# PROJECT MANUAL FOR LONG VALLEY STREETS PROJECT Project No. 9116 State Project No. RPSTPL-5947(063)

## MONO COUNTY, CALIFORNIA



Invitation for Bids Instructions to Bidders Proposal Forms Sample Standard Agreement Technical Specifications & Quality Assurance Program Project Plans

> CONTRACTING AGENCY: COUNTY OF MONO

Department of Public Works Post Office Box 457 74 North School Street Bridgeport, California 93517 760.932.5440

## April 2021

OPTIONAL PRE-BID CONFERENCE: 11:00 am, Wednesday July 28, 2021 Public Works Conference Room 74 North School Street Bridgeport, California 93517

**BID SUBMITTAL DEADLINE:** 

**3:00 pm, Wednesday August 4, 2021** Clerk of the Board of Supervisors 74 North School Street / P.O. Box 237 Bridgeport, California 93517

# **CERTIFICATION PAGE**

County of Mono, Department of Public Works

### Long Valley Streets Project Project No. 9116

These contract documents, plans, specifications and special provisions contained herein have been prepared by, or under the direction of, the following registered civil engineer:

**APPROVED BY:** 



06/18/2021 Date

Paul Roten C56891 County Engineer County of Mono Department of Public Works 74 North School Street Bridgeport, California 93517

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# **SECTION I**



# **INVITATION FOR BIDS**

**Long Valley Streets Project** 

Project No. 9116

#### COUNTY OF MONO DEPARTMENT OF PUBLIC WORKS

# **INVITATION FOR BIDS**

LONG VALLEY STREETS PROJECT Project No. 9116

Notice is hereby given that the Mono County ("County") Department of Public Works calls for bids from qualified General Engineering and Asphalt Paving contractors for the LONG VALLEY STREETS PROJECT ("Project"). The project is state-only funded under the State Transportation Improvement Program (STIP). The purpose of this Project is to rehabilitate approximately 5 miles of county roads within the communities Long Valley, Crowley Lake, Sunny Slopes, and Swall Meadows. Road rehabilitation will include full depth reclamation on Substation Road, Wildrose Drive, Sierra Springs Road, Pearson Road, Elderberry Circle, and Crowley Lake Circle. A combination of mill and/or conform grind with a hot mix asphalt overlay will be applied on Hilton Creek Drive, Hilton Creek Place, Aspen Terrace, Delta Drive, Lake Manor Place, Meadow View Drive, Sunny Slopes Road, Montana / Wheeler View Road, Foothill Road, and the westerly portion of Mountain View Drive. Associated hot mix asphalt dikes, signs, paint striping, and paint markings are included in the project.

No contractor or subcontractor may be listed in a bid proposal or awarded a contract for this project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (unless one of the limited time extensions set forth in Labor Code section 1771.1 applies, in which case registration must be completed by the time of contract award). This Project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

The Project Manual and Project Plans provide, in detail, the requirements for the Project. The Project Manual, Project Plans, and related Project documents are available on the Mono County Bid Management System. To access the system, go to <a href="http://bids.monocounty.ca.gov/">http://bids.monocounty.ca.gov/</a> and click on "view details" to the right of the name of this Project in the RFP/RFQ/RFB Title list. This page shows the Project summary, status, bid due date, up-to-date plan-holders list, and supporting documents. If you would like to be added to the plan-holder list and receive email notices when addenda are posted, click "Click here to create a new user account." After registering your company, click "Add me to the Planholder List." You can ask questions about the project by clicking "Ask a question about this solicitation." If you would like assistance registering and using the Bid Management System, please contact us at 760.932.5440 or publicworks@mono.ca.gov.

Each bid shall be made on the proposal forms contained in the Project Manual and must be accompanied by bid security in the amount of not less than 10 percent (10%) of the total bid.

In accordance with Public Contract Code section 22038, the County has the option, after receiving and tabulating bids, to reject all bids and perform the work by force account if the Board of Supervisors determines, by a four-fifths vote, that the work can be performed more economically by its own employees.

The Project and all work (Bid Items A through D) must be completed within **65 working days** from the date of issuance of the Notice to Proceed.

An optional pre-bid conference conference will be held at the County's Public Works Conference Room,

Second Floor of Annex 1, 74 North School Street, Bridgeport, California 93517. Participants who wish to attend online remotely via the web may do so. Online web access to attend the meeting will posted on the Mono County Bid Management System prior to the scheduled date. Should Corona virus restrictions prohibit in person gatherings, the meeting will be held entirely online. The optional pre-bid conference is scheduled for **11:00 am Wednesday July 28, 2021.** Site visits to project locations will be scheduled in the afternoon by request. Should the Department of Public Works determine there is a need to reschedule the pre-bid conference based on severe weather and/or road conditions, or any other reason, all plan-holders will be notified in advance.

Bids may be mailed to the Clerk of the Board of Supervisors, P.O. Box 237, Bridgeport, California, 93517, or delivered to the office of the Clerk of the Board of Supervisors, 74 North School Street, Bridgeport, California. In either event, to be considered, bids must be **received** by the Clerk of the Board of Supervisors no later than **3:00 pm Wednesday August 4, 2021 ("Bid Submission Deadline").** 

As soon thereafter as is practicable, all bids received by the Clerk as of the Bid Submission Deadline will be taken to the Department of Public Works Conference Room, located on the second floor of Courthouse Annex 1, 74 North School Street, Bridgeport, California 93517, and there publicly opened, read aloud, and recorded. All interested parties are invited to attend. Advance notice will be posted on the Mono County Bid Management System for all interested parties to attend online via the web.

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Chad Senior Associate Engineer Mono County Department of Public Works

#### COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

# **INSTRUCTIONS TO BIDDERS**

LONG VALLEY STREETS PROJECT Project No. 9116

#### 1. <u>SECURING BID DOCUMENTS</u>

The Project Manual, which includes the Invitation for Bids, Instructions to Bidders, Proposal Forms, Sample Standard Agreement, Technical Specifications, Construction Quality Assurance Program, and Project Plans provide in detail the requirements for the Project. The Project Manual is available on the Mono County Bid Management System. To access the system go to <u>http://bids.monocounty.ca.gov/</u> and click on "view details" to the right of the name of the Project in the RFP/RFQ/RFB Title list. This page shows the Project summary, status, bid due date, up-to-date plan-holders list, and supporting documents. If you would like to be added to the plan-holder list and receive email notices when addenda are posted, click "Click here to create a new user account." After registering your company, click "Add me to the Planholder List." You can ask questions about the Project by clicking "Ask a question about this solicitation." If you would like assistance registering and using the Bid Management System, please contact us at 760.932.5440 or <u>publicworks@mono.ca.gov</u>.

### 2. <u>PRE-BID CONFERENCE</u>

An **optional** pre-bid conference will be held at the Public Works Conference Room, Second Floor of Annex 1, 74 North School Street, Bridgeport, California 93517 to review the project scope and requirements. Interested parties may attend the meeting online via Zoom. Information to join the meeting online will be posted on the County's Bid Management System prior to the scheduled conference. The conference is scheduled for **11:00 am, Wednesday, July 28, 2021**. If requested, a field visit can be scheduled for the afternoon to visit project locations. Should the Department of Public Works determine there is a need to reschedule the pre-bid conference or site visit for any reason, all plan-holders will be notified in advance.

## 3. INTERPRETATION OF PROJECT PLANS AND SPECIFICATIONS

- A. For information not provided in the Project Manual, bidders shall refer to the Standard Plans or Standard Specifications.
- B. Should bidders find discrepancies in, ambiguities, or omissions from, the Project Manual, or should there be any doubt as to their meaning, they shall at once notify the Director of the Department of Public Works and, should it be found necessary, a written addendum or bulletin of instructions will be sent to all plan-holders and posted on the Mono County Bid Management System. Failure to raise any such concerns prior to the submission of a bid will be deemed to waive such issues following the award of a contract. In the event that written addenda or bulletins of instructions are issued, all bidders will be required to acknowledge that they have reviewed and considered such addenda or bulletins in formulating their bids.
- C. No employee, agent, or representative of the County, or anyone else, is authorized to give oral instructions, interpretations, or explanations of the Project Manual, and a submission

of a bid constitutes agreement by a bidder that its representative has placed no reliance on any such oral explanation or interpretation. Oral instructions may, however, be given by the County or its agent upon inquiry by a bidder to direct the bidder's attention to the specific provisions of the Project Manual that cover the subject of the inquiry.

#### 4. <u>APPROXIMATE QUANTITIES</u>

The quantities given in the Bid Schedule are approximate only and are being given as a basis for the comparison of bids. The County does not, expressly or by implication, agree that the actual amount of work will correspond therewith, and the County reserves the right to increase or decrease the amount of any class or portion of the work, or to omit portions of the work, as may be deemed necessary.

#### 5. <u>PROPOSALS</u>

- A. For bids to receive consideration, they shall be made in accordance with the Invitation for Bids, the Proposal Forms, and these Instructions to Bidders. All bids shall be submitted on the unaltered Long Valley Streets Project Proposal Forms ("Proposal Forms") contained in the Project Manual with all items completely filled out with typewritten or legible handwritten responses. Signatures of all persons signing shall be in longhand. Completed Proposal Forms shall be without interlineations, alterations, or erasures.
- B. ALL BID SUBMITTALS SHALL REMAIN BOUND TOGETHER. Proposal Forms (contained herein on pages **BD-1 through BD-22**) may be separated from the Project Manual for purposes of bid submittal.
- C. Bids shall not contain any recapitulation of the work to be done. Alternative proposals will not be considered unless called for by the County. No oral, telegraphic, or telephonic proposals or modifications will be considered. Unauthorized conditions, limitations, or provisions attached to a bid will render it informal and may cause its rejection.
- D. Bidders are advised that there is limited funding available for this project. After bid opening, the County will determine available funding, and, if it chooses to do so, the County will award a contract for construction of the project. For purposes of comparing bids and determining the apparent low bidder, the County will use the amount entered as the "Bidder's Total Project Cost" on page BD-8 of the proposal forms.
- E. Each bid is to be in accordance with the Contract Documents. Before submitting a bid, bidders shall carefully read this Project Manual, including the contents and form of the Sample Standard Agreement, and the Project Plans, and inform themselves fully as to all existing conditions and limitations, which must include a visit to the site of the work, and shall include in the bid a sum to cover the cost of all work contemplated in the Contract Documents. The submission of a bid shall be conclusive evidence that the bidder has reviewed and is satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and the materials to be furnished, and as to the requirements of the Project Manual and Project Plans. The submission of a bid shall also be conclusive evidences that the person signing the Proposal Forms is authorized to bind or obligate the bidder to any agreement.
- F. Bidders' attention is directed to the insurance and bond requirements described below and as provided in the Sample Standard Agreement. It is highly recommended that bidders

confer with their respective insurance carriers or brokers to determine the availability of surety bonds, insurance certificates, and endorsements as prescribed and provided herein in advance of bid submission. If an apparent low bidder fails to comply strictly with the bonding and insurance requirements, that bidder may be disqualified from award of the contract and its bid security may be forfeited. The cost of such bonds and insurance shall be included in each bidder's bid.

- G. Each bidder shall inform itself of, and the bidder awarded the contract shall comply with, all federal, state, and local laws, statutes and ordinances relative to the execution of the work. This requirement includes, but is not limited to, applicable regulations concerning Buy America, Disadvantaged Business Enterprises, employment of labor, fair labor practices, equal opportunity, drug-free workplace, construction and building, Americans with Disabilities Act, protection of public and employee health and safety, environmental protection, the protection of natural resources, fire protection, burning and non-burning requirements, permits, fees, and similar subjects.
- H. This Project is not subject to Disadvantaged Business Enterprise (DBE) requirements. However, Mono County encourages DBE participation for this project.
- Proposal Forms (contained herein on pages BD-1 through BD-22 and bidder's bid security must be received in a sealed, opaque envelope clearly labeled with <u>LONG VALLEY</u> <u>STREETS PROJECT</u> printed on the outside of the envelope. Bids received unsealed or unlabeled will not be considered. Bids submitted by facsimile (fax) transmission will not be considered.
- J. To be considered, bids must be received by the Clerk of the Board of Supervisors no later than 3:00 pm, Wednesday, August 4, 2021 ("Bid Submission Deadline"). Bids may be mailed to the Clerk of the Board of Supervisors, P.O. Box 237, Bridgeport, California, 93517, or delivered to the office of the Clerk of the Board of Supervisors, 74 North School Street, Bridgeport, California, 93517.
- K. Bidders are advised that due to the remote nature of central Mono County, "overnight" delivery by the US Postal Service, UPS, FedEx, and other carriers is actually scheduled as a **two-day delivery**. Bidders should also take potential holiday mail delays into consideration.

#### 6. <u>MODIFICATION OF BID</u>

A bidder may modify its bid by written communication provided such communication is received via email to Chad Senior at <u>csenior@mono.ca.gov</u> or by the Clerk of the Board of Supervisors up to, but not later than, the Bid Submission Deadline described above Paragraph 5.I. The written communication shall not reveal the bid price but shall state the amount of addition or subtraction or other modification so that the final prices or terms will not be known by the County until the sealed bid is opened.

## 7. <u>WITHDRAWAL OF BID</u>

Bids may be withdrawn without prejudice by the bidder up to, but not later than, the Bid Submission Deadline described above in Paragraph 5.I. Such withdrawal may be made by written letter or by email or facsimile (fax) request. Such request shall be signed by an authorized representative of the bidder. Bids so withdrawn will be returned unopened to the bidder by the County. Bids withdrawn following bid opening shall be permitted only as allowed by the Public Contract Code and may subject the accompanying bid security to forfeiture and retention by the County as in the case of failure to execute the awarded contract as provided below. Negligence on the part of the bidder in preparing the bid shall not entitle the bidder to withdraw the bid subsequent to the County opening bid proposals.

#### 8. AGREEMENT AND BONDS

- A. Bidders are required to submit, along with the Proposal Forms, a certified or cashier's check or bidder's bond in an amount of at least 10 percent (10%) of their respective bids made payable to the County of Mono. This bidder's bond or bid security shall be given as a guarantee that the bidder will enter into a contract if awarded, and may be forfeited by the successful bidder and retained by the County if the bidder refuses, neglects, or fails to enter into said contract (including a failure to provide required insurance certificates and bonds) within five (5) calendar days after provision by the County of a complete and final contract for execution by successful bidder.
- B. The successful bidder will be required to furnish a labor and materials bond (also known as a "payment bond") in an amount equal to 100 percent (100%) of the contract price, and a faithful performance bond in an amount equal to 100 percent (100%) of the contract price. In addition, the successful bidder, as the Contractor, will be required to furnish a one-year warranty bond in an amount equal to 10 percent (10%) upon project completion, pursuant to the requirements in the Sample Standard Agreement. Only surety bonds issued by an admitted surety insurer, as defined in the Sample Standard Agreement, will be accepted. Bonds shall be in a form acceptable to the Mono County Counsel; a sample of an acceptable form of each type of bond required is included in this Project Manual.
- C. The Contract Documents include a Sample Standard Agreement, which the successful bidder, as the Contractor, will be required to execute, and the insurance and bonds, which the Contractor will be required to furnish.
- D. All alterations, extensions of time, extra and additional work, and other changes authorized by the County consistent with applicable provisions of the Contract Documents, may be made without securing the consent of the surety or sureties on the contract bonds.

#### 9. <u>OPENING OF BIDS</u>

As soon after the Bid Submission Deadline as is practicable to do so, all bids received before that deadline will be taken to the Public Works Conference Room, located on the second floor of Courthouse Annex 1, 74 North School Street, Bridgeport, California, 93517, and there publicly opened, read aloud, and recorded. All interested parties are invited to attend. Should any mandates by the State of California or Mono County due to Corona virus prohibit meeting in person, attendance for the bid opening will be provided online via the web. Advance notice will be posted on the Mono County Bid Management System providing web access for any interested parties to attend. Note, any bid received after the Bid Submission Deadline will be returned to the bidder unopened.

#### 10. BID EVALUATION

After all bids are opened and publicly announced, personnel from the Department of Public

Works will evaluate the bids; identify the lowest responsive bid by a responsible bidder; send a Notice of Intent to Award the contract, with a ranked tabulation of all bid amounts submitted, to the identified Bidder (copied to all Bidders); and agendize the matter for review by the Board of Supervisors. The Board of Supervisors shall determine whether to proceed to contract award or to reject all bids if it is in the public of interest to do so, and in accordance with applicable laws. If the Board of Supervisors elects to proceed to contract award, it will approve and authorize execution of a contract with the successful bidder. In the event of a discrepancy between the numeric total bid written and the numeric total bid calculated, the bid amount calculated by multiplying each item quantity by the unit price and then adding each item of the proposal shall prevail.

Bid evaluation will consist of reviewing submitted bids for responsiveness, ranking the responsive bid amounts from lowest to highest, and investigating whether the apparent low bidder, and such other bidders as the Department of Public Works deems appropriate, appears to be a "responsible bidder." Said investigation will involve checking each bidder's and any listed subcontractor's license status and eligibility to contract for public works, and may also include, a request for bidder references and/or insurance certificates, a request for documents demonstrating the bidder's solvency and available resources to timely complete the work, and consideration of the bidder's performance on any prior contracts with the County. The County reserves the right to waive any informality or irregularity in any bid that does not affect the contract price and provided such waiver is allowed by law.

#### 11. <u>BID PROTEST PROCEDURE</u>

Bidders may file a protest in accordance with the directions provided herein with respect to the apparent low bid, any other bid submitted, and/or with respect to the qualifications or responsibility of the apparent low bidder, or of any other bidder.

The bid protest period shall commence immediately upon the County's issuance of the Notice of Intent to Award the contract and shall remain open until 4:30 PM of the fifth (5th) business day following the date of the Notice of Intent to Award the contract ("Bid Protest Deadline"). All bid protests must be received by the County, as described in this Paragraph 11, by the Bid Protest Deadline. Postmarks will not be accepted. Failure to timely file a written protest by the Bid Protest Deadline shall constitute a waiver of the right to protest. Untimely protests will not be accepted or considered.

Bidders may submit protests to the County by mail, facsimile (fax), or electronically. Protests submitted by mail (USPS, UPS, FedEx, Golden State Overnight, etc.) must be addressed and delivered to the Clerk of the Board of Supervisors, c/o Mono County Department of Public Works, Attn: Chad Senior, 74 North School Street, Post Office Box 237, Bridgeport, California, 93517. Protests submitted by facsimile (fax) must be sent to 760.932.5441. Protests submitted electronically should be emailed to Chad Senior at csenior@mono.ca.gov.

Bid protests must be submitted in and include the following information: (1) the name of the person or entity making the protest; (2) the name of the bid project; (3) a complete statement of all legal and factual grounds for the protest; (4) any documentation supporting the protestor's grounds for the protest; and (5) the form of relief requested and the legal basis for such relief.

If a valid protest is timely filed, the Department of Public Works shall investigate the bid protest. The protested bidder shall have three (3) business days to respond to the Department

of Public Works' investigation and to provide any information requested by the Department of Public Works. The Department of Public Works shall notify the protested bidder of any evidence reflecting upon his responsibility, afford the protested bidder an opportunity to rebut such evidence, and allow the protested bidder to present evidence in support of his qualifications to perform the contract. The Department of Public Works shall respond to the protesting party upon the conclusion of its investigation by providing the protesting party a statement of its conclusions and findings. Thereafter, the Director of the Department of Public Works shall make a recommendation to the Board of Supervisors regarding the bid protest.

In addition to other requirements related to claim presentation, the bid protest procedure described herein must be pursued and exhausted before any person or entity may commence litigation against the County, or any of its officers, agents, or employees related to or arising out of the award of a contract for the construction of the Project to a bidder whose winning bid could have been the subject of a protest as outlined above.

#### 12. AWARD OR REJECTION OF BIDS

- A. After expiration of the Bid Protest Deadline, the County may, in its discretion take any of the following actions: (1) Award a contract notwithstanding the filing of a bid protest; (2) refrain from awarding a contract pending resolution of any or all bid protests; or (3) otherwise proceed as it deems appropriate, including without limitation rejecting all bids received. Further, under Public Contract Code Section 22038, the County has the option, after receiving and tabulating bids, to reject all bids and perform the work by force account if the Board of Supervisors determines, by a four-fifths vote, that the work can be performed more economically by its own employees.
- B. If it chooses to award a contract, the County shall award the contract to the bidder found responsible by the County which has submitted the lowest responsive bid. Bidders are advised that should this Invitation for Bids result in the award of a contract, any such contract will not be in force until it is approved and fully executed by the County and the successful bidder.
- C. Payment under any contract resulting from this Invitation for Bids will be consistent with the Sample Standard Agreement, a sample of which has been provided with this Invitation for Bids. Any contract awarded as a result of this Invitation for Bids will be awarded without discrimination based on race, color, religion, age, sex, sexual orientation, or national origin.
- D. Contract award, if made, is anticipated to occur within two (2) weeks after the date of bid opening but could occur up to 60 days after said date. In such an event, all bidders will be notified in writing that additional time will be required. No bid can be withdrawn during that period unless such withdrawal is authorized under the Public Contract Code and the bid security shall remain in full force and effect.
- E. The County assumes no responsibility for any costs the bidder may incur, regardless of whether or not a contract is awarded, in preparing and/or submitting abid.

#### 13. CONTRACT EXECUTION

A. Accompanying the County's Notice of Intent to Award will be the contract for the Project, which the successful bidder will be required to execute and return, together with the

required bonds and certificates of insurance, to the County within five (5) calendar days following receipt of such contract and Notice of Intent to Award. Failure to do so by the successful bidder shall be just cause for annulment of the contract award and forfeiture of the bid security, which shall be retained by the County as liquidated damages, and it is agreed by both parties that the bid security sum is a fair estimate of such failure. Signature by both parties constitutes execution of a contract for the Project.

- B. In the event the successful bidder is unable to physically deliver the required bonds and insurance certificates, and where approved in writing by the Director of the Department of Public Works, the bidder shall, prior to its commencement of the work, submit evidence satisfactory to the County that such bonds and certificates will be furnished in a timely manner.
- C. In the event of failure of the lowest responsible, responsive bidder to sign and return a contract for the Project with acceptable evidence of bonds and insurance certificates as prescribed herein, the County may award the contract to the next lowest responsible, responsive bidder, and so forth, until a fully-executed contract for the Project and acceptable bonding and insurance certificates are received by the County.
- D. The bid security of all bidders will be retained by the County until a contract for the Project is executed by the successful Bidder and evidence of bonds and insurance acceptable to the County is received, after which those bid securities, except any that may have been forfeited, will be returned to the bidders whose proposals they accompanied.

#### 14. LISTING OF AND SUBSTITUTIONS OF SUBCONTRACTORS

- A. If awarded a contract, the successful bidder shall perform with his own organization contract work amounting to not less than 30 percent (30%) of the original total contract price. The bidder shall give his/her personal attention to the fulfillment of the contract and shall keep the work under his/her control. All persons engaged in the Project and related work will be held responsible for their work, which shall be subject to the provisions of the Project Manual and any contract executed pursuant to this Invitation for Bids.
- B. Each bidder shall in its bid or offer, set forth the name and location of the office, shop, or mill of each subcontractor who will perform work or labor or render service to the bidder in or about the construction of the work or improvement and the portion of the work which will be done by each subcontractor if the amount of the subcontractor's work will be in excess of one-half of one percent (0.5%), or Ten Thousand dollars (\$10,000.00), whichever is greater, of the bidder's bid.
- C. If the bidder fails to specify a subcontractor for any portion of the work to be performed under the contract as specified above, it shall be deemed to have agreed to perform such portion itself, and it shall not be permitted to subcontract that portion of the work except under conditions hereinafter set forth.
- D. No bidder whose bid is accepted shall, without consent of the Director of the Department of Public Works, do any of the following:
  - (1) Substitute any person as subcontractor in place of the subcontractor designated in the original bid; or
  - (2) Permit any subcontractor to be assigned or transferred or allow the work to be

performed by anyone other than the original subcontractor listed in the bid; or

- (3) Sublet or subcontract any portion of the work in excess of one-half of one percent (0.5%) of the bidder's bid as to which its original bid did not designate a subcontractor.
- E. Subletting or subcontracting any portion of the work as to which no subcontractor was designated in the original bid shall be permitted only in case of public emergency, necessity, or otherwise in accordance with the Public Contract Code, and then only after a finding has been made in writing, by the Director of the Department of Public Works, setting forth the facts constituting such emergency, necessity, or statutory basis for the substitution.
- F. If haulers are used merely to convey materials and will not excavate or load the material and if they will not apply judgment as to the suitability of the material to meet Project specifications, then they do not need to be identified on the "List of Subcontractors" in the bid forms.

#### 15. <u>INTEREST IN MORE THAN ONE BID</u>

No person, firm, or corporation shall be allowed to make or file or be interested in more than one bid for the same work unless alternative bids are called for. A person, firm, or corporation who has submitted a sub-proposal to a bidder or who has quoted prices on materials to a bidder, is not hereby disqualified from submitting a sub-proposal or quoting prices to other bidders.

#### 16. COORDINATION WITH OTHER CONTRACTORS

Bidders are required to inform themselves fully of the conditions relating to construction and labor under which the work will be performed, and bidders must employ, as far as possible, such methods and means in the carrying out the Project and related work as will not cause any interruptions or interference with any other contractor or the operations of the facility at which the work is being performed.

#### 17. <u>SUBSTITUTIONS</u>

Throughout the Project Manual, materials may be specified that are in short supply or that are restricted by government limitation orders. For the purpose of submitting proposals, bidders shall assume that the County will require all materials to be furnished as specified. No substitutions will be permitted until all sources or supply have been exhausted and written notice is given to the Director of the Department of Public Works stating such fact. Substituted materials shall have the written approval of the Director of the Department of Public Works, or its authorized agent, before installation in the Project.

#### 18. <u>CONTRACTOR'S LICENSING LAWS</u>

- A. The successful bidder, as the Contractor, will be required to furnish a valid Mono County Business License issued by County's Office of the Treasurer prior to commencing the work. Additionally, a valid Mono County Business License shall be furnished for all subcontractors prior to beginning work.
- B. In order to be eligible for award of a contract for the Project, a bidder must possess either

of the following classification(s) of contractor's license: (1) Class A – General Engineering; or (2) C12 – Earthwork and Paving.

C. Attention is directed to the provisions of Article 4, Chapter 9, of the California Business and Professions Code concerning the licensing of contractors. All bidders, contractors, and subcontractors shall be licensed in accordance with the laws of the State of California and any bidder, contractor, or subcontractor not so licensed is subject to the penalties imposed by such laws. All bidders, contractors, and subcontractors shall possess the appropriate licenses to cover the above advertised work. The County will verify that the successful bidder, as well as any contractor and any subcontractor, is appropriately licensed to perform Project work designated prior to awarding any contract pursuant to this Invitation for Bids.

## 19. <u>LABOR REQUIREMENTS</u>

The services and work to be provided by the successful bidder, as the Contractor for this Project, constitute a "public work" within the meaning of Labor Code sections 1720 and 1720.3. Accordingly, as required by Labor Code section 1771, the successful bidder, as the Contractor, and any subcontractor under it, shall pay not less than the general prevailing rate of per diem wages ("prevailing wage") specified for each craft and classification to all workers employed in the execution of the project. Copies of prevailing wages, as determined by the Director of Department of Industrial Relations, available the are online at: www.dir.ca.gov/OPRL/DPreWageDetermination.htm and on file at the office of the Department of Public Works, located at 74 North School Street, Bridgeport, California, 93517, and are available to any interested party upon request. These wages are not included in any part or section of the Project Manual. Changes, if any, to prevailing wage rates will be available at the same location.

No contractor or subcontractor may be listed in a bid proposal or awarded a contract for a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 (unless exempt under Labor Code section 1771.1). This Project is subject to compliance monitoring and enforcement by the California Department of Industrial Relations.

#### 20. <u>PROJECT SCHEDULE AND LIQUIDATED DAMAGES</u>

Project construction shall begin on the start date stated in the Notice to Proceed issued by the County. If a construction start date is not stated in the Notice to Proceed, the Contractor shall begin work within 15 calendar days after the issuance of the Notice to Proceed. The Project and all related work shall be diligently prosecuted to completion before the expiration of **sixty-five (65) working days** from the construction start date. By submitting a bid proposal, bidder acknowledges the following: (1) that the bidder has fully read Section 14.2 of Exhibit 1 of the Sample Standard Agreement; (2) that it has had ample opportunity to consult with legal counsel and obtain an explanation of these liquidated damage provisions; (3) and that it is agreed by both parties that the successful bidder, as the Contractor, will pay Mono County liquidated damages specified in Exhibit 1 of the Sample Standard Agreement.

COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

# **PROPOSAL FORMS**



# LONG VALLEY STREETS PROJECT

Project No. 9116

#### COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

#### PROPOSAL FORMS LONG VALLEY STREETS PROJECT

Project No. 9116

Proposal of			("Bidder"	'), organized	and	existing	under t	the laws	of the
State of			, doing bi	isiness as					
	 							4 · · · · · ·	

(e.g., "a partnership;" "a corporation;" "a sole proprietor"), as applicable to the County of Mono, ("County"). This bid proposal consists of the attached pages **BD-1 through BD-22**.

In compliance with your Invitation for Bids and Instructions to Bidders, Bidder hereby proposes to perform all work for the **LONG VALLEY STREETS PROJECT** ("**Project**") in strict accordance with the Project Manual, which include the Instructions to Bidders, Project Plans, Special Provisions, Technical Specifications, Construction Quality Assurance Program, Agreement, any applicable addenda issued by the County's Department of Public Works, and other Contract Documents within the time set forth therein at prices stated on the attached Bid Schedule. Prices quoted in this proposal include, but are not limited to, the cost for all labor, materials, tools, equipment, supplies, transportation, permits, services, and applicable local, state, and/or federal taxes, fees, patent rights, and/or royalties necessary to complete the Project and related work contemplated in the Project Manual and described in any contract executed pursuant to this Invitation for Bids.

By submitting this Bid Proposal, Bidder certifies (and in the case of a joint bid, each party thereto certifies as to his own organization) that this bid has been arrived at independently without consultation, communication, or agreement as to any matter relating to this bid with any other Bidder or with any competitor.

Bidder hereby agrees to commence work on the Project pursuant to any contract executed pursuant to this Invitation for Bids on or before 14 calendar days following the award of contract by the County, unless a later date is specified by the County in the Notice to Proceed, and to **fully complete the project within 65 working days from the date of issuance of the Notice to Proceed**, pursuant to the provisions specified in any contract executed pursuant to this Invitation for Bids.

It is understood that, except for lump sum items, the quantities set forth in the Bid Schedule are approximate only and are solely for the purpose of facilitating the comparison of bids, and that the Bidder's compensation will be computed on the basis of documented final quantities in completed work, measured as specified, whether they be more or less than those shown.

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the for questionnaire and statements of Public Contract Code Sections 10162, 10232 and 10285.1 are true and correct and that the bidder has complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, Title 2 of the California Administrative Code). By my signature on this proposal I further certify, under penalty of perjury under the laws of the State of California and the United States of America, that the Non-Collusion Affidavit required by Title 23 United States Code, Section 112 and Public Contract Code Section 7106; and the Title 49 Code of Federal Regulations, Part 29 Debarment and Suspension Certification are true and correct.

Bidder's Company Name:		
Company Address:		
Office Telephone No.:	Email Address:	
Contractor's Calif. License No.:	Class:	
Mono County Business License. No.:		
Name of Company Officer:	Title:	
Bidder's Sig	nature	Date
(Add seal if by a corporation)		

#### BID SCHEDULE Long Valley Streets Project Project No. 9116

Contractor's Name: \_\_\_\_

	Cro	wley Lake Roads - Miscellaneous		Α				
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price		
A1	8	Mobilization	1	LS				
A2	13	Water Pollution Control (SWPPP Prep, BMP Installation, Monitoring	1	LS				
A3	12	Temporary Traffic Control	30	Days				
	Crowley Lake Roads - Miscellaneous, Bid Items A1 - A3 - Subtotal:							

		Wildrose Drive		Α					
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price			
A4	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	755	SY					
A5	39	3" Hot Mix Asphalt	121	Ton					
A6	19	Shoulder Backing (AC Grindings)	399	LF					
A7	84	"STOP" Marking (Paint)	1	EA					
A8	84	Stop bar / Limit Line (Paint)	1	EA					
A9	82	Steel Post STOP sign with Street Name signs above (Remove exist wood post signs and reuse sign panels)	1	EA					
	Wildrose Drive, Bid Items A4 - A9 - Subtotal:								

		Sierra Springs Drive		Bid Iten	ns	А
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A10	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	10373	SY		
A11	39	3" Hot Mix Asphalt	1658	Ton		
A12	19	Shoulder Backing (AC Grindings)	3564	LF		
A13	51	Reset Existing Manhole to Grade (Contingency Item)	1	EA		
A14	51	Reset Existing Water Valve Cap to Grade (Contingency Item)	1	EA		
A15	84	"STOP" Marking (Paint)	2	EA		
A16	84	Stop bar / Limit Line (Paint)	2	EA		
A17	82	Steel Post 25 MPH Sign (Remove wood post sign and reuse sign panel)	3	EA		
A18	82	Steel Post STOP sign with Street Name signs above (Remove wood post signs and reuse existing sign panels)	1	EA		
	•	Sierra Springs Drive	, Bid Items	A10 - A18	- Subtotal:	

		Pearson Road		Bid Iter	ns	Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A19	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	5928	SY		
A20	51	Reset Existing Water Valve Cap to Grade	7	EA		
A21	39	3" Hot Mix Asphalt (Road and Path)	947	Ton		
A22	39	Hot Mix Asphalt Dike (Caltrans Type E)	1405	LF		
A23	19	Shoulder Backing (AC Grindings)	1368	LF		
A24	84	"STOP" Marking (Paint)	3	EA		
A25	84	Stop bar / Limit Line (Paint)	3	EA		
A26	84	Centerline (Paint)	1435	LF		
A27	84	6" Bike Lane (Paint)	2870	LF		
A28	84	Bike Lane Symbol Without Person Marking (Paint)	5	EA		
A29	84	Bike Lane Arrow Marking (Paint)	4	EA		
A30	82	Steel Post STOP sign with Street Name signs above (Remove exist wood post signs and reuse sign panels)	1	EA		
		Pearson Road	l, Bid Items	A19 - A30	- Subtotal:	

		Elderberry Lane		Bid Iten	ns	Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A31	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	1578	SY		
A32	39	3" Hot Mix Asphalt	261	Ton		
A33	51	Concrete Manhole Collar	1	EA		
A34	19	Shoulder Backing (AC Grindings)	388	LF		
A35	84	"STOP" Marking (Paint)	1	EA		
A36	84	Stop bar / Limit Line (Paint)	1	EA		
A37	82	Steel Post STOP sign with street name signs above (Remove exist wood post signs and reuse sign panels)	1	EA		
		Elderberry Land	e, Bid Items	A31 - A37	- Subtotal:	

		Crowley Lake Circle	Bid Items			Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A38	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	633	SY		
A39	39	3" Hot Mix Asphalt	101	Ton		
A40	19	Shoulder Backing (AC Grindings)	155	LF		
A41	84	"STOP" Marking (Paint)	1	EA		
A42	84	Stop bar / Limit Line (Paint)	1	EA		
A43	82	Steel Post STOP sign (new R1-1) with street name signs above (Remove exist wood post sign and reuse sign panels)	1	EA		
	Crowley Lake Circle, Bid Items A38 - A43 - Subtotal:					

		Meadow View Drive	Bid Items			Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A44	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	4682	SY		
A45	39	1.5" Hot Mix Asphalt Overlay	374	Ton		
A46	19	Shoulder Backing (AC Grindings)	387	LF		
A47	39	Hot Mix Asphalt Dike (Caltrans Type A)	1320	LF		
A48	51	Reset Existing Water Valve to Grade	2	EA		
A49	84	"STOP" Marking (Paint)	1	EA		
A50	84	Stop bar / Limit Line (Paint)	1	EA		
A51	82	Steel Post STOP sign with "4-WAY" and street names above (Remove exist wood post signs and reuse exist sign panels)	1	EA		
	1	Meadow View Drive	e. Bid Items	444 - A51	- Subtotal:	

		Lake Manor Place		Bid Iter	ns	Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A52	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	3542	SY		
A53	39	1.5" Hot Mix Asphalt Overlay	283	Ton		
A54	39	Hot Mix Asphalt Dike (Caltrans Type A)	1310	LF		
A55	19	Shoulder Backing (AC Grindings)	198	LF		
A56	84	"STOP" Marking (Paint)	1	EA		
A57	84	Stop bar / Limit Line (Paint)	1	EA		
A58	82	Steel Post STOP sign (new R1-1) with Street Names above (Remove exist wood post sign and reuse exist street name sign panels)	1	EA		
A59	82	Steel Post STOP sign with street names above (Remove exist wood post signs and reuse exist sign panels)	1	EA		
	Lake Manor Place, Bid Items A52 - A59 - Subtotal:					

		Delta Drive		Bid Iter	Α	
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A60	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	3932	SY		
A61	39	1.5" Hot Mix Asphalt Overlay	314	Ton		
A62	39	Hot Mix Asphalt Dike (Caltrans Type A)	349	LF		
A63	19	Shoulder Backing (AC Grindings)	1392	LF		
A64	84	"STOP" Marking (Paint)	1	EA		
A65	84	Stop bar / Limit Line (Paint)	1	EA		
A66	82	Steel Post Street Names Sign (Remove exist wood post sign, Reuse exist street name signs)	1	EA		
A67	82	Steel Post STOP sign with street names above (Remove exist wood post signs and reuse exist sign panels)	1	EA		
	Delta Drive, Bid Items A60 - A67 - Subtotal:					

		Placer Road		Α		
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A68	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	490	SY		
A69	39	1.5" Hot Mix Asphalt Overlay	39	Ton		
A70	19	Shoulder Backing (AC Grindings)	462	LF		
A71	73	6' Concrete Cross Gutter (including excavation, subgrade preparation, and placement of 6" AC grindings)	189	SF		
A72	82	Steel Post STOP sign (new, R1-1) with street name signs above (Remove wood post and reuse exist street name signs)	1	EA		
	Placer Road, Bid Items A68 - A72 - Subtotal:					

		Aspen Terrace	Bid Items			Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A73	19, 39	Repair Existing Road (sawcut, remove exist AC, prepare subgrade, place 4" AC grindings and 1.5" HMA)	27	SY		
A74	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	4138	SY		
A75	39	1.5" Hot Mix Asphalt Overlay	330	Ton		
A76	19	Shoulder Backing (AC Grindings)	1105	LF		
A77	84	"STOP" Marking (Paint)	2	EA		
A78	84	Stop bar / Limit Line (Paint)	2	EA		
A79	82	Steel Post STOP sign with street names above (Remove exist wood post signs and reuse exist sign panels)	2	EA		
	Aspen Terrace, Bid Items A73 - A79 - Subtotal:					

