, product literature for the various components, ICBO Evaluation Reports for structural components, and a discussion of risk issues associated with the proposed system which could adversely impact overall project completion.
- 6. If requested by the Construction Manager during the work, manufacturer's field services and reports. If not so requested, treat same as Product Data.

PART 2--PRODUCTS

2.01 SOURCE QUALITY CONTROL

A. CONTRACTOR RESPONSIBILITIES:

Provide source quality control according to the reviewed and accepted QCS plan and paragraph 1.04 herein. Coordinate with Construction Manager to facilitate the work of the Testing Laboratory specified in Section 01 45 29 and Special Inspector. Provide ready access to sampling and inspection locations and incidental labor customary in such sampling and inspections. Timely prepare and submit submittals and revise as indicated by review comments. Comply with technical requirements in each specification Section that applies to the work.

B. CONSTRUCTION MANAGER RESPONSIBILITIES:

Review Contractor's tracking of QCS activities at monthly meetings. Facilitate completion of submittal review per Section 01 33 00. Assist Contractor to ensure that Special Inspection occurs where and when specified.

C. ACCEPTANCE CRITERIA:

Acceptable characteristics and quality of a particular item or construct is defined in that item's or construct's specification Section.

2.02 PRODUCT DATA

The following product data shall be provided in accordance with Section 013300.

- 1. Manufacturers' field services and reports unless requested by Construction Manager to be submitted for review.
- 2. Special Inspection reports, unless otherwise directed in each technical specification Section.

PART 3--EXECUTION

3.01 FIELD QUALITY CONTROL

Field quality control responsibilities of the Contractor and Construction Manager are substantially the same as described in paragraph 2.01, with the exception that this work occurs primarily on the jobsite as the work progresses, and Special Inspection will occur more often than at the source.

Acceptable characteristics and quality of a particular item or construct is defined in that item's or construct's specification section.

3.02 REGULATORY COMPLIANCE - SPECIAL INSPECTIONS

The following types of work require Special Inspection according to Chapter 17 of the IBC and each system's specification section:

- 1. Structure fill.
- 2. Structural concrete and reinforcing.
- 3. Anchor bolts and post-installed anchor systems.
- 4. Structural steel and aluminum including connections.

Section 01 45 29 describes Testing Laboratory sampling, testing and reporting, much of which is conforming to Special Inspection requirements, and need not be replicated.

Contractor designed structural systems are subject to the same Special Inspection requirements as all other work.

3.03 CORRECTION OF DEFECTIVE WORK

Remove and replace defective, rejected, and condemned work at Contractor's expense until such work meets the requirements of Contract Documents. Costs for Inspection of corrected work shall be paid by the Contractor.

SECTION 01 45 29

TESTING LABORATORY SERVICES

PART 1--GENERAL

1.01 DESCRIPTION

This Section specifies Quality Control testing and reporting performed by the Testing Laboratory. Construction Manager shall select a qualified Testing Laboratory and contract for the services specified herein, except as specifically noted where Contractor may elect to utilize Testing Laboratory to fulfill submittal requirements. Such an arrangement does not relieve the Contractor from their responsibility to provide the completed project as specified, and to perform Quality Assurance according to the QCS as reviewed and accepted.

1.02 REFERENCES

This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued, or replaced.

Reference	Title
AASHTO T-27	Standard Method of Test for Sieve Analysis of fine and Course Aggregate
ACI 214	Evaluation of Strength Test Results of Concrete
ASTM A880	Criteria for Use in Evaluation of Testing Laboratories and Organizations for Examination and Inspection of Steel, Stainless Steel, and Related Alloys
ASTM C29	Standard Test Method for Bulk Density ("Unit Weight") and Voids in Aggregate
ASTM C31	Making and Curing Concrete Test Specimens in the Field
ASTM C39	Compressive Strength of Cylindrical Concrete Specimens
ASTM C42	Obtaining and Testing Drilled Cores and Sawed Beams of Concrete

Reference	Title
ASTM C127	Standard Test Method for Density, Relative Density (Specific Gravity), and Absorption of Coarse Aggregate
ASTM C136	Standard Method for Sieve Analysis of Fine and Coarse Aggregates
ASTM C143/C143M	Slump of Hydraulic Cement Concrete
ASTM C172	Sampling Freshly Mixed Concrete
ASTM C802	Conducting an Inter-laboratory Test Program to Determine the Precision of Test Methods for Construction Materials
ASTM C1021	Laboratories Engaged in the Testing of Building Sealants
ASTM CI077	Laboratories Testing Concrete and Concrete Aggregates for Use in Construction and Criteria for Laboratory Evaluation
ASTM D75	Sampling Aggregates
ASTM D1556	Test Method for Density of Soil in Place by the Sand-Cone Method
ASTM D1557	Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures Using 10-lb (4.5-kg) Rammer and 18-in. (457-mm) Drop
ASTM D2419	Standard Test Method for Sand Equivalent Value of Soils and Fine Aggregate
ASTM D2487	Classification of Soils for Engineering Purposes
ASTM D3017	Test Method for Moisture Content of Soil and Soil- Aggregate in Place by Nuclear Methods (Shallow Depth)
ASTM D3441	Standard Test Method for Mechanical cone Penetration Tests of Soil
ASTM D3666	Specification for Minimum Requirements for Agencies Testing and Inspecting Road and Paving Materials
ASTM D3740	Minimum Requirements for Agencies Engaged in the Testing and/or Inspection of Soil and Rock as Used in Engineering Design and Construction
ASTM D4318	Liquid Limit, Plastic Limit, and Plasticity Index of Soils
ASTM D4561	Quality Control Systems for Organizations Producing and Applying Bituminous Paving Materials
ASTM D4832	Standard Test Method for Preparation and Testing of Controlled Low Strength Material (CLSM) Test Cylinders
ASTM E4	Force Verification of Testing Machines
ASTM E329	Agencies Engaged in the Testing and/or Inspection of Materials Used in Construction
ASTM E543	Agencies Performing Nondestructive Testing

Reference	Title
ASTM E994	Calibration and Testing Laboratory Accreditation Systems General Requirements for Operation and Recognition
IBC	2013 California Building Code

1.03 TESTING LABORATORY QUALIFICATIONS

Testing Laboratory shall satisfy the following qualifications:

- 1. Recommended Requirements for Independent Laboratory Qualification, published by American Council of Independent Laboratories.
- 2. Conform to the requirements of ASTM E329 in particular, and other reference standards as generally pertain to this project.
- 3. Authorized to operate in the State of California, with personnel and equipment based sufficiently close to the project to allow short-notice site access for sampling and testing.
- 4. Acceptable to Owner, Construction Manager, and local building authorities.

1.04 TESTING LABORATORY RESPONSIBILITIES

Testing Laboratory shall provide qualified personnel at the site and cooperate with Construction Manager and Contractor in performance of the following services:

- 1. Perform specified independent inspection, sampling, and testing of products in accordance with specified standards, to determine compliance with requirements of Contract Documents.
- 2. Provide sampling equipment and personnel, deliver samples to the testing laboratory, record field measurements, and cure samples as required by Contract Documents.
- 3. Perform Building Department required tests and inspections, including Special Inspection as specified in Section 01 45 00.
- 4. Timely prepare and deliver reports summarizing results of tests and inspections.
- 5. Attend pre-construction conferences and, if requested, a limited number of progress meetings where Quality Control, testing, and inspection issues require discussion.
- 6. When directed by the Construction Manager or requested by the Contractor, provide special and additional tests and inspections to verify material compliance with requirements of Contract Documents.

- a. Construction Manager shall pay for special tests and inspections where work conforms to the Contract Document requirements.
- Contractor shall pay for additional tests and inspections where
 work fails to comply with Contract Document requirements (reinspection) and for costs associated with cancelled or short-notice
 re-scheduling of requested sampling, testing, and inspection.
 Testing Laboratory work requested by Contractor to fulfill submittal
 requirements shall also be considered additional tests.

1.05 CONTRACTOR RESPONSIBILITIES

Contractor shall deliver adequate samples of materials proposed to be used and which require testing to the Testing Laboratory. Contractor shall cooperate with Testing Laboratory personnel and provide access to the work and to manufacturer's facilities. Contractor shall provide incidental labor and facilities to provide access to work to be tested, to obtain and handle samples at the site or at source of products to be tested, to facilitate tests and inspections, storage and curing of test samples.

Contractor shall notify Testing Laboratory and Construction Manager 24 hours prior to expected time for operations requiring inspection, sampling and testing services.

1.06 TEST AND INSPECTION REPORTS

A. REPORT CONTENTS:

At a minimum, Test and Inspection Reports shall include the following:

- 1. Project name and date of report.
- 2. Testing Laboratory name, address, telephone number, name of laboratory field sampling personnel, lab testing personnel, or QCS Inspector as applicable.
- 3. Date, time, and location of sampling, testing, and inspecting.
- 4. Ambient temperature and weather conditions at the site or shop and curing conditions of samples.
- 5. Product identification and referenced specification Section number.
- 6. Type of sample, test, and inspection and industry standard for sampling and testing.
- 7. Results of sample, test, and inspection.
- 8. Evaluation of compliance with requirements in Contract Documents.
- 9. Certified Inspection Reports shall specifically indicate the qualification of the inspector to render judgment and certify said inspection.
- 10. When requested by Construction Manager, interpretation of test results.

