SPECIFICATIONS

FOR

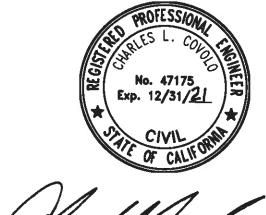
Crows Landing Road (Whitmore Avenue to Hatch Road) Federal Aid Project No. HSIPL-5938(238) Contract No. 9622

BOARD OF SUPERVISORS

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Jody Hayes, Chief Executive Officer David A. Leamon, Public Works Director

The Specifications contained herein have been prepared by or under the direction of the following registered engineer.



Approved By:

Charles Covylo, P.E.

Bid Opening Time and Date: 2:00 p.m., April 8, 2020

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PART I - INVITATION TO BIDDERS

Contractors are invited to submit written, formal bids for the Crows Landing Road (Whitmore Avenue to Hatch Road), Federal Aid Project No. HSIPL-5938(238) project. Estimated Construction cost for this project is less than \$3,702,600. The work to be accomplished includes installation of bike lanes, raised medians, curb ramps, street lights, activated flashing beacons, re-striping, traffic signal modifications, and pavement rehab..

Plans and Specifications are available for viewing on the Modesto Reprographics webpage at <u>www.modestoplanroom.com</u>. Paper copies are available from Modesto Reprographics. Call (209) 544-2400 for questions regarding the purchase of plans and specifications.

Technical Questions: All questions must be submitted in writing. Email your questions to covoloc@stancounty.com or fax your questions to (209) 541-2509, Attn: Charles Covolo, P.E..

Bid forms are provided in the Section titled "Bid Proposal". Bids shall be submitted in a sealed envelope and plainly marked **"Bid Proposal for Crows Landing Road (Whitmore Avenue to Hatch Road), Federal Aid Project No. HSIPL-5938(238)**". Bid envelopes shall be addressed to: Stanislaus County Public Works, Clerk of the Board of Supervisors, 1010 10th Street, Ste. 6700, Modesto, California, 95354. Attn: Marcie Ryan, 1716 Morgan Road, Modesto California, 95358. Bid envelopes must be delivered to the Clerk of the Board of Supervisors Public Works prior to 2:00 p.m., April 8, 2020, as evidenced by the Clerk's date/time stamp on the envelopes. The bids will be publicly opened in Room 6709 and read by the Clerk of the Board after bid closing.

EVENT DESCRIPTION	ANTICIPATED DATE
Project Advertisement	March 2, 2020
Last Day Contractors Clarification Requests	April 1, 2020
Issuance of Addendum (if required)	April 3, 2020
Bid Opening	April 8, 2020
Board Approval of Contract	May 12, 2020
Notice to Proceed	May 25, 2020 May 26, 2020

The award of the contract, if it be awarded, will be to the lowest responsible bidder whose bid proposal complies with all the requirements prescribed.

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

All bids will be compared on the basis of the Engineer's Estimate of the quantities of work to be done.

The DBE contract goal for this project has been set at 19 percent participation.

Other such items and details not mentioned herein that are required by the Plans, Standard Specifications or Special Provisions shall be performed, placed, constructed or detailed.

A pre-construction conference shall be required prior to the "Notice to Proceed".

This project is subject to the "Buy America" provisions of the Surface Transportation Assistance Act of 1982, as amended by the Intermodal Surface Transportation Efficiency Act of 1991.

The contractor shall possess a Class A License from the time this contract is awarded through contract acceptance.

This contract is subject to state contract nondiscrimination and compliance requirements pursuant to Government Code, Section 12990.

The successful bidder shall furnish a payment bond and a performance bond.

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

Pursuant to Sections 1770 and 1773 of the Labor Code, the Board of Supervisors has ascertained the general prevailing rate of per diem wages applicable to the work to be done for straight time, overtime, Saturday, Sunday, and holiday work. These wage rates are set forth by the Director of the Department of Industrial Relations and are available at the agencies web site and are on file with the Department of Public Works and hereby made a part of the agreement.

Attention is directed to the Federal minimum wage rate requirements in Part III, "Bid Proposal." If there is a difference between the minimum wage rates predetermined by the Secretary of Labor and the general prevailing wage rates determined by the Director of the California Department of Industrial Relations for similar classifications of labor, the Contractor and subcontractors shall pay not less than the higher wage rate. The County will not accept lower State wage rates not specifically included in the Federal minimum wage determinations. This includes "helper" (or other classifications based on hours of experience) or any other classification not appearing in the Federal wage determinations. Where Federal wage determinations do not contain the State wage rate determination otherwise available for use by the Contractor and subcontractors, the Contractor and subcontractor shall pay not less than the Federal minimum wage rate, which most closely approximates the duties of the employees in question.

The U.S. Department of Transportation (DOT) provides a toll-free hotline to report bid rigging activities. Use the hotline to report bid rigging, bidder collusion, and other fraudulent activities. The hotline number is (800) 424-9071. The service is available 24 hours 7 days a week and is confidential and anonymous. The hotline is part of the DOT's effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General.