	Hilton Creek Drive			Bid Iter	Α	
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A80	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	1752	SY		
A81	39	1.5" Hot Mix Asphalt Overlay	238	Ton		
A82	19	Shoulder Backing (AC Grindings)	1916	LF		
A83	84	"STOP" Marking (Paint)	1	EA		
A84	84	Stop bar / Limit Line (Paint)	1	EA		
A85	82	Steel Post STOP sign with street names above (Remove exist wood post signs and reuse exist sign panels)	1	EA		
	Hilton Creek Drive, Bid Items A80 - A85 - Subtotal:					

		Hilton Creek Place	Bid Items			Α
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
A86	19, 39	Repair Existing Road (sawcut, remove exist AC, prepare subgrade, place and compact 4" AC grindings, place 1.5" HMA)	97	SY		
A87	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	301	SY		
A88	39	1.5" Hot Mix Asphalt Overlay	109	Ton		
A89	19	Shoulder Backing (AC Grindings)	710	LF		
A90	84	"STOP" Marking (Paint)	1	EA		
A91	84	Stop bar / Limit Line (Paint)	1	EA		
A92	82	Steel Post STOP sign with street names above (Remove exist wood post signs and reuse exist sign panels)	1	EA		
	Hilton Creek Place, Bid Items A86 - A92 - Subtotal:					

A. Crowley Lake Roads - Total	\$
(BID ITEMS A1-A92)	Ŷ

	Sunny Slopes Roads - Miscellaneous			Bid Iten	В	
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
B1	8	Mobilization	1	LS		
B2	13	Water Pollution Control (SWPPP Prep, BMP Installation, Monitoring	1	LS		
B3	12	Temporary Traffic Control	6	Day		
	Sunny Slopes Roads - Miscellaneous, Bid Items B1 - B3 - Subtotal:					

		Sunny Slopes Road	Bid Items			В
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
B4	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	748	SY		
B5	51	Reset Existing Water Valve Cap to Grade	3	EA		
B6	39	1.5" Hot Mix Asphalt Overlay	183	Ton		
B7	19	Shoulder Backing (AC Grindings)	1559	LF		
B8	84	"STOP" Marking (Paint)	1	EA		
B9	84	Stop bar / Limit Line (Paint)	1	EA		
B10	82	Steel Post STOP sign (new, R1-1) with new street names "Wheeler View Dr" and "Owens Gorge Rd" above	1	EA		
	Sunny Slopes Road, Bid Items B4 - B10 - Subtotal:					

	V	Vheeler View Dr /Montana Rd		Bid Iten	18	В
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
B11	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	1388	SY		
B12	39	3" Hot Mix Asphalt	222	Ton		
B13	19	Shoulder Backing (AC Grindings)	650	LF		
B14	84	"STOP" Marking (Paint)	1	EA		
B15	84	Stop bar / Limit Line (Paint)	1	EA		
B16	82	Steel Post Street Name "Montana Rd" Sign (new)	1	EA		
B17	82	Steel Post STOP sign (new, R1-1) with new street names "Wheeler View Dr" and "Owens Gorge Rd" above	1	EA		
	Wheeler View Dr / Montana Rd, Bid Items B11 - B17 - Subtotal:					

B. Sunnyslopes Roads - Total	s
(BID ITEMS B1 - B17)	

	Swall Meadows Roads - Miscellaneous			Bid Items		
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
C1	8	Mobilization	1	LS		
C2	13	Water Pollution Control (SWPPP Prep, BMP Installation, Monitoring	1	LS		
C3	12	Temporary Traffic Control	8	Day		
	Swall Meadows Roads - Miscellaneous, Bid Items C1 - C3 - Subtotal: \$					

	Mountain View Drive			Bid Iten	С	
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
C4	19, 39	Repair Existing Road (sawcut, remove exist AC, prepare subgrade, place and compact 4" AC grindings and 1.5" HMA)	36	SY		
C5	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	2476	SY		
C6	39	1.5" Hot Mix Asphalt Overlay	481	Ton		
C7	19	Shoulder Backing (AC Grindings)	2459	LF		
		Mountain View Dr	ive, Bid Iten	ns C4 - C7	- Subtotal:	

		Foothill Road	Bid Items			С
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
C8	19, 39	Repair Existing Road (sawcut, remove exist AC, prepare subgrade, place and compact 4" AC grindings and 1.5" HMA)	427	SY		
С9	39	Mill/Conform Grind Exist Asphalt Concrete (1.5-inch Depth)	725	SY		
C10	39	1.5" Hot Mix Asphalt Overlay	284	Ton		
C11	39	Asphalt Concrete Swale	420	LF		
C12	39	Shoulder Backing (AC Grindings)	1753	LF		
		Foothill Roa	d, Bid Items	C8 - C12	- Subtotal:	

C. Sunny Slopes Roads - Total	\$
(BID ITEMS C1 - C12)	Ψ

	Substation Road - Miscellaneous			Bid Items			
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price	
D1	8	Mobilization	1	LS			
D2	13	Water Pollution Control (SWPPP Prep, BMP Installation, Monitoring	1	LS			
D3	12	Temporary Traffic Control	20	Day			
	Substation Road - Miscellaneous, Bid Items D1 - D3 - Subtotal:						

		Substation Road		ns	D	
Item No.	Spec Reference	Item	Quantity	Units	Price per Unit	Item Price
D4	22, 30	Grind / Pulverize Exist Roadbed, Finish Roadway	22416	SY		
D5	39	3" Hot Mix Asphalt	3512	Ton		
D6	19, 22	Prepare new road apron subgrade and base grade	184	SY		
D7	73	6' Concrete Cross Gutter (including excavation, subgrade preparation, and placement of 6" AC grindings)	359	SF		
D8	19	Shoulder Backing (Import)	1200	LF		
D9	19	Shoulder Backing (AC Grindings)	12852	LF		
D10	84	"STOP" Marking (Paint)	3	EA		
D11	84	Centerline (Paint)	7326	LF		
D12	84	6" Bike Lane (Paint)	1244	LF		
D13	84	6" Right Edgeline (Paint)	1782	LF		
D14	84	Stop bar / Limit Line (Paint)	3	EA		
D15	82	Steel Post STOP Sign (Remove wood post and reuse existing sign panel)	1	EA		
D16	82	Steel Post End of Road Warning Sign, OM4-2 (new)	1	EA		
D17	82	Steel Post "ROAD ENDS 500 FT" Warning Sign (new W31A (CA))	1	EA		
D18	82	Steel Post Chevron W1-6R, 48"x24" (new)	1	EA		
D19 82 Steel Post Curve Warning Sign with 20 MPH (Remove wood post and reuse exist sign panel)				EA		
		Substation Roa	d, Bid Items	D4 - D18	- Subtotal:	

D. Substation Road - Total	s	
(BID ITEMS D1 - D19)	Ψ.	

<b>BIDDER'S TOTAL PROJECT COST</b>	¢
(DID ITEMS $A + D + C + D$ )	3

(BID ITEMS A + B + C + D) County will use this total to compare bids and determine apparent low bidder.

#### COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

#### EXHIBIT 12B: BIDDER'S LIST OF SUBCONTRACTORS (DBE AND NON-DBE) PART 1 LONG VALLEY STREETS PROJECT

Project No. 9116

As of March 1,2015, Contractors (and sub-contractors) wishing to bid on public works contracts shall be registered with the State Division of Industrial Relations and certified to bid on Public Works contracts. Please register at: https://efiling.dir.ca.gov/PWCR/ActionServlet?action=displayPWCRegistrationForm

Listed hereinafter are the names and addresses of all subcontractors who will be employed in the completion of project work and the type of work that each will perform if the contract is awarded to the undersigned Bidder. In accordance with Title 49, Section 26.11 of the Code of Federal Regulations, and Section 4104 of the Public Contract Code of the State of California, as amended, the following information is required for each sub-contractor who will perform work amounting to more than onehalf of one percent (0.5%) of my total bid, or ten thousand dollars (\$10,000), whichever is greater. As to any work in which I fail to do so, I agree to perform that portion myself or be subject to penalty under the Act.

Notes:

- A. The above statement constitutes a part of the proposal and signature on the signature portion of the bid proposal constitutes signature on this statement.
- B. Vendors or suppliers that will be providing materials only need not be listed.
- C. If further space is required, copies of this sheet or additional sheets showing the required information, as indicated below, shall be attached hereto and made a part of the proposal. Fillable pdf forms of this exhibit are available for download at: <u>http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/chapter12/12b.pdf</u>
- D. This listing is required.

Subcontractor Name and Location	Line Item & Description	Subcontract Amount	Percentage of Bid Item Sub- contracted	Contractor License Number DIR-Reg-Number	DBE (Y/N)	DBE Cert Number	Annual Gross Receipts
Name:	0	2					. <\$1 million .
	-						<\$5 million
City, State:				•			יוינענע אינגיא
							<\$15 million
							Age of Firm:yrs.
Name:							<\$1 million
	4						nomm ccs
City, State:					č.		<\$10 million
							<\$15 million
135							Age of Firm:yrs.
Name:					Ĩ		<i><i><i><i><i><i><i><i><i><i><i><i><i>&lt;</i></i></i></i></i></i></i></i></i></i></i></i></i>
City, State:	-				1		<\$10 million
city, state.							STO INTONI
				· ·			<\$15 million
				-		1	Age of Firm:yrs.
Name:		20	c.			8	<\$1 million
							<\$5 million
City, State:	4			S			<\$10 million
							<\$15 million
							Age of Firm:yrs.
Name:							<\$1 million
City, States	-						<\$5 million <\$10 million
City, State:							<210 million
							<\$15 million
	0	St	10				Age of Firm:yrs.
Name:		E 8	2				<\$1 million
	-						<\$5 million
City, State:							<\$10 million
							<\$15 million
							Age of Firm:yrs.

Distribution: Original-Local Agency File

# COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

#### EXHIBIT 12B: BIDDER'S LIST OF SUBCONTRACTORS (DBE AND NON-DBE) PART 2 LONG VALLEY STREETS PROJECT PROJECT NO. 9116

In accordance with Title 49, Section 26 of the Code of Federal Regulations, the bidder shall list all subcontractors who provided a quote or bid, but <u>were not selected</u> to participate as a subcontractor on this project.

If further space is required, copies of this sheet or additional sheets showing the required information, as indicated below, shall be attached hereto and made a part of the proposal. Fillable pdf forms of this exhibit are available for download at: <a href="http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/chapter12/12b.pdf">http://www.dot.ca.gov/hq/LocalPrograms/lam/forms/chapter12/12b.pdf</a>

Subcontractor Name and Location	Line Item & Description	Subcontract Amount	Percentage of Bid Item Sub- contracted	Contractor License Number DIR Reg Number	DBE (Y/N)	DBE Cert Number	Annual Gross Receipts
Name:	0	<u>8</u>	2				<\$1 million
	-						<\$5 million
City, State:							<\$10 million
							<\$15 million
							Age of Firm:yrs.
Name:							<\$1 million
							Noninin cev
City, State:							<\$10 million
							<\$15 million
							Age of Firm:yrs.
Name:							<\$1 million
	-						<\$5 million
City, State:							<\$10 million
							<\$15 million
							Age of Firm:yrs.
Name:	4. <sup>1</sup>	30	S		· · · · · · · · · · · · · · · · · · ·	2	<\$1 million
							<55 million
City, State:				3			<\$10 million
							<\$15 million
							Age of Firm:yrs.
Name:							<\$1 million
	- 1						<\$5 million
City, State:				-			<\$10 million
							<\$15 million
		3					Age of Firm:yrs.
Name:		8					<\$1 million
	-						<\$5 million
City, State:							<\$10 million
							<\$15 million
							Age of Firm: yrs.

Distribution: Original-Local Agency File

# **ACKNOWLEDGEMENTS**

LONG VALLEY STREETS PROJECT Project No. 9116

#### **RECEIPT OF ADDENDA**

The County of Mono is advised that Bidder has received the following addenda for the Contract Documents, including plans, specifications, and special provisions for the above-referenced project:

Addendum Number:	Issuance Date:
Subject Matter:	
Addendum Number:	Issuance Date:
Subject Matter:	
Addendum Number:	Issuance Date:
Subject Matter:	
Addendum Number:	Issuance Date:
Subject Matter:	

If you did not receive any addenda for the above-referenced project, please initial here:

#### **ACKNOWLEDGEMENT OF SITE VISIT**

The County of Mono is advised that I have visited the project site as acknowledged by my initials below. In doing so, I have made myself aware of the conditions that exist and have prepared the attached proposal accordingly.

Substation Road:	□Yes	□No
Wildrose Drive:	□Yes	□No
Sierra Springs Drive:	□Yes	□No
Pearson Road:	□Yes	□No
Elderberry Lane:	□Yes	□No
Crowley Lake Circle:	□Yes	□No
Hilton Creek Place:	□Yes	□No
Hilton Creek Drive:	□Yes	□No
Delta Drive:	□Yes	□No

Lake Manor Place:	□Yes	□No
Meadow View Drive:	□Yes	□No
Placer Road (paved portion):	□Yes	□No
Aspen Terrace:	□Yes	□No
Sunny Slopes Road:	□Yes	□No
Wheeler View/Montana Rd	□Yes	□No
Foothill Road:	□Yes	□No
Mountain View Drive:	□Yes	□No

Note: This questionnaire constitutes a part of the proposal, and signature on the signature portion of the proposal constitutes signature on this questionnaire and a declaration under penalty of perjury under the laws of the State of California that the statements made herein are true and correct. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

## **DISCLOSURES AND CERTIFICATIONS**

LONG VALLEY STREETS PROJECT

Project No. 9116

In conformance with Public Contract Code Section 10162, the Bidder shall complete the following questionnaire under penalty of perjury:

#### PUBLIC CONTRACT CODE SECTION 10162 OUESTIONNAIRE

Has the Bidder, or any officer or employee of the Bidder who has a proprietary interest in the Bidder, ever been disqualified, removed, or otherwise prevented from bidding on or completing a federal, state, or local government project because of a violation of law or safety regulation?

Yes:\_\_\_\_\_ No: \_\_\_\_\_

If the answer is yes, please explain the circumstances in the space provided below and/or attach separate sheet(s) as necessary, with signature affixed.

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats.1985), the Bidder shall complete the following questionnaire under penalty of perjury:

#### PUBLIC CONTRACT CODE SECTION 10285.1 OUESTIONNAIRE

Within the past three years, has the Bidder, or any officer or employee of the Bidder who has a proprietary interest in the Bidder, ever been convicted by a court of competent jurisdiction of any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any federal or state antitrust law in connection with the bidding upon, award of, or performance of any "public works contract," as defined in Public Contract Code Section 1101, with any "public entity," as defined in Public Contract Code Section 1100, the Regents of the University of California, or the Trustees of the California State University? The term "Bidder" is understood to include any partner, member, officer, director, responsible managing officer, or responsible managing employee thereof, as referred to in Section 102985.1.

Yes:\_\_\_\_\_ No: \_\_\_\_\_

If the answer is yes, please explain the circumstances in the space provided below and/or attach separate sheet(s) as necessary, with signature affixed.

#### PUBLIC CONTRACT CODE 10232 STATEMENT

In conformance with Public Contract Code Section 10232, the Contractor, hereby states under penalty of perjury, that no more than one final unappealable finding of contempt of court by a federal court has been issued against the Contractor within the immediately preceding two-year period because of the Contractor's failure to comply with an order of a federal court which orders the Contractor to comply with an order of the National Labor Relations Board.

Note: The above Questionnaires and Statement are a part of the Proposal. Signing on the signature portion of this Proposal shall also constitute signature of this Questionnaire and Statement, and the Bidder declares under penalty of perjury under the laws of the State of California that the statements made herein are true and correct. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

#### WORKERS' COMPENSATION CERTIFICATION

I do hereby certify that I am aware of the provisions of the California Labor Code which requires every employer to be insured against liability for Workers' Compensation or to undertake self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of work in this contract.

#### **NON-COLLUSION AFFIDAVIT**

In conformance with Title 23 United States Code Section 112 and Section 7106 of the California Public Contract Code, the Bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the Bidder or any other bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other bidder, or to secure any advantage against the public body awarding the contract of anyone interested in the proposed contract; that all statements contained in the bid are true; and, further, that the Bidder has not, directly or indirectly, submitted its bid price or any breakdown thereof, or the contents thereof, or divulged information or data relative thereto, or paid, and will not pay, any fee to any corporation, partnership, company, association, organization, bid depository, or to any member or agent thereof to effectuate a collusive or sham bid, and has not paid, and will not pay, any person or entity for such purpose.

Any person executing this affidavit on behalf of a bidder that is a corporation, partnership, joint venture, limited liability company, limited liability partnership, or any other entity, hereby represents that he or she has full power to execute, and does execute this declaration on behalf of the Bidder.

Note: The above Workers' Compensation Certification and Non-Collusion Affidavit are a part of the Proposal. Signing on the signature portion of this Proposal constitutes signature on the above certification and affidavit, and the Bidder declares under penalty of perjury under the laws of the State of California that the statements made herein are true and correct. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

#### EOUAL EMPLOYEMENT OPPORTUNITY COMPLIANCE CERTIFICATE

- A. The bidder hereby certifies that he (as the contractor) and all subcontractors agree to conform to the equal opportunity clauses required by Executive Orders 10925, 11114, and 11246, as well as 41 CFR 60-1.4 (Equal Opportunity Clause).
- B. The bidder certifies that within 30 days of the award of the contract, as required, the contractor and subcontractors will file an "Equal Employment Opportunity Employer Information Report EEO-1 (SF-100)" with the U.S. Department of Labor and, annually thereafter, file the same report with the U.S. Department of Labor by March 31. (If your company has filed one of these reports this year, you do not have to comply with the 30-day regulation). Refer to <u>https://www.eeoc.gov/employers/eeo1survey/upload/instructions\_form.pdf</u> for filing requirements (SF-100).
- C. The contractor and all subcontractors shall certify that prior reports have been filed under the applicable filing requirements as follows:
  - a. Contractor/Subcontractor has held previous contracts where EEO provisions were in force. Yes \_\_\_\_\_ No \_\_\_\_\_ (If yes, answer question 2 also)
  - b. Contractor/Subcontractor has filed all "required" reports for these previous contracts. Yes \_\_\_\_\_ No \_\_\_\_\_

Proposed prime contractors and subcontractors who have participated in a previous contract or subcontract subject to Executive Orders 10925, 11114, and 11246 and that have not filed reports when required should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such contractor (and/or subcontractor) submits a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director of the U.S. Department of Labor's Office of Federal Contract Compliance.

If the bidder has participated in a previous contract subject to the equal opportunity clause and has not submitted compliance reports due under applicable filing requirements, the Bidder shall submit a compliance report on Standard Form 100, "Employee Information Report EEO-1" prior to the award of any contract issued pursuant to this IFB.

- D. This certification is required by the Equal Employment Opportunity Regulations of the Secretary of the Department of Labor (41 CFR 60-1.7(b) (1)) and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the equal opportunity clause. Contracts and subcontracts which are exempt from the equal opportunity clause are set forth in 41 CFR 60-1.5 (generally only contracts or subcontracts of \$10,000 or less are exempt).
- E. Contractor/Subcontractor certifies that he is not currently in receipt of any outstanding letters of deficiency, show cause, probable cause, or other such Notification of Non-compliance with EEO regulations.
- F. A compliance certificate in conformance with this section is not required at time of bid, but each subcontractor must provide this certificate to the County prior to execution of any contract issued pursuant to this IFB. If available, subcontractor certificates may be supplied at time of bid. Subcontractor signature below certifies Equal Employment Opportunity compliance. Each subcontractor shall answer the questions in Item C above and sign a copy of this page.

Subcontractor Name

Subcontractor Signature

Date

Note: This Certificate constitutes a part of the proposal, and the contractor's signature on the signature portion of the proposal constitutes the Contractor's "Equal Employment Opportunity Compliance Certificate" and a declaration under penalty of perjury under the laws of the State of California that the statements made herein are true and correct.

#### **DEBARMENT AND SUSPENSION CERTIFICATION**

#### TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The Bidder, under penalty of perjury, certifies that, except as noted below, she/he or any other person associated therewith in the capacity of owner, partner, director, office manager:

- Is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency;
- Has not been suspended, debarred, voluntarily excluded or determined ineligible by any federal agency within the past three (3) years;
- Does not have a proposed debarment pending; and
- Has not been indicated, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years.

If there are any exceptions to this certification, insert the exception in the following space:

Exceptions will not necessarily result in denial of award, but will be considered in determining bidder responsibility. For any exception noted above, indicate below to whom it applies, initiating agency, and dates of actions.

Providing false information may result in criminal prosecution or administrative sanction. The above certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this certification and a declaration under penalty of perjury under the laws of the State of California that the statements made herein are true and correct.

#### COUNTY OF MONO, DEPARTMENT OF PUBLIC WORKS

# **BIDDER'S QUALIFICATION STATEMENT**

LONG VALLEY STREETS PROJECT

Project No. 9116

This Qualifications Statement will be used by Mono County to determine if a Bidder is qualified to do the work to be performed and therefore to find if the Bidder is a "responsible" bidder. The Qualifications Statement should be completed on behalf of the Bidder by an officer or other individual who is knowledgeable about the Bidder's past and current operations, policies, and practices. A response must be provided to each question. If a particular question does not apply, the response should state "not applicable" or "N/A". **Qualifications statements that contain missing or incomplete answers may render the proposal non-responsive.** The County reserves the right, however, to allow the bidder to submit additional information pertaining to its qualifications after the Bid Submission Deadline provided in the Project Manual if circumstances warrant and to waive any error or defect in a Bidder's Qualification Statement.

Answers may be expanded upon by attaching additional pages. Use 8½" x 11" paper and mark each additional page with the Bidder's name and identification of the particular question to which an answer is being given. For the purposes of this Qualification Statement, the terms "company," "firm," "bidder," "proposer," and "contractor" are used interchangeably and have the same meaning.

The following documents or information must be included with your Qualifications Statement for this Bid Proposal. (Existing certification and license information on file with the County and current may meet the requirements of this section subject to verification prior to award of any contract):

<u>Insurance</u>: Contractor must provide proof that the firm is insured at least to the limits identified in the Sample Standard Agreement.

<u>Licenses</u>: Copies of all applicable and current trade licenses issued to the Contractor which legally allow the Contractor to perform the work identified for this Project.

<u>Previous Work History</u>: This Qualifications Statement includes a form titled "Experience on Completed or Ongoing Projects." Please use this form to detail the work that the firm has performed within the last three (3) years. A minimum of three (3) successfully completed general civil and/or paving construction projects are required. Use one (1) page per project and reproduce copies of the form as necessary. In each project description, identify your firm as a prime contractor, subcontractor, or joint venture partner.

<u>OSHA Violations</u>: If at any time within the past five (5) years the Contractor has received an OSHA serious violation, you must provide copies of the *Citation and Notification of Penalty*, signed *Settlement Agreement*, and narrative which details the specific issue(s) cited, remedial action required and taken by the Contractor, amount of fine initially imposed, and ultimate resolution.

<u>Resumes and Organizational Chart</u>: The Contractor must include current resumes for each principal and key individual identified in Question 2B below. The statement must also include a copy of the firm's current organizational chart.

Equipment: The Contractor must provide a list of equipment that would be available for the work.

#### 1. GENERAL INFORMATION:

A. Type of organization:

If Corporation, include year and state incorporated If Partnership, state whether general or limited If Sole Proprietorship, include name of owner If Joint Venture\*, include name all partnering firms

- \* Bidder's submitting a bid as joint venture must obtain a joint venture contractor's license before they may be awarded a contract, per Business and Professions Code §7029.1.
- B. Is the firm, and all persons or firms listed in the bid as subcontractors, registered with the Department of Industrial Relations as required by California Labor Code section 1725.5?

Yes

<u>\_\_\_\_No</u>

C. If you checked "No" in the previous question, then you must fall within one of the limited exceptions set forth in California Labor Code section 1771.1, and must register with the Department of Industrial Relations prior to contract award. Does the firm (or any subcontractor) fall within California Labor Code section 1771.1 and become registered prior to contract award?

\_\_\_\_\_ Yes (attach explanation)

\_\_\_\_\_No (not qualified)

#### 2. PERSONNEL:

A. Identify the current number of employees below:

Employee Type	Full-Time	Part-Time
Office		
Field		

B. Principals and Key Personnel: On the chart below, supply the required information. Principals and key personnel include proprietors, partners, directors or officers of the firm; any manager or individual who participates in overall policy-making or financial decisions of the firm; any person who makes significant financial contributions to the firm's operations; any person in a position to control and direct the firm's overall operations or any significant part of its operation (including site foremen and superintendents). Resumes for principals and key personnel must be provided herewith. If necessary, use additional sheets to identify all principals and key personnel.

Description	Person 1	Person 2	Person 3
Name			
Title			
% Ownership			

3.	FINANCIAL INFORMATION:	
	A. Are there any liens outstanding against the Contractor? (if yes, provide a detailed explanation on an attached sheet)	Yes No
	B. Has the Contractor, principals, or key personnel been party to a bankruptcy or reorganization proceeding with the last five years? (if yes, provide a detailed explanation on an attached sheet)	🗌 Yes 🗌 No
	C. Annual sales dollar volume of Contractor:	\$ <u></u>

**4. INTEGRITY OF CONTRACTOR:** Please provide an explanation on an attached sheet for any of the following questions with the answer "yes".

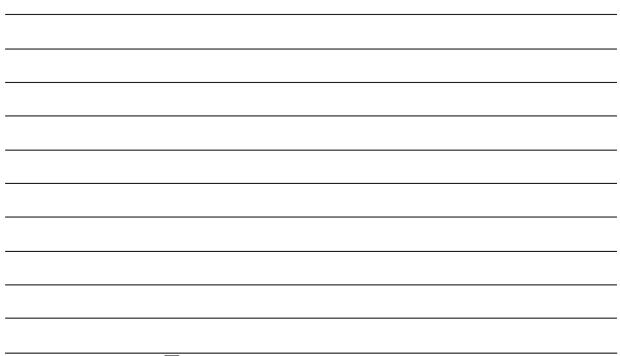
#### A. During the past five years has the Contractor:

	i.	Been subject of a lien or claim of \$25,000 or more by a		
		subcontractor or supplier?	Yes	No No
	ii.	Failed to complete a contract?	Yes	🗌 No
	ii.	Been suspended, debarred, disqualified or otherwise declared ineligible to bid?	Yes	🗌 No
	iv.	Been defaulted on any contract?	Yes	🗌 No
	v.	Had a contract terminated?	Yes	🗌 No
	vi.	Had liquidated damages assessed against it upon completion of a contract?	Yes	🗌 No
	vii	. Been a plaintiff or defendant in any lawsuits arising out of public or private construction contracts?	Yes	🗌 No
B.	Du	ring the past five years has the Contractor, Principals or Key Personnel:		
	i.	Been a plaintiff or defendant in any lawsuits arising out of public or private construction contracts?	Yes	🗌 No
i	ii.	Been the subject of an investigation involving any alleged violation of		
		criminal law, civil antitrust law or other federal, state, or local civil law?	Yes	🗌 No
	iii.	Been convicted after trial or by plea of any felony under state or federal law?	Yes	🗌 No
	iv.	Entered a plea of nolo contendere to a charge of embezzlement, theft, forgery, bribery, falsification or destruction of records, receiving stolen property or violation of an antitrust law?	Yes	🗌 No
	v. ]	Been the subject of an investigation of any alleged violation of federal, state, or local regulations by any public agency?	Yes	🗌 No

vi. Been found to have committed a violation of any labor law or regulation including prevailing wage rates and fair labor practices?	Yes	🗌 No
vii. Been found to have committed an OSHA "serious violation"?	Yes	🗌 No
vii. Been found to have committed a construction-related violation of federal, state, or local environmental law or regulation?	Yes	🗌 No

#### 5. BIDDING CAPABILITY AND PREVIOUS EXPERIENCE:

A. Provide a detailed narrative of the Contractor's experience and involvements in pavement rehabilitation processes, particularly full depth reclamation (FDR) and mill/overlay. Previous experience in this field of construction is necessary for the Contractor to be found responsible specific to this Project. Additional information can be provided on an attached sheet.



mark if continued on an attached sheet

- B. Identify Contractor specialty capabilities (check all appropriate). Bidder must have self-performing capability for each specialty selected.
  - $\Box$  1. Grading & Earthwork
  - $\Box$  2. Concrete Work
  - □ 3. Hot Mix Asphalt Paving
  - □ 4. Roadway milling
  - □ 5. Roadway Grinding & Pulverization
  - □ 6. Roadway Subgrade Stabilization
  - □ 7. Pavement Grid Interlayer Installation
  - □ 8. Full Depth Reclamation (FDR)
  - □ 9. Hot Mix Asphalt Overlays
  - □ 10. Stress Absorbing Membrane Interlayer
  - □ 11. Asphalt Concrete Hot In-Place Recycle
  - □ 12. Asphalt Concrete Cold In-Place Recycle

- □ 13. Micro-surfacing
- $\Box$  14. Slurry Sealing
- □ 15. Tack Coat Placement
- □ 16. Utility Placement & Trenching
- □ 17. Traffic Control
- □ 18. SWPPP Preparation
- 🗆 19. Roadway Sign Placement
- 20. Roadway Paint Striping
- □ 21. Roadway Paint Markings
- □ 22. Erosion Control Protection /BMP
- □ 23. Roadway Culvert Installation / Repair
- □ 24. Metal Fabrication and Welding
- C. Contract capability (determined by size of previous work and bonding capacity):
  - □ 1. \$0 \$10,000
  - □ 2. \$0 \$50,000
  - □ 3. \$0 \$100,000
  - □ 4. \$0 \$250,000
  - □ 5. \$0 \$500,000
  - □ 6. \$0 \$1,000,000
  - □ 7. \$0 \$5,000,000
  - □ 8. \$0 \$10,000,000
  - □ 9. \$0 ->\$10,000,000
- D. Use the following form on the next page to describe Bidder's experience on completed or ongoing projects over the last five (5) years. A separate sheet must be completed for each project; a minimum of three (3) projects are required.

#### PROJECT EXPERIENCE WITH ROADWAY REHABILITATION AND/OR ASPHALT RECONSTRUCTION PROJECTS

]	Project Status: ☐ Project completed ☐ Work in progress	Contractor's Role*: <ul> <li>Prime Contractor</li> <li>Subcontractor</li> <li>Joint Venture Partner</li> </ul>		
	* Entity submitting proposal is considered '	'Contractor	"	
Facility / Pro	oject Name:			
Address of P	Project:			
Project Own	er:			
Contract Am	nount (Contractor's Share): \$	Was project bonded?	🗆 Yes	□ No
% of total pr	oject performed by Contractor by (	Contractor's own forces:	<u>%</u>	
Was Contrac	ctor required to provide a Performan	nce Bond and/or Payment Bond?	🗆 Yes	🗆 No
Start Date:	Scheduled Completion I	Date:Actual Completion Date:		
Construction	n Manager / Project Manager:			
Com	pany:			
Add	lress:			
Teleph	ione:	email:		
Contact Na	ame:	Title:		
Architect / E	ngineer:			
Com	pany:			
	ione:			
Contact Na	ame:	Title:		
	miliar with Contractor's performan			
Com	pany:			
	lress:			
	ione:			
Contact Na	ame:	Title:		
Description	of work performed by Contractor:			

# **BID BOND**

(MINIMUM 10% OF TOTAL BID AMOUNT)

#### LONG VALLEY STREETS PROJECT (PROJECT NO. 9116)

If the Principal is awarded the contract and enters into a written contract, in the form prescribed by the Owner, at the price designated by his bid, and files two bonds with the Owner, one to guarantee payment for labor and materials and the other to guarantee faithful performance, in the time and manner specified by the Owner, and carries all insurance in the type and amount which conforms to the Contract Documents, and furnishes required certificates and endorsements thereof, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

Forfeiture of this bond shall not preclude the Owner from seeking all other remedies provided by law to cover losses sustained as a result of the Principal's failure to do any of the foregoing.

Principal and Surety agree that if the Owner is required to engage the services of an attorney in connection with the enforcement of this bond, each shall pay Owner's reasonable attorney's fees incurred with or without suit.

PRINCIPAL:

Executed on:\_\_\_\_\_

By: \_\_\_\_\_

(Seal of Corporation)

Title:

(Attach notary acknowledgment for Contractor's authorized representative and for Attorney-in-Fact of Surety)

NOTICE: No substitution or revision to this bond form will be accepted. Sureties must be authorized to do business in and have an agent for service of process in California. A certified copy of Power of Attorney must be attached.

\_

Any claims under this bond may be addressed to:	
	(Name and address of Surety)
	(Name and address of Surety's agent for service of process in California, if different from above)
	(Telephone number of Surety's agent in Calif.)
(Attach notary acknowledgement)	SURETY
By:	
	(Attorney-in-Fact)

# **SECTION II**



# SAMPLE STANDARD AGREEMENT

**Long Valley Streets Project** 

Project No. 9116

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## AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

#### **INTRODUCTION**

WHEREAS, the County of Mono ("County") may have the need for the construction services of [CONTRACTOR], of [CITY, STATE] ("Contractor") (County and Contractor may be referred to individually as a "Party" and collectively as the "Parties"), and in consideration of the mutual promises, covenants, terms and conditions hereinafter contained, the Parties hereby agree as follows:

#### **TERMS AND CONDITIONS**

#### 1. SCOPE OF WORK

Contractor shall furnish to County, upon its request, those services and work set forth in the Scope of Work set forth in Attachment A, attached hereto and by this reference incorporated herein, and in accordance with the Project Manual (including technical specifications) and Contractor's bid. Requests by County to Contractor to perform under this Agreement will be made by the Director of the Department of Public Works or an authorized representative thereof. Requests to Contractor for services or work to be performed under this Agreement will be based upon County's need for such services and work. County makes no guarantee or warranty, of any nature, that any minimum level or amount of services or work will be requested of Contractor by County under this Agreement. By this Agreement County incurs no obligation or requirement to request from Contractor the performance of any services or work at all, even if County should have some need for such services or work during the term of this Agreement.

Services and work provided by Contractor at County's request under this Agreement will be performed in a manner consistent with the requirements and standards established by applicable federal, state, and county laws, ordinances, and resolutions including, but not limited to, those that are referred to in this Agreement.

This Agreement is subject to the following Exhibits (as noted) which are attached hereto, following all referenced Attachments, and incorporated herein by this reference:

- **Exhibit 1**: General Conditions (Construction)
- **Exhibit 2**: Prevailing Wages
- **Exhibit 3**: Bond Requirements
- **Exhibit 4**: Invoicing, Payment, and Retention
- **Exhibit 5**: Trenching Requirements
- **Exhibit 6**: FHWA Requirements
- **Exhibit 7**: CDBG Requirements
- **Exhibit 8**: HIPAA Business Associate Agreement
- **Exhibit 9**: Other: \_\_\_\_\_

In the event of a conflict between the terms of an attached Exhibit and this Agreement, the terms of the applicable Exhibit shall govern.

# 2. TERM

The term of this Agreement shall be from [DATE], to [DATE], unless sooner terminated as provided in this Agreement.

# 3. CONSIDERATION

A. <u>Compensation</u>. County shall pay Contractor in accordance with the Schedule of Fees (set forth as Attachment B) for the services and work described in Attachment A that are performed by Contractor at County's request.

B. <u>Travel and Per Diem</u>. Contractor will not be paid or reimbursed for travel expenses or per diem that Contractor incurs in providing services and work requested by County under this Agreement, unless otherwise provided for in Attachment B.

C. <u>No Additional Consideration</u>. Except as expressly provided in this Agreement, Contractor shall not be entitled to, nor receive, from County, any additional consideration, compensation, salary, wages, or other type of remuneration for services rendered under this Agreement. Specifically, Contractor shall not be entitled, by virtue of this Agreement, to consideration in the form of overtime, health insurance benefits, retirement benefits, disability retirement benefits, sick leave, vacation time, paid holidays, or other paid leaves of absence of any type or kind whatsoever.

D. <u>Limit upon amount payable under Agreement</u>. The total sum of all payments made by County to Contractor for services and work performed under this Agreement shall not exceed [X Dollars (\$X)], plus the amount of any change order(s) approved in accordance with authority delegated by the Board of Supervisors (collectively, the "Contract Limit"). The County expressly reserves the right to deny any payment or reimbursement requested by Contractor for services or work performed that is in excess of the Contract Limit.

E. <u>Billing and Payment</u>. Contractor shall submit to County, on a monthly basis, an itemized statement of all services and work described in Attachment A, completed at the County's request. The statement to be submitted will cover the period from the first (1st) day of the preceding month through and including the last day of the preceding month. Alternatively, Contractor may submit a single request for payment corresponding to a single incident of service or work performed at County's request. All statements submitted in request for payment shall identify the date on which the services and work were performed and describe the nature of the services and work which were performed on each day. Invoicing shall be informative but concise regarding services and work performed during that billing period. Upon finding that Contractor has satisfactorily completed the work and performed the services as requested, the County shall make payment to Contractor within 30 days of its receipt of the itemized statement. Should Contractor produce an incorrect statement, County shall withhold payment until the services and work are satisfactorily completed or performed and/or the statement is corrected and resubmitted.

# If Exhibit 4 ("Invoicing, Payment, and Retention") is attached to this Agreement, then the language contained in Exhibit 4 shall supersede and replace this Paragraph 3.E. in its entirety.

#### F. <u>Federal and State Taxes</u>.

(1) Except as provided in subparagraph (2) below, County will not withhold any federal or state income taxes or social security from any payments made by County to Contractor under the terms and

conditions of this Agreement.

(2) County shall withhold California state income taxes from payments made under this Agreement to non-California resident independent contractors when it is anticipated that total annual payments to Contractor under this Agreement will exceed One Thousand Four Hundred Ninety-nine dollars (\$1,499.00).

(3) Except as set forth above, County has no obligation to withhold any taxes or payments from sums paid by County to Contractor under this Agreement. Payment of all taxes and other assessments on such sums is the sole responsibility of Contractor. County has no responsibility or liability for payment of Contractor's taxes or assessments.

(4) The total amounts paid by County to Contractor, and taxes withheld from payments to non-California residents, if any, will be reported annually to the U.S. Internal Revenue Service and the California State Franchise Tax Board.

# 4. WORK SCHEDULE

Contractor's obligation is to perform, in a timely manner, those services and work identified in Attachment A that are requested by County. It is understood by Contractor that the performance of these services and work will require a varied schedule. Contractor, in arranging his/her schedule, will coordinate with County to ensure that all services and work requested by County under this Agreement will be performed within the time frame set forth by County.

# 5. REQUIRED LICENSES, CERTIFICATES, AND PERMITS

Any licenses, certificates, or permits required by the federal, state, county, or municipal governments, for Contractor to provide the services and work described in Attachment A must be procured by Contractor and be valid at the time Contractor enters into this Agreement. Further, during the term of this Agreement, Contractor must maintain such licenses, certificates, and permits in full force and effect. Licenses, certificates, and permits may include, but are not limited to, driver's licenses, professional licenses or certificates, and business licenses. Such licenses, certificates, and permits will be procured and maintained in force by Contractor at no expense to County. Contractor will provide County, upon execution of this Agreement, with evidence of current and valid licenses, certificates and permits that are required to perform the services identified in Attachment A. Where there is a dispute between Contractor and County as to what licenses, certificates, and permits are required to perform the services identified in Attachment A. County reserves the right to make such determinations for purposes of this Agreement.