B. DISTRIBUTION OF TEST AND INSPECTION REPORTS:

Test and Inspection reports shall be submitted to the Construction Manager for distribution as Product Data described in Section 01 33 00, unless technical specification sections require submittal for review. Test reports shall be submitted not more than two days after completion of required tests. Inspection reports shall be submitted immediately if deficiencies or significant irregularities are noted, and in no case less than two working days after said inspection. Provide six (6) copies of all reports.

1.07 SUBMITTALS

The following information shall be provided in accordance with Section 01 33 00:

- 1. A copy of this specification section, with addendum updates included, and all referenced and applicable sections, with addendum updates included, with each paragraph check-marked to indicate specification compliance or marked to indicate requested deviations from specification requirements. Check marks (✓) shall denote full compliance with a paragraph as a whole. If deviations from the specifications are indicated, and therefore requested by the Contractor, each deviation shall be underlined and denoted by a number in the margin to the right of the identified paragraph, referenced to a detailed written explanation of the reasons for requesting the deviation. The Construction Manager shall be the final authority for determining acceptability of requested deviations. The remaining portions of the paragraph not underlined will signify compliance on the part of the Contractor with the specifications. Failure to include a copy of the marked-up specification sections, along with justification(s) for any requested deviations to the specification requirements, with the submittal shall be sufficient cause for rejection of the entire submittal with no further consideration.
- 2. Documentation of conformance with Testing Laboratory Qualifications as specified in paragraph 01 45 29-1.03 herein.
- 3. Form A described in paragraph 01 45 29-3.03 herein, by both Testing Laboratory and Contractor.
- 4. Final laboratory report as described in paragraph 01 45 29-3.04.

1.08 LIMITS ON TESTING LABORATORY AUTHORITY

Testing Laboratory may not release, revoke, alter, or enlarge on requirements of Contract Documents. Testing Laboratory may not approve or accept any portion of the work, nor assume any duties of Contractor. Testing Laboratory has no authority to stop the work.

PART 2--PRODUCTS

2.01 SOURCE QUALITY CONTROL

A. GENERAL:

Source quality control is defined in Section 01 45 00. This Section provides general guidelines as to the sampling, tests, and inspections required of products and manufactures prior to delivery to the project site and should be considered a minimum. Additional information and requirements are provided in each technical specification Section and those requirements shall control over this Section when in conflict. Absence of a test, inspection or requirement listed herein from a subsequent specification Section does not relieve the Testing Laboratory or the Contractor from their respective responsibilities specified in this Section.

B. REFERENCE STANDARDS IN OTHER SECTIONS:

Codes, standards, and other references called out below, but which are not listed in paragraph 1.02 are described in other specification Sections and not repeated herein.

C. FILL MATERIALS:

 IMPORTED FILL MATERIALS: Testing Laboratory may conduct additional testing on behalf of Contractor to prepare required submittals specified in Section 31 00 00. Tests shall conform to the following for both Source and Field Quality Control:

	0, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,
Test	Standard Procedure
Moisture content	ASTM D3017
Gradation	ASTM C136
Density in-place	ASTM D1556
Moisture-density relationships	ASTM D1557
Liquid Limit, Plasticity Index	ASTM D4318

2. TYPE C FILL MATERIAL: Testing Laboratory shall conduct required testing to verify on-site materials proposed for fill conforms to specification Section 31 20 00. Contractor shall pay Testing Laboratory for such sampling and testing. Sampling and testing shall Classify Soil according to ASTM D2487 including Liquid Limit, Plasticity Index, and determine optimum moisture content and density relationship, and other data as required for proper use of this material.

D. PAVING MATERIALS:

Provide sampling and testing requested by Construction Manager or additional testing as requested by Contractor to verify materials proposed for use conform to specification Sections 31 20 00 and 32 00 00.

E. CONCRETE REINFORCING:

Provide sampling and testing requested by Construction Manager or additional testing as requested by Contractor to verify materials proposed for use conform to specification Section 03 20 00.

F. CAST-IN-PLACE CONCRETE:

- 1. GENERAL: Field sampling and testing shall be performed by the testing laboratory specified in paragraph 01 45 29-1.01 A. Samples shall be taken at random locations and at such times to represent the quality of the materials and work throughout the project. The laboratory shall provide the necessary labor, materials and facilities for sampling. Aggregates shall be sampled not less than 30 days prior to the use of such aggregates in the work. At Contractor's expense, Testing Laboratory may assist Contractor in formulating concrete mix designs, testing and reporting same, and providing the services of a Professional Engineer to review and seal the mix design.
- 2. AGGREGATES: Samples shall be taken at the discharge gates of the bins feeding the weigh hopper. The Contractor shall provide safe and suitable facilities for obtaining samples. Testing shall confirm continuing conformance with specifications for gradation, cleanliness and sand equivalent. A maximum of one test per day of each aggregate is required. Sampling shall be repeated when the source of material is changed or when unacceptable deficiencies or variations from the specified requirements of materials are found in testing. The full test program is required before source changes will be accepted. Aggregate samples shall be tagged and their sources identified.
- 3. COARSE AGGREGATE: A sample weighing between 50 and 60 pounds shall be taken after the batch plant is brought up to full operation conforming to ASTM D75. Sample and test coarse aggregate each 400 cubic yards of concrete. The samples shall be taken so that a uniform cross section, accurately representing the materials on the belt or in the bins, is obtained.
- 4. FINE AGGREGATE: Samples shall be taken as specified for coarse aggregate. Sample and test fine aggregate each 200 cubic yards of concrete. The samples shall be taken for sieve analysis of fine aggregate and specific gravity tests. Samples of sand shall be taken when the sand is moist.

G. STRUCTURAL STEEL:

- Shop Weld Inspection for Structural Steel, and Steel Fabrications: AWS
 Certified Welding Inspector shall visually inspect 100 percent of structural
 welds and will inspect 25 percent of fillet welds greater than 5/16 inch,
 100 percent of butt welds, moment connection welds, and full penetration
 groove welds by ultra-sonic or magnetic particle inspection. Acceptance
 Criteria: AWS D 1.1. Paragraph 8.15.1 for visual inspection and
 Paragraphs 8.15.2.1 and 8.15.2.2 for ultra-sonic or magnetic particle
 inspection.
- 2. Shop Inspection of High-Strength Bolted Connections: Inspect 100 percent of high-strength bolted connections according to AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts." All

such bolts shall be fully tensioned unless otherwise noted on the drawings.

 Materials' Conformance to Specifications: Testing Laboratory shall sample and test such items to ensure Standard Compliance for any specified steel materials, connection hardware, and details for which mill certificates or other required certificates have not been submitted. Contractor shall pay for the cost of such sampling, additional testing, and reporting.

H. MISCELLANEOUS METALWORK AND GUARDRAILING:

Provide sampling and testing requested by Construction Manager or additional testing as requested by Contractor to verify materials proposed for use conform to specification Sections 05 50 00 and 05 52 00.

I. COATING SYSTEMS:

Provide sampling and testing requested by Construction Manager or additional testing as requested by Contractor to verify materials proposed for use conform to specification Section 09 90 00.

J. CHEMICAL RESISTANCE (PICKLE JAR) TEST.

This test is used to determine the physical properties and weight change of specimens of materials used in sewers after exposure to chemical solutions. Specimens of composite materials shall be seal coated on 2 adjacent edges of their 4 edges and not seal coated on the inner or outer surface. Specimens of non-composite materials shall not be seal coated. Test specimens shall be conditioned in a mechanical convection oven for 7 Days at a constant weight and at a temperature of 110° F \pm 3° F (43° C \pm 3° C) and subsequently cooled for 3 hours in a desiccator. This conditioning shall be performed before and after submersion of the test specimens in the solutions shown in Table 211-2 (A) for a period of 28, 56, 84 and 112 Days at 77° F \pm 5° F (25° C \pm 3° C). Test specimens shall be provided as follows, unless otherwise approved by the Engineer.

- a) Specimens For Non-Composite Materials Provide 55 each ASTM D638 specimens and 164 each ASTM D543 specimens measuring 1 inch x 3 inches x 0.125 inch thick (25 mm x 75 mm x 3 mm).
- b) Specimens For Composite Materials Provide 55 each ASTM D638 specimens and 164 each ASTM D543 specimens measuring 1 inch x 3 inches x 0.125 inch to 0.25 inch thick (25 mm x 75 mm x 3 mm to 6 mm).

The allowable percent weight gain or loss for these specimens shall be as specified for the respective type of material.

TABLE 211-2 (A)

Chemical Solution	Concentration1	Tolerance	Check	Replace
			Concentration	Chemical
				Solution
Sulfuric Acid (H2SO4)	20%	± 0.1%	NA2	NA
Sodium Hydroxide (NaOH)	5%	± 0.2%	56 Days	When < 4.8%
Ammonium Hydroxide (NH4OH)	5%	± 1.0%	28 Days	When < 4.0%
Nitric acid (HNO3)	1%	± 0.1%	28 Days	When Turbid
Ferric Chloride (FeCl3)	1%	± 0.2%	28 Days	When Turbid
Sodium Hypochlorite (NaOCI)	1%	± 0.1%	NA	28 Days
Soap	0.10%	NA	NA	28 Days
Detergent (Linear alkyl benzyl	0.10%	NA	NA	28 Days
sulfonate or LAS)				-
Bacteriological (BOD)	≥ 700 ppm	NA	NA	7 Days

- 1. Volume percentages Actual concentration of reagent must be corrected to 100%.
- 2. NA Not Applicable.

If required by the type of material and the manufacturer, specimens thicker than 0.25 inch (6 mm) will be accepted and evaluated. The same number of ASTM D638 AND D543 specimens, as specified in 211-2a or 211-2b above, will be required. The allowable weight change value for the 112-Day test period for these thicker specimens shall conform to the values shown in Table 211-2 (B).

At 28-Day intervals, specimens shall be removed from each chemical solution and tested. If any specimen fails to meet the 112-Day requirement specified for the material being tested before completion of the 112-Day exposure, the material will be rejected.

TABLE 211-2 (B)

Thickness of Sample Inches (mm)	Weight Change1,2
0.375 (9.5)	± 0.75 %
0.50 (12.7)	± 0.63 %
0.75 (19.1)	± 0.50 %
1.0 (25.4)	± 0.44 %
1.5 (38.1)	± 0.38 %

- 1. With respect to initial test results.
- 2. Allowable percent weight gain or loss for the thickness between the designated values can be a straight line interpretation.

If required by the type of material being evaluated, additional size and quantity specimens may be required in order to meet the testing and ASTM requirements in the section for the material.

Five of the ASTM D638 specimens and 16 of the ASTM D543 specimens for the type of material being tested shall be submersed in each of the 9 solutions listed in Table 211-2 (A). At 28-Day intervals, 4 specimens shall be removed from each chemical solution, tested for weight change and the percent weight gain or loss shall be recorded. Required physical property

testing shall be obtained at 0 and 112 Days. The chemical strength of each solution shall be tested and replaced if not in compliance with the required values shown in Table 211-2 (A). If any specimen fails to meet the 112-Day requirement specified for the material being tested before completion of the 112-Day exposure, the material will be rejected.

The Contractor shall furnish a Certificate of Compliance, signed by an authorized representative of the testing laboratory, identifying the product, the test results for each of the 9 solutions and confirming conformance with the Specifications. Supporting test data shall be furnished upon request by the Engineer.

The chemical resistance test is a qualification test only. Requalification is required only when the compound formulation changes.

PART 3--EXECUTION

3.01 FIELD QUALITY CONTROL

A. GENERAL:

Field quality control is defined in Section 01 45 00. This Section provides general guidelines as to the sampling, tests, and inspections required of work in progress or completed in the field and should be considered a minimum. Additional information and requirements are provided in each technical specification Section and those requirements shall control over this Section when in conflict. Absence of a test, inspection or requirement listed herein from a subsequent specification Section does not relieve the Testing Laboratory or the Contractor from their respective responsibilities specified in this Section.

B. REFERENCE STANDARDS IN OTHER SECTIONS:

Codes, standards, and other references called out below, but which are not listed in paragraph 1.02 are described in other specification Sections and not repeated herein.

C. EARTHWORK AND FILL:

- 1. GENERAL: The Construction Manager will coordinate the taking of samples and making tests to check compliance with these specifications. The Contractor shall remove surface material at locations designated by the Construction Manager and provide such assistance as necessary for sampling and testing. The Construction Manager may direct the Contractor to construct inspection trenches in compacted or consolidated backfill to determine that the Contractor has complied with these specifications. Payment for inspection trenches shall be as specified in paragraph 01 45 00 1.04(7)
- 2. Subgrade Preparation and Compaction: Verify depth of scarification, moisture content is within optimal limits for compaction, and degree of compaction achieved. Frequency of testing shall generally conform to 25 foot maximum spacing for strip footings, each isolated pad footing, every 900 square feet for slabs and mat foundations, or as directed by the Construction Manager in light of actual geometry and conditions extent.

- 3. Structure Fill: Verify material provided, lift thickness, and compaction density. Frequency of sampling and testing shall be the same as for Subgrade Preparation and Compaction.
- 4. Structure Backfill: Verify material provided, lift thickness, and compaction density. Frequency of sampling and testing shall be as directed by the Construction Manager but not less than every 2 feet vertical lifts and every 1600 square feet of filled area.
- 5. Other Fill Materials: Verify material used, lift thickness, and compaction density. Frequency of sampling and testing shall be as directed by the Construction Manager.

D. PAVING:

- EARTHWORK AND BASE AGGREGATE: Provide sampling and testing same as Fill described above and specified in Section 32 00 00.
 Frequency shall conform to Asphalt Concrete Pavement, below.
- 2. HOT MIX ASPHALT PAVEMENT: Sample and test pavement thickness and installation per Caltrans Standard Specifications. Thickness verification shall be made at a frequency not to exceed 1600 square feet of roadway or parking zones or as directed by the Construction Manager.
- 3. SITEWORK CONCRETE AT PAVEMENT: Sitework concrete at pavement consists of curbs, gutters, monolithic curb/sidewalk, inlet structures, catch basins, and other concrete construction in contact with paving or necessary for a complete paving job but not associated with buildings or structural work controlled by the IBC. Testing Laboratory shall conduct sampling and testing the same as specified for cast-in-place concrete in Section 32 00 00, except strength cylinder testing shall occur at one-half the frequency (placing rate) as for structural concrete.

E. CONCRETE REINFORCING:

- 1. Provide Special Inspection for all structural reinforcing in concrete per IBC Section 1704.4.
- 2. Provide Special Inspection for mechanical reinforcing connectors and splicing systems as required by that product's ICBO Evaluation Report, or equivalent.

F. CAST-IN-PLACE CONCRETE:

- 1. Sample the first daily truckload of ready mixed concrete and every 50 cubic yards thereafter, complying with ASTM C172.
- 2. Perform one slump test for each truck load of ready mixed concrete, complying with ASTM C143.

- 3. Perform one air content test for each set of compressive strength specimens, complying with ASTM C31.
- 4. Fabricate compressive strength specimens, complying with ASTM C39.
- 5. Make one set of 6 of compressive strength specimens for each day of structural concrete placing or each 50 cubic yards or fraction thereof for each class of concrete.
- 6. Test two specimens after curing 7 days, two specimens after curing 28 days, and retain two specimens for later testing if required.
- 7. Comply with ACI 214 for evaluation and acceptance of concrete.
- 8. Certified reports of the test results shall be provided directly to the Construction Manager. Test reports shall include sufficient information to identify the mix used, the stationing or location of the concrete placement, and the quantity placed. Slump, air content, temperature of concrete, and ambient temperature shall be noted. Quality control charts showing field test results shall be included with the test results for each class of concrete in each major structure. Charts shall be prepared in accordance with ACI 214. Quality control charts shall be maintained throughout the entire job and shall be available for the Construction Manager's inspection at any time.
- 9. If the 28-day test results fall below the specified compressive strength for the class of concrete required for any portion of the work, adjustment in the proportions, water content, or both, shall be made as necessary at the Contractor's expense. Changes and adjustments shall be reported in writing to the Construction Manager.
- 10. If compressive test results indicate concrete in place may not meet structural requirements, tests shall be made to determine if the structure or portion thereof is structurally sound. Tests may include, but not be limited to, cores in accordance with ASTM C42/C42M and any other analyses or load tests acceptable to the Construction Manager. Costs of such tests shall be borne by the Contractor.

G. ANCHOR BOLTS AND ANCHORS:

- Provide Special Inspection for wedge anchors, undercut anchors, adhesive anchors, epoxy anchors, and all other anchoring systems installed in hardened concrete as required by that product's ICBO Evaluation Report, or equivalent.
- 2. Site Inspection of Structural Anchor Bolts: Visually inspect all structural anchor bolts for grade, diameter, embedment, geometry, or type ("J" bolt or hex-head), quantity, and general location. Contractor shall assume all responsibility for detailed dimensions locating each individual bolt, each bolt group in total, and locations of bolts within each group (template).

H. GROUT:

- CEMENTITIOUS GROUT FOR STRUCTURAL BEARING: Visually inspect all column baseplates, and grouted zone between structural struts/beams and their supporting wall elements. Determine complete fill beneath baseplate by tapping with hammer and noting hollow reports. Verify grout conforms to specification by observing empty bags, which Contractor shall leave visible adjacent to area used until inspection complete.
- 2. EPOXY GROUT FOR EQUIPMENT BASES: Provide inspection conforming to applicable specification Sections and their reference standards, details on the Drawings, and the requirements of the epoxy grout manufacturer.