# 6. OFFICE SPACE, SUPPLIES, EQUIPMENT, ETC

Contractor shall provide such office space, supplies, equipment, vehicles, reference materials, support services and telephone service as is necessary for Contractor to provide the services identified in Attachment A to this Agreement. County is not obligated to reimburse or pay Contractor for any expense or cost incurred by Contractor in procuring or maintaining such items. Responsibility for the costs and expenses incurred by Contractor in providing and maintaining such items is the sole responsibility and obligation of Contractor.

# 7. COUNTY PROPERTY

A. <u>Personal Property of County</u>. Any personal property such as, but not limited to, protective or safety devices, badges, identification cards, keys, uniforms, vehicles, reference materials, furniture, appliances, etc. provided to Contractor by County pursuant to this Agreement is, and at the termination of this Agreement

remains, the sole and exclusive property of County. Contractor will use reasonable care to protect, safeguard and maintain such items while they are in Contractor's possession. Contractor will be financially responsible for any loss or damage to such items, partial or total that is the result of Contractor's negligence.

B. <u>Products of Contractor's Work and Services</u>. Any and all compositions, publications, plans, designs, specifications, blueprints, maps, formulas, processes, photographs, slides, videotapes, computer programs, computer disks, computer tapes, memory chips, soundtracks, audio recordings, films, audio-visual presentations, exhibits, reports, studies, works of art, inventions, patents, trademarks, copyrights, or intellectual properties of any kind that are created, produced, assembled, compiled by, or are the result, product, or manifestation of, Contractor's services or work under this Agreement are, and at the termination of this Agreement remain, the sole and exclusive property of the County. At the termination of the Agreement, Contractor will convey possession and title to all such properties to County.

# 8. WORKERS' COMPENSATION

Contractor shall provide Statutory Workers' Compensation insurance coverage and Employer's Liability coverage for not less than One Million dollars (\$1,000,000.00) per occurrence for all employees engaged in services or operations under this Agreement. Any insurance policy limits in excess of the specified minimum limits and coverage shall be made available to County as an additional insured. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of County for all work performed by Contractor, its employees, agents, and subcontractors.

# 9. INSURANCE

A. Contractor shall procure and maintain, during the entire term of this Agreement or, if work or services do not begin as of the effective date of this Agreement, commencing at such other time as may be authorized in writing by the County Risk Manager, the following insurance (as noted) against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder and the results of that work by Contractor, its agents, representatives, employees, or subcontractors.

# MINIMUM SCOPE AND LIMITS OF INSURANCE

Coverage shall be at least as broad as:

- Commercial General Liability. A policy of Comprehensive General Liability Insurance which covers all the work and services to be performed by Contractor under this Agreement, including operations, products and completed operations, property damage, bodily injury (including death) and personal and advertising injury. Such policy shall provide limits of not less than **Five Million dollars (\$5,000,000.00)** per claim or occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project or the general aggregate limit shall be twice the required occurrence limit.
- Automobile Liability Insurance. A policy of Comprehensive Automobile/Aircraft/Watercraft Liability Insurance for bodily injury (including death) and property damage which provides total limits of not less than **Five Million dollars (\$5,000,000.00)** per claim or occurrence applicable to all owned, non-owned and hired vehicles/aircraft/watercraft. If the services provided under this Agreement include the transportation of hazardous materials/wastes, then the Automobile Liability policy shall be endorsed to include Transportation Pollution Liability insurance covering materials/wastes to be transported by Contractor pursuant to this Agreement. Alternatively, such coverage may be provided in Contractor's Pollution Liability policy.

□ Professional Errors and Omissions Liability Insurance. A policy of Professional Errors and Omissions Liability Insurance appropriate to Contractor's profession in an amount of not less than One Million dollars (\$1,000,000.00) per claim or occurrence / Two Million dollars (\$2,000,000.00) general aggregate. If coverage is written on a claims-made form then: (1) the "retro date" must be shown, and must be before the beginning of contract work; (2) insurance must be maintained and evidence of insurance must be provided for at least five years after completion of the contract work; and (3) if coverage if cancelled or non-renewed, and not replaced with another claims- made policy form with a "retro date" prior to the contract effective date, then Contractor must purchase "extended reporting" coverage for a minimum of five years after completion of contract work.

Pollution Liability Insurance. A policy of Comprehensive Contractor's Pollution Liability coverage applicable to the work being performed and covering Contractor's liability for bodily injury (including death), property damage, and environmental damage resulting from "sudden accidental" or "gradual" pollution and related cleanup costs arising out of the work or services to be performed under this Agreement. Coverage shall provide a limit no less than One Million dollars (\$1,000.000.000) per claim or occurrence / Two Million dollars (\$2,000,000.00) general aggregate. If the services provided involve lead-based paint or asbestos identification/remediation, the Pollution Liability policy shall not contain lead-based paint or asbestos exclusions.

B. <u>Coverage and Provider Requirements</u>. Insurance policies shall not exclude or except from coverage any of the services and work required to be performed by Contractor under this Agreement. The required polic(ies) of insurance shall be issued by an insurer authorized to sell such insurance by the State of California and have at least a "Best's" policyholder's rating of "A" or "A+". Prior to commencing any work under this agreement, Contractor shall provide County: (1) a certificate of insurance evidencing the coverage required; (2) an additional insured endorsement for general liability applying to the County of Mono, its agents, officers and employees made on ISO form CG 20 10 11 85, or providing equivalent coverage; and (3) a notice of cancellation or change of coverage endorsement indicating that the policy will not be modified, terminated, or canceled without 30 days written notice to County.

C. <u>Deductible</u>, <u>Self-Insured Retentions</u>, and <u>Excess Coverage</u>. Any deductibles or self-insured retentions must be declared and approved by County. If possible, the Insurer shall reduce or eliminate such deductibles or self-insured retentions with respect to County, its officials, officers, employees, and volunteers; or the Contractor shall provide evidence satisfactory to County guaranteeing payment of losses and related investigations, claim administration, and defense expenses. Any insurance policy limits in excess of the specified minimum limits and coverage shall be made available to County as an additional insured.

D. <u>Subcontractors</u>. Contractor shall require and verify that all subcontractors maintain insurance (including Workers' Compensation) meeting all the requirements stated herein and that County is an additional insured on insurance required of subcontractors.

# **10. STATUS OF CONTRACTOR**

All acts of Contractor, its agents, officers, and employees, relating to the performance of this Agreement, shall be performed as an independent contractor, and not as an agent, officer, or employee of County.

Contractor, by virtue of this Agreement, has no authority to bind or incur any obligation on behalf of, or exercise any right or power vested in, County, except as expressly provided by law or set forth in Attachment A. No agent, officer, or employee of County is to be considered an employee of Contractor. It is understood by both Contractor and County that this Agreement shall not, under any circumstances, be construed to create an employer-employee relationship or a joint venture. As an independent contractor:

A. Contractor shall determine the method, details, and means of performing the work and services to be provided by Contractor under this Agreement.

B. Contractor shall be responsible to County only for the requirements and results specified in this Agreement, and except as expressly provided in this Agreement, shall not be subjected to County's control with respect to the physical action or activities of Contractor in fulfillment of this Agreement.

C. Contractor, its agents, officers and employees are, and at all times during the term of this Agreement shall represent and conduct themselves as, independent contractors, and not employees of County.

## **11. DEFENSE AND INDEMNIFICATION**

Contractor shall defend with counsel acceptable to County, indemnify, and hold harmless County, its agents, officers, and employees from and against all claims, damages, losses, judgments, liabilities, expenses, and other costs, including litigation costs and attorney's fees, arising out of, resulting from or in connection with, the performance of this Agreement by Contractor, or Contractor's agents, officers, or employees. Contractor's obligation to defend, indemnify, and hold the County, its agents, officers, and employees harmless applies to any actual or alleged personal injury, death, damage or destruction to tangible or intangible property, including the loss of use. Contractor's obligation under this paragraph extends to any claim, damage, loss, liability, expense, or other costs that are caused in whole or in part by any act or omission of the Contractor, its agents, employees, supplier, or anyone directly or indirectly employed by any of them, or anyone for whose acts or omissions any of them may be liable.

Contractor's obligation to defend, indemnify, and hold the County, its agents, officers, and employees harmless under the provisions of this paragraph is not limited to, or restricted by, any requirement in this Agreement for Contractor to procure and maintain a policy of insurance and shall survive any termination or expiration of this Agreement.

# **12. RECORDS AND AUDIT**

A. <u>Records</u>. Contractor shall prepare and maintain all records required by the various provisions of this Agreement, federal, state, county, municipal, ordinances, regulations, and directions. Contractor shall maintain these records for a minimum of four (4) years from the termination or completion of this Agreement. Contractor may fulfill its obligation to maintain records as required by this paragraph by substitute photographs, micrographs, or other authentic reproduction of such records.

B. <u>Inspections and Audits</u>. Any authorized representative of County shall have access to any books, documents, papers, records, including, but not limited to, financial records of Contractor, that County determines to be pertinent to this Agreement, for the purposes of making audit, evaluation, examination, excerpts, and transcripts during the period such records are to be maintained by Contractor. Further, County has the right, at all reasonable times, to audit, inspect, or otherwise evaluate the work performed or being performed under this Agreement.

#### **13. NONDISCRIMINATION**

During the performance of this Agreement, Contractor, its agents, officers, and employees shall not unlawfully discriminate in violation of any federal, state, or local law, against any employee, or applicant for employment, or person receiving services under this Agreement, because of race, religious creed, color, ancestry, national origin, physical disability, mental disability, medical condition, marital status, sex, age, or sexual orientation. Contractor and its agents, officers, and employees shall comply with the provisions of the Fair Employment and Housing Act (Government Code section 12900, et seq.), and the applicable regulations promulgated thereunder in the California Code of Regulations. Contractor shall also abide by the Federal Civil Rights Act of 1964 (P.L. 88-352) and all amendments thereto, and all administrative rules and regulations issued pursuant to said Act.

#### **14. TERMINATION**

This Agreement may be terminated by County without cause, and at will, for any reason by giving to Contractor thirty (30) calendar days written notice of such intent to terminate. Contractor may terminate this Agreement without cause, and at will, for any reason whatsoever by giving to County thirty (30) calendar days written notice of such intent to terminate.

Notwithstanding the foregoing, if this Agreement is subject to General Conditions (set forth as an Exhibit hereto), then termination shall be in accordance with the General Conditions and this Paragraph 14 shall not apply.

#### **15. ASSIGNMENT**

This Agreement is an agreement for the personal services of Contractor. County has relied upon the skills, knowledge, experience, and training of Contractor as an inducement to enter into this Agreement. Contractor shall not assign or subcontract this Agreement, or any part of it, without the express written consent of the County. Further, Contractor shall not assign any moneys due or to become due under this Agreement without the prior written consent of County.

#### **16. DEFAULT**

If Contractor abandons the work, or fails to proceed with the work and services requested by County in a timely manner, or fails in any way as required to conduct the work and services as required by County, County may declare Contractor in default and terminate this Agreement upon five (5) days written notice to Contractor. Upon such termination by default, County will pay to Contractor all amounts owing to Contractor for services and work satisfactorily performed to the date of termination.

#### **17. WAIVER OF DEFAULT**

Waiver of any default by either party to this Agreement shall not be deemed to be a waiver of any subsequent default. Waiver or breach of any provision of this Agreement shall not be deemed to be a waiver of any other or subsequent breach and shall not be construed to be a modification of the terms of this Agreement unless this Agreement is modified as provided in paragraph 23 below.

#### **18. CONFIDENTIALITY**

Contractor agrees to comply with various provisions of the federal, state, and county laws, regulations, and ordinances providing that information and records kept, maintained, or accessible by Contractor in the course of providing services and work under this Agreement, shall be privileged, restricted, or confidential. Contractor agrees to keep confidential, all such privileged, restricted or confidential information and records obtained in the course of providing the work and services under this Agreement. Disclosure of such

information or records shall be made by Contractor only with the express written consent of the County.

# **19. CONFLICTS**

Contractor agrees that he/she has no interest, and shall not acquire any interest, direct or indirect, that would conflict in any manner or degree with the performance of the work and services under this Agreement. Contractor agrees to complete and file a conflict-of-interest statement.

# 20. POST-AGREEMENT COVENANT

Contractor agrees not to use any confidential, protected, or privileged information that is gained from County in the course of providing services and work under this Agreement, for any personal benefit, gain, or enhancement. Further, Contractor agrees for a period of two (2) years after the termination of this Agreement, not to seek or accept any employment with any entity, association, corporation, or person who, during the term of this Agreement, has had an adverse or conflicting interest with County, or who has been an adverse party in litigation with County, and concerning such, Contractor by virtue of this Agreement has gained access to County's confidential, privileged, protected, or proprietary information.

## **21. SEVERABILITY**

If any portion of this Agreement or application thereof to any person or circumstance shall be declared invalid by a court of competent jurisdiction, or if it is found in contravention of any federal, state, or county statute, ordinance, or regulation, the remaining provisions of this Agreement, or the application thereof, shall not be invalidated thereby, and shall remain in full force and effect to the extent that the provisions of this Agreement are severable.

### **22. FUNDING LIMITATION**

The ability of County to enter into this Agreement is based upon available funding from various sources. In the event that such funding fails, is reduced, or is modified, from one or more sources, County has the option to terminate, reduce, or modify this Agreement, or any of its terms within ten (10) days of notifying Contractor of the termination, reduction, or modification of available funding. Any reduction or modification of this Agreement effective pursuant to this provision must comply with the requirements of paragraph 23.

# 23. AMENDMENT AND MODIFICATION

This Agreement may be amended or modified by the mutual consent of the Parties, if such amendment or modification is in written form, and executed with the same formalities as this Agreement or in accordance with delegated authority therefor, and attached to the original Agreement to maintain continuity.

#### 24. NOTICE

Any notice, communication, amendments, additions or deletions to this Agreement, including change of address of any party during the term of this Agreement, which Contractor or County shall be required, or may desire to make, shall be in writing and may be personally served, or sent by prepaid first-class mail or email (if included below) to the respective parties as follows:

If to County: Mono County Public Works Department Attn: Chad Senior P.O. Box 457 Bridgeport, CA 93517 Phone: 760 924-1812 Email: csenior@mono.ca.gov

If to Contractor: [CONTRACTOR] Attn: [NAME] [ADDRESS] [PHONE] [EMAIL]

#### **25. COUNTERPARTS**

This Agreement may be executed in two (2) or more counterparts (including by electronic and facsimile transmission), each of which shall constitute an original, and all of which taken together shall constitute one and the same instrument.

#### 26. GOVERNING LAW; VENUE

This Agreement shall be interpreted under the laws of the State of California. Exclusive venue for any legal action shall be Mono County, California

#### **27. ENTIRE AGREEMENT**

This Agreement contains the entire agreement of the parties, and no representations, inducements, promises, or agreements otherwise between the parties not embodied herein or incorporated herein by reference, shall be of any force or effect. Further, no term or provision hereof may be changed, waived, discharged, or terminated, unless executed in writing by the parties hereto.

# IN WITNESS THEREOF, THE PARTIES HERETO HAVE SET THEIR HANDS AND SEALS THIS \_\_\_\_\_\_ DAY OF \_\_\_\_\_\_, 2021.

COUNTY OF MONO	[CONTRACTOR]	
By:	Ву:	
Name: Tony Dublino	Name:	
Title: Public Works Director	Title:	
Dated:	Dated:	
APPROVED AS TO FORM:		
Mono County Counsel's Office		
APPROVED BY RISK MANAGEMENT:		

#### Mono County Risk Manager

Long Valley Streets Project - Sample Standard Agreement

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# ATTACHMENT A

#### AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

#### **TERM:**

#### FROM: [DATE] TO: [DATE]

#### **SCOPE OF WORK:**

County has selected, and Contractor shall construct, project Bid Items A through D set forth in project manual and included in Attachment B2 of this agreement.

The major work items of this the LONG VALLEY STREETS PROJECT, Project No. 9116 ("Project") are to rehabilitate the existing asphalt concrete on Substation Road, Meadow View Drive, Lake Manor Place, Aspen Terrace, Delta Drive, Hilton Creek Drive, Hilton Creek Place, Crowley Lake Circle, Elderberry Lane, Placer Road (portion), Pearson Road, Wildrose Drive, Sierra Springs, Sunny Slopes Road, Wheeler View Drive, Montana Road, Foothill Road, and the westerly portion of Mountain View Drive. Rehabilitation of the roads will include repair of damaged road locations, grinding, milling, conforming of existing asphalt, placement of hot mix asphalt, construction of curbs, installation of roadway signs, installation of road paint markings, and other items or details not mentioned above that shall be performed, placed, constructed, or installed in accordance with the Project's Invitations for Bids and the Contract Documents, including the Project Manual, Project Plans, the Standard Specifications and the Standard Plans (2018) issued by the California Department of Transportation, and the AASHTO Green Book (2018) as they may have been amended for County's use.

Tasks performed in completing the Project shall follow generally accepted practices for the construction industry and shall meet the minimum requirements and guidelines established by federal, state, and local agencies. Work tasks shall be coordinated with County's Department of Public Works.

Note: This Agreement and Scope of Work includes and is subject to the provisions of the Contract Documents, including Project Manual, Project Plans, and the General Prevailing Wage Rates established by the California Department of Industrial Relations in effect on the date of this Agreement, which documents are attached hereto and/or by this reference incorporated herein.

#### SCHEDULE OF FEES:

See Bid Schedule set forth in Attachment B of this Agreement and incorporated herein.

#### WORK SCHEDULE:

See Contract Documents, attached hereto and incorporated herein. All work shall be completed within sixty-five (65) working days of the start of construction date stated in the Notice to Proceed issued by the County. Contractor shall pay County liquidated damages in the amount of \$4,000.00

per day for any working days exceeding sixty (60) working days. Completion of site improvements shall be specified by the Department of Public Works in a Notice of Completion filed in the Office of the County Recorder.

# **ATTACHMENT B**

#### AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

#### TERM:

FROM: [DATE]

TO: [DATE]

#### **SCHEDULE OF FEES:**

See Bid Schedule, attached hereto and incorporated herein as Attachment B2. As specified in Paragraph 3.D of the Agreement, the total project cost shall not exceed [X Dollars (\$X)] unless otherwise authorized by the County in writing prior to Contractor incurring additional expenses. Upon the County's written approval and authorization to proceed, payment shall be made for any additional items or tasks not initially specified in Attachment A (Scope of Work) attached to the Agreement and incorporated herein.

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# ATTACHMENT B2

#### AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

# **BID SCHEDULE**

#### [INSERT BID SCHEDULE]

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# **EXHIBIT 1**

# AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

# **GENERAL CONDITIONS**

# **SECTION 1. GENERAL**

#### 1.1 DEFINITIONS AND TERMS.

Where the following terms are used in these General Conditions, the intent and meaning shall be interpreted as identified in the Standard Specifications and as follows:

- A. **ADMITTED SURETY INSURER** (or, **SURETY):** A corporate insurer or inter-insurance exchange to which the State Insurance Commissioner has issued a certificate of authority to transact surety insurance in California, as defined in Section 105 of the Insurance Code.
- B. **AWARD:** The acceptance by the County of the successful bidder's proposal.
- C. **CALENDAR DAY:** Unless otherwise specified, days or calendar days means each and every day shown on the calendar, Saturdays, Sundays, and holidays included.
- D. **CHANGE ORDER:** A written order to the Contractor covering changes in the plans, specifications, or proposal quantities and establishing the basis of payment and contract time adjustment, if any, for the work affected by such changes. The work, covered by a change order, shall be within the scope of the contract.
- E. **CONTRACT** (or, **CONTRACT DOCUMENTS**): The written and executed agreement between the County and the Contractor covering the work to be performed. The written agreement consists of all attachments as well as all documents incorporated by reference and shall include, but is not limited to, the agreement, performance bond, labor and materials payment bond, any required insurance certificates, the project manual, any addenda issued to bidders, and the project plans.
- F. **CONTRACTOR:** The business entity entering into a contract with the County of Mono for the performance of the work.
- G. **CONTRACT ITEM (**or, **PAY ITEM):** A specific unit of work for which a price is provided in the Contract.
- H. **CONTRACT TIME:** The number of calendar days or working days, for completion of the contract, including authorized time extensions. If a calendar date of completion is stated in the proposal, in lieu of a number of calendar or working days, the contract shall be completed by that date.
- I. **COUNTY:** The County of Mono, a political subdivision of the State of California.
- J. **DEPARTMENT:** The Mono County Department of Public Works, except where Department of Transportation publications and offices are cited, whereupon such citations are to remain as written and refer to the State of California, Department of Transportation.

- K. **ENGINEER:** The individual, partnership, firm, or corporation duly authorized by the County to be responsible for engineering supervision of the contract work and acting directly or through an authorized representative.
- L. **EQUIPMENT:** All machinery, together with the necessary supplies for upkeep and maintenance, and also all tools and apparatus necessary for the proper construction and acceptable completion of the work.
- M. **EXTRA WORK:** An item of work not provided for in the awarded contract as previously modified by change order or supplemental agreement, but which is found by the Engineer to be necessary to complete the work within the intended scope of the contract as previously modified.
- N. **INSPECTOR:** An authorized representative of the Engineer assigned to make all necessary inspections and/or tests of the work performed or being performed, or of the materials furnished or being furnished by the Contractor.
- O. **LABORATORY:** The laboratory or laboratories authorized by the Department to test materials and work involved in the contract.
- P. LIQUIDATED DAMAGES: the daily amount set forth in these General Conditions to be deducted from the contract price to cover additional costs incurred by a local agency because of the contractor's failure to complete the contract work within the number of calendar days or workdays specified.
- Q. **NOTICE TO PROCEED:** A written notice from the Department to the Contractor to begin the actual contract work on the Project. If applicable, the Notice to Proceed shall state the date on which the contract time begins.
- R. **PROJECT:** The construction, installation, placement, alteration, or repair of any improvement of any kind, which is required directly or indirectly by the contract.
- S. **SPECIFICATIONS:** A part of the contract containing the written directions and requirements for completing the contract work. Standards for specifying materials or testing which are cited in the contract specifications by reference shall have the same force and effect as if physically included in the contract.
- T. **STANDARD PLANS:** State of California Department of Transportation, 2015 edition of the Standard Plans
- U. **STANDARD SPECIFICATIONS:** State of California Department of Transportation, 2015 edition of the Standard Specifications
- V. **SUPERINTENDENT:** The Contractor's executive representative who is present on the work during progress, authorized to receive and fulfill instructions from the Engineer, and who shall supervise and direct the construction.
- W. **SURVEYOR:** The individual, partnership, firm, or corporation duly authorized by the Contractor to be responsible for verifying placement of the work and acting directly or through an authorized representative.
- X. **UNEXCUSABLE DELAY:** a delay that does not entitle the Contractor to an adjustment of the Contract Limit and does not entitle the Contractor to an adjustment of the Contract Time.
- Y. **WORK:** The construction and services required by the Contract, whether completed in whole or partially completed, and includes all labor, materials, equipment, tools, supplies, tax, transportation, and services provided or to be provided by the Contractor to fulfill Contractor's obligations. The Work may constitute the whole or a part of the Project.

Z. WORKING DAY: A working day shall be any day other than a legal holiday, Saturday, or Sunday on which the normal working forces of the Contractor may proceed with regular work for at least 6 hours toward completion of the contract. Unless work is suspended for causes beyond the Contractor's control, Saturdays, Sundays, and holidays on which the Contractor's forces engage in regular work, requiring the presence of an inspector, will be considered working days.

# **1.2 ORDER OF PRECEDENCE OF DOCUMENTS.**

In the event of a conflict between the Agreement (including any attachment or exhibit thereto); the Invitation for Bids and Instructions to Bidders; the Project Plans; the Technical Specifications; the 2018 State of California, Department of Transportation, Standard Specifications; and the Quality Assurance Program (QAP), the Contractor shall immediately notify the County. The County shall have the sole discretion to resolve any such conflict by deciding which document or provision shall govern.

# **SECTION 2. PERFORMANCE OF WORK**

# 2.1 USE OF PREMISES, HOURS OF WORK, CONTACT INFORMATION AND PUBLIC NOTIFICATION.

- A. Work occurring within 500 feet of a residential or commercial occupancy shall be limited to the hours between 7:00 am and 8:00 pm Monday through Saturday (Sunday operations shall be limited to hours between 9:00 am and 5:00 pm). Concrete pouring is limited to daylight hours between sunrise and sunset.
- B. Unless otherwise provided, the Contractor accepts full control of any vehicles, equipment, material, or other property delivered to the site in the performance of services and work for the Project. The Contractor is solely responsible for ensuring the security and protection of such vehicles, equipment, materials, property, and Work. The County accepts no responsibility for the security, safety, or liability of said vehicles, equipment, material, property, or work until final acceptance of the Work. The Contractor understands that the project site is a public area and, as such, there may be vandalism or obstructions, protrusions, and undesirable materials on and under the ground surface that may result in damage to the Contractor's vehicles, equipment, materials, project work, or other property.
- C. Authorized representatives or agents of the Engineer and County, state, or federal government shall have the right to enter the project site at any time during execution of the Work for any purpose that will not unreasonably interfere with the Contractor's use, including, but not limited to, the conduct of its own business, facility inspection, or inspection to ensure compliance with the terms and conditions of the Project.
- D. 24 Hour Contact Number The Contractor shall assign a project superintendent and an assistant who have the complete authority to make decisions on behalf of the Contractor. The project superintendent or the assistant shall be at the project site at all times during the construction and shall be available and on call 24 hours a day, 7 days per week for the duration of the project. The Contractor shall provide the Engineer and the Mono County Sheriff's Department primary and secondary 24-hour mobile phone numbers for the project superintendent and the assistant. These numbers shall not automatically direct calls to a recorder or other message taking service.
- E. Advance Public Notification At least 7 days and no more than 14 days prior to beginning any work on the project, the Contractor shall deliver written notice to all adjoining residents,

businesses, tenants, to the fire department and law enforcement agency having jurisdiction over the project area, and other applicable parties listed below. Notice shall be given for general construction activity in an area as well as specific activities that will, in any way, inconvenience residents/property owners/tenants or affect their operations or access to their property. Such notices shall include the expected date for start of construction, a general description of the construction activity to take place, expected duration, and the name, address, and contact number of the Contractor's superintendent and of the County Engineer. A follow up notice shall be distributed two days prior to the construction activity. Copies of all notices shall be provided to the Engineer for approval five working days prior to the desired distribution date.

NOTICE SHALL ADDITIONALLY BE PROVIDED TO THE FOLLOWING, OR AS FOLLOWS:

Mono County Sheriff's Department Southern CA Edison Mono County Fire / Rescue Department United States Bureau of Land Management

F. Vehicular access – Vehicular access to and from commercial and residential driveways and parking lots shall be maintained at all times, except when performing items of work that cannot be accomplished without access restriction.

## **2.2 OTHER PROJECTS.**

The Contractor is advised that other projects may be taking place at the site at the same time as this Project. The Contractor will make every effort to coordinate his work with that of other contractors.

#### **2.3 PROTECTION OF PROPERTY.**

Attention is directed to Section 5-1.36, "Property and Facility Preservation," of the Standard Specifications. The Contractor shall take all reasonable precautions to preserve and protect all on-site and surrounding public and private property to prevent damage of all kinds to existing structures, signs, fences, gates, roads, drainage facilities, monitoring wells, equipment, and the environment arising from the execution of this Contract, unless otherwise called for on Project Plans or in these General Conditions. In addition, the Contractor shall be responsible for the preservation and protection of all land monuments and property markers.

In addition to its obligations pursuant to the Agreement to defend, indemnify, and hold the County harmless, the Contractor shall replace, repair, and/or be responsible for any damage or injury to property of any character during the prosecution of the Work, resulting from any act, omission, neglect, or misconduct in the Contractor's manner or method of executing the Work, or at any time due to defective work or materials, and said responsibility shall not be released until the Project is completed and accepted. Repairs or replacement required as a result of such damage shall be performed to the County's satisfaction and at no additional cost to the County.

It is the Contractor's responsibility to identify and document any property or site damage that exists prior to the start of construction. If undocumented damage is discovered by the County that could have been caused as a result of the Contractor's presence, it will be the Contractor's responsibility to repair the damage to the County's satisfaction without cost to the County. If the Contractor does not repair the damage to the County's satisfaction, the County has the right, after 48 hours of written notification, to repair the damage and charge the Contractor for all expenses associated with the repair.

The Contractor shall be responsible for the safety of all persons at or near the project site as it pertains to the Project. The Contractor shall provide signage, temporary protective fencing, or covering over any open trenching, excavation, or other hazardous situation arising from the execution of the Work, to keep out unauthorized persons, at no additional cost to the County.

# 2.4 ENVIRONMENTAL PROTECTION.

The Contractor shall comply with all federal, state, and local laws and regulations controlling pollution of the environment. All necessary precautions shall be taken to prevent pollution of streams, drainage channels, lakes, ponds, and reservoirs with fuels, oils, bitumens, chemicals, or other harmful materials and to prevent pollution of the atmosphere from particulate and gaseous matter. Any fuel or lubricants stored on-site shall be in appropriate and secure containers provided with secondary containment.

# 2.5 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES.

Should the Contractor encounter materials which the Contractor reasonably believes to be asbestos or a hazardous substance as defined in Section 25914.1 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, the Contractor may continue work in unaffected areas reasonably believed to be safe, and shall immediately cease work in the affected area and immediately report the condition to the Engineer in writing.

In accordance with Section 25914.1 et seq. of the Health and Safety Code, all such removal of asbestos or hazardous substances, including any exploratory work to identify and determine the extent of such asbestos or hazardous substance, shall be performed by a person properly licensed to perform such work and shall be performed by separate contract if the presence of asbestos or hazardous substances is not disclosed in the bid documents.

# 2.6 ARCHAEOLOGICAL AND HISTORICAL FINDINGS.

Should the Contractor encounter, during its operations, any building, part of a building, structure, or object which is incongruous with its surroundings, the Contractor shall immediately cease operations in that location and notify the Engineer. The Engineer will immediately investigate the Contractor's finding and will direct the Contractor either to resume its operations or to suspend operations as directed.

Should the Engineer order suspension of the Contractor's operations in order to protect an archaeological or historical finding, or order the Contractor to perform extra work, such work shall be covered by an appropriate contract modification (change order, amended or supplemental agreement).

# SECTION 3. ACKNOWLEDGEMENTS, DISCLOSURES, CERTIFICATIONS AND AFFIDAVITS

# 3.1 DEBARMENT AND SUSPENSION CERTIFICATION

Contractor's signature affixed to the Agreement, shall constitute a certification under penalty of perjury under the laws of the State of California, that Contractor has complied with Title 2 CFR Part 180, "OMB Guidelines to Agencies on Government wide Debarment and Suspension (non-procurement)", which certifies that he/she or any person associated therewith in the capacity of owner, partner, director, officer, or manager, is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any federal agency; has not been suspended, debarred, voluntarily excluded, or determined to be of ineligible by any federal agency within the past three (3) years; does not have a proposed debarment pending; and has not been indicted, convicted, or had a civil judgment rendered against it by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three (3) years. Any exceptions to this certification must be disclosed to the County.

# 3.2 NATIONAL LABOR RELATIONS BOARD CERTIFICATION

Contractor's signature affixed to the Agreement, shall constitute a certification under penalty of perjury under the laws of the State of California that no more than one final unappealable finding of contempt of court by a federal court has been issued against Contractor within the immediately preceding twoyear period because of Contractor's failure to comply with a court order to comply with an order of the National Labor Relations Board.

# **3.3** APPLICABILITY TO SUBCONTRACTORS

The certification and disclosure of lobbying activities forms provided in the Project Manual and/or the Agreement shall be included in each subcontract and any lower-tier contracts exceeding \$10,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

# **3.4 QUARTERLY DISCLOSURES**

The Contractor, subcontractors and any lower-tier contractors shall file a disclosure form at the end of each calendar quarter in which there occurs any event that requires disclosure or that materially affects the accuracy of the information contained in any disclosure form previously filed by the Contractor, subcontractor, or lower-tier contractor. An event that materially affects the accuracy of the information reported includes:

(1) A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered federal action; or

(2) A change in the person(s) or individual(s) influencing or attempting to influence a covered federal action; or

(3) A change in the officer(s), employees(s), or member(s) contacted to influence or attempt to influence a covered Federal Action.

# SECTION 4. SUBCONTRACTORS

# 4.1 SUBCONTRACTING.

No subcontract releases the Contractor from the contract or relieves the Contractor of its responsibility for a subcontractor's work.

If the Contractor violates Public Contract Code § 4100 et seq., the County of Mono may exercise the remedies provided under Public Contract Code § 4110 and may refer the violation to the Contractors State License Board as provided under Public Contract Code § 4111.

The Contractor shall perform work equaling at least 30 percent of the value of the original total bid with the Contractor's own employees and equipment, owned or rented, with or without operators.

Each subcontract must comply with the Agreement and all contract documents including, but not limited to insurance requirements. Subcontractor shall provide all certificates and other required

documentation/proof of insurance to Contractor, and Contractor shall make such documents available to County upon its request.

Each subcontractor must have an active and valid State contractor's license with a classification appropriate for the work to be performed (Bus & Prof Code, § 7000 et seq.).

The Contractor shall submit copies of subcontracts upon request by the Engineer. Before subcontracted work starts, the Contractor shall submit a Subcontracting Request form to the Engineer. The Contractor shall not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations web site at: <u>http://www.dir.ca.gov/dlse/debar.html</u>

Upon request by the Engineer, the Contractor shall immediately remove and not again use a subcontractor who fails to prosecute the Work satisfactorily.

If the work involves Federal funds, each subcontract and any lower-tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contract" located in the Federal Provisions within the Project Manual.

Payment for subcontracted work involved will be withheld from progress payments due or to become due, until correction is made. Failure to comply may result in termination of the contract.

# 4.2 PERFORMANCE OF SUBCONTRACTORS

The bid shall list the name and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of one-half of one percent of the total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The bidder's attention is invited to other provisions of the Act related to the imposition of penalties for a failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

# 4.3 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS.

A prime contractor or subcontractor shall pay any subcontractor not later than 7 days from receipt of each progress payment in accordance with the provision in Section 7108.5 of the California Business and Professions Code concerning prompt payment to subcontractors. The 7 days is applicable unless a longer period is agreed to in writing. Any delay or postponement of payment over 30 days may take place only for good cause and with the County's prior written approval. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanctions and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance or noncompliance by a subcontractor.

#### 4.4 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS.

Any retainage kept by the prime contractor or by a subcontractor must be paid in full to the earning subcontractor within 30 days after the subcontractor's work is satisfactorily completed. Any delay or postponement of payment may take place only for good cause and with the County's prior written approval. Any violation of these provisions shall subject the violating contractor or subcontractor to the penalties, sanctions, and remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative or judicial remedies, otherwise available to the contractor or subcontractor in the event of a dispute

involving late payment or nonpayment by the contractor, deficient subcontractor performance and/or noncompliance by a subcontractor. This clause applies to both DBE and non-DBE subcontractors.

Please refer to the Federal Provisions (for contracts involving Federal funds), attached to the Agreement for further information. Where the Federal Provisions apply, they shall supersede and replace this section 4.4 to the extent inconsistent herewith.

#### 4.5 APPALACHIAN REGIONAL DEVELOPMENT ACT OF 1965.

This project is not funded under the Appalachian Regional Development Act of 1965, therefore, page FP-13 of the Federal Provisions (if Federal Provisions are included in the contract) does not apply to this contract.

# **SECTION 5. PROJECT IMPLEMENTATION**

#### 5.1 PRE-CONSTRUCTION CONFERENCE.

Prior to Contractor mobilization, a pre-construction conference will be held at a location, date, and time to be determined by the County for the purpose of discussing with the Contractor the scope of work, Project Plans, Technical Specifications, Special Provisions, existing conditions, coordination with disposal site operations, equipment and material storage locations, materials testing and construction quality assurance, and all essential matters pertaining to the prosecution of and the satisfactory completion of the Project as required. The Contractor's representative at this conference shall include all major superintendents for the work and may include subcontractors.

#### 5.2 PROSECUTION AND PROGRESS.

The Contractor shall submit a progress schedule for the Engineer's approval within 10 calendar days after the date of the Notice to Award. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the Work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the Project in accordance with and within the time set forth in the ContractDocuments.

If, in the sole judgment of the Engineer, the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised schedule for completion of the Work within the contract time and modify its operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the Work be discontinued for any reason, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.

# 5.3 ORDER OF WORK.

The project site is located in a climate that can experience freezing temperatures throughout the year. While determination of the means, methods, techniques, sequences, and procedures of construction are the responsibility of the Contractor, such sequencing and procedures must bear climatic conditions in mind. Work shall be scheduled and protected such that inclement weather does not damage the Work or result in a hazardous condition.

# **SECTION 6. PROJECT ADMINISTRATION**

### 6.1 GENERAL.

**Changes and Extra Work:** The County may make changes within the scope of work and add extra work. The Engineer describes the changes and extra work, the payment basis, and any time adjustment in a *Change Order*. A *Change Order* is approved when the County signs the *Change Order*. Until the County approves a *Change Order*, continue to perform the work under the Contract unless the Engineer orders you to start the work described in the *Change Order* before its approval. Submit detailed cost data for a unit price adjustment for a bid item if (1) the Engineer requests the data or (2) you request a unit price adjustment resulting from a change of more than 25 percent in the bid item's quantity.

### **Control of Work**:

Attention is directed to Section 4-1.05, "Changes and Extra Work," and applicable portions of Section 5, "Control of Work," Section 7, "Legal Relations and Responsibility to the Public," and Section 8, "Prosecution and Progress," of the Standard Specifications with respect to administration of this contract and the Project.

### 6.2 OMITTED ITEMS.

The County may, if in its best interest, omit from the Work any Contract Item. Such omission shall not invalidate any other Contract provision or requirement. Should a Contract Item be omitted or otherwise ordered to be non-performed, the Contractor shall be paid for all work performed toward completion of such an item prior to the date of the order to omit such item.

### 6.3 CONTRACTOR REPRESENTATION.

The County will not recognize any subcontractor on the work. The Contractor shall at all times when work is in progress be represented in person by either a qualified, competent Superintendent or by another designated, qualified, competent representative who is duly authorized to receive and execute orders of the Engineer. The Superintendent shall be satisfactory to the County and shall not be changed except with the express written consent of the County unless the ceases to be in its employ.

All communications given to the Superintendent or other authorized representative shall be as binding as if given to the Contractor. Important communications shall be confirmed in writing. An authorized representative of the Contractor shall be available for emergency telephone communications from the County on a 24-hour, seven days per week basis during the performance of the Work.