I. STRUCTURAL STEEL:

- 1. SITE WELD INSPECTION FOR STRUCTURAL STEEL AND STEEL FABRICATIONS: Visually inspect 100 percent of structural welds. Inspect 25 percent of fillet welds greater than 5/16 inch, 100 percent of butt welds, moment connection welds, and complete penetration groove welds by ultra-sonic or magnetic particle inspection.
- 2. ACCEPTANCE CRITERIA: AWS D 1.1. Paragraph 8.15.1 for visual inspection and paragraphs 8.15.2.1 and 8.15.2.2 for ultra-sonic or magnetic particle inspection.
- 3. FIELD INSPECTION OF HIGH-STRENGTH BOLTED CONNECTIONS: Inspect 100 percent of high-strength bolted connections according to AISC "Specification for Structural Joints Using ASTM A325 or A490 Bolts." All such bolts shall be fully tensioned unless otherwise noted on the drawings.
- 4. BEND TESTS: Perform bend test on 10 percent of welded shear connectors. Modify test method and frequency if alternate (non-welded) shear connectors utilized by Contractor.

J. MISCELLANEOUS METALWORK AND GUARDRAILING:

- 1. MISCELLANEOUS METALWORK: Provide field inspections and testing if requested by Construction Manager for the work specified in Section 05 50 00. Sampling and testing shall conform to the applicable Reference Standard or Code listed in that section.
- GUARDRAILING: Provide field inspections and testing if requested by Construction Manager for the work specified in Section 05 52 00.
 Sampling and testing shall conform to the applicable Reference Standard or Code listed in that section.

K. COATING SYSTEMS:

1. COATING SYSTEMS: Provide inspection as requested by Construction Manager, and additional inspections as requested by Contractor.

3.02 EVALUATION AND CORRECTION

A. EVALUATION:

Satisfactory completion of work will be judged on results of laboratory, shop, and site tests and inspections.

B. CORRECTIONS:

If results of tests and inspections indicate work is below requirements of Contract Documents, that portion of work is defective and shall be repaired or replaced by the Contractor at no additional expense to the Owner by methods specified in each material or system's Section. Corrective action shall continue until such work meets the requirements of the Contract Documents.

3.03 SCHEDULE OF INSPECTIONS AND TESTS

Form A below shall be used to coordinate sampling and testing provided by Testing Laboratory, Construction Manager, Contractor, and other parties, if any. Testing Laboratory shall fill out Form A with anticipated inspections, sampling, and testing, submit for review by Construction Manager and for information to Contractor, and revise as directed. After receipt of Testing Laboratory's Form A submittal, Contractor shall submit Form A to identify sampling and testing requested for submittal preparation, and with an allowance for additional inspections. Such allowance shall not be less than five percent (5 percent) of the anticipated Field Quality Control budget for the Testing Laboratory, but shall not contractually commit Contractor to such expenditure, unless additional inspections requested and then only to their extent.

Form A: Anticipated sampling, testing, and inspections by Testing Laboratory and Contractor. Prepared by ____ Testing Laboratory ___ Contractor (check one). Electronic version available upon request. Expand each cell as necessary to provide a complete scope description.

Specification Section	Source Quality Control	Field Quality Control
31 20 00 Earthwork		
32 00 00 Paving		
03 20 00 Concrete Reinforcement		
03 30 00 Cast-in-Place Concrete		
03 15 19 Anchor Bolts		
05 50 00 Miscellaneous Metalwork		
05 52 00 Guardrailing		
09 90 00 Coating Systems		

3.04 FINAL LABORATORY REPORT:

A final report, prepared by the testing laboratory, shall be provided at the completion of all concreting. This report shall summarize the findings concerning concrete used in the project and provide totals of concrete used by class and structure. Final quality control charts for compressive strength tests for classes of concrete specified in each major structure shall be included. The report shall also include the concrete batch plant's coefficient of variation and standard deviation results for each class of concrete as determined in accordance with ACI 214.

SECTION 01 55 26

TEMPORARY TRAFFIC CONTROL

PART 1--GENERAL

1.01 DESCRIPTION

Work covered in this section consists of all labor, materials, and equipment required to provide adequate traffic control and regulation through construction areas and street affected by the work.

1.02 QUALITY ASSURANCE

A. QUALIFICATIONS OF WORKERS:

Provide Sufficient Skilled workers and supervisors who shall be present at all times during execution of this portion of the work and shall be thoroughly familiar with traffic regulations, permits, etc., and the materials and techniques specified.

B. CODES AND STANDARDS:

- 1. Where reference is made to the State Standard Specifications, reference shall mean State of California, Department of Transportation, Standard Specifications, latest edition.
- 2. Lights, flags, and other warning and safety devices for street and highway work shall conform to the requirements set forth in the current "Manual of Traffic Controls for Construction and Maintenance Work Zones," issued by the California State Department of Transportation.

1.03 TRAFFIC CONTROL PLAN AND PERMITS

The Contractor shall submit a complete traffic control plan indicating how construction will be sequenced and traffic will be handled during construction. The Construction Manager will review this plan for conformance to the Specifications and to ensure adequate thought has gone into the handling of traffic. The plan shall clearly identify work which will interfere with traffic on public roadways, and the estimated duration of work. This plan shall be in conformance with the Contractor's schedule.

Contractor shall obtain encroachment permits at his own expense for any work or traffic control to be performed in public roads. **Permit is not required when road is owned and controlled by this project's Owner.**

1.04 PRODUCT HANDLING

No material or equipment shall be stored where it will interfere with the free and safe passage of public traffic. At the end of each day's work and at other times when construction operations are suspended for any reason, Contractor shall remove all equipment and other obstructions from that portion of the roadway open for use by the public traffic.

PART 2--PRODUCTS

2.01 EQUIPMENT

Contractor shall furnish, erect, and maintain, at his or her expense and without cost to the Owner, such fences, barricades, lights and signs, and other devices as are necessary to prevent accidents or damage or injury to the public. Contractor shall also furnish such flagpersons and guards as are necessary to give adequate warning to traffic of any dangerous condition to be encountered. Equipment shall be furnished and kept clean and in good repair by the Contractor at his own expense.

PART 3--EXECUTION

3.01 TRAFFIC CONTROL

A. MAINTAINING TRAFFIC:

Contractor shall expedite the passage of public traffic through and around the work. The Contractor shall furnish and install signs, detours, lights, flares, barricades, and shall furnish flag persons and other facilities for the convenience and direction of public traffic. The cost of maintaining traffic, including conforming with the requirements stated herein, furnishing such signs, detours, lights, flares, barricades, flag persons and other facilities shall be considered as part of the contract price and no extra payment will be made therefore.

B. PUBLIC CONVENIENCE:

- 1. Contractor's operation shall be conducted so that they offer the least possible obstruction and inconvenience to the public. Contractor shall have under construction no greater amount of work than can be executed properly with due respect to the rights of the public. Contractor shall provide personal advance notice to each affected resident informing them of impending work and provide ample time to remove vehicles and estimated time of driveway closure.
- 2. Spillage resulting from hauling or ditching operations along or across any public traveled way shall be removed daily.
- Construction operation shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners and tenants.
 Convenient access to driveways, houses, and buildings along the line of the work shall be maintained and temporary approaches to crossing or intersecting streets shall be provided and kept in good condition.

C. PUBLIC SAFETY:

 Whenever the Contractor's operations create a condition hazardous to the public, Contractor shall furnish, erect, and maintain such fences, barricades, lights, signs, and other devices as are necessary to prevent accidents or damage or injury to the public. 2. Should the Contractor appear to be neglectful or negligent in furnishing warning and protective measures as above specified, the Construction Manager may direct attention to the existence of hazard, and the necessary warning and protective measures shall be furnished and installed by the Contractor at Contractor's expense, without cost to the Owner. Should the Construction Manager point out any inadequacy or warning and protective measures, such action on the part of the Construction Manager shall not relieve the Contractor from responsibility for public safety or abrogate Contractor's obligation to furnish and pay for these devices.

D. DETOURS:

Comply with conditions issued with the Encroachment Permit.

Full block closures will be allowed as long as there are adequate detour routes and signage placed to direct through traffic. Dates of closures must be presented to the City at least 72 hours in advance for the issuance of a public service announcement. It is the responsibility of the Contractor to inform households of traffic restrictions and days and times of closures.

E. TRAFFIC CONTROL PLAN SUBMITTAL:

The Contractor shall submit a traffic control plan indicating the preferred method of construction and traffic control plan which complies with these Specifications. Before closing any street to through traffic, the Contractor shall obtain prior approval from the Construction Manager 14 days in advance of closure. Street closures and detours shall allow for access to public facilities and shall allow for passage of emergency vehicles.

F. NOTICES:

Contractor shall expedite the passage of public traffic through and around the work. The Contractor shall furnish and install signs, detours, lights, flares, barricades, and shall furnish flag persons and other facilities for the convenience and direction of public traffic. The costs of maintaining traffic, including conforming with the requirements stated herein; public notification; and furnishing such signs, detours, lights, flares, barricades, flag persons and other facilities shall be considered in the total bid.