### 6.4 CONTRACTOR PERSONNEL.

The Contractor shall at all times enforce strict discipline and good order among its employees and shall not employ on the work any unfit person or anyone not skilled in the work assigned to him or her. The Contractor shall ensure that all workers have sufficient skill and experience necessary to properly perform the work assigned to them and that workmanship shall be of the best trade practice, regardless of the quality of materials. Workers engaged in special work or skilled work shall have sufficient experience in such work and in the operation of the equipment required to perform the work satisfactorily. The Contractor shall provide, at all times, sufficient and competent labor to carry on the work properly and ensure completion of each part in accordance with the Project Plans, these General Conditions, the Special Provisions, any QAP, and the approved schedule. An employee of the Contractor or subcontractor who is deemed by the County to be incompetent, disorderly, or otherwise objectionable shall be promptly removed by the Contractor and not reemployed on the Work.

# 6.5 METHODS AND EQUIPMENT.

The Contractor shall, at all times, employ sufficient labor and equipment for prosecuting the Work to full completion in the manner and time required by the Contract Documents.

All equipment used on the Work shall be of sufficient size and in such mechanical condition as to meet requirements of the Work and to produce a satisfactory quality of work. Equipment used on any portion of the Work shall be such that no injury to previously completed work, adjacent property, or existing facilities will result from its use.

When the methods and equipment to be used by the Contractor in accomplishing the Work are not prescribed in the Contract Documents, the Contractor is free to use any methods or equipment that will accomplish the work in conformity with the requirements of the Contract Documents.

### 6.6 PARTIAL PAYMENTS.

Unless otherwise agreed by the County, no partial payment will be made for any materials on hand which have been furnished but not incorporated into the work.

# 6.7 FINAL ACCEPTANCE.

Upon due notice from the Contractor of presumptive completion of the entire Project, the Engineer and County will make an inspection. If all construction provided for and contemplated by the Contract is found to be completed in accordance with the Contract Documents, such inspection shall constitute the final inspection. The County shall notify the Contractor in writing of final acceptance as of the date of the final inspection.

If, however, the inspection discloses any work, in whole or in part, as being unsatisfactory, the County will give the Contractor the necessary instructions for correction of same and the Contractor shall immediately comply with and execute such instructions. Upon correction of the work, another inspection will be made which shall constitute the final inspection, provided the work has been satisfactorily completed. In such event, the County will make the final acceptance and notify the Contractor in writing of this acceptance as of the date of final inspection.

The completion of the contract will be accepted and Notice of Completion recorded by the County only when the entire contract is completed satisfactorily to the County.

# 6.8 CLAIMS FOR ADJUSTMENT AND DISPUTES.

If for any reason the Contractor deems that it is due additional compensation for work or materials not clearly provided for in the Contract Documents or previously authorized as extra work, the Contractor shall notify the County in writing of its intention to claim such additional compensation 24 hours before beginning the work on which the claim is based. If such notification is not given or the County is not afforded a proper opportunity by the Contractor to keep strict account of actual cost as required, then the Contractor hereby agrees to waive any claim for such additional compensation. Such notice by the Contractor and the fact that the Engineer has kept account of the cost of the work shall not in any way be construed as proving or substantiating the validity of the claim. When the work on which the claim for additional compensation is based has been completed, the Contractor shall, within 14 calendar days,

submit its written claim to the County for consideration in accordance with local laws or ordinances. Nothing in this subsection shall be construed as a waiver of the Contractor's right to dispute final payment based on differences in measurements or computations.

Claims falling within the provisions of California Public Contract Code section 9204 shall be processed in accordance with that section.

### 6.9 FORCE MAJEURE.

Except for defaults of subcontractors at any tier, the Contractor shall not be liable for any excess costs if the failure to perform the Contract arises from causes beyond the control and without the fault or negligence of the Contractor. Examples of such causes include, but are not limited to:

- a) Acts of God or of the public enemy, and
- b) Acts of the federal or State government in either its sovereign or contractual capacity.

If the failure to perform is caused by the default of a subcontractor at any tier, and if the cause of the default is beyond the control of both the Contractor and subcontractor, and without the fault or negligence of either, the Contractor shall not be liable for any excess costs for failure to perform.

### 6.10 WARRANTY AND GUARANTEE.

The Contractor warrants to the County that all materials furnished under this Contract shall be new unless otherwise specified and that all Work, including without limitation all materials, will be of good quality, free from faults and defects and in conformance with contract requirements. Any work not so conforming to these standards may be considered defective. The obligations of the Contractor in this subsection shall be in addition to, and not in limitation of, any obligations imposed upon it by those guarantees required by the contract or otherwise prescribed by law.

Neither the recordation of a Notice of Completion, nor the final certification or payment, nor any provision of the Contract or partial or entire use or occupancy of the premises by the County shall constitute an acceptance of the Work not performed in accordance with the Contract or relieve the Contractor of liability with respect to any express warranties or responsibility for faulty materials or workmanship.

The Contractor agrees that all work and materials provided under this contract are guaranteed for a period of one year against defects of any kind or nature and that any defective work or materials resulting from the Contractor's negligence will be repaired or replaced by the Contractor at its own expense immediately upon notification by the County. The Contractor shall furnish a warranty bond in the amount of 10 percent of the contract price as provided for and meeting the requirements specified in the Agreement. The warranty bond shall be furnished and approved prior to final payment and release and shall remain in effect for the duration of the guarantee period to insure the repair or replacement of defective work or materials. The one-year guarantee period shall commence on the day of recordation of the Notice of Completion.

The County will give notice of observed defects with reasonable promptness. The County is authorized to make such repairs and charge the Contractor the actual costs of such necessary labor and material, if, within 14 calendar days after mailing a notice in writing to the Contractor or its agent, the Contractor neglects to make or undertake with due diligence the aforesaid repairs; provided, however, that in the

case of an emergency where, in the opinion of the County, delay would cause hazard to health or serious loss or damage, repairs may be made without notice being sent to the Contractor, and the Contractor shall pay the cost thereof.

If after installation and acceptance, the Work provided for under this Contract proves to be unsatisfactory to the County, the County shall have the right to use the Work until it can, without damage to the County, be taken out of service for correction or replacement. Such period of use of the defective Work pending correction or replacement shall in no way decrease the guarantee period.

Nothing in this section shall be construed to limit, relieve or release the Contractor's, subcontractor's, and supplier's liability to the County for damages sustained as the result of latent defects in the Work caused by the negligence of their respective agents, employees or subcontractors.

# **SECTION 7: TERMINATION**

### 7.1 TERMINATION BY CONTRACTOR.

The Contractor shall have the right to terminate the Contract only upon the occurrence of one of the following:

- Provided that County has not commenced reasonable action to remove any order of a court within the 90 day period, the Work is stopped for 90 consecutive days, through no act or fault of Contractor, any Subcontractor, or any employee or agent of Contractor or any Subcontractor, due to an issuance of an order of a court or other public authority having jurisdiction or due to an act of government, such as a declaration of a national emergency making material unavailable.
- 2. The County fails to perform any material obligation under the Contract Documents and fails to cure such default within 30 days, or County has not commenced to cure such default within 30 days where such cure will require a reasonable period beyond 30 days and diligently prosecutes the same to completion, after receipt of notice from Contractor stating the nature of such default(s).

Upon occurrence of one of the events listed above, the Contractor may, upon 10 days additional notice to County and Engineer, and provided that the condition giving rise to Contractor's right to terminate is continuing, terminate the Contract.

Upon termination by Contractor, County will pay to Contractor the sum determined by Section 7.4 of these General Conditions. Such payment will be the sole and exclusive remedy to which Contractor is entitled in the event of termination of the Contract by Contractor pursuant to this section; and Contractor will be entitled to no other compensation or damages and expressly waives the same.

### 7.2 TERMINATION BY COUNTY FOR CAUSE.

The County will have the right to terminate the Contract for cause or the Contractor's right to perform the Contract for cause at any time after the occurrence of any of the following events:

- 1. Contractor becomes insolvent or files for relief under the bankruptcy laws of the United States.
- 2. Contractor makes a general assignment for the benefit of its creditors or fails to pay its debts as the same become due.

- 3. A receiver is appointed to take charge of Contractor's property.
- 4. The commencement or completion of any Work activity on the critical path is more than 6 days behind the date set forth in the Contract Schedule for such Work activity as a result of an Unexcusable Delay.
- 5. Contractor abandons the Work.

Upon the occurrence of any of the following events and subject to the clause entitled "Force Majeure", the County will have the right to terminate the Contract for cause or the Contractor's right to perform the Contract for cause if the Contractor fails to promptly commence to cure such default and diligently prosecute such cure within 5 days after notice from the County, or within such longer period of time as is reasonably necessary to complete such cure:

- 1. Contractor persistently or repeatedly refuses or fails to supply skilled supervisory personnel, an adequate number of properly skilled workers, proper materials, or necessary equipment to prosecute the Work in accordance with the Contract Documents.
- 2. Contractor fails to make prompt payment of amounts properly due subcontractors after receiving payment from County.
- 3. Contractor fails to follow applicable legal requirements.
- 4. Contractor persistently or materially fails to execute the Work in accordance with the Contract Documents.
- 5. Contractor is in default of any other material obligation under the ContractDocuments.
- 6. Contractor persistently or materially fails to comply with applicable safety requirements.

Upon any of the occurrences referred to above the County may, at its election and by notice to the Contractor, terminate the Contract and take possession of the Project site and all materials, supplies, equipment, tools, and construction equipment and machinery thereon owned by Contractor; accept the assignment of any or all of the subcontracts; and then complete the Work by any method County may deem expedient. If requested by County, Contractor shall remove any part or all of Contractor's materials, supplies, equipment, tools, and construction equipment and machinery from the Project site within 7 days of such request; and if Contractor fails to do so, County may remove or store, and after 90 days sell, any of the same at Contractor's expense.

If the Contract or Contractor's right to perform is terminated by the County as provided in this section, the Contractor shall not be entitled to receive any further payment until the expiration of 35 days after Final Completion and acceptance of all Work by County.

If the unpaid balance of the Contract Sum exceeds the cost of completing the Work, including all additional costs and expenses made necessary thereby, including costs for County staff time, plus all losses sustained, including any liquidated damages provided under the Contract Documents, such excess shall be paid to Contractor. If such costs, expenses, losses, and liquidated damages exceed the unpaid balance of the Contract Sum, Contractor shall pay such excess to County.

No termination or action taken by the County after termination shall prejudice any other rights or remedies of the County provided by law or by the Contract Documents upon such termination; and the County may proceed against the Contractor to recover all losses suffered by County.

Termination of the Contract does not relieve the surety of its obligation for any just claims arising out of

the work performed.

### 7.3 TERMINATION BY COUNTY FOR CONVENIENCE.

The County may, at its option, terminate this Contract, in whole or from time to time in part, at any time by giving notice to Contractor. Upon such termination, the Contractor agrees to waive any claims for damages, including loss of anticipated profits, on account thereof; and, as the sole right and remedy of the Contractor, the County shall pay the Contractor in accordance with this Section, below.

Upon receipt of notice of termination under this Section 7.3, Contractor shall, unless the notice directs otherwise, do the following:

- 1. Immediately discontinue the Work to the extent specified in the notice.
- 2. Place no further orders or subcontracts for materials, equipment, services, or facilities, except as may be necessary for completion of such portion of the Work as is not discontinued.
- 3. Promptly cancel, on the most favorable terms reasonably possible, all subcontracts to the extent they relate to the performance of the discontinued portion of the Work.
- 4. Thereafter, do only such Work as may be necessary to preserve and protect Work already in progress and to protect materials, plants, and equipment on the Project site or in transit thereto.

Upon such termination, the obligations of the Contract shall be as set forth in section 7.4. Termination of the Contract does not relieve the surety of its obligation for any just claims arising out of the work performed.

### 7.4 PAYMENT ADJUSTMENT FOR TERMINATION.

Section 8-1.14E, "Payment Adjustment for Termination," of the Standard Specifications is replaced in its entirety by the following language:

Upon such termination, the County shall pay to Contractor the sum of the following:

- 1. The amount of the Contract Sum allocable to the portion of the Work properly performed by Contractor as of the date of termination, less sums previously paid to Contractor.
- 2. Plus previously unpaid costs of any items delivered to the Project Site that were fabricated for subsequent incorporation in the Work.
- 3. Plus any proven losses with respect to materials and equipment directly resulting from such termination.
- 4. Plus reasonable demobilization costs.
- 5. Plus reasonable costs of preparing a statement of the aforesaid costs, expenses, and losses in connection with such termination.

The above payment shall be the sole and exclusive remedy to which the Contractor is entitled in the event of termination of the Contract by the County pursuant to Sections 7.2 or 7.3; and the Contractor will be entitled to no other compensation or damages and expressly waives same.

# **SECTION 8. MATERIALS**

### 8.1 MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS.

Wherever, in the Contract Documents, a particular brand or make of item is specified, the Contractor shall comply strictly with the specifications and recommendations of that manufacturer as to the installation and/or application of that particular item. This requirement shall be met with respect to the specifications and recommendations of the manufacturer of an "or equal" item approved by the Engineer and installed or applied by Contractor.

### 8.2 REFERENCE TO SPECIFICATIONS AND TRADE NAMES.

Where American Society for Testing Materials (ASTM) or other specifications or standards are mentioned, it shall be understood that the materials or methods mentioned therewith shall conform to all requirements of the same that are in effect on the date of bid submission.

Where the trade name of a product or the name of a product or the name of a manufacturer appears, it shall be understood to specify the product so identified or its "Approved Equal." The words "Or Equal" or "Approved Equal" shall mean equal in the opinion of, and approval by, the Engineer. Any substitutions for products or manufacturers mentioned in the Contract Documents shall be submitted by the Contractor to the County for approval within 14 calendar days following the Award of Contract or as otherwise permitted in writing by the Engineer.

### 8.3 STORAGE OF MATERIALS.

Materials shall be stored as to assure the preservation of their quality and fitness for the Work. Stored materials, even if approved before storage, may again be inspected prior to their use in the Work. Stored materials shall be located so as to facilitate their prompt inspection. The Contractor shall coordinate the storage of all materials with the County and the location of the Contractor's plant and parked equipment or vehicles shall be as directed by the County. Private property shall not be used for storage purposes without written permission of the owner or lessee of the property. The Contractor shall make all arrangements and bear all expenses for the storage of materials on private property. Upon request, the Contractor shall furnish the County a copy of the owner's or lessee's permission. All storage sites on private or County property shall be restored to their original condition by the Contractor at its entire expense, except as otherwise agreed to in writing by the County.

# **SECTION 9. CONSTRUCTION DETAILS**

### 9.1 ORDER OF WORK.

The location where Project improvements are to be constructed will be exposed to public traffic. The Contractor shall conduct operations so that conditions do not exist that would create a nuisance, hazard, or other damage. Appropriate safety measures, warning devices and protective devices shall be implemented to protect all workers, the traveling public, and the work.

### 9.2 SANITARY, HEALTH, AND SAFETY PROVISIONS.

The Contractor shall provide and maintain in a neat, sanitary condition such accommodations for the use of its employees as may be necessary to comply with the requirements of the State and local Health Department, or of other bodies or tribunals having jurisdiction.

Attention is directed to federal, State, and local laws, rules and regulations concerning construction safety and health standards. The Contractor shall not require any worker to work in surroundings or under conditions that are unsanitary, hazardous, or dangerous to that worker's health or safety.

The Engineer and County shall have **NO** responsibility for job site safety. The Contractor and his subcontractors must execute their daily work in accordance with the latest edition of the Occupational Safety and Health Administration (OSHA).

# 9.3 CONSTRUCTION SITE NUISANCE.

The Contractor shall maintain preventative controls of blowing dust, noise, and other nuisances from construction work. No dogs or other animals are allowed within the project limits.

# 9.4 PUBLIC CONVENIENCE AND SAFETY.

The Contractor shall provide temporary protective fencing, barriers, and/or covering over any open trenching or excavation arising from the execution of this Contract, to keep out unauthorized persons, at no additional cost to the County. The cost for providing signage, barriers, or any other items associated with public convenience and safety shall be the sole responsibility of the Contractor and no additional payment will be allowed therefor.

Contractor shall comply with OSHA regulations applicable to Contractor regarding necessary safety equipment and procedures. Contractor shall comply with safety instructions issued by County. Contractor's personnel shall wear hard hats and safety vests at all times while working at the project site. Pursuant to the authority contained in Section 591 of the Vehicle Code, County has determined that such areas are within the limits of the project and are open to public traffic. Contractor shall comply with all applicable requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. Contractor shall take all reasonably necessary precautions for safe operation of its vehicles and the protection of the traveling public from injury and damage from such vehicles. All subcontracts entered into by Contractor shall contain the above provisions.

# 9.5 HIGHWAY CONSTRUCTION EQUIPMENT.

Attention is directed to Section 591 of the Vehicle Code and Sections 7-1.0lD, "Vehicle Code," and 5-1.37B, "Load Limits," of the Standard Specifications. The Contractor shall take all necessary precautions for safe operation of its equipment and the protection of the public from injury and damage from such equipment.

# 9.6 PERMITS.

The Contractor shall give all notices as required and comply with all laws, ordinances, rules and regulations bearing on the conduct of the Work as drawn and specified. If the Contractor observes that the Project Plans and Technical Specifications are at variance therewith, the Contractor shall notify the County promptly in writing, of any necessary changes in the work. If the Contractor performs any work knowing it to be contrary to such laws, ordinances, rules and regulations, and without such notice to the County, the Contractor shall bear all costs arising therefrom. Copies of permits shall be furnished to the County.

# 9.7 CONSTRUCTION LAYOUT AND STAKES.

If specified on the plans, the Contractor shall engage the services of a State of California licensed Professional Land Surveyor to perform construction layout. All staking on the project shall be performed by, or under, the direct supervision of a Professional Land Surveyor. The Contractor will be responsible for establishing and maintaining all survey controls and other layout that may be required for construction of the work.

# 9.8 TESTING AND INSPECTIONS.

Aside from materials testing and certifications required from the Contractor in the Quality Assurance Program (QAP), Technical Specifications, Standard Specifications, Special Provisions (if applicable) and/or these General Conditions, the County will provide testing services for installed work. Inspections shall be performed either: (1) as directed by the Engineer; or (2) pursuant to a written Inspection plan provided by County.

# 9.9 CONTRACTOR QUALITY CONTROL.

The Contractor shall be responsible for the quality of all materials entering into the work and of the work performed. The County and Engineer shall establish, maintain, and modify if needed, a quality control system that will provide assurance that materials and completed work conform to contract requirements. Where applicable, a copy of the QAP, which establishes testing frequency for materials incorporated into the work and criteria used to monitor the Contractor's conformance with Project Plans and Technical Specifications, will be included in the Project Manual.

# 9.10 INSPECTION OF THE WORK.

All materials and each part or detail of the work shall be subject to inspection by the Engineer. The Engineer shall be allowed access to all parts of the work and shall be furnished with such information and assistance by the Contractor as is required to make a complete and detailed inspection.

If the Engineer requests it, the Contractor, at any time before acceptance of the work, shall remove or uncover such portions of the finished work as may be directed. After examination, the Contractor shall restore said portions of the work to the standard required by the specifications. Should the work thus exposed or examined prove acceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the work so exposed or examined prove unacceptable, the uncovering, or removing, and the replacing of the covering or making good of the parts removed will be paid for as extra work; but should the covering or making good of the parts removed will be at the Contractor's expense.

Any work done or materials used without supervision or inspection by an authorized representative of the County may be ordered removed and replaced at the Contractor's expense unless the County's representative failed to inspect after having been given reasonable notice in writing that the work was to be performed.

# 9.11 RETEST OF WORK.

When, as provided for in the Contract Documents, the County or Contractor performs sampling and test of the work and the tests show a failure to meet the requirements of the Special Provisions, the QAP, Technical Specifications, or Standard Specifications, the expense of re-testing, after re-working or substitution by the Contractor, will be at the expense of the Contractor, and such costs will be deducted from any amounts due to the Contractor.

# 9.12 MAINTENANCE DURING CONSTRUCTION.

The Contractor shall maintain the Work during construction and until the Work is accepted. This maintenance shall constitute continuous and effective Work prosecuted day by day, with adequate equipment and forces so that the work is maintained in satisfactory condition at all times. All costs of maintenance work before the project is accepted shall be included in the unit prices bid on the various

Contract Items, and the Contractor will not be paid an additional amount for such work.

Should the Contractor at any time fail to maintain the work as provided herein, the Engineer shall immediately notify the Contractor of such noncompliance. Such notification shall specify a reasonable time within which the Contractor shall be required to remedy such unsatisfactory maintenance condition. The time specified will give due consideration to the exigency that exists. Should the Contractor fail to respond to the Engineer's notification, the Engineer may suspend any work necessary for the County to correct such unsatisfactory maintenance condition, depending on the exigency that exists. Any maintenance cost incurred by the County shall be deducted from monies due or to become due the Contractor.

# SECTION 10. OPERATIONS AND SAFETY

# **10.1 TEMPORARY CONTRACTOR FACILITIES.**

At a minimum, the Contractor shall provide chemical toilets for use by contractor and subcontractor employees. Chemical toilets shall be regularly serviced to maintain a clean and odorless facility.

The Contractor's storage area shall be determined at the pre-construction conference. The Contractor shall secure at his own expense any area required for storage of equipment or materials, or for other supplies.

The County will not be responsible for providing telephone, electrical, water, sewer, or any other temporary utility for use by the Contractor.

The Contractor shall remove all equipment, materials, and rubbish from the work areas which it occupies and shall leave the areas in a clean, safe and presentable condition.

### 10.2 BORROW, DISPOSAL AND MATERIAL SITES.

The operation of any borrow or disposal sites used by the Contractor to produce or dispose of materials for this project shall comply with the requirements of the contract documents. All provisions for water pollution, air pollution, and sound control that apply within the limits of the contract shall apply to all borrow or disposal sites utilized by the Contractor.

Full compensation for complying with the requirements for borrow, disposal and material sites in this section shall be considered as included in the contract prices paid for the items of work which require the use of the sites and no additional compensation will be allowed therefor.

### **10.3 WATER SUPPLY**.

The Contractor is responsible for making its own arrangements to obtain an adequate supply of water required for the proper construction of this project in accordance with the contract documents. The Contractor shall be responsible for all costs associated with obtaining construction water. If the Contractor uses non-potable water on the project, the sources and discharge of non-potable water shall meet the California Department of Health Services water reclamation criteria and the requirements of the Lahontan Regional Water Quality Control Board.

If used, non-potable water shall not be conveyed in tanks or drain pipes which will be used to convey potable water. There shall be no connection between non-potable water supplies and potable water supplies. Non-potable water supply, tanks, pipes, and other conveyances of non-potable water shall be

### labeled, "NON-POTABLE WATER-DO NOT DRINK."

Full compensation for developing a water supply, loading, and transporting water, labeling as specified, and dust control and moisture-conditioning on the project site shall be considered included in the prices paid for the various Contract Items of work involving the use of water and no additional compensation will be allowed therefor.

The Contractor shall, whenever possible and not in conflict with the above requirements, minimize the use of water during construction of the project. Watering equipment shall be kept in good working order; water leaks shall be repaired promptly; and washing of equipment, except when necessary for safety or for the protection of equipment, shall be discouraged.

When ordered by the Engineer, a dust palliative conforming to the provisions of Section 18, "Dust Palliative," of the Standard Specifications shall be used to control dust on this project. No direct payment shall be made for dust palliative. Payment for dust palliative shall be included in the cost of other work.

### **10.4 EXISTING FACILITIES.**

The Contractor shall be responsible for protecting all existing structures and facilities from damage as a result of the Contractor's activities. Any damage resulting from the Contractor's operations shall be repaired immediately, at the Contractor's expense.

# **SECTION 11. PROGRESS MEETINGS**

### **11.1 WEEKLY PROGRESS MEETINGS.**

The Engineer will conduct Progress Meetings at regularly scheduled times convenient for all parties involved. Progress Meetings are in addition to specific meetings held for other purposes, such as coordination meetings. Discussions will address administrative and technical issues of concern, determining resolutions, and development of deadlines for resolution within allowable time frames.

### **11.2 ATTENDEES.**

As may be required by the Engineer, in addition to representatives of Mono County and the Contractor, each subcontractor, supplier or other entity concerned with current progress or involved in planning, coordination or performance of future activities shall be represented at these meetings by individuals directly involved with the Contract and authorized to conclude matters relating to progress.

# SECTION 14. WORK SCHEDULE AND LIQUIDATED DAMAGES

### 14.1 BEGINNING OF WORK AND TIME OF COMPLETION.

The Contractor shall begin work on the date provided in the Notice to Proceed issued by the Public Works Director or his designee. The work shall be diligently prosecuted to completion before the expiration of **Sixty-five (65) WORKING DAYS** beginning on the date set forth in the Notice to Proceed.

### 14.2 LIQUIDATED DAMAGES.

The County expects the Contractor to perform its responsibilities and tasks as specified in these Contract

Documents. The expectation is reasonable, within normally acceptable business practices, and in the best interest of the County and its residents. The Contractor acknowledges that the County, in entering this Agreement, has considered and relied on the Contractor's representations as to its ability and commitment to quality and timeliness of service; that the provision of reliable and timely services is of utmost importance to the County; and that the County will suffer damages if the Contractor fails to fulfill its obligations under the Contract. The Contractor acknowledges that it is and will be impractical and extremely difficult to ascertain and determine the exact amount of damages that the County will suffer and that liquidated or actual damages attach and will be payable from any funds due to the Contractor.

The liquidated damages described below, represent the projected financial loss and expenditures that may occur as a result of Contractor non-performance, including financial loss as a result of project delays. The County and Contractor agree that the liquidated damages provided for herein do not represent a penalty; rather, the liquidated damages represent a good faith effort by the County and Contractor to establish a reasonable estimate of the damages that will be incurred by the County in the circumstances described, considering all of the circumstances existing on the date of contract award, including the relationship of the sums to the range of harm to the County that reasonably could be anticipated and the anticipation that proof of actual damages would be costly or inconvenient.

This provision for liquidated damages for delay shall in no manner affect the County's right to terminate the Contract or the Contractor's right to perform the Contract as provided elsewhere in the Contract Documents. The County's exercise of the right to terminate shall not release the Contractor from its obligation to pay said liquidated damages in the amount set out below.

The Contractor shall pay to the County the sum of **\$4,000.00 per day**, as liquidated damages, for each and every working day's delay in finishing the work in excess of the number of working days prescribed above. This sum is based on the recommended calculation located in the Caltrans Local Assistance Procedures Manual, Chapter 12, page 17-18, available at http://www.dot.ca.gov/hq/LocalPrograms/lam/LAPM/ch12.pdf.

# **14.3 BREACH.**

If conditions of non-performance justifying the imposition of liquidated damages continue, they may amount to a material breach for which the County may pursue recovery of actual losses resulting from the Contractor's failure to perform, and the County expressly reserves this right. The County shall notify the Contractor in writing, for any default specified herein, and such liquidated damages shall be paid by the Contractor within thirty (30) calendar days of the County's notice. The Contractor's failure to pay the assessed liquidated damages within the designated time-frame may be deemed by the County as a breach of contract.

# **SECTION 15. PROJECT CLOSEOUT**

### 15.1 "As-Built" Drawings.

The Contractor shall maintain a set of accurate "as-built" drawings during the course of the project. Any project work completed that varies from the "as-built" drawings as issued shall be legibly noted on the "as-built" drawings in red ink. Both text and line work shall be used to reflect the changes. The "as-built" drawings shall be clearly labeled as "as-built" drawings and each sheet signed and dated by the Contractor, certifying that the information provided is accurate. At the completion of the project and prior to final payment, the "as-built" drawings shall be delivered to the County and, upon receipt, shall be maintained as the property of the County.

# EXHIBIT 2

### AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT

### PREVAILING WAGES AS OF: [DATE]

### A. Determination.

The services and work to be provided by Contractor under this Agreement constitute a public work within the meaning of California Labor Code sections 1720 and 1720.3. Accordingly, and as required by California Labor Code section 1771, Contractor and any subcontractor under him, shall pay not less than the general prevailing rate of per diem wages, and not less than the general prevailing rate of per diem work, to all workers employed in the execution of those services and work requested by the County as described in Attachment A (Scope of Work) of this Agreement that constitute a public work.

### B. Prevailing Wage Rate.

The general prevailing rate of per diem wages applicable to each class of worker employed in the execution of those services and work that constitute a public work under this Agreement has been determined by the Director of the California Department of Industrial Relations (hereinafter referred to as "Director"). Pursuant to California Labor Code section 1773.2, copies of the Director's determination are on file at the Mono County Department of Public Works office, 74 North School Street, Bridgeport, California, and are available to any interested party upon request.

### C. Apprentices.

Pursuant to California Labor Code section 1777.5, properly registered apprentices performing services and work that constitute a public work, if any, shall be paid the standard wage paid to apprentices under the regulations of the craft or trade at which he or she is employed, and shall be employed only at the work of the craft or trade to which he or she is registered. In addition, Contractor and/or any subcontractor under him employing a registered apprentice to perform services or work that constitute a public work shall comply with the remaining requirements and provisions of California Labor Code section 1777.5, a copy of which is included at the end of this Exhibit 2. The Contractor, as the prime contractor under any contract issued for the AIRPORT ROAD REHABILITATION PROJECT, shall be responsible for complying with California Labor Code section 1777.5 for all apprenticeable positions and workers employed by the Contractor.

### D. Penalty for Non-Payment of Prevailing Wages.

Pursuant to California Labor Code section 1775, Contractor, and any subcontractor under him, shall, as a penalty to the County, forfeit not more than Two Hundred dollars (\$200.00) for each calendar day, or portion thereof, for each worker paid less than the general rate of per diem wages for the performance of services and work that constitute a public work, as determined by the Director, for the work or craft for which the worker is employed in the performance of services and work provided under this Agreement that constitute a public work, except as provided by California Labor Code section 1775(b). In addition, Contractor and/or any subcontractor under him shall comply with and be subject to the remaining

requirements and provisions of California Labor Code section 1775, a copy of which is included at the end of this Exhibit 2.

### E. Payroll Records.

Pursuant to California Labor Code section 1776, Contractor, and any subcontractor under him, shall keep accurate payroll records, showing the name, address, social security number, work classification, straight time and overtime hours worked each day and week and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by him or her in connection with the performance of the services and work requested by the County, as described in Attachment A (Scope of Work) of this Agreement.

### F. Inspection of Payroll Records.

Contractor, and any subcontractor under him, shall comply with each of the additional requirements set forth in California Labor Code section 1776, regarding: (1) the form of records; (2) the provision of records upon request to the County, the Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the California Department of Industrial Relations; and, (3) the inspection of records by the public.

### G. Posting of Prevailing Wages at Job Site.

Pursuant to California Labor Code section 1773.2, Contractor shall post at each job site in connection with this Agreement a copy of the Director's determination of the general prevailing rate of per diem wages for each classification of worker required in the execution of those services and work requested by the County, as described in Attachment A (Scope of Work) of this Agreement that constitute a public work.

### H. Hours.

Pursuant to California Labor Code section 1810, the time of service of any worker employed by Contractor, or by any subcontractor under him, in the performance of services and work requested by the County, as described in Attachment A (Scope of Work) of this Agreement that constitute a public work, is limited and restricted to eight (8) hours during any one (1) calendar day and 40 hours during any one (1) calendar week, except as otherwise provided by the California LaborCode.

### I. Overtime.

Pursuant to California Labor Code section 1815, the performance of services and work, as described in Attachment A (Scope of Work) of this Agreement that constitute a public work by employees of Contractor, or employees of any subcontractor under him, in excess of eight hours per calendar day, and 40 hours during any one week, shall be permitted upon compensation for all hours worked in excess of eight hours per calendar day at not less than one and one-half  $(1\frac{1}{2})$  times the basic rate of pay.

J. Records of Hours.

Contractor, and any subcontractors under him, shall keep an accurate record showing the name of and actual hours worked each calendar day and each calendar week by each worker employed by him or her in connection with the performance of the services and work requested by the County that constitute a public work, as described in Attachment A (Scope of Work) of this Agreement. The record shall be kept open at all reasonable hours to the inspection of the County and to the Division of Labor Standards Enforcement as required by California Labor Code section 1812.

K. Penalty for Violation of Work Hours.

Pursuant to California Labor Code section 1813, Contractor, and any subcontractor under him, shall, as a penalty to the County, forfeit twenty-five dollars (\$25.00) for each worker employed by the respective contractor or subcontractor in the execution of the services and work requested by the County that constitute a public work, as described in Attachment A (Scope of Work) of this Agreement, for each calendar day during which the worker is required or permitted to work more than eight (8) hours in any one (1) calendar day and 40 hours in any one calendar week.

L. Registration with DIR and Compliance Monitoring.

Pursuant to California Labor Code section 1725.5, unless subject to the limited exceptions stated in Labor Code section 1771.1, no contractor or subcontractor may be qualified or listed in a bid proposal or awarded a contract for a public works project unless registered with the Department of Industrial Relations. This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.

# **CALIFORNIA LABOR CODE SECTIONS**

California Labor Code Section 1775:

(a) (1) The contractor and any subcontractor under the contractor shall, as a penalty to the state or political subdivision on whose behalf the contract is made or awarded, forfeit not more than two hundred dollars (\$200) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rates as determined by the director for the work or craft in which the worker is employed for any public work done under the contract by the contractor or, except as provided in subdivision (b), by any subcontractor under the contractor.

(2) (A) The amount of the penalty shall be determined by the Labor Commissioner based on consideration of both of the following:

(i) Whether the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) Whether the contractor or subcontractor has a prior record of failing to meet its prevailing wage obligations.

(B) (i) The penalty may not be less than forty dollars (\$40) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, unless the failure of the contractor or subcontractor to pay the correct rate of per diem wages was a good faith mistake and, if so, the error was promptly and voluntarily corrected when brought to the attention of the contractor or subcontractor.

(ii) The penalty may not be less than eighty dollars (\$80) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the contractor or subcontractor has been assessed

penalties within the previous three years for failing to meet its prevailing wage obligations on a separate contract, unless those penalties were subsequently withdrawn or overturned.

(iii) The penalty may not be less than one hundred twenty dollars (\$120) for each calendar day, or portion thereof, for each worker paid less than the prevailing wage rate, if the Labor Commissioner determines that the violation was willful, as defined in subdivision (c) of Section 1777.1.

(C) If the amount due under this section is collected from the contractor or subcontractor, any outstanding wage claim under Chapter 1 (commencing with Section 1720) of Part 7 of Division 2 against that contractor or subcontractor shall be satisfied before applying that amount to the penalty imposed on that contractor or subcontractor pursuant to this section.

(D) The determination of the Labor Commissioner as to the amount of the penalty shall be reviewable only for abuse of discretion.

(E) The difference between the prevailing wage rates and the amount paid to each worker for each calendar day or portion thereof for which each worker was paid less than the prevailing wage rate shall be paid to each worker by the contractor or subcontractor, and the body awarding the contract shall cause to be inserted in the contract a stipulation that this section will be complied with.

(b) If a worker employed by a subcontractor on a public works project is not paid the general prevailing rate of per diem wages by the subcontractor, the prime contractor of the project is not liable for any penalties under subdivision (a) unless the prime contractor had knowledge of that failure of the subcontractor to pay the specified prevailing rate of wages to those workers or unless the prime contractor fails to comply with all of the following requirements:

(1) The contract executed between the contractor and the subcontractor for the performance of work on the public works project shall include a copy of the provisions of this section and Sections 1771, 1776, 1777.5, 1813, and 1815.

(2) The contractor shall monitor the payment of the specified general prevailing rate of per diem wages by the subcontractor to the employees, by periodic review of the certified payroll records of the subcontractor.

(3) Upon becoming aware of the failure of the subcontractor to pay his or her workers the specified prevailing rate of wages, the contractor shall diligently take corrective action to halt or rectify the failure, including, but not limited to, retaining sufficient funds due the subcontractor for work performed on the public works project.

(4) Prior to making final payment to the subcontractor for work performed on the public works project, the contractor shall obtain an affidavit signed under penalty of perjury from the subcontractor that the subcontractor has paid the specified general prevailing rate of per diem wages to his or her employees on the public works project and any amounts due pursuant to Section 1813.

(c) The Division of Labor Standards Enforcement shall notify the contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor on that public works project to pay workers the general prevailing rate of per diem wages.

### California Labor Code Section 1777.5:

(a) This chapter does not prevent the employment of properly registered apprentices upon public works.

(b) (1) Every apprentice employed upon public works shall be paid the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered and shall be employed only at the work of the craft or trade to which he or she is registered.

(2) Unless otherwise provided by a collective bargaining agreement, when a contractor requests the dispatch of an apprentice pursuant to this section to perform work on a public works project and requires the apprentice to fill out an application or undergo testing, training, an examination, or other preemployment process as a condition of employment, the apprentice shall be paid for the time spent on the required preemployment activity, including travel time to and from the required activity, if any, at the prevailing rate of per diem wages for apprentices in the trade to which he or she is registered. Unless otherwise provided by a collective bargaining agreement, a contractor is not required to compensate an apprentice for the time spent on preemployment activities if the apprentice is required to take a preemployment drug or alcohol test and he or she fails to pass that test.

(c) Only apprentices, as defined in Section 3077, who are in training under apprenticeship standards that have been approved by the Chief of the Division of Apprenticeship Standards and who are parties to written apprentice agreements under Chapter 4 (commencing with Section 3070) of Division 3 are eligible to be employed at the apprentice wage rate on public works. The employment and training of each apprentice shall be in accordance with either of the following:

(1) The apprenticeship standards and apprentice agreements under which he or she is training.

(2) The rules and regulations of the California Apprenticeship Council.

(d) If the contractor to whom the contract is awarded by the state or any political subdivision, in performing any of the work under the contract, employs workers in any apprenticeable craft or trade, the contractor shall employ apprentices in at least the ratio set forth in this section and may apply to any apprenticeship program in the craft or trade that can provide apprentices to the site of the public work for a certificate approving the contractor under the apprenticeship standards for the employment and training of apprentices in the area or industry affected. However, the decision of the apprenticeship program to approve or deny a certificate shall be subject to review by the Administrator of Apprenticeship. The apprenticeship program or programs, upon approving the contractor, shall arrange for the dispatch of apprentices to the contractor. A contractor covered by an apprenticeship program's standards shall not be required to submit any additional application in order to include additional public works contracts under that program. "Apprenticeable craft or trade," as used in this section, means a craft or trade determined as an apprenticeship Council. As used in this section, "contractor" includes any subcontractor under a contractor who performs any public works not excluded by subdivision (o).

(e) Before commencing work on a contract for public works, every contractor shall submit contract award information to an applicable apprenticeship program that can supply apprentices to the site of the public work. The information submitted shall include an estimate of journeyman hours to be performed under the contract, the number of apprentices proposed to be employed, and the approximate dates the apprentices would be employed. A copy of this information shall also be submitted to the awarding body, if requested by the awarding body. Within 60 days after concluding work on the contract, each contractor and subcontractor shall submit to the awarding body, if requested, and to the apprenticeship program a verified statement of the journeyman and apprentice hours performed on the contract. The information under this subdivision shall be public. The apprenticeship programs shall retain this information for 12 months.

(f) The apprenticeship program supplying apprentices to the area of the site of the public work shall ensure equal employment and affirmative action in apprenticeship for women and minorities.

(g) The ratio of work performed by apprentices to journeymen employed in a particular craft or trade on the public work may be no higher than the ratio stipulated in the apprenticeship standards under which the apprenticeship program operates if the contractor agrees to be bound by those standards. However, except as otherwise provided in this section, in no case shall the ratio be less than one hour of apprentice work for every five hours of journeyman work.

(h) This ratio of apprentice work to journeyman work shall apply during any day or portion of a day when any journeyman is employed at the jobsite and shall be computed on the basis of the hours worked during the day by journeymen so employed. Any work performed by a journeyman in excess of eight hours per day or 40 hours per week shall not be used to calculate the ratio. The contractor shall employ apprentices for the number of hours computed as above before the end of the contract or, in the case of a subcontractor, before the end of the subcontract. However, the contractor shall endeavor, to the greatest extent possible, to employ apprentices during the same time period that the journeymen in the same craft or trade are employed at the jobsite. When an hourly apprenticeship ratio is not feasible for a particular craft or trade, the Administrator of Apprenticeship, upon application of an apprenticeship program, may order a minimum ratio of not less than one apprentice for each five journeymen in a craft or trade classification.

(i) A contractor covered by this section who has agreed to be covered by an apprenticeship program's standards upon the issuance of the approval certificate, or who has been previously approved for an apprenticeship program in the craft or trade, shall employ the number of apprentices or the ratio of apprentices to journeymen stipulated in the applicable apprenticeship standards, but in no event less than the 1-to-5 ratio required by subdivision (g).

(j) Upon proper showing by a contractor that he or she employs apprentices in a particular craft or trade in the state on all of his or her contracts on an annual average of not less than one hour of apprentice work for every five hours of labor performed by journeymen, the Administrator of Apprenticeship may grant a certificate exempting the contractor from the 1-to-5 hourly ratio, as set forth in this section for that craft or trade.

(k) An apprenticeship program has the discretion to grant to a participating contractor or contractor association a certificate, which shall be subject to the approval of the Administrator of Apprenticeship, exempting the contractor from the 1-to-5 ratio set forth in this section when it finds that any one of the following conditions is met:

(1) Unemployment for the previous three-month period in the area exceeds an average of 15 percent.

(2) The number of apprentices in training in the area exceeds a ratio of 1 to 5.

(3) There is a showing that the apprenticeable craft or trade is replacing at least one-thirtieth of its journeymen annually through apprenticeship training, either on a statewide basis or on a local basis.

(4) Assignment of an apprentice to any work performed under a public works contract would create a condition that would jeopardize his or her life or the life, safety, or property of fellow employees or the public at large, or the specific task to which the apprentice is to be assigned is of a nature that training cannot be provided by a journeyman.

(1) If an exemption is granted pursuant to subdivision (k) to an organization that represents contractors in a specific trade from the 1-to-5 ratio on a local or statewide basis, the member contractors shall not be required to submit individual applications for approval to local joint apprenticeship committees, if they are already covered by the local apprenticeship standards.

(m) (1) A contractor to whom a contract is awarded, who, in performing any of the work under the contract, employs journeymen or apprentices in any apprenticeable craft or trade shall contribute to the California Apprenticeship Council the same amount that the director determines is the prevailing amount of apprenticeship training contributions in the area of the public works site. A contractor may take as a credit for payments to the council any amounts paid by the contractor to an approved apprenticeship program that can supply apprentices to the site of the public works project. The contractor may add the amount of the contributions in computing his or her bid for the contract.

(2) (A) At the conclusion of the 2002–03 fiscal year and each fiscal year thereafter, the California Apprenticeship Council shall distribute training contributions received by the council under this subdivision, less the expenses of the Department of Industrial Relations for administering this subdivision, by making grants to approved apprenticeship programs for the purpose of training apprentices. The grant funds shall be distributed as follows:

(i) If there is an approved multiemployer apprenticeship program serving the same craft or trade and geographic area for which the training contributions were made to the council, a grant to that program shall be made.

(ii) If there are two or more approved multiemployer apprenticeship programs serving the same craft or trade and county for which the training contributions were made to the council, the grant shall be divided among those programs based on the number of apprentices from that county registered in each program.

(iii) All training contributions not distributed under clauses (i) and (ii) shall be used to defray the future expenses of the Department of Industrial Relations for the administration and enforcement of apprenticeship standards and requirements under this code.

(B) An apprenticeship program shall only be eligible to receive grant funds pursuant to this subdivision if the apprenticeship program agrees, prior to the receipt of any grant funds, to keep adequate records that document the expenditure of grant funds and to make all records available to the Department of Industrial Relations so that the Department of Industrial Relations is able to verify that grant funds were used solely for training apprentices. For purposes of this subparagraph, adequate records include, but are not limited to, invoices, receipts, and canceled checks that account for the expenditure of grant funds. This subparagraph shall not be deemed to require an apprenticeship program to provide the Department of Industrial Relations with more documentation than is necessary to verify the appropriate expenditure

of grant funds made pursuant to this subdivision.

(C) The Department of Industrial Relations shall verify that grants made pursuant to this subdivision are used solely to fund training apprentices. If an apprenticeship program is unable to demonstrate how grant funds are expended or if an apprenticeship program is found to be using grant funds for purposes other than training apprentices, then the apprenticeship program shall not be eligible to receive any future grant pursuant to this subdivision and the Department of Industrial Relations may initiate the process to rescind the registration of the apprenticeship program.

(3) All training contributions received pursuant to this subdivision shall be deposited in the Apprenticeship Training Contribution Fund, which is hereby created in the State Treasury. Upon appropriation by the Legislature, all moneys in the Apprenticeship Training Contribution Fund shall be used for the purpose of carrying out this subdivision and to pay the expenses of the Department of Industrial Relations.

(n) The body awarding the contract shall cause to be inserted in the contract stipulations to effectuate this section. The stipulations shall fix the responsibility of compliance with this section for all apprenticeable occupations with the prime contractor.

(o) This section does not apply to contracts of general contractors or to contracts of specialty contractors not bidding for work through a general or prime contractor when the contracts of general contractors or those specialty contractors involve less than thirty thousand dollars (\$30,000).

(p) An awarding body that implements an approved labor compliance program in accordance with subdivision (b) of Section 1771.5 may, with the approval of the director, assist in the enforcement of this section under the terms and conditions prescribed by the director.

# EXHIBIT 3

### AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

### **BOND REQUIREMENTS**

Contractor shall furnish and maintain during the entire term of this Agreement or, if work or services do not begin as of the effective date of this Agreement, commencing at such other time as may be authorized in writing by the Director of the Department of Public Works or his designee after consultation with the County Risk Manager, the following bonds: 1) a labor and materials payment bond in an amount equal to one hundred percent (100%) of the contract price; 2) a faithful **performance bond** in an amount equal to one hundred percent (100%) of the contract price; and, 3) upon project completion and acceptance by the County, a one-year warranty bond in an amount equal to ten percent (10%) of the contract price. The bonds shall comply with the requirements of California Civil Code Section 9554 and must be issued by an "Admitted Surety Insurer." For purposes of this Agreement, an Admitted Surety Insurer means a corporate insurer or inter-insurance exchange to which the California State Insurance Commissioner has issued a certificate of authority to transact surety insurance in California, as defined in Section 105 of the California Insurance Code. Bonds shall be in a form acceptable to the Mono County Counsel. The Attorney-in- Fact (resident agent) who executes the bonds on behalf of the surety company must attach a copy of his Power of Attorney as evidence of his authority. A notary shall acknowledge this Power of Attorney as of the date of the execution of the surety bond that it covers. If any surety becomes unacceptable to the County or fails to furnish reports as to its financial condition as requested by County, Contractor shall promptly furnish such additional security as may be required from time to time to protect the interests of County and of persons supplying labor or materials in the prosecution of the work contemplated by this Agreement. Payment and Performance Bonds are released by County within 35 days from the date of filing of the Notice of Completion. Sample bond forms are included on the following pages.

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### SAMPLE PERFORMANCE BOND

WHEREAS, the County of Mono, acting by and through its Department of Public Works, has awarded to , hereafter designated as the "Contractor", a contract for the

work described as follows:

LONG VALLEY STREETS PROJECT, PROJECT NO. 9116 as described in the Project Manual.

**AND WHEREAS**, the Contractor is required to furnish a bond in connection with said contract, guaranteeing the faithful performance thereof:

NOW, THEREFORE, we the undersigned Contractor and Surety are held firmly bound to the County of Mono in the sum of \_\_\_\_\_\_ Dollars

(\$\_\_\_\_\_\_), to be paid to said County or its certain attorney, its successors and assigns: for which payment, well and truly to be made, we bind ourselves, our heirs, executors and administrators, successors or assigns, jointly and severally, firmly by these presents.

**THE CONDITION OF THIS OBLIGATION IS SUCH,** that if the above bound Contractor, its heirs, executors, administrators, successors or assigns, shall in all things stand to and abide by, and well and truly keep and perform the covenants, conditions and agreements in the foregoing contract and any alteration thereof made as therein provided, on his or their part to be kept and performed at the time and in the manner therein specified, and in all respects according to their intent and meaning, and shall indemnify and save harmless the County of Mono, its officers and agents, as therein stipulated, then this obligation shall become and be null and void; otherwise it shall be and remain in full force and virtue.

As a part of the obligation secured hereby and in addition to the face amount specified therefor, there shall be included costs and reasonable expenses and fees, including reasonable attorney's fees, incurred by County in successfully enforcing such obligation, all to be taxed as costs and included in any judgment rendered.

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specifications accompanying the same shall in anywise 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 agreement or to the work or to the specifications.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on this	sday of
,20	

Correspondence or claims relating to this bond	
should be sent to the surety at the following	
address:	

Contractor

Name of Surety

(SEAL)

By: Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

APPROVED AS TO FORM:

Mono County Counsel

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### SAMPLE PAYMENT BOND

WHEREAS, The County of Mono, acting by and through its Department of Public Works, hereafter referred to as "Obligee", has awarded to \_\_\_\_\_\_\_, hereafter designated as the "Principal", a contract for the work described as follows:

LONG VALLEY STREETS PROJECT, PROJECT NO. 9116 as described in the Project Manual.

**AND WHEREAS**, said Principal is required to furnish a bond in connection with said contract, to secure the payment of claims of laborers, mechanics, material, men and other persons as provided by law.

NOW, THEREFORE, we the undersigned Principal and Surety are bound unto the Obligee in the sum of \_\_\_\_\_\_ Dollars (\$\_\_\_\_\_\_), for which payment, we bind ourselves, jointly and severally.

### THE CONDITION OF THIS OBLIGATION IS SUCH,

That if said Principal or its subcontractors shall fail to pay any of the persons named in Civil Code Section 9lOO, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by such claimant, or any amounts required to be deducted, withheld, and paid over to the Employment Development Department from the wages of employees of the Principal and his subcontractors under Section 13O2O of the Unemployment Insurance Code, with respect to such work and labor, that the surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the surety will pay a reasonable attorney's fee to be fixed by the court.

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

The surety hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the agreement or to the work to be performed thereunder or the specifications accompanying the same shall in anywise 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 agreement or to the work or to the specifications.

Dated:,20
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Correspondence or claims relating to this bond should be sent to the surety at the following address:

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Prin	c <sub>1</sub> p	aL
	••P	~

Surety

(SEAL)

By: Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

### APPROVED AS TO FORM:

### Mono County Counsel

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### SAMPLE WARRANTY BOND

### KNOW ALL BY THESE PRESENTS that we,\_

the Contractor in the contract hereto annexed, as Principal, and, \_\_\_\_\_\_\_\_as Surety, are held and firmly bound unto the County of Mono in the sum of

(\$\_\_\_\_\_\_) lawful money of the United States, for which payment, well and truly to be made, we bind ourselves, jointly and severally, firmly by these presents.

Signed, Sealed, and Dated

The condition of the above obligation is that if said Principal, its successors and assigns, as Contractor in the contract for the work described herein, or its subcontractor, fails to maintain and remedy in a good workmanlike manner the work of the LONG VALLEY STREETS PROJECT, PROJECT NO. 9116 such that it is free from defects in materials and workmanship for a period of one year commencing on \_\_\_\_\_\_ [DATE] (the "Maintenance Period") and shall indemnify and save harmless the County of Mono, its officers and agents, as stipulated in the contract, said Surety will pay for the same in an amount not to exceed the sum hereinabove set forth, and also in case suit is brought upon this bond, a reasonable attorney's fee to be fixed by the court.

**PROVIDED, HOWEVER**, that any suit under this bond shall be commenced no later than one (l) year from the expiration date of the Maintenance Period; provided, however, that if this limitation is prohibited by any law controlling the construction hereof, such limitation shall be deemed to be amended so as to be equal to the minimum period of limitation permitted by such law, and said period of limitation shall be deemed to have accrued and shall commence to run on the expiration date of the Maintenance Period.

Dated:\_\_\_\_\_,20 \_\_\_\_

Correspondence or claims relating to this bond should be sent to the surety at the following address:

Principal

Surety

(SEAL)

By: Attorney-in-Fact

NOTE: Signatures of those executing for the surety must be properly acknowledged.

APPROVED AS TO FORM:

### Mono County Counsel

Long Valley Streets Project - Sample Standard Agreement

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# EXHIBIT 4

### AGREEMENT BETWEEN COUNTY OF MONO AND [CONTRACTOR] FOR THE CONSTRUCTION OF THE LONG VALLEY STREETS PROJECT PROJECT NO. 9116

### INVOICING, PAYMENT AND RETENTION

3.E. (l). <u>Invoicing and payment</u>. Contractor shall submit to County, not more than once per month, a payment request in the form of an itemized statement of all services and work described in the Scope of Work (Attachment A) and Contract Documents, which were done at County's request. The statement to be submitted will cover the period from the first day of the preceding month through and including the last day of the preceding month. Alternatively, Contractor may submit a single request for payment at the conclusion of the work. All statements submitted in request for payment should identify the date on which the services and work were performed and describe the nature of the services and work which were performed on each day. Invoices shall be informative and concise regarding work performed during that billing period.

☐ If this box is checked, then invoicing shall be made in the format and according to the schedule and payment terms set forth in the Application and Certificate for Payment set forth on the following two (2) pages.

The progress of work shall initially be determined by Contractor, but must then, be approved in writing by County. Additionally, the making of one or more (1+) progress payments shall not be construed as approval of the work performed by Contractor. Should Contractor submit an improper payment request, County shall, as soon as practicable, return the request to Contractor accompanied by a document setting forth the reasons why the payment request is not proper. Should County determine the services or work have not been completed or performed as called for in the Scope of Work (Attachment A) and/or the Contract Documents and/or should Contractor submit an improper payment request, then County shall withhold payment of any disputed amount, plus those amounts authorized by Public Contract Code section 7107, until the services and work are satisfactorily completed or performed and/or the payment request is corrected and resubmitted.

Final payment (excluding retention) for work completed by the Completion Date specified in the Notice of Completion, shall be made within 35 days from the date that County records the Notice of Completion.

3.E.(2). <u>Retention</u>. In accordance with Public Contract Code sections 9203 and 20104.50, County shall retain five percent (5%) of each progress payment until the Project is completed unless, at any time after fifty percent (50%) of the work has been completed, the Board of Supervisors finds that satisfactory progress is being made, in which case County may make any of the remaining progress payments in full for actual work completed. In accordance with Public Contract Code section 22300, Contractor may substitute securities for any moneys withheld by County to ensure performance under this Agreement or request County to make payments of the retention earnings directly to an escrow agent at Contractor's expense.

Retention for work completed by the Completion Date will be released within 60 days of the date County records the Notice of Completion.

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# **SECTION III**



# TECHNICAL SPECIFICATIONS & QUALITY ASSURANCE PROGRAM

**Long Valley Streets Project** 

Project No. 9116

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# **TECHNICAL SPECIFICATIONS**

LONG VALLEY STREETS PROJECT Project No. 9116

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# 2. <u>BIDDING</u>

### **BID INELIGIBILITY**

A firm that has provided architectural or engineering services to the Department for this contract before bid submittal for this contract is prohibited from any of the following:

- 1. Submitting a bid
- 2. Subcontracting for a part of the work
- 3. Supplying materials

### CONTRACTOR REGISTRATION

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)].

### JOB SITE AND DOCUMENT EXAMINATION

Examine the job site and bid documents. Notify the Department of apparent errors and patent ambiguities in the plans, specifications, and Bid Item List. Failure to do so may result in rejection of a bid or rescission of an award.

Bid submission is your acknowledgment that you have examined the job site and bid documents and are satisfied with:

- 1. General and local conditions to be encountered
- 2. Character, quality, and scope of work to be performed
- 3. Quantities of materials to be furnished
- 4. Character, quality, and quantity of surface and subsurface materials or obstacles
- 5. Requirements of the contract

### **BID ITEM LIST**

Submit a bid based on the bid item quantities the County shows on the Bid Item List.

### SUBCONTRACTOR LIST

On the Subcontractor List form, list each subcontractor that will perform work in an amount in excess of 1/2 of 1 percent of the total bid or \$10,000, whichever is greater (Pub Cont Code § 4100 et seq.).

For each subcontractor listed, the Subcontractor List form must show:

- 1. Business name and the location of its place of business.
- 2. California contractor license number for a non-federal-aid contract.
- 3. Public works contractor registration number.
- 4. Portion of work it will perform. Show the portion of the work by:
  - 4.1. Bid item numbers for the subcontracted work
  - 4.2. Percentage of the subcontracted work for each bid item listed
  - 4.3. Description of the subcontracted work if the percentage of the bid item listed is less than 100 percent

### **BID DOCUMENT COMPLETION AND SUBMITTAL**

Use the bid forms provided in the Project Manual. Failure to submit the forms and information as specified may result in a nonresponsive bid.

Bid Proposals shall be submitted by the bid opening date and time shown on the *Invitation for Bids* with the exception of the following items:

1. Public works contractor registration numbers may be submitted up to ten (10) days after bid opening for both contractor and subcontractor list.

Bid forms and information on the form that are due after the time of bid may be submitted at the time of bid.

#### **BID WITHDRAWAL**

Bids are not filed with the County until the date and time of bid opening.

A bidder may withdraw or revise a bid after it has been submitted if this is done before the bid opening date and time.

#### **BID OPENING**

The County publicly opens and reads bids at the time and place shown on the *Invitation for Bids*. The Department may reject:

- 1. All bids
- 2. A nonresponsive bid
- 3. A bid from any entity that is a parent, affiliate, or subsidiary, or that is under common ownership, control, or management with any other entity submitting a bid on the project

### 4. <u>SCOPE OF WORK</u>

The LONG VALLEY STREETS PROJECT (hereinafter referred to as the project) is for the purpose of rehabilitating the existing asphalt concrete on Substation Road, Meadow View Drive, Lake Manor Place, Aspen Terrace, Delta Drive, Hilton Creek Drive, Hilton Creek Place, Crowley Lake Circle, Elderberry Lane, Placer Road (portion), Pearson Road, Wildrose Drive, Sierra Springs Road, Sunny Slopes Road, Wheeler View Drive, Montana Road, Foothill Road, and the westerly portion of Mountain View Drive. Rehabilitation of the roads will include repair of damaged road locations, grinding or milling of existing asphalt, placement of hot mix asphalt, construction of curbs, installation of roadway signs, installation of road paint markings, and other items or details not mentioned above that shall be performed, placed, constructed, or installed.

There may be other items of work not mentioned above that are required by the 2018 State of California, Department of Transportation, Standard Specifications, 2018 Edition (hereinafter referred to as Caltrans Specifications), or these Technical Specifications. Project work shall conform to the plans, project specifications, including these Technical Specifications, and the Caltrans Specifications. If any item of work or statement in the Technical Specifications or project plans conflicts with State Project Requirements, the State requirement shall prevail and be upheld by the Contractor.

The contract intent is to provide for work completion using the best general practices. Nothing in the specifications voids the Contractor's public safety responsibilities.

#### CHANGES AND EXTRA WORK

The County may make changes within the scope of work and add extra work. The Engineer describes the changes and extra work, the payment basis, and any time adjustment in a Change Order.

A Change Order is approved when the County signs the Change Order. Any proposed Change Order work performed by the Contractor prior to obtaining permission or a signed Change Order from the County will not be reimbursed. Until the County approves a Change Order, continue to perform the work under the Contract unless the Engineer orders you to start the work described in the Change Order before its approval.

Submit detailed cost data for a unit price adjustment for a bid item if (1) the Engineer requests the data or (2)

you request a unit price adjustment resulting from a change of more than 25 percent in the bid item's quantity.

#### **Work-Character Changes**

The County adjusts the unit price for an item if:

- 1. Ordered plan or specification change materially changes the character of a work item from that on which the bid item price was based.
- 2. Unit cost of the changed item differs from the unit cost of that item under the original plans and specifications.
- 3. No approved Change Order addresses the payment.

#### **DIFFERING SITE CONDITIONS (23 CFR 635.109)**

#### **Contractor's Notification**

Promptly notify the Engineer if you find either of the following conditions:

- 1. Physical conditions differing materially from either of the following:
  - 1.1. Contract documents
  - 1.2. Job site examination
- 2. Physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the Contract.

Include details explaining the information you relied on and the material differences you discovered.

If you fail to promptly notify the Engineer, you waive your claim of a differing site condition for the period between your discovery of the differing site condition and your notification to the Engineer.

If you disturb the site after discovery and before the Engineer's investigation, you waive the differing-sitecondition claim.

#### **Engineer's Investigation and Decision**

Upon your notification, the Engineer investigates job site conditions and:

- 1. Notifies you whether to resume affected work.
- 2. Decides whether the condition differs materially and is cause for an adjustment of time, payment, or both.

# 5. <u>CONTROL OF WORK</u>

#### GENERAL

A Notice to Proceed must be issued before commencement of any work.

A pre-construction meeting is required prior to the start of work.

Hot Mix Asphalt pavement mix design must be approved before any grinding / pulverizing activities commence.

Furnish the resources except County-furnished materials required to complete the work as described in the Contract.

Contractor shall be responsible for all construction survey staking, as necessary for construction.

Work is subject to the County's inspection, sampling, and testing. The County's inspection, sampling, and testing do not relieve you of your responsibility to provide Quality Control (QC). Contractor shall provide QC for all work performed. This work consists of obtaining samples for process control testing, performing

process control tests, providing quality control inspection, exercising management control to plan and implement construction processes that are systematic, consistent, and effective; ensuring that work conforms to the contract requirements; and documenting quality control activities and results.

Ensure the County's safe and unrestricted access to the work. Furnish facilities necessary for the County's inspection.

Where the means and methods to complete the work are not described in the Contract, choose the means and methods to complete the work.

Where the Contract describes more than 1 construction method or more than 1 type of material or equipment, the County does not assure that each construction method or type of material or equipment can be used successfully throughout all or any part of the project. You are responsible to use the alternative or alternatives that will accomplish the work under the conditions encountered.

Failure to comply with any Contract part is a waiver of your right to an adjustment of time and payment related to that part.

Character of Workers - If a worker appears to the Engineer to be incompetent or acts disorderly or improperly, discharge the worker immediately upon request. Do not employ that worker again on the work.

### **INSPECTOR'S AUTHORITY**

Inspectors are authorized to inspect work including preparation, fabrication or manufacture of materials for the project. The inspector is not authorized to alter or waive contract requirements, issue instruction contrary to the contract, act as foreman for the Contractor, or direct Contractor's operations. The inspector has authority to identify non-conforming work until the issue can be referred to and decided by the Engineer. The inspector may take necessary action to prevent imminent and substantial risk of death or injury including stopping work.

#### **ENGINEER'S AUTHORITY**

The Engineer makes the final decision on questions regarding the Contract, including:

- 1. Work quality and acceptability
- 2. Manner of performance of the work
- 3. Drawing and specification interpretation
- 4. Contract fulfillment
- 5. Time and progress rate
- 6. Measurement and payment

The Engineer has the authority to enforce or fulfill an order that you fail to fulfill promptly. Failure to enforce a Contract part does not waive enforcement of any Contract provision.

The Engineer may reject work that does not comply with the Contract at any time, including after a payment has been made.

#### SUBCONTRACTING

No subcontract releases you from the Contract or relieves you of your responsibility for a subcontractor's work.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor. For a list of debarred contractors, go to the Department of Industrial Relations' website.

If you violate Public Contract Code §4100 et seq., the County may exercise the remedies provided in Public Contact Code §4110. The County may refer the violation to the Contractors State License Board as provided

under Public Contract Code §4111.

Except for a building-construction non-federal-aid contract, perform work equaling at least 30 percent of the value of the original total bid with your employees and with equipment you own or rent, with or without operators.

Each subcontract must comply with the Contract.

The County encourages you to include a dispute resolution process in each subcontract.

Each subcontractor must have an active and valid:

- 1. State contractor license with a classification appropriate for the work to be performed (Bus & Prof Code §7000 et seq.)
- 2. Public works contractor registration number with the Department of Industrial Relations.

Submit copies of subcontracts upon request.

Upon request, immediately remove and do not again use a subcontractor who fails to satisfactorily prosecute the work.

#### **SUBMITTALS**

The Contractor shall provide an 'electronic file' of submittals for each of the following items to the Engineer:

- 1. Construction Schedule
- 2. Storm Water Pollution Prevention Program (SWPPP)
- 3. Traffic Control Plan (Caltrans Standard Plan T-Sheets acceptable)
- 4. Asphalt Concrete Mix Design
- 5. Concrete Mix Design
- 6. Pavement Marking Paint and glass beads Product Specifications and Certificates of Compliance
- 7. Sign panel certificates of compliance
- 8. Quality Control personnel certifications, laboratory certifications, required test data, laboratory test results, field test reports, and evaluation reports
- 9. Subcontracts, as requested
- 10. Certified Payroll
- 11. Other materials specifications, Certificates of Compliance, and informational submittals, as requested

The Engineer reserves the right to require additional submittals from the Contractor that are not specifically identified above. If so requested, the Contractor shall provide the Engineer with an 'electronic file' of any additional submittals.

## CONSTRUCTION

Work shall progress only after engineer's approval of the Construction Schedule Submittal. The construction schedule shall include consideration for local events and holidays. Many of these events have set up times and clean up times that must also be avoided, before and after said event. We have included dates below for local events in the year 2021 between April and November. If any construction occurs outside that time frame, there may be additional block-out dates. Refer to <a href="https://www.monocounty.org/things-to-do/events/">https://www.monocounty.org/things-to-do/events/</a> for the most current list of events planned for each community. Based on local events the following are general block-out dates:

- Memorial Day (May 29 May 31)
- 4<sup>th</sup> of July (July 3 July 5)
- Labor Day

• Mammoth Gran Fondo (September 11, 2021)

The engineer may increase or decrease block-out dates for local events. During the duration of local events, work can continue in unaffected regions.

Furnish a weatherproof bulletin board of suitable size and construction for continuous display of posters and other information required by the contract (worker's rights, prevailing wage requirements, etc.). Erect and maintain the bulletin board at a conspicuously accessible location on the Project and remove and dispose of it after final Project acceptance.

No equipment or construction materials shall be stored or staged within the traveled way. The Contractor shall coordinate with Mono County regarding establishment and operation of storage and staging areas.

The contractor is responsible for providing water, as necessary, for all relevant construction activities. Any water meter charges shall be paid by the contractor.

Any construction staking shall be the responsibility of the contractor. Road alignments, road elevations, etc. can be provided for construction staking upon request.

In each stage of construction, after completion of the preceding stage, the first order of work shall be the removal of any existing pavement delineation that conflicts with the pavement delineation being used by public traffic, as determined by the Engineer.

24 Hour Contact Number - The Contractor shall assign a Project Superintendent and an assistant who have the complete authority to make decisions on behalf of the Contractor. The project superintendent or the assistant shall be at the project site at all times during the construction and shall be available and on call 24 hours a day, 7 days per week for the duration of the project. The Contractor shall provide the Engineer and the Mono County Sheriff's Department primary and secondary 24-hour mobile phone numbers for the project superintendent and the assistant. These numbers shall not automatically direct calls to a recorder or other message taking service.

Advance Public Notification – At least 7 days and no more than 14 days prior to beginning any work on the project, the Contractor shall post a notice of construction at each construction location in the relevant community. No parking signs with dates of construction shall be posted, as necessary on each road. In addition, Contractor shall notify applicable parties listed below. Notice shall be given for general construction activity in an area as well as specific activities that will, in any way, inconvenience residents/property owners/tenants or affect their operations or access to their property. Such notices shall include the expected date for start of construction, a general description of the construction activity to take place, expected duration, and the name, address, and contact number of the Contractor's superintendent and the Mono County Department of Public Works. Notice shall state that access to and from their property will be maintained on all roads during construction.

The Contractor shall provide Advance Notice and coordinate the work with the following parties:

Mammoth Ranger District (U.S. Forest Service)	760 924-5500
Hilton Creek Community Services District	760 965-9696
Long Valley Fire Protection	760 935-4545
Mono County Sheriff's Department	760 932-7549
Southern California Edison	760 924-4810

### NONCOMPLIANT AND UNAUTHORIZED WORK

Correct or remove and replace work that (1) does not comply with the Contract, (2) is unauthorized, or (3) both. The County does not pay for any of the following:

- 1. Corrective, removal, or replacement work
- 2. Unauthorized work

If ordered, submit a work plan for the corrective, removal, or replacement work.

If you fail to comply promptly with an order, the County may correct, remove, or replace noncompliant or unauthorized work. The County deducts the cost of this work.

#### **Survey Monuments**

Protect survey monuments on and off the roadway. Notify the County Engineer of any survey monuments within the construction areas.

## RECORDS

## **Record Retention**

Retain project records from bid preparation through

- 1. Final payment
- 2. Resolution of claims, if any

For at least 3 years after the later of these, retain cost records, including records of:

- 1. Bid preparation
- 2. Overhead
- 3. Payrolls
- 4. Payments to subcontractors and suppliers
- 5. Cost accounting

Maintain the records in an organized way in the original format, electronic and hard copy, conducive to professional review and audit.

#### **Record Inspection, Copying, and Auditing**

Make your records available for inspection, copying, and auditing by State representatives for the time frame listed above. The records of subcontractors and suppliers must be made available for inspection, copying, and auditing by State representatives for the same period. Before Contract acceptance, the State representative notifies the Contractor, subcontractor, or supplier 5 business days before inspection, copying, or auditing.

If an audit is to start more than 30 days after Contract acceptance, the State representative notifies the Contractor, subcontractor, or supplier of the date when the audit is to start.

#### **Cost Accounting Records**

Maintain cost accounting records for the project distinguishing between the following work cost categories:

- 1. Work performed based on bid item prices
- 2. Change order work other than extra work. Distinguish this work by:
  - 2.1. Bid item prices
  - 2.2. Force account
  - 2.3. Agreed price
- 3. Extra work. Distinguish extra work by:
  - 3.1. Bid item prices
  - 3.2. Force account

- 3.3. Agreed price
- 3.4. Specialist billing
- 4. Work performed under potential claim records
- 5. Overhead
- 6. Work performed by subcontractors, suppliers, owner-operators, and professional services

Cost accounting records must include:

- 1. Final cost code lists and definitions
- 2. Itemization of the materials used and copies of the corresponding vendors' invoices
- 3. Direct cost of labor
- 4. Equipment rental charges
- 5. Workers' certified payrolls
- 6. Equipment:
  - 6.1. Size
  - 6.2. Type
  - 6.3. Identification number
  - 6.4. Hours operated

Maintain separate records for change order work costs.

# FINAL INSPECTION AND CONTRACT ACCEPTANCE

When you complete the work, request the Engineer's final inspection.

If the Engineer determines that the work is complete, the Engineer recommends Contract acceptance. Immediately after Contract acceptance, you are relieved from:

- 1. Maintenance and protection duties
- 2. Responsibility for injury to persons or property or damage to the work occurring after Contract acceptance except as specified below (Guarantee).

## **GUARANTEE**

Guarantee that work remains free from substantial defects for 1 year after Contract acceptance except for work parts for which you were relieved of maintenance and protection. Guarantee each of these relieved work parts for 1 year after the relief date.

The guarantee excludes damage or displacement caused by an event outside your control, including:

- 1. Normal wear and tear
- 2. Improper operation
- 3. Insufficient maintenance
- 4. Abuse
- 5. Unauthorized change
- 6. Act of God

During the guarantee period, repair or replace each work part having a substantial defect.

The Department does not pay for corrective work.

During corrective work activities, provide the same insurance specified before Contract acceptance.

The Contract bonds must be in force until the later of (1) the expiration of the guarantee period or (2) the completion of the corrective work.

If a warranty specification conflicts with this section, comply with the warranty specification.

During the guarantee period, the Engineer monitors the completed work. If the Engineer finds work having a substantial defect, the Engineer lists the defective work parts and furnishes you the list.

Within 10 days of receipt of the list, submit for authorization a detailed plan for correcting the work. Include a schedule that includes:

- 1. Start and completion dates
- 2. List of labor, equipment, materials, and any special services you plan to use
- 3. Work related to the corrective work, including traffic control and temporary and permanent pavement markings

The Engineer notifies you when the plan is authorized. Start the corrective work and related work within 15 days of notice.

If the Engineer determines corrective work is urgently required to prevent injury or property damage:

- 1. The Engineer furnishes you an order to start emergency repair work and a list of parts requiring corrective work
- 2. Mobilize within 24 hours and start work
- 3. Submit a corrective work plan within 5 business days of starting the emergency repair work

If you fail to perform the work as specified, the Department may perform the work and bill you.

## PAYMENT

There is no separate payment for CONTROL OF WORK.

# 6. <u>CONTROL OF MATERIALS</u>

### GENERAL

All work performed in connection with CONTROL OF WORK shall conform to the provisions in Caltrans Specifications Section 6, "CONTROL OF MATERIALS".

Select sources and submit acceptable material. If possible, submit material source information on or before the preconstruction meeting. Notify the Engineer of proposed sources prior to delivery to the project to expedite material inspection and testing. Do not incorporate materials requiring submittal into the work until approved.

Material may be approved at the source of supply before delivery to the project. Approval of material source does not constitute acceptance of material submitted from the source. If an approved material source fails to supply acceptable material during the life of the project, further use of that source may be denied.

Store materials and samples in a way that preserves the quality and facilitates prompt inspection. Stored material approved before storage may again be inspected before use in the work. Do not use private property for storage without written permission of the owner or lessee. Submit copies of agreements and documents.

Material incorporated into the work must be new.

## **QUALITY ASSURANCE (QA)**

Quality assurance includes all activities used to (1) provide an overall level of quality for the project and (2) determine compliance with the Contract documents.

Quality control includes sampling, testing, and inspections performed under your QC program to (1) control material quality and (2) ensure the specified quality characteristics for the project are met.

County acceptance includes sampling, testing, and inspections performed by the County to verify compliance

with the Contract. Refer to Mono County's Quality Assurance Program included in the Project Manual and Appendix A, Table 1, *Long Valley Streets Project, Schedule of Minimum Sampling and Testing for Acceptance*, included herein, for project specific QA requirements.

## COUNTY ACCEPTANCE

The County may use multiple acceptance methods for a material.

Specifications in sections titled "County Acceptance" do not include all requirements on which the County makes its acceptance.

The County may inspect, sample, and test materials for compliance with the Contract at any time.

Allow the County to record, including photograph and video, to ensure a material is produced to comply with the Contract.

You may examine the records and reports of tests the County performs.

Schedule work to allow time for the County's inspection, sampling, and testing.

The County deducts testing costs for work that does not comply with the Contract.

The County may retest material previously tested and authorized for use. If the County notifies you of a retest, furnish resources for retesting.

#### Job Site Inspection and Testing

If a material is to be inspected or tested at the job site, the material must be authorized for use before it is incorporated into the work.

#### **Certificates of Compliance**

Where a certificate of compliance is specified and if any material is produced outside the United States.

Submit a certificate of compliance:

- 1. Before the material is incorporated into the work
- 2. For each lot of the material. Identify the lot on the certificate
- 3. Signed by the producer of the material and stating that the material complies with the Contract

### **QUALITY CONTROL**

Develop, implement, and maintain a Quality Control program.

Prepare and maintain QC records, including:

- 1. Names and qualifications of:
  - 1.1. Samplers
  - 1.2. Testers
  - 1.3. Inspectors
- 2. Testing laboratories' identification and certifications
- 3. Testing equipment calibrations and certifications
- 4. Inspection reports
- 5. Sampling and testing records organized by date and type of material
- 6. Test results with comparison of quality characteristic requirements
- 7. Test results in relation to action and any suspension limits
- 8. Records of corrective actions and suspensions

Within 24 hours, notify the Engineer of any noncompliance identified by your QC program.

Allow the County access to all QC records.

Submit QC test data and QC test results within 2 business days of test completion.

#### Quality Control Manager:

The QC manager must be responsible directly to you for the quality of the work, including materials and workmanship performed by you and your subcontractors.

The QC manager must be your employee or must be hired by a subcontractor providing only QC services. The QC manager must not be employed or compensated by a subcontractor or by other persons or entities hired by subcontractors who will provide other services or materials for the project.

Notify the Engineer of the name and contact information of the QC manager.

### PAYMENT

There is no separate payment for CONTROL OF MATERIALS.

# 7. <u>RESPONSIBILITY TO THE PUBLIC</u>

## PUBLIC CONVENIENCE

Compliance with this section does not relieve you of your responsibility for public safety.

Construction activities must not inconvenience the public or abutting property owners. Schedule and conduct work to avoid unnecessary inconvenience to the public and abutting property owners. Avoid undue delay in construction activities to reduce the public's exposure to construction.

Where possible, route traffic on new or existing paved surfaces.

Maintain convenient access to driveways, houses, and buildings. When an abutting property owner's access across the right-of-way line is to be eliminated or replaced under the Contract, the existing access must not be closed until the replacement access facility is usable. Construct temporary approaches to a crossing and an intersecting highway.

Provide a reasonably smooth and even surface for use by traffic at all time during the excavation of a roadway and construction of an embankment. Before other grading activities, place fill at culverts and bridges to allow traffic to cross. If ordered, excavate a roadway cut in layers and construct an embankment in partial widths at a time alternating construction from one side to the other and routing traffic over the side opposite the one under construction. Install or construct culverts on only 1/2 the width of the traveled way at a time; keep the traveled way portion being used by traffic open and unobstructed until the opposite side of the traveled way is ready for use by traffic.

Upon completion of rough grading or placing any subsequent layer, bring the surface of the roadbed to a smooth and even condition, free of humps and depressions, and satisfactory for the use of the public.

After subgrade preparation for a specified layer of material has been completed, repair any damage to the roadbed or completed subgrade, including damage caused by public use.