SECTION 01 57 23

WATER POLLUTION PREVENTION

PART 1 – GENERAL

The work to be done under this section includes the furnishing of all labor, materials, equipment, tools and incidentals as required to prevent the pollution of surface or groundwater from the effects of construction of the Project. Contractor shall comply with the Construction General Permit Order 2009-0009-DWQ.

PART 2 - PRODUCTS

The Water Pollution Control Program (WPCP) manual is attached to this RFQ. All work shall conform to the provisions in the WPCP.

PART 3 – EXECUTION

The Contractor will provide all labor, materials, tools, equipment, and necessary incidentals to implement the WPCP as otherwise necessary to prevent surface water or groundwater pollution from the effects of the Project construction. Contractor shall have a qualified WPCP Practitioner overseeing the implementation of the WPCP in accordance with the statewide general permit.

Contractor shall upload all required reports, submittals, another required documentation in accordance with the statewide general permit to the SMARTS system. City will certify reports as required.

SECTION 01 74 23

FINAL CLEANING

1.0 GENERAL

- A. At the completion of work and immediately prior to final inspection, cleaning of the entire project shall be accomplished according to the following provisions:
 - 1. The Contractor shall thoroughly clean, sweep, wash, and polish all work and equipment provided under the contract, including finishes. The cleaning shall leave the structures and site in a complete and finished condition to the satisfaction of the Construction Manager.
 - 2. All subcontractors shall similarly perform, at the same time, an equivalent thorough cleaning of all work and equipment provided under their contracts.
 - 3. The Contractor shall remove all temporary structures and all debris, including all nails, dirt, sand, gravel, rubbish and waste material.
 - 4. Should the Contractor not remove rubbish or debris or not clean the facilities and site as specified, the Owner reserves the right to have the cleaning done at the expense of the Contractor.
 - 5. Only experienced workers, or professional cleaners, shall be employed for final cleaning.
 - 6. Only cleaning materials recommended by the manufacturer of surface to be cleaned shall be used.
 - 7. Cleaning materials shall be used only on surfaces recommended by the cleaning material manufacturers.
 - 8. In preparation for substantial completion or occupancy, a final inspection of sight-exposed surfaces, and of concealed spaces, shall be conducted.
 - 9. Grease, dust, dirt, stains, labels, fingerprints, and other foreign materials shall be removed from sight-exposed finished surfaces. Polish surfaces so designated to shine finish.
 - 10. Marred surfaces shall be repaired, patched, and touched up to specified finish, to match adjacent surfaces.
 - 11. Materials shall be handled in a controlled manner with as few handlings as possible. Do not drop or throw materials from heights.

2.0 OWNER OCCUPANCY

As a condition precedent to final acceptance or release of a portion of the facility for use by the Owner, the Contractor and all subcontractors shall thoroughly clean all surfaces to leave same in first-class condition.

3.0 POST-CONSTRUCTION REPAIRS

The Contractor shall make such minor repairs and alterations as may be necessary to make any structure or component ready for occupancy. This section shall not apply after or to the extent that the Owner has taken possession of a portion of the facilities on which the Contractor has performed work.

4.0 SITE CLEANUP

For all roadway work, the Contractor shall conform the work to acceptable line and grade, as determined by the Engineer. In addition, the Contractor shall have the sidewalks and streets affected by the work swept by a street or sidewalk cleaner as determined by the Construction Manager. Other surfaces of the grounds shall be rake cleaned. The Owner will not authorize final payment until the Contractor has removed all rubble and debris from the street and adjoining work areas, including all temporary storage and parking areas used by the Contractor.

For pipelines, storm sewers, catch basins and manholes, prior to their activation or at the conclusion of the project, the Contractor shall thoroughly clean all of the new pipes by flushing with water for fluid lines. Debris cleaned from the lines shall be removed from the lowest access point.

All temporary utility drops, fencing, and water supply outlets shall be removed.

All plant gate identification signs, barricades, tools, rubbish collection receptacles and other such items shall be removed by the Contractor.

SECTION 02 01 00

MAINTENANCE OF EXISTING CONDITIONS

PART 1 – GENERAL

1.01 DESCRIPTION

A. Related requirements specified elsewhere:

See Division 01 regarding general conditions specific to the Contract. See also Section 02 00 00 regarding site conditions.

See Plans for the locations of utilities.

1.02 CALIFORNIA ADMINISTRATIVE CODE

- A. Section 1540(a)1 of Construction Safety Orders (Title 8) California Administrative Code, Section 1540 states:
 - 1. "Prior to opening an excavation, effort shall be made to determine whether underground installations; i.e., sewer, water, fuel, electric lines, etc., will be encountered and, if so, where such underground installations are located. When the excavation approaches the approximate location of such an installation, the exact location shall be determined by careful probing or hand digging; and, when it is uncovered, adequate protection shall be provided for the existing installation. All known owners of underground facilities in the area concerned shall be advised of proposed work at least 48 hours prior to the start of actual excavation."
- B. In line with California's Administrative Code, Section 1540, Contractor shall make the effort to determine the exact location of underground installations.

PART 2 - PRODUCTION - OWNERS

2.01 UTILITIES AFFECTED

A. GENERAL:

Underground Service Alert (USA) North 811 shall be contacted at least 72 hours before any work commences. USA North 811 can be contacted at (800) 642-2444.

B. ELECTRICAL

In the project area, Pacific Power has control of overhead and underground power. Where overhead power service to a structure known to require electrical service does not exist, then underground power service shall be assumed to exist. Pacific Power can be contacted at (888) 221-7070.

C. WATER SERVICE

City of Crescent City Water/Sewer Department can be contacted at (707) 464-6517.

D. SEWER SERVICE

City of Crescent City Water/Sewer Department can be contacted at (707) 464-6517.

E. ROADS / STREETS / DRAINAGE

The City of Crescent City has jurisdiction over roads, streets, and drainage in the City. City Public Works can be contacted at (707) 464-9506.

F. TELEPHONE

Frontier Communications can be contacted at (541) 269-3375.

G. CABLE TELEVISION / INTERNET

Charter Communications (Spectrum) can be contacted at (866) 874-2389. (This is the public-facing customer service number).

PART 3 - EXECUTION

3.01 CONTRACTOR RESPONSIBILITY

- A. It may be expected that there will be some variation in location of existing utilities from that as shown on the Plans. Contractor is also hereby notified that there are likely additional irrigation lines in the project area that are not shown on the plans. Actual location can best be determined in the field after pre-marking by the various utilities affected. Contractor is required to contact Underground Services Alert (USA), also known as "USA North 811" before beginning any excavations.
- B. The Contractor shall be responsible for determining the location of existing service laterals, irrigation lines, or appurtenances whenever the presence of such utilities on the site of the construction can be inferred from the presence of other visible facilities, such as building, meter and junction boxes, located on or adjacent to the site.
- C. The Contractor shall promptly notify the Engineer in writing in the event that the Contractor discovers utility facilities not identified by the Engineer in the Contract Plans or Specifications.

D. It should be understood that the various utilities are indicated on the Plans to show only the approximate location and must be verified in the field by the Contractor. It may be expected that there will be variation in location from that as shown on the Plans to the actual location. Actual location can best be determined in the field after pre-marking by the various utilities affected. The various utilities will cooperate with the Contractor to endeavor to familiarize the Contractor with all known underground utilities, obstructions, but this will not relieve the Contractor from assuming full responsibility in anticipating and locating their actual location with respect to utilities which the Contractor must locate and identify under the provisions hereof.

SECTION 02 41 00

DEMOLITION

QUALITY CONTROL PART 1 - GENERAL

1.01 WORK INCLUDED:

- A. Removal and disposal of designated foundations, walls, concrete, utilities, mechanical, lighting, and other structures.
- B. Removal and disposal of all other materials needed to accomplish the project.

1.03 QUALITY ASSURANCE:

- A. Contractor Qualifications: Minimum of 5 years' experience in demolition of comparable structures.
- B. Requirements of Regulatory Agencies: 1. Comply with requirements of codes. 2. Comply with requirements of local Public Health Authority. 3. Comply with local utility companies and/or utility districts.

1.04 SUBMITTALS:

- A. Certificates of severance of utility services.
- B. Permit for transport and disposal of debris.
- C. Demolition procedures and operational sequence for review by Owner's Representative

1.05 JOB CONDITIONS:

A. Protection:

- 1. Erect barriers, fences, guard rails, enclosures, chutes, and shoring to protect structures, and utilities remaining intact.
- 2. Protect designated trees and plants from damage.
- 3. If required by governing authorities, provide alternate routes around closed or obstructed traffic ways.
- B. Maintaining Traffic:
- 1. Ensure minimum interference with roads, street, driveways, sidewalks, and adjacent facilities.
- 2. Do not close or obstruct streets, sidewalks, alleys or passageways without permission from authorities having jurisdiction.

PART 2 – PRODUCTS (Not Applicable)

PART 3 - EXECUTION

1.01 PREPARATION:

- A. Prepare adjacent areas to prevent injury, movement, or settlement of structures which are to remain.
- B. Arrange for and verify termination of utility services to include removing meters and capping lines.