While subgrade and paving activities are underway, allow the public to use the shoulders. If half-width paving methods are used, allow the public to use the side of the roadbed opposite the one under construction. If enough width is available, keep open a passageway wide enough to accommodate at least 2 lanes of traffic at locations where subgrade and paving activities are underway. Shape shoulders or reshape subgrade as necessary to accommodate traffic during subgrade preparation and paving activities.

Apply a dust palliative for the prevention or alleviation of dust nuisance.

Install signs, lights, flares, Type K temporary railing, barricades and other facilities to direct traffic. Provide flaggers whenever necessary to direct the movement of the public through or around the work. Flagging must comply with section 12-1. The Department pays you for this work under section 12-1.04.

You are required to pay for the cost of replacing or repairing all facilities installed under change order work for the convenience, direction, or warning of the public that are lost while in your custody or are damaged by your operations to such an extent as to require replacement or repair.

The Engineer may order or consent to your request to open a completed section of surfacing, pavement, or structure roadway surface for public use. You will not be compensated for any delay to your construction activities caused by the public. This does not relieve you from any other contractual responsibility.

## PUBLIC SAFETY

You are responsible to provide for public safety.

Do not construct a temporary facility that interferes with the safe passage of traffic.

Control dust resulting from the work, inside and outside the right-of-way.

Move workers, equipment, and materials without endangering traffic.

Whenever your activities create a condition hazardous to the public, furnish, erect and maintain those fences, temporary railing, barricades, lights, signs, and other devices and take any other necessary protective measures to prevent damage or injury to the public.

Any fences, temporary railing, barricades, lights, signs, or other devices furnished, erected and maintained by you are in addition to those for which payment is provided elsewhere in the specifications.

Provide flaggers whenever necessary to ensure that the public is given safe guidance through the work zone. Flagging must comply with section 12. The County pays you for this work under section 12.

At locations where traffic is being routed through construction under one-way controls, move your equipment in compliance with the one-way controls unless otherwise ordered.

Use of signs, lights, flags, or other protective devices must comply with the *California MUTCD* and any directions of the Engineer. Signs, lights, flags or other protective devices must not obscure the visibility of, nor conflict in intent, meaning, and function of either existing signs, lights and traffic control devices, or any construction area signs.

Do not store vehicles, material, or equipment in a way that:

- 1. Creates a hazard to the public
- 2. Obstructs traffic control devices

Do not install or place temporary facilities used to perform the work which interfere with the free and safe passage of traffic.

Temporary facilities that could be a hazard to public safety if improperly designed must comply with design requirements described in the Contract for those facilities or, if none are described, with standard design criteria or codes appropriate for the facility involved.

If you appear to be neglectful or negligent in furnishing warning devices and taking protective measures, the Engineer may direct your attention to the existence of a hazard. You must furnish and install the necessary warning devices. If the Engineer points out the inadequacy of warning devices and protective measures, that action on the part of the Engineer does not relieve you from your responsibility for public safety or abrogate your obligation to furnish and pay for these devices and measures.

#### PAYMENT

There is no separate payment for RESPONSIBILITY TO THE PUBLIC.

# 8. <u>PROSECUTION AND PROGRESS</u>

### GENERAL

The Contractor shall submit a construction schedule for the Engineer's approval within 10 calendar days after the date of the Notice to Award. The Contractor's progress schedule, when approved by the Engineer, may be used to establish major construction operations and to check on the progress of the Work. The Contractor shall provide sufficient materials, equipment, and labor to guarantee the completion of the Project in accordance with and within the time set forth in the ContractDocuments.

If, in the sole judgment of the Engineer, the Contractor falls significantly behind the submitted schedule, the Contractor shall, upon the Engineer's request, submit a revised schedule for completion of the Work within the contract time and modify its operations to provide such additional materials, equipment, and labor necessary to meet the revised schedule. Should the prosecution of the Work be discontinued for any reason, the Contractor shall notify the Engineer at least 24 hours in advance of resuming operations.

#### SUBMITTALS

Construction Schedule

### TIME

Complete the work within the Contract time.

Meet each specified interim work-completion date.

The Engineer issues a Weekly Statement of Working Days form by the end of the following week.

The Weekly Statement of Working Days form shows:

- 1. Working days and non–working days during the reporting week
- 2. Time adjustments
- 3. Calculations of work completion dates, including working days remaining
- 4. Controlling activities

#### Delays

To request a delay-related time or payment adjustment, submit an RFI.

#### Time Adjustments

The Department may make a time adjustment for a critical delay. The Engineer uses information from the schedule to evaluate requests for time adjustments.

To request an adjustment, submit a revised schedule showing the delay's effect on the controlling activity. If the delay has:

- 1. Occurred, submit records of the dates and what work was performed during the delayed activity
- 2. Not occurred, submit the expected dates or duration of the delayed activity

Update the schedule to the last working day before the start of the delay if ordered.

#### **Payment Adjustments**

The County may make a payment adjustment for an excusable delay that affects your costs.

The County specifies liquidated damages (Pub Cont Code § 10226). Liquidated damages, if any, accrue starting on the 1st day after the expiration of the working days through the day of Contract acceptance.

The Department withholds liquidated damages before the accrual date if the anticipated liquidated damages may exceed the value of the remaining work.

## Liquidated damages for this project are \$4,000.00 per day.

## MOBILIZATION

Mobilization shall consist of preparatory work and operations, including, but not limited to, those necessary for the movement of personnel, equipment, materials, supplies and incidentals to and from the project site. Mobilization includes the obtaining of permits, insurance, and bonds.

## PAYMENT

There is no separate payment for PROSECUTION AND PROGRESS.

The contract LUMP SUM (LS) price paid for "MOBILIZATION" shall constitute full compensation for furnishing all labor and materials, including tools, equipment and incidentals, and for performing the work involved in placing, removing, storing, maintaining, moving to new locations, replacing, and disposing of equipment and materials, bonding, creating as-built drawings, and for performing all work required for which separate payment is not otherwise provided as specified in the CT Specifications and these Technical Specifications, and as directed by the Engineer. No adjustment will be made to the lump sum price for mobilization due to the requirement of a winter suspension, two mobilizations, or changes to other items of work or additions to the Contract.

# 9. PAYMENT

## **PAYMENT SCOPE**

The County pays you for furnishing the resources and activities required to complete the work. The County's payment is full compensation for furnishing the resources and activities, including:

- 1. Risk, loss, damage repair, or cost of whatever character arising from or relating to the work and performance of the work.
- 2. Permits, licenses, agreements, certifications, or any combination of these and taxes.
- 3. Any royalties and costs arising from patents, trademarks, and copyrights involved in the work.

The County does not pay for your loss, damage, repair, or extra costs of whatever character arising from or relating to the work that is a direct or indirect result of your choice of construction methods, materials, equipment, or manpower, unless specifically mandated by the Contract.

Payment is:

- 1. Full compensation for all work involved in each bid item shown on the Bid Item List by the unit of measure shown for that bid item.
- 2. For the price bid for each bid item shown on the Bid Item List or as changed by change order with a specified price adjustment.

Work paid for under one bid item is not paid for under any other bid item.

Payment for a bid item includes payment for work in sections referenced by the section set forth by that bid item.

#### ELIMINATED ITEMS

If the Engineer eliminates an item, the Engineer notifies you and the Department pays your costs incurred before the notification date.

If you order authorized material for an eliminated item before the notification date and the order cannot be canceled, either of the following occurs:

- 1. If the material is returnable to the vendor, the Engineer orders you to return the material and the Department pays your handling costs and vendor charges.
- 2. The Department pays your cost for the material and its handling and becomes the material owner.

# 12. TEMPORARY TRAFFIC CONTROL

All work performed in connection with TEMPORARY TRAFFIC CONTROL shall conform to the provisions in CT Specifications Section 12 TEMPORARY TRAFFIC CONTROL. Sections 7- 1.08, "Public Convenience," 7-1.09, "Public Safety," and Section 12, "Construction Area Traffic Control Devices," and these Technical Specifications. Nothing in these Technical Specifications shall be construed as relieving the Contractor from the responsibilities specified in Section 7-1.09.

Temporary traffic control, including flagging, apparel, temporary traffic control devices, and equipment for flaggers, must comply with the *California MUTCD*, Part 6, "Temporary Traffic Control."

Accommodate traffic according to the MUTCD, the approved traffic control plan, and this section.

#### CONSTRUCTION

Perform work in a manner that ensures the safety and convenience of the public and protects residents and property adjacent to the project. Accommodate public traffic on roads adjacent to and within the project until the project is accepted as complete.

Assign flaggers to:

- 1. Control traffic
- 2. Warn the public of any dangerous conditions resulting from the work activities
- 3. Provide for the passage of traffic through the work as specified for the passage of traffic for public convenience and public safety

Maintain flagging apparel, traffic control devices, and equipment for flaggers in good repair.

The Contractor shall maintain public access on all roads during construction. No roads may be closed to the public without permission from the County.

Except for temporary interruptions approved by the Engineer, Contractor shall maintain property owner access to their property over both walkways and driveways at all times. Temporary interruption to property access shall be minimized to the extent possible.

The Contractor shall maintain a safe workplace at all times, including, but not limited to, providing flaggers, safety equipment, barricades, safe pedestrian passage along sidewalks, and maintenance of handicap access

throughout the project site where applicable.

The Contractor shall fulfill the requirements of this section 24 hours per day, seven days per week, including holidays, from the time the Notice to Proceed is issued until the project is accepted as complete.

A minimum of one paved traffic lane, not less than ten (10) feet wide, shall be open for use by public traffic in each direction of travel except for single direction traffic control with flaggers as approved by the Engineer. Traffic may not be routed over unpaved roadways unless authorized by the Engineer. Public traffic will be permitted on roads only after adequate grading and compaction of the roadbed has been completed. At no time shall traffic be permitted on a public roadway with loose, uncompacted material.

For shoulder drop-offs of 3 inches or less, provide "Low Shoulder" warning signs. For shoulder drop-offs in excess of 3 inches, provide 1V:3H fillet with "Should Drop-Off" warning signs.

Whenever vehicles or equipment are parked on the shoulder within 6 feet of a traffic lane, the shoulder area shall be closed with fluorescent traffic cones or portable delineators placed on a taper in advance of the parked vehicles or equipment and along the edge of the pavement at 25-foot intervals to a point not less than 25 feet past the last vehicle or piece of equipment. A minimum of 9 cones or portable delineators shall be used for the taper. A C23 (Road Work Ahead) or C24 (Shoulder Work Ahead) sign shall be mounted on a portable sign stand with flags. The sign shall be placed as approved by the Engineer.

When entering or leaving roadways carrying public traffic, the Contractor's equipment, whether empty or loaded, shall in all cases yield to public traffic.

All excess and unsuitable material resulting from the Contractor's operation shall be removed from the project site before the end of each workday.

## SUBMITTALS

Temporary Traffic Control Plan (TTC). The TTC shall include the relevant CT Standard Plan(s) and shall be submitted for approval prior to the start of construction.

## PAYMENT

The contract price paid per DAY for "TEMPORARY TRAFFIC CONTROL" shall include full compensation for furnishing all labor, materials (including signs, arrow boards, barricades and cones), tools, equipment and incidentals, preparing and submitting the required traffic control plans, obtaining Caltrans Encroachment Permit if needed, and providing construction and detour signs (including temporary in-ground signs within the Caltrans right-of-way), flaggers, pilot car, and the installation and subsequent removal of signing, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the traffic control system as shown on the plans, as specified in the CT Specifications and these Technical Specifications, and as directed by the Engineer.

# 13. WATER POLLUTION CONTROL

All work performed in connection with WATER POLLUTION CONTROL shall conform to the provisions in CT Specifications Section 13 WATER POLLUTION CONTROL, the plans and these Technical Specifications.

The intent of the WATER POLLUTION CONTROL is to eliminate the potential for dust or sediment to exit the project site in any form of runoff and to conform to any federal, state and/or local requirements.

## SUBMITTALS

Stormwater Pollution Prevention Plan (SWPPP)

Note, SWPPP must be prepared using the latest template posted on the Construction stormwater website (Caltrans).

Within 48 hours after (1) the end of a storm event resulting in a discharge, (2) a non-stormwater discharge, or (3) receiving a written notice or an order from the RWQCB or another regulatory agency, submit the following information:

- 1. Date, time, location, and nature of the activity and the cause of the discharge, notice, or order
- 2. Type and quantity of the discharge
- 3. WPC practices in use before the discharge or before receiving the notice or order
- 4. Description of WPC practices and corrective actions taken to manage the discharge or cause of the notice

Refer to SWPPP Section below for submittal requirements based on Risk Level calculated for the project.

Certificates of Compliance for erosion control materials, as required.

### MATERIALS

Fiber Rolls Other BMP's per SWPPP and as determined in the field

### CONSTRUCTION

Monitor the National Weather Service's forecast daily. Work shall be scheduled for time when there is no stormwater runoff entering or exiting the site, except as authorized by the engineer.

Install BMP facilities and devices before performing other job site activities. Install soil stabilization and sediment control materials in all active areas or before any storm event. No construction debris shall be allowed to exit the site.

Repair or replace facilities and devices used for BMP practices within 24 hours of discovering any damage.

You must submit a SWPPP and pay all associated costs if you do any of the following:

- 1. Disturb 1 ac or more of soil on a project without an erosivity waiver
- 2. Disturb more than 5 ac of soil on a project with an erosivity waiver
- 3. Fail to comply with the schedule for soil-disturbing activities for a project with an erosivity waiver and the delay voids the erosivity waiver

Do not start job site activities until (1) the SWPPP is authorized and (2) a waste discharge ID number is issued.

The SWPPP, Waste Discharge Identification (WDID), and associated permits, records, and inspection forms shall be kept on-site and made available for inspection when requested. At the completion of the Project, the complete SWPPP, including inspection forms, logs, monitoring reports, and any other information added during the Project shall be provided to Mono County.

#### Project Winterization:

This project is not expected to require winterization. If winterization is required, all costs

associated with it will be the responsibility of the Contractor. Winterization would include cleaning all surfaces of sediment, debris and dust. If there is a winter shutdown, no work will be permitted in project areas that have not been started.

Continue SWPPP implementation during any suspension of work activities.

#### **STORMWATER POLLUTION PREVENTION PLAN (SWPPP)**

Preparing a stormwater pollution prevention plan includes developing and implementing the plan, providing a Water Pollution Control (WPC) manager, conducting WPC training, and monitoring, inspecting, and correcting WPC practices.

Submit the documents shown with an X in the following table corresponding to the project risk level:

	Submit	ttal Require	ments		
Document	Risk	Risk level	Risk level	EPA	Lake Tahoe
	level 1	2	3		Hydrologic Unit
SWPPP	Х	Х	Х	Х	Х
Construction Site Monitoring Program	Х	Х	Х	Х	Xa
Job site monitoring reports	Х	Х	Х	Х	Х
Sampling and analysis plan	Х	Х	Х	Х	Х
Sampling and analysis plan for nonvisible	Х	Х	Х	Х	Х
pollutants					
Sampling and analysis plan for pH and		Х	Х		Х
turbidity					
NAL reports		Х	Х		Х
Receiving water monitoring trigger			Х		
reports					
Rain Event Action Plan		Х	Х		Х
Annual Certification	Х	Х	Х	Х	Х
Stormwater Annual Report	Х	Х	Х	Х	Х

<sup>a</sup>For a project in the Lake Tahoe Hydrologic Unit, this program is referred to as the Construction Site Monitoring and Reporting Program

Refer to Caltrans Standard Specification 13-3 for specific SWPPP requirements for construction projects.

#### JOB SITE MANAGEMENT

Job site management work includes spill prevention and control, material management, waste management, non-stormwater management, and dewatering activities.

Implement effective housekeeping practices for handling, storing, using, and disposing of materials to prevent pollution. Limit potential pollutants at their source before they come in contact with stormwater.

#### SPILL PREVENTION AND CONTROL

Keep material or waste storage areas clean, organized, and equipped with enough cleanup supplies for the material being stored.

Implement spill and leak prevention procedures for chemicals and hazardous substances stored on the job site. If you spill or your equipment or materials leak chemicals or hazardous substances at the job site, you are responsible for all associated cleanup costs and related liability.

Prevent spills from entering stormwater runoff before and during cleanup activities. Do not bury the spill or wash it with water.

Immediately report spills to the WPC manager.

As soon as it is safe, contain and clean up spills of petroleum materials and sanitary and septic waste substances listed in 40 CFR, parts 110, 117, and 302. Comply with section 14-11 for a spill or leak that produces hazardous waste.

#### MATERIAL MANAGMENT

Minimize or eliminate discharge of material into the air, storm drain systems, and receiving waters while taking delivery of, using, or storing the following materials:

- 1. Hazardous chemicals, including acids, lime, glues, adhesives, paints, solvents, and curing compounds
- 2. Soil stabilizers and binders
- 3. Fertilizers
- 4. Detergents
- 5. Plaster
- 6. Petroleum materials, including fuel, oil, and grease
- 7. Asphalt and concrete components
- 8. Pesticides and herbicides

Employees trained in emergency spill cleanup procedures must be present during the unloading of hazardous materials or chemicals.

Minimize the use of hazardous materials if practicable.

Perform each of the following activities at least 100 feet from a concentrated flow of stormwater, a drainage course, or an inlet wherever it is performed (1) within the floodplain or (2) at least 50 feet outside the floodplain:

- 1. Stockpiling materials
- 2. Storing pile-driving equipment and liquid waste containers
- 3. Washing vehicles and equipment in outside areas
- 4. Fueling and maintaining vehicles and equipment

## MATERIAL STORAGE

Store materials in their original containers with the original labels maintained in legible condition. Immediately replace damaged or illegible labels.

## **STOCKPILE MANAGEMENT**

Minimize stockpiling of materials at the job site.

Do not allow soil, sediment, or other debris from stockpiles to enter storm drains, open drainages, or watercourses.

Manage stockpiles by implementing WPC practices on:

- 1. Active stockpiles before a forecasted storm event
- 2. Inactive stockpiles according to the WPCP or SWPPP schedule

Cover active and inactive soil stockpiles with soil stabilization material or a temporary cover and surround them with a linear sediment barrier.

Cover stockpiles of concrete and asphalt concrete rubble, HMA, AB, or AS with a temporary cover and surround them with a linear sediment barrier.

Place stockpiles of pressure-treated wood on pallets and cover them with an impermeable material.

Place stockpiles of cold mix asphalt concrete on an impervious surface and cover them with an impermeable material. Protect the stockpile from stormwater run-on and runoff.

Repair or replace linear sediment barriers and covers as needed to keep them functioning properly. If sediment accumulates to 1/3 of the linear sediment barrier's height, remove the accumulated sediment.

## PAYMENT

The contract LUMP SUM (LS) price paid for WATER POLLUTION CONTROL (SWPPP PREP, BMP INSTALLATION, MONITORING) shall include full compensation for preparing and obtaining an approved Stormwater Pollution Prevention Plan (SWPPP), obtaining necessary permits, inspecting, sampling, and for furnishing all labor, materials (including fiber rolls, silt fences, geotextiles, etc.), tools, equipment and

incidentals, and providing the required BMPs and subsequent removal of BMPs, monitoring, and for doing all the work involved in placing, removing, storing, maintaining, moving to new locations, replacing and disposing of the components of the WATER POLLUTION CONTROL as specified in the SWPPP, as shown on the Project plans, as specified in the CT Specifications and these Technical Specifications, and as directed by the Engineer.

# **15. EXISTING FACILITIES**

All work performed in connection with EXISTING FACILITIES shall conform to the provisions in Section 15, "Existing Facilities," of the CT Specifications and these Technical Specifications.

# CONSTRUCTION

Existing underground utility lines are not shown on the plans. The Contractor shall be responsible for locating and field verifying the location of all existing utilities and utility features prior to the start of construction activities and protecting all facilities during construction. Engineer shall be notified of utility conflicts. Contractor shall allow 14 days after notification of utility conflicts prior to construction of affected work. Damage caused by the Contractor to existing facilities shall be repaired within 24 hours at the sole expense of the Contractor.

Not all existing overhead utility lines are not shown on the plans. The contractor shall take all precautionary measures necessary to protect overhead utility lines and protect workers and pedestrians during construction operations.

The Contractor shall notify and coordinate the work of identifying and marking utility facilities with the respective utility companies. The Contractor is required to call Underground Service Alert (USA) at 811 forty-eight (48) hours in advance of any excavation activity. The Contractor shall submit to the Engineer copies of all USA confirmation numbers including associated documentation.

Clean earth and other foreign material, including concrete, from material to be salvaged or incorporated into the work.

Dispose of removed facilities not to be salvaged or incorporated into the work.

If you damage a facility or a portion of a facility to remain in place, repair or replace it. The repair or replacement must be equal or better in quality than the original portion.

Repair or replace materials to be salvaged or incorporated into the work that are lost or damaged during work activities. The repair or replacement must be equal or better in quality than the original portion. Instead of this repair or replacement, the Department may deduct the repair or replacement cost.

Existing survey monuments shall be preserved, referenced or replaced pursuant to the requirements of State of California Streets and Highways Code Sections 732.5, 1492.5, and 1810.5 and Business and Professions Code Section 8771 and the following:

The Contractor shall not disturb permanent survey monuments or benchmarks except as shown on the plans and as approved by the Engineer. The Contractor shall bear the expense of replacing any monuments or benchmarks that may be disturbed without permission. Replacement shall be done only by a registered Land Surveyor in the presence of the Engineer.

Should the Contractor during the course of construction encounter a survey monument or benchmark not shown on the plans, he shall promptly notify the Engineer so that the monument or benchmarks

may be referenced accordingly.

## PAYMENT

Full compensation for EXISTING FACILITIES and for preservation of existing survey monuments, utilities, manholes, and valves, except those noted on the plans as requiring replacement and paid for separately, shall be considered as included in the contract prices paid for the various items of work, and no additional compensation will be allowed therefor.

# 17. CLEARING AND GRUBBING

Clearing and grubbing consists of removing objectionable material from the following construction areas:

- 1. Highways
- 2. Bridges and other structures
- 3. Roads, road approaches, streets, and ramps
- 4. Material sites
- 5. Ditches and channels
- 7. Other described areas

Clear and grub before performing earthwork in a project area.

Do not injure standing trees, plants, and improvements shown to be protected.

## CLEARING

Clear all construction areas above original ground of (1) all vegetation such as trees, logs, upturned stumps, roots of downed trees, brush, grass, and weeds and (2) other objectionable material including concrete, masonry, and debris. Cut tree branches that extend over the roadway and hang within 20 feet of finished grade.

## GRUBBING

Grub all construction areas to a depth necessary to remove all trees, existing stumps, roots, buried logs, and other vegetative or objectionable material.

## **DISPOSAL OF MATERIALS**

Dispose of materials resulting from clearing and grubbing activities legally at a landfill or the material may be disposed of on-site with approval from the Engineer.

# PAYMENT

Full compensation for CLEARING AND GRUBBING shall be considered as included in the prices paid for the various items of work involved, including SHOULDER BACKING (AC GRINDINGS), and no separate payment will be made therefor.

# 18. DUST CONTROL

All work performed in connection with DUST CONTROL shall conform to the provisions in CT Specifications Section 18 DUST PALLIATIVES.

## CONSTRUCTION

The Contractor shall perform necessary work to control dust at all times, as required by regulation.

Water shall be used to suppress dust as necessary on:

- 1. Construction staging, material storage, and layout areas
- 2. Compacted soil or aggregate base roads or driveways
- 3. Paved surfaces
- 4. Active haul roads and detours

If necessary, sweep up or vacuum any residue on pavement before it can be blown by traffic or wind, migrate across lanes or shoulders, migrate to adjacent soils or enter a drainage facility.

Debris collected shall be disposed legally, such as at landfill facility.

### PAYMENT

Full compensation for DUST CONTROL including but not limited to that resulting from construction, public traffic, or wind shall be considered as included in the prices paid for the various items of work involved, and no separate payment will be made therefor.

# 19. EARTHWORK

## 19.1 <u>GENERAL</u>

All work performed in connection with EARTHWORK shall conform to the provisions in CT Specifications Section 19 EARTHWORK.

Performing earthwork activities includes removal of unsuitable material or a buried man-made object if the removal is described. The work also consists of salvaging, removing, and disposing of fences, structures, pavements, culverts, utilities, curbs, sidewalks, signs, snow poles, and other obstructions within the project earthwork area.

Excavated material may be used as road shoulder fill if approved by the Engineer.

## UNSUITABLE MATERIAL

Excavate and dispose of unsuitable material encountered below the natural ground surface in embankment areas or below the grading plane in excavation areas as ordered.

Notify the Engineer before removing the unsuitable material if:

- 1. Removal is not otherwise described
- 2. You request payment for removal as change order work

Backfill the space resulting from excavating unsuitable material with material suitable for the planned use.

#### **GRADE TOLERANCE**

Immediately before placing subsequent layers of material, prepare the grading plane such that the grading plane:

- 1. Does not vary more than 0.05 foot above or below the grade established by the Engineer where HMA is to be placed.
- 2. Does not extend above the grade established by the Engineer where concrete base or pavement is to be placed.

- 3. Beneath structural approach slabs or the thickened portion of sleeper slabs do no extend above the grade established by the Engineer.
- 4. At any point is within 0.05 foot above the grade established by the Engineer if the material to be placed on the grading plane is paid by the cubic yard.
- 5. At any point is within 0.10 foot above the grade established by the Engineer if subbase or base material to be placed on the grading plane is paid by the ton

## **BURIED MAN-MADE OBJECTS**

Remove and dispose of a buried man-made object encountered in an excavation as part of the excavation work.

Notify the Engineer before removing the buried man-made object if:

- 1. Removal of the object is not otherwise described
- 2. Object could not have been determined by visual inspection
- 3. You request payment for removal of the object as change order work

## 19.2 <u>ROADWAY EXCAVATION</u>

Roadway excavation consists of all excavation involved in the grading and construction of the roadway except structure excavation and any excavation paid for as a separate bid item.

Roadway excavation includes:

- 1. Excavating and stockpiling the selected material
- 2. Removing the stockpiled material and placing it in its final position
- 3. Removing surcharge material
- 4. Performing the removal of a slide or slipout which is paid for as the type of roadway excavation involved

Excavate to the described or authorized grade. If you over-excavate, backfill with an authorized material and compact it.

Remove pavement within the limits of roadway excavation. Pavement removal must comply with section 39 and 41.

Compaction must comply with section 19-5.

Construct embankments under section 19-6.

#### SURPLUS MATERIAL

If a quantity of surplus material is shown, the quantity is approximate.

Ensure enough material is available to complete the embankments before placing the material at other locations on the job site or disposing of it.

Obtain authorization before disposing of surplus material or using it for any of the following:

- 1. Widening embankments uniformly
- 2. Flattening slopes
- 3. Placing along the roadway or at other locations

If you cannot use surplus material within the highway, dispose of it.

If you dispose of any surplus material prematurely and later find a material shortage, replace the surplus material with an authorized material.

If an ordered change increases the quantity of excavation or decreases the quantity of embankment such that surplus material must be disposed of, disposing of this material is change order work.

### **DEFICIENCY MATERIAL**

If the quantity of acceptable material from excavation is not enough to construct the embankments, the quantity of material needed to complete the embankments must consist of local or imported borrow or asphalt grindings, as approved by the engineer.

#### SELECTED MATERIAL

Specific material excavated from a described location on the job site.

If selected material is not used for a specified layer, place the selected material in the roadway prism as embankment or structure backfill.

If selected material is used as a specified layer, spread and compact it under section 25.

If practicable and unless processing of material is required, haul selected material directly from the excavation to its final position in the roadway prism and compact it in place.

Selected material must remain in place until it can be placed in its final position unless stockpiling of selected material is ordered.

#### **SLOPES**

Construct slopes to the lines and grades established by the Engineer. Slope tolerances are measured perpendicular to the planned slope.

Any point on the completed excavation slope must be within 0.5 foot of the planned slope, unless the excavation is in rock, in which case, any point on the completed slope must be within 2 feet of the planned slope.

Slopes or portions of slopes must not encroach on the roadbed.

Round the tops of excavation slopes and ends of excavations.

Any point on the completed embankment slope must be within 0.5 foot of the planned slope for slopes within 4 feet of the shoulder grade. Slopes below 4 feet must be within 1 foot of the planned slope.

Maintain completed slopes. Repair any slope damage caused by erosion.

#### PAYMENT

The payment quantity for roadway excavation is included in various work items involved including "REPAIR EXISTING ROAD / CUL-DE-SAC (SAWCUT, REMOVE EXIST AC, PREPARE SUBGRADE, PLACE AND COMPACT 4" AC GRINDINGS AND 1.5" HMA)" which is paid by the SQUARE YARD (SY) and includes full compensation for furnishing all labor, materials, tools, equipment, hauling, storing, grubbing, disposal, placing, compaction, and other incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications, and as directed by the Engineer.

## 19.5 COMPACTION

Section 19-5 includes specifications for compacting all earthwork except structure backfill.

## CONSTRUCTION

Relative compaction specifications apply to material whether in an excavation or an embankment.

The moisture content of material to be compacted to at least 95 percent must be such that the specified relative compaction is attained and the embankment is in a firm and stable condition.

Do not compact material that contains excessive moisture until the material is dry enough.

#### **RELATIVE COMPACTION (95 Percent)**

Compact earthwork to a relative compaction of at least 95 percent. All bottom of excavations shall be compacted to a relative compaction of at least 95 percent of maximum dry density.

#### PAYMENT

Full compensation for COMPACTION shall be considered as included in the prices paid for the various items of work involved Section 19 and 22, and no separate payment will be made therefor.

#### **19.9 SHOULDER BACKING**

Specifications for constructing shoulder backing adjacent to the edge of new pavement surfacing.

#### MATERIALS

Shoulder backing must be clean and consist of one or any combination of the following materials:

- 1. Broken stone
- 2. Crushed gravel
- 3. Natural rough surfaced gravel
- 4. Sand
- 5. RAP
- 6. Aggregate base

Shoulder backing must be graded within the percentage passing limits shown in the following table:

Sieve size	Percentage passing
2"	100
1"	75–100
3/4"	65–100
No. 4	35–60
No. 30	10–35
No. 200	5-15

If 100 percent RAP is used, shoulder backing must be graded within the percentage passing limits shown in the following table:

Sieve size	Percentage passing
1-1/2"	100
3/4"	70–100
No. 4	30-80

Shoulder backing must comply with the sand equivalent requirements shown in the following table:

Project Manual

inc	ar specifications		110jeet 10	Iunu
	Quality characteristics	Test method	Requirement	
	Sand Equivalent			
	Single type of material except RAP		10-35	
	Combination of all type of materials including RAP	California Test 217	10-35	
	Combination of all type of materials excluding RAP	217	10-30	
	100% RAP (min)		10.50	
			10	

If aggregate base is used for shoulder backing, the aggregate base shall meet the requirements of CT Specifications, Section 26, "Aggregate Base".

## CONSTRUCTION

Grub the shoulder backing area, removing weeds, grass, and debris from the area to receive shoulder backing.

Excavate, if necessary, to a depth of 3 inches below adjacent pavement surface. Scarify the basement material to receive shoulder backing at least 0.25 feet deep and water immediately before placing the shoulder backing.

Place and spread shoulder backing directly on the basement material. After placing the shoulder backing, water and compact it with a minimum of 2 passes with a steel-tired roller weighing at least 8 tons. Compaction equipment width shall match the width of shoulder backing installed to prevent bridging during compaction. Wherever the total thickness of shoulder backing is more than 6 inches, place the backing as embankment (Ct Specifications 19.) and compact to 95% of maximum dry density. Form smooth and uniform cross sections and slopes.

Do not deposit shoulder backing on new pavement.

Complete shoulder backing within 5 days after placement of adjacent new surfacing except complete shoulder backing within 15 days wherever edge treatment under is placed.

Before opening a lane adjacent to uncompleted shoulder backing, place portable delineators and W8-9, Low Shoulder, signs off of and adjacent to the new pavement surfacing.

Portable delineators and signs must comply with section 12 except the signs may be set on temporary portable supports or on barricades.

Place portable delineators at the beginning and along the drop-off of the edge of pavement in the direction of travel, at maximum intervals of 500 feet on tangents and 200 feet on curves.

Place the W8-9 signs at the beginning and along the drop-off of the edge of pavement in the direction of travel, at maximum intervals of 2,000 feet.

Remove portable delineators and W8-9 signs when the shoulder backing is complete in that area.

# **PAYMENT** SHOULDER BACKING (AC GRINDINGS OR IMPORT) is paid for by the LINEAR FOOT (LF). The

payment quantity for shoulder backing is the horizontal length of shoulder backing placed parallel to the road centerline. The County does not increase the embankment quantity if subsidence or consolidation occurs after you start placing the backing material.

The contract unit price paid shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

# 22. FINISHING ROADWAY

Perform finishing activities after completing all other construction activities.

## CONSTRUCTION

Trim and shape graded areas without surfacing to smooth and uniform cross sections and slopes:

- 1. Between edge of shoulder and hinge point of slopes
- 2. At medians

For a graded roadbed without surfacing or pavement, trim and shape the entire roadbed to uniform cross sections and slopes.

Trim slopes of gutters without lining or surfacing to the required grade and cross section.

Do not stockpile material on finished pavement or allow material to drift across pavement. Clean finished pavement of dirt and foreign material.

Clear debris and obstructions from ditches and channels constructed under the Contract.

Clean out sewers, culverts, and other drainage facilities and appurtenant structures constructed under the Contract.

Remove debris and excess material adjacent to culverts, headwalls and endwalls, bridge ends, poles, posts, trees, or other objects and leave in a neat and orderly condition.

Remove from slopes any exposed material that might become loose such as rocks and roots.

Remove loose rock larger than 2-1/2 inches in maximum dimension from:

- 1. Between the edge of shoulder and hinge point of slopes
- 2. Medians
- 3. Finished roadbed

Dispose of material resulting from finishing activities. If authorized, soil and rock resulting from finishing activities may be used along the roadway.

Finishing roadway includes removal, loading, and hauling of excess asphalt road grindings necessary to finish grade the roadway. Any excess asphalt grindings not used in the project shall be hauled and stockpiled at the Long Valley Mineral Mining Site north of the Mammoth Yosemite Airport.

## PAYMENT

Full compensation for finishing roadway shall be considered as included in the prices paid for the bid items

GRIND / PULVERIZE EXIST ROADBED, FINISH ROADWAY, paid for by the SQUARE YARD (SY) and MILL/CONFORM GRIND EXIST ASPHALT CONCRETE (1.5-INCH DEPTH), paid for by the SQUARE YARD (SY), and no separate payment will be made therefor. The contract unit price paid shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, for hauling and stockpiling excess material, transporting required material to project locations, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

# **30. <u>RECLAIMED PAVEMENTS</u>**

## 30.2 Pulverized Roadbed

Includes specifications for constructing a uniform reclaimed pavement base by pulverizing the asphalt concrete pavement and underlying material.

## SUBMITTALS

Material sampling shall be done on the first day of road pulverization (test strip) to confirm the gradation meets the requirements. Initial test results shall be submitted within 24 hours.

Perform sampling and testing for each test strip and production work at the specified frequency for the quality characteristics shown in the following table:

Quality characteristic	Test method	Minimum sampling and testing frequency	Sampling location
Gradation	California Test 202	Minimum 1 per material/type	Loose mix after pulverizing and mixing per CT125
Depth of cut	NA	500 feet	Both sides of reclaiming machine along cut length
In-place wet density	ASTM D1557 (Modified Proctor) or CT 231	Minimum 1 per material/type	Loose mix after pulverizing and mixing per CT125
Relative compaction	ASTM D6938 or CT 231	Minimum one test per 5000 sq. ft. of road area	Compacted roadbed

## Pulverized Roadbed Quality Characteristic Sampling Locations and Testing Frequencies

## COUNTY ACCEPTANCE

The County accepts pulverized roadbed based on:

- 1. Visual inspection including:
  - 1.1. Segregation, tearing, and scarring of the finished surface
  - 1.2. Variance of more than 0.05 foot measured from the lower edge of a 12-foot straightedge
  - 1.3. Uniform surface texture throughout the work limits
  - 1.4. Repaired areas
- 2. Compliance with the following table:

Quality characteristic	Test method	Requirement
Relative compaction (min, %)	ASTM D6938 or CT 231	95
Thickness (ft)	Field measurement	Not more than 0.05 ft less than the thickness shown

#### **Pulverized Roadbed Requirements for Acceptance**

## MATERIALS

The quality characteristics of pulverized roadbed must comply with the requirements shown in the following table:

I unterneeu Rouubeu Quun	ty Characteristic Requireme	
Quality characteristic	Test method	Requirement
Gradation (%, passing)		
Sieve Size:	California Test 202	
2 inch	Camornia Test 202	100
1 1/2 inch		90-100
Depth of cut	NT A	Not more than 0.05 ft less than the
(ft)	NA	thickness shown
In-place wet density	ASTM D1557 or CT 231	Deport only
(lb/cu ft)	ASTW D1557 OF C1 251	Report only
Relative compaction	ASTM D6938 or CT 231	95
(min, %)	AST M D0958 OF C1 251	73

### Pulverized Roadbed Quality Characteristic Requirements

# SUPPLEMENTARY AGGREGATE

If supplementary aggregate is specified, supplementary aggregate must comply with the specifications for Class 2 aggregate base in Caltrans Standard Specifications, Section 26.

# CONSTRUCTION

Pulverizing equipment must:

- 1. Be a self-propelled reclaiming machine
- 2. Pulverize the existing pavement and underlying material to the required size
- 3. Mix the pulverized pavement, underlying material, and water into a homogeneous and uniform mixture
- 4. Be equipped with automatic depth controls capable of maintaining the cutting depth to within 0.05 foot of the depth shown
- 5. Have a minimum 8-foot wide cutter that can remove the existing pavement to the specified depths

Compacting equipment must be a sheepsfoot roller, a vibratory steel-tired roller, and a pneumatic-tired roller. All compacting equipment must be self-propelled and reversible. The frequency of amplitude of vibrating rollers must be adjustable and exceed a static force of 15 tons in vibratory mode.

## FINISHING

The finished surface must be free from segregation, tearing, and scarring, and have a uniform surface texture throughout the work limits.

Maintain the pulverized roadbed surface free of ruts, bumps, indentations, raveling, and segregation. Repair damaged pulverized roadbed with minor HMA.

# PAYMENT

Payment for GRIND/PULVERIZE EXIST ROADBED, FINISH ROADWAY measured per SQUARE YARD (SY) shall include full compensation for furnishing all labor, materials, tools, equipment, road grading, compaction, finishing roadway, stockpiling, hauling unused material to County Yard stockpile location at Tom's Place, incidentals, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT Specifications and these Technical Specifications, and as directed by the Engineer.

# **39.** <u>ASPHALT CONCRETE</u>

# TYPE A HOT MIX ASPHALT

Hot Mix Asphalt (HMA) binder shall be PG 64-28 or PG 58-34, modified (preferred) or unmodified, per Section 92 of the Caltrans Standard Specifications (Type A). Aggregate gradation shall be <sup>3</sup>/<sub>4</sub>-inch for full depth reclamation areas (3-inch HMA). For mill / overlay locations (1.5-inch HMA), aggregate gradation shall be <sup>1</sup>/<sub>2</sub>-inch.

This item shall consist of pavement courses composed of mineral aggregate and an approved asphalt cement binder (asphalt binder) mixed in a central mixing plant and placed on a prepared course in accordance with these specifications and shall conform to the lines, grades, thicknesses, and typical cross sections shown on the plans. Each course shall be constructed to the depth, typical section, and elevation required by the plans and shall be rolled, finished and approved before placement of the next course.

# JOB MIX FORMULA (JMF)

The JMF must be based on the superpave HMA mix design as described in *MS-2 Asphalt Mix Design Methods* by the Asphalt Institute, or alternately, Mono County will accept a current Marshall or HVEEM mix design. Note, test methods and/or HMA relative compaction specifications contained herein may be revised to match the approved HMA Mix Design (JMF), if necessary.

**Submit the proposed HMA mix design**, including location of all commercial mixing plants to be used for approval prior to the start of work. A separate job-mix formula (JMF) shall be supplied for each plant proposed for use on the project. Asphalt Binder certificate of compliance from the manufacturer shall be included with the mix design submittal. HMA mix design shall be approved by the Engineer in writing prior to the start of HMA production.

Laboratories testing aggregate and HMA qualities used to prepare the mix design and JMF must be qualified under AASHTO Materials Reference Laboratory program and Caltrans Independent Assurance Program. A **copy of the laboratory's current accreditation and accredited test methods** shall be submitted to the Engineer with the proposed JMF prior to start of construction.

Should a change in sources of materials be made, a new JMF must be approved by the Engineer in writing before the new material is used. After the initial production JMF has been approved by the Engineer and a new or modified JMF is required for whatever reason, the subsequent cost of the Engineer's approval of the new or modified JMF will be borne by the Contractor. There will be no time extension given or considerations for extra costs associated with the stoppage of production paving or restart of production paving due to the time needed for the Engineer to approve the initial, new or modified JMF.

The job mix formula shall meet the design requirements in CT Standard Specifications, Section 39. The submitted JMF shall be stamped or sealed by the responsible professional Engineer and shall include the following at minimum:

• Manufacturer's Certificate of Analysis (COA) for the asphalt binder used in the JMF.

- Manufacturer's Certificate of Analysis (COA) for the anti-stripping agent if used in the JMF.
- Certified material test reports for the course and fine aggregate and mineral filler.
- Percent passing each sieve size for individual gradation of each aggregate cold feed and/or hot bin; percent by weight of each cold feed and/or hot bin used; and the total combined gradation in the JMF.
- Specific Gravity and absorption of each coarse and fine aggregate.
- Percent natural sand.
- Percent fractured faces.
- Percent by weight of flat particles, elongated particles, and flat and elongated particles (and criteria).
- Percent of asphalt binder content
- Percentage and properties (asphalt content, asphalt binder properties, and aggregate properties) of reclaimed asphalt mix pavement (RAP), if used.
- Number of gyrations or blows
- Laboratory mixing and compaction temperatures.
- Supplier-recommended field mixing and compaction temperatures.
- Plot of the combined gradation on a 0.45 power gradation curve.
- Graphical plots of air voids, voids in the mineral aggregate (VMA), and unit weight versus asphalt content. To achieve minimum VMA during production, the mix design needs to account for material breakdown during production.
- Tensile Strength Ratio (TSR).
- Type and amount of Anti-strip agent when used.
- Asphalt Pavement Analyzer (APA) results or Hamburg wheel test.
- The Contractor shall submit to the Engineer the results of verification testing of at least three (3) asphalt samples prepared at the optimum asphalt content.
- SDS for asphalt binder, supplemental fine aggregate (except fines from dust collectors), and antistrip additives.
- Date the JMF was developed. Mix designs that are not dated will not be accepted. Mix designs from a previous construction season may or may not be accepted; the engineer will determine acceptance.

Submit a new JMF if you change any of the following:

- 1. Target asphalt binder percentage greater than  $\pm 0.2$  percent
- 2. Asphalt binder supplier
- 3. Combined aggregate gradation
- 4. Aggregate sources
- 5. Liquid antistrip producer or dosage
- 6. Average binder content in a new processed RAP stockpile by more than ±2.00 percent from the average RAP binder content reported on page 4 of your Contractor Hot Mix Asphalt Design Data form
- Average maximum specific gravity in a new processed RAP stockpile by more than ±0.060 from the average maximum specific gravity value reported on page 4 of your Contractor Hot Mix Asphalt Design Data form
- 8. Any material in the JMF, except lime supplier and source

Refer to Caltrans Standard Specifications, Section 39-2.02B(2) for Type A Hot Mix Asphalt Mix Design requirements for super pave mix design submittals. Documentation of aggregate quality must be provided.

## **Reclaimed Asphalt Pavement (RAP)**

You may substitute RAP for part of the virgin aggregate in a quantity up to 25 percent of the aggregate blend.

Provide enough space at your plant for complying with all RAP handling requirements. Provide a clean, graded base, well drained area for stockpiles.

If RAP is from multiple sources, blend the RAP thoroughly and completely before fractionating.

For RAP substitution greater than 15 percent of the aggregate blend, fractionate RAP stockpiles into 2 sizes, a coarse fraction RAP retained on 3/8-inch sieve and a fine fraction RAP passing 3/8-inch sieve. For RAP substitution of 15 percent of the aggregate blend or less, fractionation is not required.

The RAP fractionation must comply with the requirements shown in the following table:

KAP Stockpile Fractiona	tion Gradation Requirem	nents
Size	Test method	Requirement
Coarse (% passing the 1-inch sieve)	California Test 202 <sup>a</sup>	100
Fine (% passing the 3/8-inch sieve)	California Test 202 <sup>a</sup>	98–100

# **RAP Stockpile Fractionation Gradation Requirements**

<sup>a</sup>Maximum mechanical shaking time is 10 minutes.

You may use the coarse fractionated stockpile, the fine fractionated stockpile, or a combination of the coarse and fine fractionated stockpiles.

Isolate the processed RAP stockpiles from other materials. Store processed RAP in conical or longitudinal stockpiles. Processed RAP must not be agglomerated or be allowed to congeal in large stockpiles.

## CONSTRUCTION

Do not place HMA on wet pavement or frozen surface.

You may deposit HMA in a windrow and load it in the paver if:

- 1. Paver is equipped with a hopper that automatically feeds the screed
- 2. Loading equipment can pick up the windrowed material and deposit it in the paver hopper without damaging base material
- 3. Activities for depositing, pickup, loading, and paving are continuous
- 4. For method compaction:
  - 4.1. The temperature of the HMA and the HMA produced with WMA water injection technology in the windrow does not fall below 260 degrees F
  - 4.2. The temperature of the HMA produced using WMA additive technology in the windrow does not fall below 250 degrees F

HMA placed in a windrow on the roadway surface must not extend more than 250 feet in front of the loading equipment or material transfer vehicle.

You may place HMA in 1 or more layers on areas less than 5 feet wide and outside the traveled way. You may use mechanical equipment other than a paver for these areas. The equipment must produce uniform smoothness and texture.

HMA handled, spread, or windrowed must not stain the finished surface of any improvement, including pavement.

Do not use petroleum products such as kerosene or diesel fuel to release HMA from trucks, spreaders, or compactors.

HMA must be free of:

1. Segregation

- 2. Coarse or fine aggregate pockets
- 3. Hardened lumps
- 4. Marks
- 5. Tearing
- 6. Irregular texture

Complete finish rolling activities before the pavement surface temperature is:

- 1. Below 150 degrees F for HMA with unmodified binder
- 2. Below 140 degrees F for HMA with modified binder

Where the pavement thickness shown is 0.30 foot or greater, you may place Type A HMA in multiple lifts not less than 0.15 foot each. If placing Type A HMA in multiple lifts:

- 1. Table in Section 39-2.02B(4)(b) does not apply
- 2. Aggregate gradation must comply with the requirements shown in the following table:

	<u> </u>
Type A HMA lift thickness	Gradation
0.15 to less than 0.20 foot	1/2 inch
0.20 foot to less than 0.25 foot	3/4 inch
0.25 foot or greater	3/4 inch or 1 inch

#### **Aggregate Gradation Requirements**

- 3. Apply a tack coat before placing a subsequent lift
- 4. The Engineer evaluates each HMA lift individually for compliance

If the ambient air temperature is below 60 degrees F, cover the loads in trucks with tarpaulins. If the time for HMA discharge to truck at the HMA plant until transfer to paver's hopper is 90 minutes or greater and if the ambient air temperature is below 70 degrees F, cover the loads in trucks with tarpaulins, unless the time from discharging to the truck until transfer to the paver's hopper or the pavement surface is less than 30 minutes. The tarpaulins must completely cover the exposed load until you transfer the mixture to the paver's hopper or the pavement surface.

Spread Type A HMA at the ambient air and surface temperatures shown in the following table:

	Mininum Am	Dicht All and Sullac	c remperatures	
Lift thickness	Ambien	t air (°F)	Surfac	ce (°F)
(feet)	Unmodified	Modified asphalt	Unmodified	Modified asphalt
	asphalt binder	binder	asphalt binder	binder
Type A HMA and	Гуре A HMA produce	d with WMA water inj	jection technology	
< 0.15	55	50	60	55
≥0.15	45	45	50	50
Type A HMA prod	uced with WMA addit	ive technology		
< 0.15	45	45	50	45
≥0.15	40	40	40	40

## Minimum Ambient Air and Surface Temperatures

#### **Spreading and Compaction Equipment**

Paving equipment for spreading must be:

- 1. Self-propelled
- 2. Mechanical
- 3. Equipped with a screed or strike-off assembly that can distribute HMA the full width of a traffic lane

- 4. Equipped with a full-width compacting device
- 5. Equipped with automatic screed controls and sensing devices that control the thickness, longitudinal grade, and transverse screed slope

Install and maintain grade and slope references.

The screed must be heated and produce a uniform HMA surface texture without tearing, shoving, or gouging.

The paver must not leave marks such as ridges and indentations unless you can eliminate them by rolling.

Rollers of the vibratory, steel wheel, and pneumatic-tired type shall be used. They shall be in good condition, capable of operating at slow speeds to avoid displacement of the HMA. The number, type, and weight of rollers shall be sufficient to compact the HMA to the required density while it is still in a workable condition. All rollers shall be specifically designed and suitable for compacting HMA concrete and shall be sized to achieve the required compaction results. Rollers that impair the stability of any layer of a pavement structure or underlying soils shall not be used. Depressions in pavement surfaces caused by rollers shall be repaired by the Contractor at their own expense.

Operate rollers according to the recommendation of the manufacturer. Each roller must have a separate operator. Rollers must be self-propelled and reversible.

The use of equipment which causes crushing of aggregate will not be permitted.

Rollers must be equipped with a system that prevents HMA from sticking to the wheels. You may use a parting agent that does not damage the HMA or impede the bonding of layers.

In areas inaccessible to spreading and compacting equipment:

- 1. Spread the HMA by any means to obtain the specified lines, grades, and cross sections
- 2. Use a pneumatic tamper, plate compactor, or equivalent to achieve thorough compaction

#### Material Transfer Vehicle

If a material transfer vehicle is specified, the material transfer vehicle must have sufficient capacity to prevent stopping the paver and must be capable of:

- 1. Either receiving HMA directly from trucks or using a windrow pickup head to load it from a windrow deposited on the roadway surface
- 2. Remixing the HMA with augers before transferring into the paver's receiving hopper or feed system
- 3. Transferring HMA directly into the paver's receiving hopper or feed system

Deliveries shall be scheduled so that placing and compacting of HMA is uniform with minimum stopping and starting of the paver. Hauling over freshly placed material shall not be permitted until material has been compacted, as specified, and allowed to cool to atmospheric temperature.

#### **Surface Preparation**

Before placing HMA, remove loose paving particles, dirt, and other extraneous material by any means including flushing and sweeping.

#### Subgrade

Prepare subgrade to receive HMA under the sections for the material involved. Subgrade must be free of loose and extraneous material.

#### **Prepaving Inertial Profiler**

Does not apply to this project.

### Tack Coat

Edges of existing HMA pavement abutting the new work shall be saw cut and carefully removed as shown on the drawings and coated with asphalt tack coat before new material is placed against it.

Apply a tack coat:

- 1. To existing pavement including planed surfaces
- 2. Between HMA layers
- 3. To vertical surfaces of:
  - 3.1. Curbs
  - 3.2. Gutters
  - 3.3. Construction joints

Equipment for the application of tack coat must comply with CT Specifications, section 37-1.03B.

Before placing HMA, apply a tack coat in 1 application at the minimum residual rate shown in the following table for the condition of the underlying surface:

Tack Coat Application Rates for HMA
-------------------------------------

	Minimum residual rates (gal/sq yd)		
HMA over:	CSS1/CSS1h, SS1/SS1h and QS1h/CQS1h asphaltic emulsion	CRS1/CRS2, RS1/RS2 and QS1/CQS1 asphaltic emulsion	Asphalt binder and PMRS2/PMCRS2 and PMRS2h/PMCRS2h asphaltic emulsion
New HMA (between layers)	0.02	0.03	0.02
Concrete pavement and existing asphalt concrete surfacing	0.03	0.04	0.03
Planed pavement	0.05	0.06	0.04

If a stress absorbing membrane interlayer as specified in section 37-2.06 is applied, the tack coat application rates for new HMA apply.

Notify the Engineer if you dilute asphaltic emulsion with water. The weight ratio of added water to asphaltic emulsion must not exceed 1 to 1.

Measure added water either by weight or volume under section 9-1.02 or use water meters from water districts, cities, or counties. If you measure water by volume, apply a conversion factor to determine the correct weight.

With each dilution, submit:

- 1. Weight ratio of water to bituminous material in the original asphaltic emulsion
- 2. Weight of asphaltic emulsion before diluting
- 3. Weight of added water
- 4. Final dilution weight ratio of water to asphaltic emulsion

Apply a tack coat to vertical surfaces with a residual rate that will thoroughly coat the vertical face without running off.

If authorized, you may: 1. Change tack coat rates

- 2. Omit tack coat between layers of new HMA during the same work shift if:
  - 2.1. No dust, dirt, or extraneous material is present
  - 2.2. Surface is at least 140 degrees F

Immediately in advance of placing HMA, apply additional tack coat to damaged areas or where loose or extraneous material is removed.

Close areas receiving tack coat to traffic. Do not allow the tracking of tack coat onto pavement surfaces beyond the job site.

If you use an asphalt binder for tack coat, the asphalt binder temperature must be from 285 to 350 degrees F when applied.

#### **Longitudinal Joints**

Longitudinal joints in the top layer must match lane lines. Alternate the longitudinal joint offsets in the lower layers at least 0.5 foot from each side of the lane line. Other longitudinal joint placement patterns are allowed if authorized.

The distance between the ends of the adjacent surfaced lanes at the end of each day's work must not be greater than can be completed in the following day of normal paving.

If placing HMA against the edge of existing pavement, saw cut or grind the pavement straight and vertical along the joint and remove extraneous material.

#### **Pavement Edge Treatments**

Construct edge treatment on the HMA pavement as shown per plan.

Where a tapered edge is required, use the same type of HMA used for the adjacent lane or shoulder.

The edge of roadway where the tapered edge is to be placed must have a solid base, free of debris such as loose material, grass, weeds, or mud. Grade the areas to receive the tapered edge as required.

The tapered edge must be placed monolithic with the adjacent lane or shoulder and must be shaped and compacted with a device attached to the paver.

The device must be capable of shaping and compacting HMA to the required cross section as shown. Compaction must be accomplished by constraining the HMA to reduce the cross-sectional area by 10 to 15 percent. The device must produce a uniform surface texture without tearing, shoving, or gouging and must not leave marks such as ridges and indentations. The device must be capable of transitioning to crossroads, driveways, and obstructions.

For the tapered edge, the angle of the slope must not deviate by more than  $\pm 5$  degrees from the angle shown. Measure the angle from the plane of the adjacent finished pavement surface.

If paving is done in multiple lifts, the tapered edge must be placed with each lift.

Short sections of hand work are allowed to construct tapered edge transitions.

#### HMA Dikes

For miscellaneous areas and dikes:

- 1. Choose the aggregate gradation from:
  - 1.1. 3/8-inch Type A HMA aggregate gradation
  - 1.2. 1/2-inch Type A HMA aggregate gradation
  - 1.3. dike mix aggregate gradation
- 2. Choose asphalt binder Grade PG 64-10, PG 64-16 or PG 70-10, or as approved by engineer.

- 3. Minimum asphalt binder content must be:
  - 3.1. 6.40 percent for 3/8-inch Type A HMA aggregate gradation
  - 3.2. 5.70 percent for 1/2-inch Type A HMA aggregate gradation
  - 3.3. 6.00 percent for dike mix aggregate gradation

If you request and the Engineer authorizes, you may reduce the minimum asphalt binder content.

Aggregate gradation for dike mix must be within the TV limits for the specified sieve size shown in the following table:

(i ci centage i assing)			
Sieve size	Target value limit	Allowable tolerance	
1/2"	100		
3/8"		95 - 100	
No. 4	73–77	$TV \pm 10$	
No. 8	58–63	$TV \pm 10$	
No. 30	29–34	$TV \pm 10$	
No. 200		0 - 14	

#### Dike Mix Aggregate Gradation (Percentage Passing)

#### Compaction

Rolling must leave the completed surface compacted and smooth without tearing, cracking, or shoving.

Sequence of rolling operations and type of rollers used shall be at discretion of the Contractor. The speed of the roller shall, at all times, be sufficiently slow to avoid displacement of the hot mixture and be effective in compaction. Any displacement occurring as a result of reversing direction of the roller, or from any other cause, shall be corrected at once.

Sufficient rollers shall be furnished to handle the output of the plant. Rolling shall continue until the surface is of uniform texture, true to grade and cross section, and the required field density is obtained.

If a vibratory roller is used as a finish roller, turn the vibrator off.

Do not open new HMA pavement to traffic until its mid depth temperature is below 160 degrees F.

If the surface to be paved is both in sunlight and shade, pavement surface temperatures are taken in the shade.

Any HMA that becomes loose and broken, mixed with dirt, contains check-cracking, or in any way defective shall be removed and replaced with fresh hot mixture and immediately compacted to conform to the surrounding area. This work shall be done at the Contractor's expense. Skin patching shall not be allowed.

Areas of segregation in the surface course, as determined by the Engineer, shall be removed and replaced at the Contractor's expense. The area shall be removed by saw cutting and milling a minimum of 2 inches deep. The area to be removed and replaced shall be a minimum width of the paver and a minimum of 10 feet long.

#### ASPHALT PRODUCTION START-UP PROCEDURES (CONTROL STRIP):

An asphalt concrete control strip shall be constructed prior to the start of production asphalt paving to correlate the nuclear gauge(s) to obtained asphalt core densities and confirm compliance with project specifications. Note, if nuclear gauge correlation data from a previous job within the last year can be provided, showing the proposed nuclear gauge was calibrated to the project approved HMA mix design, the County may waive the start-up procedures (control strip) requirement.

The amount of HMA shall be sufficient to construct a test section 300 feet long and 24 feet wide, at

minimum, placed in two lanes, with a longitudinal cold joint, and shall be of the same depth specified for the construction of the course which it represents. A cold joint for this test section is an exposed construction joint at least 4 hours old or whose mat has cooled to less than 160° F. The cold joint must be constructed using the same procedure that will be used during production. The underlying grade or pavement structure upon which the test section is to be constructed shall be the same as the remainder of the course represented by the test section. Construct the control strip using asphalt concrete mix production, lay-down, and compaction procedures intended for the entire mix production.

Nuclear density gauge readings shall be taken behind each roller pass at final compaction to determine the roller pattern necessary to achieve required density.

Cores of the compacted HMA control strip shall be obtained to correlate the nuclear gauge(s) to the HMA mix using the following procedure:

- 1. Establish a minimum of 5 random test site locations after placement and compaction of the control strip.
- 2. Determine in-place density of the asphalt using the nuclear gauge and obtain a set of two cores (4" or 6" diameter) from within the outlined test position of the nuclear gauge for each of the 5 test site locations (CT 375).
- 3. Determine average core density for each test site location (CT 308 or AASHTO T275, Method A).
- 4. Determine the gauge correlation factor for each test site by subtracting the average nuclear density from the average core density for each test location.
- 5. Compute the average correlation factor for all the test site locations and compute the standard deviation. If any correlation value varies from the average correlation value by more than two standard deviations at the 95% confidence level, consider this correlation value statistically invalid and exclude it from the data.
- 6. Determine the final correlation factor by averaging the valid correlation factors.

Note, a correlation factor must be developed for each nuclear gauge used on the project. The obtained correlation factor shall remain with the gauge and be applied to all compaction testing results for the duration of the project. A new correlation factor shall be established whenever there is a change in lift thickness of 0.5" or more, underlying material, material source, mix design, or recalibration of the nuclear density gauge.

## HMA MATERIAL ACCEPTANCE AND TESTING (QA):

Unless otherwise specified, all acceptance sampling and testing necessary to determine conformance with the requirements specified in this section will be performed by the Engineer at no cost to the Contractor except that coring, as required in Section B below, shall be completed and paid for by the Contractor, if required. Refer to Appendix A, Table 1, *Airport Road Rehabilitation Project, Schedule of Minimum Sampling and Testing for Acceptance Testing.* 

A standard **Lot shall be equal to one day's production**. Measurement in tons shall be the U.S. ton (short ton) which is equal to 2000 lbs. Where more than one plant is simultaneously producing HMA for the job, the lot sizes shall apply separately for each plant. Each **Lot** shall be divided into **Sublots** of approximately equal size for compaction testing using nuclear gauge for each day's paving.

## A. Hot Mix Asphalt

Plant-produced HMA will be tested for asphalt content (CT 382 or AASHTO T308) and theoretical maximum density (CT 309 or AASHTO T209) **per Lot (one test per day of HMA production).** Sampling shall be from a random location from the windrow or loose mat behind paver per CT 125. Frequencies of testing shall be per Appendix A, Table 1, *Long Valley Streets Rehabilitation Project, Schedule of Minimum Sampling and Testing for Acceptance.*  Coldfeed will be sampled **per Lot (one test per day of HMA production)** from the batch plant during HMA production for sieve analysis. If RAP is part of the JMF, RAP will be collected concurrently with the coldfeed at the batch plant for sieve analysis and the gradation shall be combined. Coordinate sampling with the batch plant to obtain coldfeed / RAP samples that correspond to field sampled HMA tonnage. Frequencies of testing is provided in Appendix A, Table 1, *Long Valley Streets Project, Schedule of Minimum Sampling and Testing for Acceptance.* 

# **B. In-Place HMA**

HMA placed in the field shall be tested for in-place density (relative compaction) on a **Sublot** basis, identified by road stations. Testing locations for in-place density shall be on a random basis with frequencies per Appendix A, Table 1, *Long Valley Streets Project, Schedule of Minimum Sampling and Testing for Acceptance:* 

• Perform in-place density and relative compaction using a calibrated nuclear gauge at a minimum rate of **10 tests per 500 tons of HMA placed**.

Reporting of results for in-place density shall include all test results obtained in the field. Each test result obtained shall identify the corresponding Sublot and Lot. An average in-place density shall be provided for each Sublot.

Relative compaction shall be calculated from the peak density obtained from the nuclear gauge during compaction divided by the Theoretical Maximum Density obtained from that day's production (CT 309 or AASHTO T209). Relative compaction shall be 91 to 97 percent of the Lot theoretical maximum density.

If relative compaction results obtained with the nuclear density gauge do not meet 91 to 97 percent relative compaction based on average compaction per lot, asphalt concrete cores shall be obtained at the contractor's expense to determine in-place bulk density. Three cores shall be obtained per 500 tons of asphalt placed. If the percent of theoretical maximum density using the cores does not comply with average relative compaction specifications per Lot, the Engineer may accept the HMA and take a payment deduction as shown in the following table:

Keduced Payment Factors for Percent of Maximum Theoretical De					
HMA percent of	Reduced payment	HMA percent of	Reduced payment		
maximum theoretical	factor	maximum theoretical	factor		
density		density			
91.0	0.0000	97.0	0.0000		
90.9	0.0125	97.1	0.0125		
90.8	0.0250	97.2	0.0250		
90.7	0.0375	97.3	0.0375		
90.6	0.0500	97.4	0.0500		
90.5	0.0625	97.5	0.0625		
90.4	0.0750	97.6	0.0750		
90.3	0.0875	97.7	0.0875		
90.2	0.1000	97.8	0.1000		
90.1	0.1125	97.9	0.1125		
90.0	0.1250	98.0	0.1250		
89.9	0.1375	98.1	0.1375		
89.8	0.1500	98.2	0.1500		
89.7	0.1625	98.3	0.1625		
89.6	0.1750	98.4	0.1750		
89.5	0.1875	98.5	0.1875		
89.4	0.2000	98.6	0.2000		
89.3	0.2125	98.7	0.2125		
89.2	0.2250	98.8	0.2250		
89.1	0.2375	98.9	0.2375		
89.0	0.2500	99.0	0.2500		
<89.0	Remove and replace	>99.0	Remove and replace		

#### HMA QUALITY CONTROL

Contractor Quality Control shall be performed for the project including inspection, sampling, and testing necessary to maintain process control and meet minimum testing requirements. An organizational list of personnel with associated responsibilities and relevant certifications and relevant Laboratory certifications shall be provided prior to construction. An action plan shall be developed to correct situations when deviations from required specifications occur.

Except for smoothness, if 2 consecutive QC test results or any 3 QC test results for 1 day's production do not comply with the materials specifications:

- 1. Stop HMA production
- 2. Notify the Engineer
- 3. Take corrective action
- 4. Demonstrate compliance with the specifications before resuming production and placement

For QC tests performed under AASHTO T 27 OR CTM 202, results are considered 1 QC test regardless of number of sieves out of compliance.

#### COLD PLANING ASPHALT CONCRETE PAVEMENT

#### General

Specifications for cold planning asphalt concrete pavement.

Cold planning asphalt concrete pavement includes the removal of pavement markers, traffic stripes, and pavement markings within the area of cold planning.

Schedule cold planing activities such that the pavement is cold planed, the HMA is placed, and the area is opened to traffic during the same work shift, if possible. If not completed, HMA must be placed the next work shift.

# Materials

HMA for temporary tapers must be of the same quality that is used for the HMA overlay or comply with the specifications for minor HMA in section 39-2.07. Temporary tapers not required for changes in height less than or equal to 1.5 inches.

# Construction

# General

Do not use a heating device to soften the pavement.

The cold planing machine must be:

- 1. Equipped with a cutter head width that matches the planing width unless a wider cutter head is authorized.
- 2. Equipped with automatic controls for the longitudinal grade and transverse slope of the cutter head and:
  - 2.1. If a ski device is used, it must be at least 30 feet long, rigid, and a 1-piece unit. The entire length must be used in activating the sensor.
  - 2.2. If referencing from existing pavement, the cold planing machine must be controlled by a selfcontained grade reference system. The system must be used at or near the centerline of the roadway. On the adjacent pass with the cold planing machine, a joint-matching shoe may be used.
- 3. Equipped to effectively control dust generated by the planing operation
- 4. Operated such that no fumes or smoke is produced.

Replace broken, missing, or worn machine teeth.

If you do not complete placing the HMA surfacing before opening the area to traffic, you must:

- 1. Construct a temporary HMA taper to the level of the existing pavement, if greater than 1.5" inches.
- 2. Place HMA during the next work shift.

# **Grade Control and Surface Smoothness**

Install and maintain grade and transverse slope references. You may adjust the planed depth up to  $\pm 0.03$  foot from the depth shown to achieve uniform pavement profile, cross slope, and surface smoothness. The average cold planed depth must be equal to or greater than the depth shown.

The final cut must result in a neat and uniform surface.

The completed surface of the planed pavement must not vary more than 0.02 foot when measured with a 12-foot straightedge parallel with the centerline. With the straightedge at right angles to the centerline, the transverse slope of the planed surface must not vary more than 0.03 foot.

If you encounter delaminations during planing operations notify the Engineer immediately. If authorized, adjust the planed depth up to  $\pm 0.05$  foot to eliminate delaminations. Authorized work beyond the  $\pm 0.05$  foot range or other authorized mitigation work is change order work.

Where lanes are open to traffic, the drop-off of between adjacent lanes must not be more than 0.15 foot.

# Planed Material

Remove cold planed material concurrently with planing activities such that the removal does not lag more than 50 feet behind the planer.

# **Temporary HMA Tapers**

If a drop-off between the existing pavement and the planed area at transverse joints cannot be avoided before opening to traffic, construct a temporary HMA taper if height difference is greater than 1.5 inches.

Completely remove temporary tapers before placing permanent surfacing.

# PAYMENT

Payment for TACK COAT is included in the payment for 3" HOT MIX ASPHALT and 1.5" HOT MIX ASPHALT OVERLAY.

The Department does not adjust the unit price for an increase or decrease in the tack coat quantity.

The payment quantity for 3" HOT MIX ASPHALT and 1.5" HOT MIX ASPHALT OVERLAY is measured based on the combined mixture weight (TONS). Payment will be made only for HMA material actually used. If recorded batch weights are printed automatically, the bid item for HMA is measured by using the printed batch weights, provided:

- 1. Total aggregate and supplemental fine aggregate weight per batch is printed. If supplemental fine aggregate is weighed cumulatively with the aggregate, the total aggregate batch weight must include the supplemental fine aggregate weight.
- 2. Total virgin asphalt binder weight per batch is printed.
- 3. Each truckload's zero tolerance weight is printed before weighing the first batch and after weighing the last batch.
- 4. Time, date, mix number, load number and truck identification is correlated with a load slip.
- 5. Copy of the recorded batch weights is certified by a licensed weigh master and submitted.

The payment quantity for 3" HOT MIX ASPHALT and 1.5" HOT MIX ASPHALT OVERLAY is measured based on the combined mixture weight (TONS) of material actually used based on batch weights or truck scale weights with a licensed Weighmaster's Certificate, as stated above. Time, date, mix number, load number, and truck identification must be provided on each load ticket.

Payment for HOT MIX ASPHALT DIKE (TYPE E) shall be by the LINEAR FOOT (LF) and shall include full compensation for materials, transportation, placement of HMA, backfilling and compacting material to top of dike, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

Payment for HOT MIX ASPHALT DIKE (TYPE A) shall be by the LINEAR FOOT (LF) and shall include full compensation for materials, transportation, placement of asphalt concrete, backfilling and compacting material to top of dike, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

Payment for MILL /CONFORM GRIND EXIST ASPHALT CONCRETE (1.5-INCH DEPTH) shall be per SQUARE YARD (SY) and shall include full compensation for furnishing all labor, materials, tools, equipment, controlling dust, and removal and stockpiling material, hauling unused material to County Yard stockpile location at Tom's Place, incidentals, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT Specifications and these Technical Specifications, and as directed by the Engineer.

The contract unit price paid per each item included in this specification section shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT

Specifications and these Technical Specifications and as directed by the Engineer.

Full compensation for the Quality Control is included in the contract prices paid per ton for HMA as designated in the bid schedule and no additional compensation will be allowed therefor.

Full compensation for the performing and submitting mix designs and for Contractor sampling, testing, inspection, testing facilities, and preparation and submittal of results is included in the contract price paid per ton for HMA as designated in the Bid Schedule and no additional compensation shall be allowed therefor.

Full compensation for reclaimed asphalt pavement, if applicable, is included in the contact price paid per ton for HMA as designated in the Bid Schedule and not compensation shall be allowed therefor.

# 51. CONCRETE STRUCTURES (MINOR)

#### GENERAL

Applies to manhole collars and water valve collars to be reset or constructed in roadways.

# MATERIALS

Concrete must comply with the specifications for minor concrete.

Non-shrink grout must be a dry, packaged type complying with ASTM C1107/C1107M.

Metal frames, covers, grates, and other miscellaneous iron and steel used with minor structures must comply with section 75-2.

# SUBMITTALS

Manufacturer's specifications of pre-cast concrete (PC) collars and materials, if applicable. Concrete mix design for any cast-in-place (CIP) concrete structures, if applicable.

# CONSTRUCTION

You may construct minor structures using PC units or a combination of PC and CIP structures as an alternative to CIP construction, provided that the structure in place substantially complies with the specified CIP construction.

Remove exterior forms to at least 5 inches below the final ground surface. Exterior forms below this depth may remain if their total thickness is not more than 1 inch.

Cure concrete surfaces of minor structures using the water method, the forms-in-place method, or the curing compound method.

# PAYMENT

Payment for CONCRETE MANHOLE COLLAR shall be by EACH (EA) manhole collar installed and shall include full compensation for materials, transportation, saw-cutting, placement of CIP or PC concrete, backfilling and compacting material if necessary, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

Payment for RESET EXISTING WATER VALVE CAP TO GRADE shall be by EACH (EA) water valve collar installed and shall include full compensation for materials, transportation, saw-cutting, placement of CIP or PC concrete, backfilling and compacting material if necessary, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the

Payment for RESET EXISTING MANHOLE TO GRADE (CONTINGENCY ITEM) shall be by EACH (EA) manhole collar installed and shall include full compensation for materials, transportation, saw-cutting, placement of CIP or PC concrete, backfilling and compacting material if necessary, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

Payment for RESET EXISTING WATER VALVE CAP TO GRADE (CONTINGENCY ITEM) shall be by EACH (EA) water valve collar installed and shall include full compensation for materials, transportation, saw-cutting, placement of CIP or PC concrete, backfilling and compacting material if necessary, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

Metal frames and covers or frames and grates are not included in the payment for minor structures.

# 73. <u>CONCRETE GUTTERS</u>

# GENERAL

Includes general specifications for constructing concrete curbs, sidewalks, and their appurtenances, such as gutter depressions, cross gutters, and island paving; and curb ramps and driveways.

# MATERIALS AND COUNTY ACCEPTANCE

Concrete shall be Portland cement Type II or V with a minimum 28-day compressive strength of 5000 psi. If fly ash or natural pozzolan is used which would extend curing time, compressive strength at 42 days or 56days shall be used, depending on mix design. Concrete shall be sampled once every 100 cubic yards of concrete placed. Concrete shall contain entrained air content of 5 percent  $(5.0\% \pm 1.0\%)$  for acceptance). Concrete slump shall be 4 inches  $(4.0" \pm 1.0")$  for acceptance) for fixed form construction. If an extrusion machine is used, the slump may be reduced. No water is permitted to be added to the concrete truck onsite that would exceed the water to cement ratio specified in the mix design. Any water added to the concrete truck onsite shall be approved by Resident Engineer or County designated material tester prior being added. Any water added to the concrete onsite shall be done in the presence of the County Engineer or County designated material tester.

# SUBMITTALS

A concrete mix design shall be submitted for approval.

# **GENERAL CONSTRUCTION**

Construct contraction joints by (1) scoring concrete with a grooving tool and rounding corners with an edger tool or (2) saw cutting hardened concrete to a depth of at least 1 inch. Immediately apply curing compound to the exposed surfaces of saw cut joints.

Construct expansion joints at each side of structures and at the ends of curb returns. Fill expansion joints with 1/4-inch-thick preformed joint filler. Finish the concrete adjacent to expansion joints with an edger tool. Do not construct expansion joints within 20 feet of an island nose. Shape the preformed joint filler to match the surface contour of the concrete.

# FIXED FORM METHOD

Set forms to the required alignment, grade, and dimensions.

Forms must:

- 1. Be smooth on the side placed against concrete.
- 2. Have a straight upper edge.
- 3. Be rigid enough to withstand the pressure of fresh concrete without distortion. Use enough stakes, clamps, spreaders, and braces to ensure rigidity.
- 4. Be clean of debris and old concrete.
- 5. Coated with form oil before placing concrete.

You may use either benders or thin plank forms on curves, grade changes, or curb returns.

Wet the subgrade and forms immediately before placing the concrete.

Place the preformed joint filler at expansion joints in the correct position before placing concrete against the filler.

Place and compact the concrete without segregation.

#### SUBGRADE AND BASE PREPARATION

Subgrade at cross gutter locations shall be compacted to 95 percent of the material's maximum dry density. If unsuitable subgrade material is present, replace the subgrade material with asphalt grindings or aggregate base to a depth of 12 inches. Place a minimum of 4 inches of class 2 aggregate base or asphalt grindings above subgrade level to base grade and compact to 95 percent of the material's maximum density.

#### PAYMENT

Payment for 6' CROSS GUTTER (INCLUDING EXCAVATION, SUBGRADE PREPARATION, AND PLACEMENT OF 4" AC GRINDINGS) shall be by the SQUARE FOOT (SF) and shall include sawcutting, excavation, subgrade and base preparation, compaction, and shall include full compensation for materials, forms, forming, reinforcement, placement of concrete, transportation, and for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved including finishing surface, complete in place, as shown on the plans, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

# 82. <u>SIGNS AND MARKERS</u>

Section includes general specifications for fabricating and installing sign panels and markers and constructing roadside signs.

Signs and markers must comply with the *California MUTCD*, *California Sign Specifications*, and the FHWA publication *Standard Highway Signs and Markings*.

# SIGN PANELS

#### SUBMITTALS

Submit a manufacturer's specification sheet showing the proposed sign meets CA requirements and a certificate of compliance as applicable for:

1. Aluminum sheeting

- 2. Retroreflective sheeting
- 3. Screened-process colors
- 4. Nonreflective, opaque, black film
- 5. Protective-overlay film

### MATERIALS

A sign panel must be produced at a fabrication plant.

The face of a fabricated sign must be uniform, flat, smooth, and free from defects, scratches, chips, wrinkles, gel, hard spots, streaks, extrusion marks, and air bubbles. The front, back, and edges of sign panels must not have bends, router chatter marks, burns, sharp edges, loose rivets, delaminated skins, excessive adhesive over-spray, or aluminum marks.

Protect, transport, and store sign panels fabricated with screened-process colors under the retroreflective sheeting manufacturer's instructions.

Transport sign panels such that the faces of the panels are protected from damage and weather. Ship panels on pallets, in crates, or in tier racks. Ship panels vertically on edge, not stacked horizontally. Place padding and protective materials between the panels as necessary. Keep panels dry during transit.

Do not store sign panels directly on the ground. Keep sign panels dry at all times and store the panels:

- 1. In a dry environment
- 2. On edge vertically whether indoors or outdoors
- 3. In enclosed, climate-controlled trailers or containers in areas of high heat and humidity
- 4. Indoors whenever the panels will be stored more than 30 days

#### Aluminum Sheeting

A sign panel must be fabricated from aluminum sheeting of an alloy and temper complying with ASTM B209.

The aluminum sheeting must be pretreated for corrosion resistance as specified in ASTM B449. The surface of the sheeting must be cleaned, deoxidized, and coated with a light, tightly-adherent chromate conversion coating free from powdery residue. The conversion coating must be Class 2 with a weight from 10 to 35 mg/sq ft and an average weight of 25 mg/sq ft. After the cleaning and coating process, the aluminum sheeting must be protected from exposure to grease, oils, dust, and contaminants.