- C. Examine the areas and conditions under which the work of this Section will be performed. Correct conditions detrimental to timely and proper completion of the work. Do not proceed until unsatisfactory conditions are corrected.
- D. Remove items scheduled to be salvaged for Owner, and place in designated storage area.

3.02 DEMOLITION:

- A. Remove designated foundations, walls, concrete, utilities, mechanical, lighting, and other structures and dispose of in accordance with rules and regulations. Stockpile ballast, gravel, and other pavement materials when required.
- B. Coordinate removal and relocation of power poles, street lighting, telephone lines and site lighting, with the local electric utility and the Owner.
- C. Remove existing water services, sanitary sewer, storm drainage pipe, and structures as indicated and as necessary to facilitate new construction.
- D. Remove old foundations, cisterns, etc., which may be encountered within the construction area. Storm drains to be abandoned shall have each open end filled with concrete that is vibrated into place until no more concrete will flow into pipe end. A plywood form shall be constructed so that a minimum of 3-ft of head can be placed on the pipe end. Other openings in storm drains to be abandoned shall be filled in a similar fashion. City may camera lines to determine other locations to be filled.

3.03 SELECTIVE STRUCTURAL DEMOLITION

A. General:

- 1. Prior to the start of demolition, carefully study the drawings and these Specifications.
- 2. In company with the Owner or the Owner's representative, visit the site and verify the extent of demolition to be performed under this contract.
- B. Observe all safety and health precautions as required for removal of hazardous materials when hazardous materials are identified as part of the demolition activity. Refer to specific work requirements associated with hazardous material removal.
- C. Protect other components, materials, and landscaping in the vicinity of the demolition to prevent unintentional damage to components and materials that are not to be removed. Provide temporary support of structures that are to remain that are affected by the materials to be demolished and removed.
- D. Remove materials as designated on the drawings.
- E. Demolished materials that are not to be salvaged for reuse on this project shall be considered the property of the contractor and shall be completely removed from the jobsite and disposed of properly.
- F. The contractor shall be responsible for repair of all components, materials, and landscaping damaged as part of the demolition process at no additional cost to the Owner.
- G. Existing light pole foundations may be either entirely removed or chipped off at 36-inches below finished grade.

3.04 DEBRIS REMOVAL:

- A. Promptly remove demolition debris from site.
- B. Obtain permission from applicable regulatory authority for disposal of debris to waste disposal site.
- C. Do not store or burn materials on site.

SECTION 32 00 00 EXTERIOR IMPROVEMENTS

PART 1 – GENERAL

1.01 DESCRIPTION

This section specifies new and replacement paving consisting of aggregate base course, hot mixed asphalt, and associated materials, gravel roadways consisting of aggregate base course and aggregate top course, and concrete walkways. Other sections in Division 32 may further refine the specifications in this section.

1.02 QUALITY ASSURANCE

A. REFERENCES:

This section contains references to the following documents. They are a part of this section as specified and modified. Where a referenced document contains references to other standards, those documents are included as references under this section as if referenced directly. In the event of conflict between the requirements of this section and those of the listed documents, the requirements of this section shall prevail.

Unless otherwise specified, references to documents shall mean the documents in effect at the time of Advertisement for Bids or Invitation to Bid (or on the effective date of the Agreement if there were no Bids). If referenced documents have been discontinued by the issuing organization, references to those documents shall mean the replacement documents issued or otherwise identified by that organization or, if there are no replacement documents, the last version of the document before it was discontinued. Where document dates are given in the following listing, references to those documents shall mean the specific document version associated with that date, regardless of whether the document has been superseded by a version with a later date, discontinued or replaced.

Reference	Title
ASTM	Test Methods for Moisture-Density Relations of
D1557-78	Soils and Soil-Aggregate Mixtures Using 10-lb.
	(4.5-kg) Rammer and 18-in. (457-mm) Drop
ASTM D2922	Test Method for Density of Soil in Place by the
	Nuclear Methods
ASTM D994	Preformed Expansion Joint Filler for Concrete
	(Bituminous Type)
CTM 216	Method of Test for Relative Compaction of
	Untreated and Treated Soils and Aggregates

CTM 231	Method of Test for Relative Compaction of
	Untreated and Treated Soils and Aggregates
	Using Nuclear Gage
Caltrans 2018	
Standard	State of California, Department of Transportation,
Specifications	Standard Specifications, latest edition (2018)

B. TESTING:

Testing will be conducted by an independent laboratory acceptable to the Engineer and paid for by the Contractor to determine compliance with the specified degree of compaction and moisture content prior to placement of aggregate base course.

- 1.03 The following Submittals are required in accordance with Specification 01 33 00:
 - 1. Mix
 - 2. Gradation of road used
 - 3. Method of placement

PART 2 - PRODUCTS

2.01 MATERIALS

A. AGGREGATE BASE:

Aggregate base course for pavement shall be Class 2, ¾-inch maximum grading conforming to Section 26 of the Caltrans 2018 Standard Specification.

B. LIQUID ASPHALT:

Liquid asphalt for tack coats and treatment of aggregate base shall be Grade MC 250 and shall comply with Section 92 of the Caltrans 2018 Standard Specifications.

C. HOT MIX ASPHALT:

Hot Mix Asphalt shall be Type A and shall conform to Section 39, "Hot Mix Asphalt," of the Caltrans 2018 Standard Specifications.

The aggregate for Type "A" Hot Mix Asphalt shall conform to gradation table for 3/4-in HMA Type A and B, as specified in Section 39-2.02A(4)(b)(ii), "Aggregates," of the Caltrans 2018 Standard Specifications.

D. CONCRETE AND REINFORCING STEEL:

Concrete and reinforcing steel for concrete curbs and sidewalks shall be as specified in Section 73, "Concrete Curbs and Sidewalks," of the Caltrans 2018 Standard Specifications.

E. EXPANSION JOINT FILLER:

Expansion joint filler shall be pre-molded, composed of asphalt fiber and mineral filler with asphalt impregnated liners on both sides, and shall conform to ASTM D994.

PART 3 - EXECUTION

3.01 GENERAL

Construction shall conform to the details, dimensions, and grades specified. Maximum variations in finished grade of paving shall be plus or minus 0.05 feet.

3.02 AGGREGATE BASE PLACEMENT

A. SUBGRADE:

The subgrades of areas to be paved or graveled shall be graded and compacted in accordance with paragraph 31 20 00 Paragraph 3.05.

B. AGGREGATE BASE:

Placing of aggregate base shall comply with Section 26 of the Caltrans 2018 Standard Specifications. Relative compaction shall be a minimum of 95 percent as determined using methods set forth in CTM 216 and CTM 231.

3.03 HOT MIX ASPHALT PAVEMENT

Placement of hot mix asphalt pavement shall comply with Section 39 of the Caltrans 2018 Standard Specifications.

3.04 CONCRETE CURBS AND SIDEWALKS

A. GENERAL:

Concrete work shall be performed in accordance with Section 73, "Concrete Curbs and Sidewalks," of the Caltrans 2018 Standard Specifications.

B. EXPANSION JOINT INSTALLATION:

Unless otherwise specified, expansion joints shall be provided in concrete work at intervals not to exceed 20 feet and against structures abutting sidewalks.

3.05 ADJUST

Adjust frames, covers, gratings, and manholes conforming to Section 71-5 ADJUST DRAINAGE STRUCTURES of the Caltrans Standard Specifications and the details shown on the plans.

SECTION 32 11 00

BASE COURSES

PART 1 - GENERAL

1.01 SUMMARY

- A. The work encompassed by this section shall consist of performing all operations and furnishing all labor, material, tools, equipment, and incidentals as necessary to:
 - Place and compact base courses for concrete paving, asphalt paving, sidewalks, and curbs;
 - 2. Place and compact rock courses and sand beds under slabs on grade.
- B. Volume 1 Contracting Requirements, and Division 01 General Requirements apply to the Work of this Section.

1.02 REFERENCES

- A. Section 26 of the Caltrans Standard Specifications.
- B. Geotechnical Investigation: Project Geotechnical Investigation.
- C. American Society of Testing and Materials:
 - 1. ASTM C136, Standard Test Method for Sieve Analysis of Fine and Coarse Aggregates.
 - 2. ASTM D1557, Test Method for Laboratory Compaction Characteristics of Soil Using Modified Effort.

1.03 SUBMITTALS

- A. Submit under provisions of Section 01 33 00 Submittal Procedures.
 - 1. Material test data for aggregate base, rock course, and sand.

1.04 QUALITY ASSURANCE

- A. Obtain materials from same source throughout.
- B. Perform Sieve Analysis test in accordance with ASTM C 117 and ASTM C 136.
- C. Determine Liquid Limit and Plasticity Index in accordance with ASTM D 4318.

- D. Moisture Density and optimum moisture content in accordance with ASTM D 1557.
- E. ASTM D 6938, nuclear gage, may be used.

1.05 ENVIRONMENTAL REQUIREMENTS

A. When unfavorable weather conditions necessitate interrupting placement operations, prepare areas by compaction of surface and grading to avoid collection of water. Provide adequate temporary drainage to prevent erosion. After interruption, re-establish compaction specified in last layer before resuming work.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Class 2 Aggregate Base: Aggregate for Class 2 aggregate base shall be free from organic matter and other deleterious substances, and shall be of such nature that it can be compacted readily under watering and rolling to form a firm, stable base. Aggregate must consist of any combination of broken stone, crushed gravel, natural rough surfaced gravel, sand, and up to 100% of any combination of processed asphalt concrete, Portland cement concrete, lean concrete base, cement treated base.
- B. Aggregate base shall conform to the grading and quality requirements shown in the following tables. Either the 1-1/2 inch maximum or 3/4 inch maximum shall be used; except that once a grading is selected the grading shall not be changed.
 - 1. Aggregate Grading Requirements:

Sieve Sizes		Percentage Passing			
	1-1/2" N	1-1/2" Maximum		aximum	
	Range	Compliance	Range	Compliance	
2"	100	100			
1-1/2"	90-100	87-100			
1"			100	100	
3/4"	50-85	45-90	90-100	87-100	
No. 4	25-45	20-50	35-60	30-65	
No. 30	10-25	6-29	10-30	5-35	
No. 200	2-9	0-12	2-9	0-12	

2. Quality Requirements:

Tests	Operating Range	Contract Compliance
Resistance (R-Value)		78 min
Sand Equivalent	25 min	22 min
Durability Index		35 min

- C. The aggregate shall not be treated with lime, cement or other chemical material before the Durability Index test is performed. Untreated reclaimed asphalt concrete and Portland cement concrete will not be considered to be treated with lime, cement or other chemical material for purposes of performing the Durability Index test.
- D. Rock Course under Building Slab:
 - 1. Clean mineral aggregate (broken stone, crushed gravel, clean quarry waste, or combination thereof).
 - 2. Free of adobe, organic matter, loam, volcanic tuff, or other deleterious material.
 - 3. Absorption of water in saturated surface dry condition shall not exceed 3% of oven dry weight of sample.
 - 4. Graded (Laboratory sieves, U.S. Series) to following: 100% passing 1inch sieve and 0 to 10% passing No. 4 sieve.
 - 5. Class 2 aggregate base is acceptable, however reclaimed aggregate shall not be used.
- E. Sand: Clean dry concrete sand of no special grading or compaction.

PART 3 - EXECUTION

3.01 EXAMINATION

A. Prior to placing Aggregate Base on subgrade for drives and parking lots, the stability of the subgrade shall be checked by proof rolling with a roller or laded water truck. Areas which are not stable shall be allowed to air dry until stable or shall be over excavated and backfilled with Aggregate Sub-base.

3.02 AGGREGATE BASE

- A. All work shall be performed in compliance with Section 26 of the 2018 Caltrans California Department of Transportation Standard Specifications.
- B. The subgrade to receive aggregate base, immediately prior to spreading shall conform to the compaction and elevation tolerance specified for the material involved and shall be free of loose or extraneous material.

- C. At the time aggregate base is spread it shall have a moisture content sufficient to obtain the required compaction. The moisture shall be uniformly distributed throughout the material.
- D. The aggregate base shall be spread and compacted as specified herein.
- E. Compact upper 12 inches of subgrade to 95% relative compaction, moisture conditioned to at least optimum. Compact base course to a minimum of 95% compaction with densities in accordance with ASTM D1557. Compacted layers shall be no greater than 6 inches per lift nor less than 3 inches per lift.
- F. Measure thickness of base course material once per every 2,000 square feet. All measurements shall be within 1/2 inch of the specified thickness; where measurements exceed ½ inch of specified thickness the section shall be considered as conforming.

SECTION 32 12 00

FLEXIBLE PAVING

PART 1 - GENERAL

1.01 SUMMARY

- A. The work encompassed by this section shall consist of performing all operations and furnishing all labor, material, tools, equipment, and incidentals as necessary to place asphalt concrete paving including prime coat, tack coat, and seal coat.
- B. Volume 1 Contracting Requirements, and Division 01 General Requirements apply to the Work of this Section.

1.02 REFERENCES

- A. Section 37 and 39 of the Caltrans 2018 Standard Specifications.
- B. Section 92, 93 and 94 of the Caltrans 2018 Standard Specifications.
- C. California Department of Transportation:
 - 1. CTM 304, Preparation of Bituminous Mixtures for Testing.
 - 2. CTM 308, Method of Test for Determining Bulk Specific Gravity and Density of Compacted Hot Mix Asphalt.
 - 3. CTM 375, Determining the In-Place Density and Relative Compaction of Hot Mix Asphalt Paving Using Nuclear Gages
- D. American Society of Testing and Materials:
 - 1. ASTM D946, Penetration Graded Asphalt Cement for use in Pavement Construction.
 - 2. ASTM D2950, Test Method for Density of Bituminous Concrete in Place by Nuclear Methods.
 - 3. ASTM D2041, Standard Test Method for Theoretical Maximum Specific Gravity and Density of Bituminous Paving Mixtures.

1.03 ACTION SUBMITTALS

- A. Submit under provisions of Section 01 33 00 Submittal Procedures.
- B. Mix design for each class of mix.

C. Samples for Verification

- 1. For the following product, in manufacturer's standard sizes unless otherwise indicated:
 - a. Paving Geotextile: 12 by 12 inches minimum

D. Qualification Data:

1. For paving-mix manufacturer and testing agency.

E. Material Certificates:

- 1. Include statement that mixes containing recycled materials will perform equal to mixes produced from all new materials.
 - a. Aggregates.
 - b. Asphalt binder.
 - c. Asphalt cement.
 - d. Cutback prime coat.
 - e. Emulsified asphalt prime coat.
 - f. Tack coat.
 - g. Fog seal.
 - h. Undersealing asphalt.
 - i. Field quality-control reports.

1.04 QUALITY ASSURANCE

- A. Perform work in accordance with the Caltrans 2018 Standard Specifications.
- B. Mixing Plant: Conform to the requirements of the Caltrans 2018 Standard Specifications.
- C. Obtain materials from same source throughout.
- D. Manufacturer Qualifications:
 - 1. A paving-mix manufacturer registered with and approved by authorities having jurisdiction or the Washington State Department of Transportation.
- E. Testing Agency Qualifications:
 - 1. Qualified in accordance with ASTM D3666 for testing indicated.
- F. Regulatory Requirements:

1. Comply with materials, workmanship, and other applicable requirements of Washington State Department of Transportation for asphalt paving work.

1.05 FIELD CONDITIONS

A. Environmental Limitations:

- 1. Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:
 - a. Prime Coat: Minimum surface temperature of 60 deg F.
 - b. Tack Coat: Minimum surface temperature of 60 deg F.
 - c. Slurry Coat: Comply with weather limitations in ASTM D3910.
 - d. Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
 - e. Asphalt Wearing Course: Minimum surface temperature of 60 deg F at time of placement.

PART 2 - PRODUCTS

2.01 MATERIALS

- A. Asphalt Binder: The grade of the asphalt binder to be mixed with aggregate for asphalt concrete shall be Grade PG 64-16 conforming to the provisions in Section 92 of the Caltrans 2018 Standard Specifications. The minimum asphalt binder must be 6.0 percent for 1/2" gradation.
- B. Aggregate: Aggregate shall meet the full requirements of Section 39-2.02 of the Standard Specifications for Type B (1/2 inch maximum medium grading). The amount of asphalt binder to be mixed with aggregate shall be such that the air void content of the resulting asphalt concrete shall be not less than 4% +/- 2%. Stabilometer value as determined by CTM 304 shall be 35 at minimum.
- C. Sand: Acceptable to the Engineer shall meet the full requirements of Section 39 of the CalTrans 2018 Standard Specifications.
- D. Prime Coat: Primer shall be MC-70 or SC-70 grade liquid asphalt conforming to the provisions of Section 93 of the Caltrans 2018 Standard Specifications applied at a rate of 0.25 gallons per square yard.
- E. Tack Coat: Tack coat shall be RS-1 type asphalt emulsion conforming to the provisions of Section 94 of the Caltrans 2018 Standard Specifications.

2.02 ASPHALT MATERIALS

A. Asphalt cement:

1. Conform to requirements for asphalt cement, PG 58-22, AASHTO MP1.

B. Mineral aggregate:

- 1. Consist of aggregate of crushed stone or gravel composed of hard, durable particles, sand, and filler meeting the requirements of Standard Specifications (2023) of California DOT, Section 39.
- 2. Provide composite material that is uniformly graded from coarse to fine and that complies with requirements of Standard Specifications (2023) of California DOT, Section 39 for HMA.
- 3. HMA Tolerances and adjustments shall be per Standard Specifications (2023) of California DOT, Section 39 using commercial evaluation.
- C. Overlay paving fabric shall be Amoco Petromat or Geosynthetic Product Division Pave-Dry.