The aluminum sheeting must be free from buckles, warps, dents, cockles, burrs, and other defects resulting from fabrication.

The base plate for standard route markers must be die cut.

#### **Retroreflective Sheeting**

Retroreflective sheeting used for the background and legend must comply with ASTM D4956 and must be on the Authorized Material List for signing and delineation materials.

Type III, IV, VIII, IX, and XI retroreflective sheeting must have Class 1, 3, or 4 adhesive backing. Type II retroreflective sheeting may have Class 1, 2, 3, or 4 adhesive backing. The adhesive backing must be pressure sensitive and fungus resistant.

Retroreflective sheeting must be applied to sign panels at the fabrication plant under the retroreflective sheeting manufacturer's instructions without appreciable stretching, tearing, or other damage.

The orientation of the legend must comply with the retroreflective sheeting manufacturer's instructions.

The retroreflective sheeting on a sign panel with a minor dimension of 48 inches or less must be a single, contiguous sheet without splices except for the splices produced during the manufacture of the retroreflective

sheeting. A sign panel with a minor dimension greater than 48 inches may have 1 horizontal splice in the retroreflective sheeting other than the splices produced during the manufacture of the retroreflective sheeting.

Unless the retroreflective sheeting manufacturer's instructions require a different method, splices in the retroreflective sheeting must overlap by at least 1 inch. The retroreflective sheeting on either side of a splice must not exhibit a color difference under incident and reflected light.

### **Process Colors and Film**

The type of material recommended by the retroreflective sheeting manufacturer must be used for:

- 1. Screened-process colors
- 2. Nonreflective, opaque, black film
- 3. Protective-overlay film

The fabricator must perform all patterns, layouts, and set-ups necessary for the screening process.

The fabricated surface of the applied screened-process color must be flat and smooth.

Colored retroreflective sheeting must be used for the background except signs with green, red, blue, or brown backgrounds may use reverse-screened-process color on white retroreflective sheeting for the background color.

The coefficient of retroreflection for reverse-screened-process colors used on white retroreflective sheeting must be at least 70 percent of the coefficient of retroreflection specified in ASTM D4956 for the corresponding colored retroreflective sheeting.

The legend must be a black, screened-process color or nonreflective, opaque, black film.

Screened-process colors and nonreflective, opaque, black film must have outdoor weatherability characteristics equivalent to those specified for retroreflective sheeting in ASTM D4956.

Nonreflective, opaque, black film must be a vinyl or acrylic material.

Cured, screened-process colors must not peel off if transparent cellophane tape with a tensile breaking strength of at least 14 lb/in width measured under ASTM D3759/D3759M is applied over the color and removed in a single, quick motion at a 90-degree angle to the sign's face.

#### **Single-Sheet Aluminum Panels**

The aluminum sheeting for framed and unframed panels must be aluminum alloy 6061-T6 or 5052-H38.

A single-sheet aluminum panel must not have a vertical splice in the aluminum sheeting. A panel with a depth greater than 48 inches may have 1 horizontal splice in the sheeting.

For a framed panel, the framing members must be aluminum channel or rectangular aluminum tubing. The lengths of the framing members must be within  $\pm 1/8$  inch of the lengths shown.

Aluminum channels or rectangular aluminum tubing must be welded together using the inert gas-shielded arc welding process and E4043 aluminum-electrode filler wires. The filler diameter must be equal to the wall thickness of the smallest welded channel or tubing.

The aluminum sheeting must be attached to the frame with 3/16-inch-diameter rivets. The rivets must be placed at least 1/2 inch from the web channel edges. The rivets must be made of aluminum alloy 5052 and be anodized or treated with a conversion coating to prevent corrosion.

A fabricated single-sheet, aluminum panel must be within  $\pm 1/8$  inch of the dimensions shown. The panel must be flat to within  $\pm 1/32$  in/ft of the panel dimensions as measured by a straightedge placed in any direction across the plane of the panel.

#### CONSTRUCTION

Deliver sign panels to the job site with the background and legend permanently affixed to the panels.

Do not chip or bend sign panels.

Immediately replace sign panels exhibiting damage or flaws, including a significant color difference between daytime and nighttime.

Obtain authorization before repairing sign panels at the job site.

Use the following hardware to mount the type of sign panel shown:

- 1. Lag screws, nuts, bolts, and washers for roadside signs
- 2. Braces and wood block spacers for roadside signs
- 3. Type A-1 and Type A-2 mounting hardware for overhead laminated-panel signs
- 4. Type A-3 mounting hardware for overhead formed-panel signs

#### MATERIALS

A roadside sign includes sign panels, fastening hardware, back braces, straps and saddle brackets, and frame assemblies for multiple sign panels.

#### **Metal Posts**

A mounting for a roadside sign to be installed on a barrier or railing must be fabricated from (1) welded or seamless steel pipe complying with ASTM A53/A53M, Grade B, and (2) structural steel complying with ASTM A36/A36M.

Bolted connections must comply with section 56-2.02D. Concrete anchorage devices must comply with section 75-3.

After fabrication, all metal parts for mounting a roadside sign must be galvanized under section 75-1.02B.

#### Sign Panel Fastening and Mounting Hardware

Frame assemblies for multiple sign installations must be fabricated from an aluminum alloy or structural steel complying with ASTM A36/A36M. Frames fabricated from structural steel must be hot-dip galvanized after fabrication.

Back braces for a sign must be made of commercial-quality, mild steel and hot-dip galvanized after fabrication.

Straps and saddle brackets for mounting sign panels on lighting standards, sign structure posts, and traffic signal standards must be stainless steel complying with ASTM A167, Type 302B. Theft-proof bolts must be stainless steel with a chromium content of at least 17 percent and a nickel content of at least 8 percent.

Bolts, except theft-proof bolts, lag screws, metal washers, and nuts must be made of commercial-quality steel and hot-dip galvanized after fabrication. Fiber washers must be commercial quality.

Galvanizing must comply with section 75-1.02B.

#### **SUBMITTALS**

Submit Certificates of Compliance for sign panels. Submit manufacturer's specifications for sign steel post.

#### CONSTRUCTION

The line between the center of the top of a post and the center of the post at ground level must not deviate from a plumb line by more than 0.02 foot in 10 feet.

Backfill the space around metal posts with minor concrete that contains at least 470 pounds of cementitious material per cubic yard.

Unless surplus excavated material is hazardous, uniformly spread it along the adjacent roadway where designated by the Engineer.

The Engineer will reject damaged signs, defective signs, and signs with spelling errors before or after installation.

# PAYMENT

Payment for all project steel post road signs shall be per EACH (EA) sign installed, including double signs, and shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

# 84. <u>MARKINGS</u>

This work shall consist of application and construction of painted pavement striping and markings including applying paint and glass beads. Equipment, mixing, surface preparation, application, and tolerances for furnishing and applying traffic striping and pavement markings shall conform to Section 84, "Markings" of the CT Specifications and these Technical Specifications.

# TRAFFIC STRIPES AND PAVEMENT MARKINGS

#### DEFINITIONS

**pavement marking**: Transverse marking such as (1) a limit line, (2) a stop line, or (3) a word, symbol, shoulder, parking stall, or railroad-grade-crossing marking.

**traffic stripe**: Longitudinal centerline or lane line used for separating traffic lanes in the same direction of travel or in the opposing direction of travel or a longitudinal edge line marking the edge of the traveled way or the edge of a lane at a gore area separating traffic at an exit or entrance ramp. A traffic stripe is shown as a traffic line.

#### SUBMITTALS

Submit manufacturers specification sheet for all materials prior to the start of work for approval.

For each lot or batch of paint or glass beads, submit a certificate of compliance prior to placement. Certificate of compliance shall include product name, lot or batch number, manufacturer date, and SDS.

For glass beads used in drop-on applications and in thermoplastic formulations, submit a certificate of compliance and test results for each lot of beads specifying the EPA test methods used and tracing the lot to the specific test sample. The testing for lead and arsenic content must be performed by an independent testing laboratory.

Submit retroreflectivity readings for traffic stripes and pavement markings at locations with deficient retroreflectivity determined by the Engineer.

#### **QUALITY ASSURANCE**

The Engineer will perform a nighttime, drive-through, visual inspection of the retroreflectivity of the traffic stripes and pavement markings and notify you of any locations with deficient retroreflectivity. Measure the retroreflectivity of the deficient areas using a retroreflectometer under ASTM E1710 and the sampling protocol specified in ASTM D7585.

Any markings installed by the Contractor that the Engineer has not pre-approved, and that the Engineer determines are installed improperly or in the wrong locations, shall be removed and replaced to the satisfaction of the Engineer at the Contractor's sole expense.

# MATERIALS

Traffic stripes and pavement markings must be retroreflective. Within 30 days of applying traffic stripes and pavement markings, the retroreflectivity of the stripes and markings must be a minimum of 250 mcd·m<sup>-2</sup>·lx<sup>-1</sup> for white and 125 mcd·m<sup>-2</sup>·lx<sup>-1</sup> for yellow when measured under ASTM E1710.

### Paint

The paint for traffic stripes and pavement markings must comply with the specifications for the paint type and color shown in following table:

Paint type	Color	Specification
Waterborne traffic line	White, yellow, and black	State Specification PTWB-01R2
Acetone-based	White, yellow, and black	State Specification PT-150VOC(A)
Waterborne traffic line for the international symbol of accessibility and other curb markings	Blue, red, and green	Federal Specification TT-P-1952E

#### Paint Specifications

The color of painted traffic stripes and pavement markings must comply with ASTM D6628.

#### **Glass Beads**

Glass beads applied to paint must comply with State Specification 8010-004.

At least 75 percent of the beads by count must be true spheres that are colorless and do not exhibit dark spots, air inclusions, or surface scratches when viewed under 20X magnification.

Each lot of glass beads used in pavement markings must contain less than 200 ppm each of arsenic and lead when tested under EPA Test Methods 3052 and 6010B or 6010C.

# CONSTRUCTION

Establish the alignment for traffic stripes and the layouts for pavement markings with a device or method that will not conflict with other traffic control devices.

A completed traffic stripe must:

- 1. Have clean, well-defined edges without running or deformation
- 2. Be uniform
- 3. Be straight on a tangent alignment and on a true arc on a curved alignment

The width of a completed traffic stripe must not deviate from the width shown by more than 1/4 inch on a tangent alignment and 1/2 inch on a curved alignment.

The length of the gaps and individual stripes that form a broken traffic stripe must not deviate by more than 2 inches from the lengths shown. The gaps and stripes must be uniform throughout the entire length of each section of broken traffic stripe so that a normal striping machine can repeat the pattern and superimpose successive coats on the applied traffic stripe.

A completed pavement marking must have well-defined edges without running or deformation.

Protect newly placed traffic stripes and pavement markings from traffic and other deleterious activities until the paint is thoroughly dry.

All traffic striping and pavement markings damaged by the Contractor's operations shall be replaced in kind.

#### **Surface Preparation**

Use mechanical wire brushing to remove dirt, contaminants, and loose material from the pavement surface that is to receive the traffic stripe or pavement marking.

Use abrasive blast cleaning to remove laitance and curing compound from the surface of new concrete pavement that is to receive the traffic stripe or pavement marking.

#### **Application of Stripes and Markings**

Apply paint for a pavement marking by hand with a stencil and spray equipment.

You may use permanent tape for a traffic stripe or a pavement marking instead of paint or thermoplastic. The permanent tape must be on the Authorized Material List for signing and delineation materials. Apply the tape under the manufacturer's instructions.

Immediately remove drips, overspray, improper markings, paint, and thermoplastic tracked by traffic with an authorized method.

Apply a traffic stripe or a pavement marking only to a dry surface during a period of favorable weather when the pavement surface is above 50 degrees F.

The glass beads must be embedded in the coat of paint or thermoplastic to a depth of 1/2 their diameters.

Verify the rate of application of the glass beads by stabbing the glass bead tank with a calibrated rod.

Where a new broken traffic stripe joins an existing broken traffic stripe, allow enough overlap distance between the new and existing striping patterns to ensure continuity at the beginning and end of the transition.

#### **Painted Traffic Stripes and Pavement Markings**

Do not thin paint for traffic stripes and pavement markings. Mix the paint by mechanical means until it is homogeneous. Thoroughly agitate the paint during its application.

Use mechanical means to paint traffic stripes and pavement markings and to apply glass beads for traffic stripes.

The striping machine must be capable of superimposing successive coats of paint on the 1st coat and on existing stripes at a speed of at least 5 mph.

The striping machine must:

- 1. Have rubber tires
- 2. Be maneuverable enough to produce straight lines and normal curves in true arcs
- 3. Be capable of applying traffic paint and glass beads at the specified rates
- 4. Be equipped with:
  - 4.1. Pointer or sighting device at least 5 feet long extending from the front of the machine
  - 4.2. Pointer or sighting device extending from the side of the machine to determine the distance from the centerline for painting shoulder stripes
  - 4.3. Positive acting cutoff device to prevent depositing paint in gaps of broken stripes
  - 4.4. Shields or an adjustable air curtain for line control
  - 4.5. Pressure regulators and gauges that are in full view of the operator for a pneumatically operated machine
  - 4.6. Paint strainer in the paint supply line
  - 4.7. Paint storage tank with a mechanical agitator that operates continuously during painting activities
  - 4.8. Glass bead dispenser located behind the paint applicator nozzle that is controlled simultaneously with the paint applicator nozzle

**Technical Specifications** 

4.9. Calibrated rods for measuring the volumes of paint and glass beads in the paint and glass bead tanks

Air-atomized spray equipment must:

- 1. Be equipped with oil and water extractors and pressure regulators
- 2. Have adequate air volume and compressor recovery capacity
- 3. Have properly sized orifices and needle assemblies for the spray gun tip

Where the configuration or location of a traffic stripe is such that the use of a striping machine is not practicable, you may apply the traffic paint and glass beads by other methods and equipment if authorized. The Engineer determines if the striping machine is not practicable for a particular use.

For an existing surface, apply traffic stripes and pavement markings in 1 coat.

For a new surface, except for the black stripe between the 2 yellow stripes of a double traffic stripe, apply traffic stripes and pavement markings in 2 coats. The 1st coat of paint must be dry before applying the 2nd coat.

Paint a 1-coat, 3-inch-wide black stripe between the two 6-inch-wide yellow stripes of a double traffic stripe.

If the two 6-inch-wide yellow stripes are applied in 2 coats, apply the black stripe concurrently with the 2nd coat of the yellow stripes.

Apply each coat of paint for any traffic stripe in 1 pass of the striping machine, including the glass beads, regardless of the number, width, and pattern of the individual stripes. Do not paint traffic stripes and pavement markings if:

- 1. Freshly painted surfaces could become damaged by rain, fog, or condensation
- 2. Atmospheric temperature could drop below 40 degrees F for acetone-based paint and 50 degrees F for waterborne paint during the drying period

On 2-lane highways:

- 1. If the 1st coat of the centerline stripe is applied in the same direction as increasing post miles, use the right-hand spray gun of the 3 spray guns used to apply the double yellow stripe to apply a single yellow stripe.
- 2. If the 1st coat of the centerline stripe is applied in the same direction as decreasing post miles, use the left-hand spray gun of the 3 spray guns used to apply the double yellow stripe to apply a single yellow stripe.
- 3. Apply the 2nd coat of centerline striping in the opposite direction of the 1st coat.

Apply 1-coat paint at an approximate rate of 107 sq ft/gal.

Apply 2-coat paint at the approximate rate shown in the following table:

I wo-Coat I and Application Rates				
	Coverage (sq ft/gal)			
Paint type	1st coat 2nd coat			
Waterborne paint	215	215		
Acetone-based paint	360	150		

Two-Coat Paint Application Rates

Apply glass beads at an approximate rate of 5 lb of beads per gallon of paint.

The Engineer determines the exact application rate of the paint and glass beads.

Verify the application rate of paint by stabbing the paint tank with a calibrated rod. If the striping machine has paint gauges, the Engineer may measure the volume of paint using the gauges instead of stabbing the paint tank with a calibrated rod.

# PAYMENT

The contract unit price paid per each item included in this specification section shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved, complete in place, as shown on the plans or matching existing locations, as specified in the CT Specifications and these Technical Specifications and as directed by the Engineer.

A double traffic stripe consisting of two 6-inch-wide yellow stripes separated by a 3-inch-wide black stripe is measured as a single traffic stripe.

Payment quantity of CENTERLINE (PAINT) is the length (Linear Feet, LF) measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe.

Payment quantity of 6" BIKE LANE (PAINT) is the length (Linear Feet, LF) measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe along each side of the road.

Payment quantity of 6" RIGHT EDGELINE (PAINT) is the length (Linear Feet, LF) measured along the line of the traffic stripe without deductions for gaps in the broken traffic stripe along each side of the road.

Payment quantity of STOP BAR / LIMIT LINE (PAINT) will be measured by EACH (EA) painted line at the location designated on the plans.

Payment quantity of "STOP" MARKING (PAINT) will be measured by EACH (EA) marking painted at the location designated on the plans.

Payment quantity of BIKE LANE SYMBOL WITHOUT PERSON MARKING (PAINT) will be measured by EACH (EA) painted marking at the location designated on the plans.

Payment quantity of BIKE LANE ARROW MARKING (PAINT) will be measured by EACH (EA) painted marking at the location designated on the plans.

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APPENDIX A

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# TABLE 1LONG VALLEY STREETS PROJECTSCHEDULE OF MINIMUM SAMPLING AND TESTING FOR ACCEPTANCE

Material	Property or Characteristic	Test Method	Frequency	Sampling Point
Excavation / Embankment	Maximum Dry Density and Optimum Moisture	ASTM D1557 (Modified Proctor) or CT 216	Minimum 1 per material/type	Representative Project location or source of material per CT 125
Subgrade	In-Place Density, Moisture content, and Relative Compaction	ASTM D6938 or CT 231	Minimum 1 test per 5000 sq ft of work area; Minimum 1 test per 2 vertical lifts	Excavation bottom, compacted lift or subgrade
Imported Borrow	- 1			5
Aggregate Base	Maximum Density and Optimum Moisture	ASTM D1557 (Modified Proctor) or CT 216	Minimum 1 per material/type	
Subbase	Sieve Analysis	CT 202	Minimum 1 per material/type	Per CT 125
Asphalt Grindings	Sand Equivalent	CT 217		
	Durability Index	CT 229	At Engineer's Discretion	
	R-Value	CT 301	At Engineer's Discretion	
	In-Place Density, Moisture content, and Relative Compaction	ASTM D6938 or CT 231	Minimum 1 test per 5000 square feet of work area; Minimum one test per Lot	In-Place Compacted Aggregate
Structure Backfill	Sieve Analysis	CT 202	Minimum 1 per material/type	Per CT 125
	Sand Equivalent	CT 217		
Select Backfill	Maximum Dry Density and Optimum Moisture	ASTM D1557 (Modified Proctor) or CT 216	Minimum 1 per material/type	Representative Project location or source of material per CT 125
	In-Place Density, Moisture content, and Relative Compaction	ASTM D6938 or CT 231	Minimum 1 test per 5000 sq ft of work area; Minimum 1 test per 2 vertical lifts	Compacted lift or subgrade
Hot Mix Asphalt	Sieve Analysis (Coldfeed, RAP)	CT 202 or AASHTO T27, AASHTO T11		Coldfeed / RAP at Batch Plant during production of
Asphalt Concrete	Sand Equivalent	CT 217 or AASHTO T176		HMA per CT 125
	Theorectical Maximum Specific Gravity and Density	CT 309 or AASHTO T209	Minimum 1 per Lot (Lot = 1 day's HMA Production)	Random Location per CT 125
	Asphalt Binder Content	CT 382 or AASHTO T308		
	HMA Moisture Content	CT 370 or AASHTO T329		
	In-Place Density and Relative Compaction	ASTM D2950 or CT 375	Minimum of 10 tests per 500 tons of HMA placed	In-place during final compaction at randomly determined locations
	Asphalt Binder	NA	Sample 1 Min per day for production of 500 tons or more per day; No testing required unless directed by Engineer	At Batch Plant per CT 125
	Bulk Specific Gravity and Density of Compacted Hot Mix Asphalt	CT 375, CT 308 or AASHTO T275	As directed by Engineer* (3 cores per 500 tons of HMA)	At randomly determined Project Location
	Smoothness	12-foot Straightedge	As necessary to confirm contract compliance	Final pavement surface

#### LONG VALLEY STREETS PROJECT SCHEDULE OF MINIMUM SAMPLING AND TESTING FOR ACCEPTANCE

Material	Property or Characteristic	Test Method <sup>b</sup>	Frequency	Sampling Point
	Making and Curing Concrete Cylinders	ASTM C31 or CT 540	Minimum 1 set of 5 cylinders per 100 cubic yards of concrete	Per ASTM C172 or CT 539
Portland Cement	Temperature	ASTM C1064 or CT 557	1 per sample	Per ASTM C172 or CT 539
Concrete	Slump	ASTM C143 or CT 556	1 per sample	Per ASTM C172 or CT 539
	Air Entrainment	ASTM C231 or CT 504	Minimum 1 per sample if concrete mix design specifies air entrainment	Per ASTM C172 or CT 539
	Unit Weight	ASTM C138 or CT 518	1 per sample	Per ASTM C172 or CT 539
	Compressive Strength	ASTM C39 or CT 521	7 days and 28 days $^{\circ}$	NA

<sup>a</sup> Asphalt coring will be required if field compaction test results using the nuclear gauge do not meet specification; Coring and laboratory testing (CT 375 and CT 308 or AASHTO T275) will be at contractor's expense.

<sup>b</sup> American Concrete Institute (ACI) provides certification to perform the relevant ASTM test methods and practices.

<sup>c</sup> If the concrete mix design contains fly ash or other pozzolan that extends curing, frequency shall be 7 days, 28 days, and 42 days. If indicated by mix design, 56 days will be permitted.

AASHTO - American Association of State Highway and Transportation Officials ACI - American Concrete Institute ASTM - American Society for Testing and Materials CT - Caltrans Test Method



# **DEPARTMENT OF PUBLIC WORKS**

# **QUALITY ASSURANCE PROGRAM (QAP)**

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# QUALITY ASSURANCE PROGRAM (QAP) AGENCY: County of Mono

The purpose of this program is to provide assurance that the materials incorporated into the construction projects are in conformance with the contract specifications. This program should be updated every five years or more frequent if there are changes to the testing and sampling frequencies or to the test methods.

Except as revised by this QAP, work shall be done in conformance with Division of Local Assistance, Office of Procedures Development and Training Quality Assurance Program (CT-QAP) Manual for Use by Local Agencies, Revised January 20, 2011 which can be found at <a href="http://www.dot.ca.gov/hq/LocalPrograms/public/QAP\_Manual.pdf">http://www.dot.ca.gov/hq/LocalPrograms/public/QAP\_Manual.pdf</a>.

# A. DEFINITION OF TERMS

- <u>Acceptance Testing (AT)</u> Sampling and testing, or inspection, to determine the degree of compliance with contract requirements.
- <u>CT</u>— California Department of Transportation (Caltrans)
- <u>Certificate of Compliance</u> -- A signed document from the materials manufacturer committing that the delivered goods meet the contract specifications
- <u>Independent Assurance Program (IAP)</u> Verification that AT is being performed correctly by qualified testers and laboratories.
- <u>Material Acceptance Program</u> Sampling, Testing, inspection, and certification of project materials to determine compliance with contract specifications.
- <u>Quality Assurance Program (QAP)</u> A sampling and testing program that will provide assurance that the materials and workmanship incorporated into the construction project are in conformance with the contract specifications. The main elements of a QAP are the Materials Acceptance Program and the Independent Assurance Sampling and Testing Program (IAP).
- <u>Source Inspection</u> Sampling, testing, and/or inspection of manufactured or prefabricated structural materials at a location other than the job site, generally at the manufactured location.

# **B. MATERIALS ACCEPTANCE PROGRAM**

Material incorporated into the work shall be accepted by one or more of the following methods, as specified in this document and the contract specifications:

- 1. Field Sampling and Acceptance Testing
- 2. Manufacturer's Certificate of Compliance (with attachments if required)
- 3. Source Inspection and Testing
- 4. Visual Inspection (for minor quantities)

# 1. Field Sampling and Acceptance Testing (AT)

AT will be performed by a materials laboratory certified to perform the required tests. The tests results will be used to ensure that all materials incorporated into the project are in compliance with the contract specifications.

Testing methods will be in accordance with the CT Methods or a national recognized standard (i.e., AASHTO, ASTM, etc.) as specified in the contract specifications.

#### General:

- Acceptance sampling and testing shall be performed by certified materials personnel.
- Acceptance testing will be performed utilizing accredited materials laboratories and properly calibrated equipment.
- Certifications and accreditations shall be specific to the tests being performed.
- A materials testing results log shall be maintained for any test method performed more than once on a project.
- The test results for materials incorporated into the work shall be in compliance with the contract specifications.
- Actions taken regarding material with failing test results will be fully documented, including details documenting remove/replace, rework/re-test, and deduction/Construction Change Order.

- Justification shall be provided for any failing material allowed to remain in place.
- At the County's digression, products may be accepted beyond the annual certification requirement, where Material Mix Designs have been used with continuous positive results and where there has been and will continue to be a consistent use of the same materials.

#### Sampling and Testing Locations and Frequencies:

- Sample and testing locations and frequencies shall be in accordance with the contract specifications.
- If not specified in the contract documents, sampling and testing locations and frequencies shall be as shown in **Attachment No. 1**, Acceptance Sampling and Testing Frequency Table.
- When sampling products such as Portland cement concrete, cement-treated base, hot mix asphalt, or similar materials; the time of such sampling shall be varied with respect to the time of the day, insofar as possible, in order to avoid a predictable sampling routine.

#### Acceptance Test Methods:

- The test methods used shall be as specified in the contract documents.
- For a material specified to comply with a property shown in the following table, the Agency tests under the corresponding test shown:

Test Property	Test	
Polative compaction	ASTM D1557,	
Relative compaction	D6938, D2950	
Sand equivalent	CT 217	
Resistance (R-value)	CT 301	
Gradation (sieve analysis)	CT 202	
Durability index	CT 229	
Cleanness Value	CT 227	

#### Acceptance Testing Laboratory:

The AGENCY will use a private consultant materials laboratory to perform AT on Federal-aid and other designated projects. The materials laboratory shall be under the responsible management of a California registered Engineer with experience in sampling, inspection and testing of construction materials. The Engineer shall certify the results of all tests performed by laboratory personnel under the Engineer's supervision. The materials laboratory shall contain certified test equipment capable of performing the tests conforming to the provisions of this QAP. Laboratories shall comply with part *C. Independent Assurance Program* of this document.

The materials laboratory used shall provide documentation that the laboratory complies with the following procedures:

- 1) <u>Correlation Testing Program</u>— The materials laboratory shall be a participant in one or more of the following testing programs:
  - a) AASHTO Materials Reference Laboratory(AMRL)
  - b) Cement and Concrete Reference Laboratory (CCRL)
  - c) Caltrans' Reference Samples Program (RSP)

The AT laboratory qualification shall occur annually.

A copy of the current laboratory qualification shall be kept in the project records.

- 2) <u>Certification of Personnel</u> The materials laboratory shall employ personnel who are certified by one or more of the following:
  - a) Caltrans District Materials Engineer
  - b) Nationally recognized non-Caltrans organizations such as the American Concrete Institute, Asphalt, National Institute of Certification of Engineering Technologies, etc.
  - c) Other recognized organizations approved by the State of California and/or Recognized by local governments or private associations.

Proficiency tests shall be performed for testers to be certified on Sieve Analysis, Sand Equivalent, and

Cleanness Value. All other types shall be witness tests.

A copy of each tester's current and applicable certifications shall be kept in the project files.

3) <u>Laboratory and Testing Equipment</u> — The materials laboratory shall only use laboratory and testing equipment that is in good working order. All such equipment shall be calibrated at least once each year. All testing equipment must be calibrated by impartial means using devices of accuracy traceable to the National Institute of Standards and Technology. A decal shall be firmly affixed to each piece of equipment showing the date of the last calibration. All testing equipment calibration decals shall be checked as part of the IAP.

#### **Reporting Acceptance Testing Results:**

The following are time periods for reporting material test results to the Resident Engineer:

- When the aggregate is sampled at material plants, test results for Sieve Analysis, Sand Equivalent and Cleanness Value should be submitted to the Resident Engineer within 24 hours after sampling.
- When materials are sampled at the job site, test results for compaction and maximum density should be submitted to the Resident Engineer within 24 hours after sampling.
- When soils and aggregates are sampled at the job site:
  - 1) Test results for Sieve Analysis, Sand Equivalent and Cleanness Value should be submitted to the Resident Engineer within 72 hours after sampling.
  - 2) Test results for "R" Value and asphalt concrete extraction should be submitted to the Resident Engineer within 96 hours after sampling.

The reporting of AT results, if not performed by the Resident Engineer's staff, shall be done on an expedited basis such as by email or telephone.

# 2. Manufacturer's Certificate of Compliance

#### General:

- Various manufactured materials may be accepted for incorporation into the work without sampling or testing, on the basis of a certificate from the manufacturer.
- Where required by the contract specifications, the contractor shall submit a certificate of compliance.
- Where required by the contract, the contractor shall *attach test data or other documents* to the certificate of compliance.
- The RE may perform sampling and testing on such materials at any time.
- Certificates of compliance shall:
  - o Be submitted by the Contractor before the material is incorporated into the work;
  - o Accompany the material to the job site.
  - o Identify the lot (or heat) number for each lot delivered;
  - Include the contract number;
  - o Include test data and other documents if required.
  - o State that the material complies with the contract specifications; and
  - Be signed by the producer of the material.

#### List of Materials Accepted by Certificate of Compliance:

A list of materials that can be typically accepted on the basis of certificates of compliance during construction is found in Appendix F of the CT-QAP Manual. This list may be supplemented or amended by the contract Special Provisions or Technical Provisions. All certificates of compliance shall conform to the requirements of the contract specifications.

# 3. Source Inspection and Testing

- Some manufactured or pre-fabricated structural materials will be inspected or tested prior to arrival at the jobsite, generally at the manufacturer's location (source inspected.)
- Structural items categorized as "catastrophic consequences of failure" or "significant safety concern" may be source inspected. Materials that might be source inspected include structural steel, precast prestressed concrete girders and pilings, RCP greater than 60", joint seals, bearing pads, lighting and signal poles, sign structures, and electrical items.
- The RE may reject source inspected material at the job site if deemed unacceptable. For example:
  - Material damage in shipment or installation.
  - Defective material; source inspection is usually a random sampling and may not have checked 100% of the material.
- A consultant materials laboratory, qualified to perform the applicable testing, will be used to perform source inspection and testing. The consultant laboratory used will vary by project

During the Design phase of the project, the Project Engineer may submit a "Source Inspection Request" to the Agency, consultant, or Caltrans for inspection and testing of manufactured and prefabricated materials by their materials laboratory. Should the Agency request Caltrans to conduct the source inspection, and the request is accepted, all sampling, testing, and acceptance of manufactured and prefabricated materials will be performed by Caltrans' Office of Materials Engineering and Testing Services.

For Federal-aid projects on the National Highway System (NHS), Caltrans will assist in certifying the materials laboratory, and the acceptance samplers and testers. For Federal-aid projects off the *NHS*, Caltrans may be able to assist in certifying the materials laboratory, and the acceptance samplers and testers.

# 4. Visual Inspection

Relatively minor quantities of construction materials may be accepted without testing.

The following 3 conditions must be met:

- 1. Visual examination of the material is performed.
- 2. The manufacturer or supplier has recently furnished similar materials found to be satisfactory using normal sampling and testing requirements.
- 3. The manufacturer (or supplier in the case of HMA or concrete) provides certification that the material furnished complies with the contract specifications.

#### Approximate quantities that may be accepted by visual inspection:

- Aggregates other than for use in Portland Cement Concrete, not to exceed:
  - o 100 tons per day, nor
  - 500 tons per project
- Bituminous mixtures (example: HMA), not to exceed
  - $\circ$  50 tons per day.
  - If project total is less than 500 tons, sample at engineer's discretion
  - Bituminous material (example: Liquid Asphalt), not to exceed:
    - 100 gallons per project

# C. INDEPENDENT ASSURANCE PROGRAM (IAP)

IAP shall be provided by personnel from Caltrans, the Agency's certified materials laboratory, or consultant's certified materials laboratory. IAP will be used to verify that sampling and testing procedures are being performed properly and that all testing equipment is in good condition and properly calibrated. All AT performed on the project shall use certified testing personnel and a qualified laboratory.

IAP personnel shall be certified in all required testing procedures, as part of IAP, and shall not be involved in any aspect of AT. IAP shall be performed on every type of materials test required for the project.

Poor correlation between acceptance tester's results and other test results may indicate probable deficiencies with the acceptance sampling and testing procedures. In cases of unresolved discrepancies, a complete review of AT shall be performed by IAP personnel, or an independent materials laboratory chosen by the Agency. IAP samples and tests are not to be used for determining compliance with contract requirements. Compliance with contract requirements is determined only by AT.

# D. RESIDENT ENGINEER'S CERTIFICATION OF PROJECT MATERIALS

Upon completion of a Federal-aid project, a "Materials Certificate" shall be completed by the Resident Engineer, The Agency shall include a "Materials Certificate" in the Report of Expenditures submitted to the Caltrans District Director, Attention: District Local Assistance Engineer. A copy of the "Materials Certificate" shall also be included in the Agency's construction records. The Resident Engineer in charge of the construction function for the Agency shall sign the certificate. All materials incorporated into the work which did not conform to specifications must be explained and justified on the "Materials Certification", including changes by virtue of contract change orders.

# E. PROJECT QAP RECORDS

All material records of samples and tests, material releases and certificates of compliance for the construction project shall be incorporated into the Resident Engineer's project file. If a Federal-aid project:

- The files shall be organized as described in Section 16.8 "Project Files" of the Local Assistance Procedures Manual
- It is recommended that the complete project file be available at a single location for inspection by Caltrans and Federal Highway Administration (FHWA) personnel
- The project files shall be available-for at Least three years following the date of final project voucher.
- The use of a "Log Summary," as shown in Appendix H of the CT-QAP Manual facilitates reviews of material sampling and testing by Caltrans and FHWA and assists the Resident Engineer in tracking the frequency of testing.

When two or more projects are being furnished identical materials simultaneously from the same plant, it is not necessary to take separate samples or perform separate tests for each project; however, copies of the test reports are to be provided for each of the projects to complete the records.

# APPROVED BY:

PROFESSIONAL CHERR RALPAY HIGERRON HIGERRON SITUE OF CALIFORNIA	Signature)
NAME:	Garrett Higerd
	(Print)
TITLE County	Engineer

Date: <u>February 5, 2019</u> (Date Signed)

<u>C70926</u> Exp Jun 30, 2019 (CE# and Expiration Date) This page intentionally left blank

#### ACCEPTANCE SAMPLING AND TESTING FREQUENCY TABLE

(Projects off the State Highway System)

Material	Property or Characteristic	Test Method	Frequency	Sampling Point
Excavation / Embankment	Maximum Dry Density and Optimum Moisture	ASTM D1557 (Modified Proctor) or CT 216	Minimum 1 per material/type	Representative Project location or source of material per CT 125
Subgrade Imported Borrow	In-Place Density, Moisture content, and Relative Compaction	ASTM D6938 or CT 231	Minimum 1 test per 5000 sq ft of work area; Minimum 1 test per 2 vertical lifts	Excavation bottom, compacted lift or subgrade
Aggregate Base	Maximum Density and Optimum Moisture	ASTM D1557 (Modified Proctor) or CT 216	Minimum 1 per material/type	
Subbase	Sieve Analysis	CT 202		Per CT 125
Asphalt Grindings	Sand Equivalent	CT 217	Minimum 1 per material/type	
	Durability Index	CT 229	At Engineer's Dispretion	
	R-Value	CT 301	At Engineer's Discretion	
	In-Place Density, Moisture content, and Relative Compaction	ASTM D6938 or CT 231	Minimum 1 test per 5000 square feet of work area; Minimum one test per Lot	In-Place Compacted Aggregate
Structure Backfill	Sieve Analysis	CT 202	Minimum 1 per material/type	Per CT 125
	Sand Equivalent	CT 217		
Select Backfill	Maximum Dry Density and Optimum Moisture	ASTM D1557 (Modified Proctor) or CT 216	Minimum 1 per material/type	Representative Project location or source of material per CT 125
	In-Place Density, Moisture content, and Relative Compaction	ASTM D6938 or CT 231	Minimum 1 test per 5000 sq ft of work area; Minimum 1 test per 2 vertical lifts	Compacted lift or subgrade
Hot Mix Asphalt	Sieve Analysis (Coldfeed, RAP)	CT 202	Minimum 1 per day for placement of 500 tons or more per day	Coldfeed / RAP at Batch Plant during production of HMA per CT 125
Asphalt Concrete	Sand Equivalent	CT 217		
	Theorectical Maximum Specific Gravity and Density	CT 309		Random Location per CT 125
	Asphalt Binder Content	CT 382	Minimum 1 per day for placement of 500 tons or more per day	
	HMA Moisture Content	CT 370		
	In-Place Density and Relative Compaction	ASTM D2950 or CT 375	Minimum of 1 test per 500 tons	In-place during final compaction at randomly determined locations
	Asphalt Binder	NA	Sample 1 Min per day for production of 500 tons or more per day; No testing required unless directed by Engineer	At Batch Plant per CT 125
	Bulk Specific Gravity and Density of Compacted Hot Mix Asphalt	CT 308	At Engineer's discretion	At randomly determined Project Location
	Smoothness	12-foot Straightedge	As necessary to confirm contract compliance	Final pavement surface

#### ACCEPTANCE SAMPLING AND TESTING FREQUENCY TABLE

(Projects off the State Highway System)

Material	Property or Characteristic	Test Method*	Frequency	Sampling Point
	Making and Curing Concrete Cylinders	ASTM C31 or CT 540	Minimum 1 set of 5 cylinders per 100 cubic yards of concrete	Per ASTM C172 or CT 539
Portland Cement Concrete	Temperature	ASTM C1064 or CT 557	1 per sample	Per ASTM C172 or CT 539
(Structural)	Slump	ASTM C143 or CT 556	1 per sample	Per ASTM C172 or CT 539
	Air Entrainment	ASTM C231 or CT 504	Minimum 1 per sample if concrete mix design specifies air entrainment	Per ASTM C172 or CT 539
	Unit Weight	ASTM C138 or CT 518	1 per sample	Per ASTM C172 or CT 539
	Compressive Strength	ASTM C39 or CT 521	7 days and 28 days**	NA

\* American Concrete Institute (ACI) provides certification to perform the relevant ASTM test methods and practices.

\*\* If the concrete mix design contains fly ash or similar additive, frequency shall be 7 days and 42 days.

ACI - American Concrete Institute ASTM - American Society for Testing and Materials CT - Caltrans Test Method

# **SECTION IV**



# **PROJECT PLANS**

**Long Valley Streets Project** 

Project No. 9116

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