2.03 AUXILIARY MATERIALS

- A. Recycled Materials for Hot-Mix Asphalt Mixes: Reclaimed asphalt pavement; reclaimed, unbound-aggregate base material from sources and gradations that have performed satisfactorily in previous installations, equal to performance of required hot-mix asphalt paving produced from all new materials.
- B. Herbicide: Commercial chemical for weed control, registered by the EPA, and not classified as "restricted use" for locations and conditions of application. Provide in granular, liquid, or wettable powder form.

2.04 EQUIPMENT

A. Equipment used for mixing, transporting, and paving asphalt concrete shall conform with Standard Specifications (2023) of California DOT, Section 39..

2.05 MIXES

A. The Contractor shall develop and submit a mix design for asphalt paving per Standard Specifications (2023) of California DOT, Section 39.

B. Hot-Mix Asphalt:

1. Dense-graded, hot-laid, hot-mix asphalt plant mixes according to Washington State Department of Transportation's, "Standard Specifications"; and complying with the following requirements:

a. Provide mixes with a history of satisfactory performance in geographical area where Project is located.

PART 3 - EXECUTION

3.01 EXAMINATION

- A. Verify that compacted aggregate base is dry and ready to support paving and imposed loads.
- B. Verify gradients and elevations of base are correct.

C. Protection:

- 1. Provide protective materials, procedures, and worker training to prevent asphalt materials from spilling, coating, or building up on curbs, driveway aprons, manholes, and other surfaces adjacent to the Work.
- D. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.
 - 1. Completely proof-roll subgrade in one direction, Limit vehicle speed to 3 mph.
 - 2. Proof-roll with a loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons.
 - 3. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by Owner's Representative, and replace with compacted backfill or fill as directed.

3.02 SURFACE PREPARATION

- A. Ensure that prepared subgrade has been proof-rolled and is ready to receive paving. Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces.
- B. Herbicide Treatment: Apply herbicide in accordance with manufacturer's recommended rates and written application instructions. Apply to dry, prepared subgrade or surface of compacted-aggregate base before applying paving materials.

C. Prime Coat:

- 1. Where portions of base course prepared for immediate treatment are excessively dry, sprinkle such portions lightly with water immediately in advance of prime coat application.
- 2. Immediately following preparation of base course, apply bituminous material by means of bituminous distributor at the temperature previously specified.

- 3. Apply priming material in manner that results in uniform distribution being obtained at all points of surface to be primed.
- 4. Following the application of prime material, allow the surface to dry for a period of not less than 48 hours without being disturbed, or for such additional period of time as may be necessary to obtain penetration into the base course and drying out or evaporation of the volatiles from prime material.
- 5. Spread sufficient sand on areas that show an excess of bituminous material to effectively blot up and cure the excess.

D. Base Courses:

- 1. Thoroughly clean base and apply prime coat before placing asphalt concrete.
- 2. Thoroughly clean any existing base, surfacing, or pavement prior to placing plant-mixed surfacing.
- 3. Where existing pavement is being widened or extended cut to straight vertical face and treat with asphalt paint binder prior to paving operations.
- 4. When asphalt concrete is to be applied over existing pavement and local irregularities in existing surface would result in course of more than specified thickness, bring surface of existing pavement to uniform contour by patching with asphalt concrete thoroughly tamped or rolled until it conforms with surrounding surface, and then apply tack coat.
- The Contractor shall shape and compact all material to a firm, even and unyielding surface conforming to these Specifications. Where truck or other traffic has degraded existing base material, the Contractor shall remove and replace at no additional cost to the Owner.

3.03 SPREADING and COMPACTING EQUIPMENT

- A. Spreading and Compacting Equipment shall conform to Section 39 of the Caltrans 2018 Standard Specifications.
- B. Furnish a minimum of one steel tired roller weighing not less than 12 tons, and one vibratory steel tired roller weighing not less than 8 tons. Vibratory rollers shall be double steel drum, have adjustable frequency and amplitude settings directly available to the operator during operation. Each roller shall have a separate operator.

3.04 PREPARATION: PRIMER

- A. Apply primer in accordance with the Caltrans 2018 Standard Specifications.
- B. Use clean sand to blot excess primer.

3.05 PREPARATION – TACK COAT

- A. Apply tack coat in accordance with the Caltrans 2018 Standard Specifications.
- B. Apply tack coat to vertical contact surfaces of curbs and gutters.
- C. Coat manhole and catch basin frame surfaces.

3.06 PLACING ASPHALT PAVEMENT

- A. Install work in accordance with the Section 39 of the Caltrans 2018 Standard Specifications.
- B. Place asphalt within 24 hours of applying primer or tack coat.
- C. Place to compacted thickness per Section 39-6.01 of the Caltrans 2018 Standard Specifications.
- D. Install gutter drainage grilles and frames, manhole frames, etc., in correct position and elevation.
- E. Compact pavement in accordance to Section 39-6.03 of the Caltrans 2018 Standard Specifications. Do not displace or extrude pavement from position. Hand compact any areas inaccessible to rolling equipment.
- F. Perform rolling with consecutive passes to achieve even and smooth finish without roller marks.
- G. Spread all mixtures at a temperature of not less than 260 degrees F, and not greater than 300 degrees F. Perform initial rolling immediately after placement. No asphalt concrete is to be placed when the atmospheric temperature is below 50 degrees F.
- H. Compact asphalt concrete to a minimum relative density of 95% of the maximum theoretical density (CTM 308 prior to mat cooling below 250 degrees F).

3.07 JOINTS

- A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.
 - 1. Clean contact surfaces and apply tack coat to joints.
 - 2. Offset longitudinal joints, in successive courses, a minimum of 6 inches.
 - 3. Offset transverse joints, in successive courses, a minimum of 24 inches.
 - 4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time.

- 5. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
- 6. Compact asphalt at joints to a density within 2 percent of specified course density.

3.08 COMPACTION

A. General:

- 1. Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.
 - a. Complete compaction before mix temperature cools to 185 deg F.
- B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.
- C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:
- D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.
- E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.
- F. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
- G. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
- H. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

3.09 TOLERANCES

- A. Flatness: The finish surface shall be uniform to a degree such that no depressions greater than 0.02 feet are present when tested with a straightedge 12 feet long.
- B. Scheduled Compacted Thickness: Within 0.01 feet.
- C. Variation from True Elevation: Within 0.02 feet.

D. Density shall be tested in conformance with CTM 375 and shall average 95% of the laboratory compacted unit weight (CTM 304).

3.10 FIELD QUALITY CONTROL

A. Testing:

- 1. Testing and Sampling shall conform with Standard Specifications (2023) of California DOT. Section 39.
- B. Provide sampling and control testing for the asphalt concrete.
 - 1. The type and size of the samples:
 - a. Suitable to determine conformance with stability, density, thickness, compaction, and other specified requirements.
 - b. Use an approved power saw or core drill for cutting samples.
 - c. Furnish all tools, labor, and materials for cutting samples, testing, and replacing the pavement where samples were removed.
 - d. Take a minimum of 1 sample per 200 tons of asphalt concrete placed.

C. Surface Smoothness:

- 1. Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.
- D. Replace and compact hot-mix asphalt where core tests were taken.
- E. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

SECTION 32 17 00 PAVING SPECIALTIES

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes:
 - 1. Traffic Stripes and Pavement markings.
 - 2. Detectable warning surface.

1.2 SUBMITTALS

- A. Product Data: Manufacturer's printed product data for each product specified.
- B. Detectible Warning Surface Warranty per Caltrans 2018 Standard Specifications Section 73-3.01C.

1.3 QUALITY ASSURANCE

A. Americans with Disabilities Act (ADA): Title III Regulations, 28 CFR Part 36 ADA Standards For Accessible Design, Appendix A, Section 4.29.2 Detectable Warnings On Walking Surfaces, supplemented by Caltrans Standard Plans and Specifications.

1.4 CALTRANS REFERENCE SPECIFICATIONS

- A. Section 84 Markings.
- B. Section 73 Concrete Curbs and Sidewalks.

PART 2 - PRODUCTS

2.1 PAVEMENT MARKING

- A. Products for Traffic Stripes and Pavement Markings to comply with Caltrans 2018 Standard Specifications Section 84-2.02 Materials.
 - 1. Thermoplastic Traffic Stripes and Pavement Markings: Thermoplastic traffic stripes and pavement markings shall conform to the provisions of Section 84-2, "Thermoplastic Traffic Stripes and Pavement Markings," of the Caltrans Standard Specifications.
 - 2. Thermoplastic Material: Thermoplastic material shall conform to either Caltrans Standard Specification PTH-02ALKYD, PTH-02SPRAY or PTH-02HYDRO. Glass beads to be applied to the surface of molten thermoplastic material shall conform to the requirements of State Specification 8010-004.

2.2 DETECTABLE WARNING SURFACE

A. Refer to Caltrans 2018 Standard Specifications Section 73-1.02B.

PART 3 - PART 3 - EXECUTION

3.1 PAVEMENT MARKING

A. Conform to Construction Requirements in Caltrans 2018 Standard Specifications Sections 84 and 73.