Pursuant to and in accordance with the Provisions of Public Contract Code Section 22300, the contractor may elect to substitute securities for retention monies withheld by the County or to request payment of retention monies earned to an escrow agent.

PART II - INFORMATION FOR BIDDERS

1. DATE AND PLACE FOR OPENING PROPOSALS

Pursuant to the "Invitation to Bidders", sealed proposals for performing the work will be received by the Clerk of the Board of Supervisors of the County of Stanislaus Stanislaus County Public Works.

At the place and time set forth in said "Invitation to Bidders", they will be publicly opened and read. The awarding of the agreement, if awarded, will be made by said Board of Supervisors as soon thereafter as practicable.

2. PRINTED FORM OF PROPOSALS

All proposals must be made upon the blank proposal as included in PART III - PROPOSAL, and must give the price data in figures, and must be signed by the bidder. In accordance with the directions in the proposal, in order to insure consideration the proposal must be enclosed in a return envelope furnished by the bidder, and plainly marked: "Proposal for the Crows Landing Road (Whitmore Avenue to Hatch Road), Federal Aid Project No. HSIPL-5938(238)" and addressed to the Stanislaus County Public Works, Attn: Clerk of the Board of Supervisors, 1010 10th Street, Ste. 6700, Modesto, California, 95354. Marcie Ryan, 1716 Morgan Road, Modesto, California, 95358. No bid may be withdrawn within Sixty (60) days after time of opening.

3. OMISSIONS AND DISCREPANCIES

Should a bidder find discrepancies in, or omissions from, the drawings or other contract documents, or should the bidder be in doubt as to their meaning, it shall at once notify the Engineer in writing who may send a written instruction to all bidders.

4. ACCEPTANCE OR REJECTION OF PROPOSALS

The Board of Supervisors reserves the right to reject any or all proposals. Without limiting the generality of the foregoing, any proposal that is incomplete, obscure, or irregular may be rejected. Any proposal having erasures or corrections in the price sheet may be rejected. Any proposal that omits a bid on any one or more items in the price sheet may be rejected. Any proposal in which unit prices are obviously unbalanced may be rejected. Any proposal accompanied by an insufficient or irregular bidder's bond may be rejected. Any proposal that does not include and have attached a list of all subcontractors, complete with names and addresses, may be rejected.

Also, the Board reserves the right to reject the proposal of any bidder who is not responsible. The successful bidder shall be licensed by the State of California to perform the work required by the plans and specifications and shall endorse its license number on the proposal. The Board may require additional evidence of experience, financial responsibility, or corporate existence, at its option. Each bidder shall endorse its address to which notices hereunder may be directed on the proposal.

A bidder may be deemed not to be responsible and its bid rejected if a listed subcontractor is not responsible. Responsibility of any bidder or of any listed subcontractor shall be determined at the sole discretion of the Board. Bidder must not be on Caltrans no bid list. Any proposal that does not comply with Section 410(a)(1) Public Contract Code (PCC) may be rejected.

5. CASH, CERTIFIED CHECK, CASHIER'S CHECK OR BIDDER'S BOND

All proposals shall be accompanied by cash, a certified check, certified to by some responsible bank or banker, a cashier's check on a bank, or a bidder's bond prepared and guaranteed by an admitted corporate surety made payable to the "County of Stanislaus" in the amount of ten percent (10%) of the total bid, unless otherwise specified. All such cash or checks will be returned to the respective bidder within ten (10) days after the proposals are opened, except those which the Board of Supervisors elects to hold until the successful bidder has executed the contract. Thereafter, all remaining cash or checks, including that of the successful bidder, will be returned within five (5) days after the issuance of the Notice to Proceed.

6. ACCEPTANCE OF PROPOSALS AND ITS EFFECT

Within ninety (90) days after the opening of the bid proposals, the Board of Supervisors will act upon them. The acceptance of a proposal will be notice in writing signed by a duly authorized representative of the Board of Supervisors and no other act of the Board of Supervisors shall constitute the acceptance of a bid proposal. The acceptance of a bid proposal shall bind the successful bidder to execute the contract and to be responsible for liquidated damages, as provided in Article SC-08. The rights and obligations provided for in the contract shall become effective and binding upon the parties only with its formal execution by the Board of Supervisors or its authorized designee.

7. MANDATORY PRE-BID MEETING AND SITE VISIT – Not Applicable.

8. BID PROTEST

Any Bid protest must be submitted in writing to the County's offices (Attention: Linda Allsop), before 5:00 p.m. of the tenth (10) day following posting on the official bulletin board of the Clerk of the Board of Notice of Intent to Award for Construction. Time will be determined by County staff using the official clock of the Clerk of the Board. County will use reasonable efforts to deliver by facsimile a copy of Notice of Intent to Award for Construction to all Bidders who submitted Bids no later than the Business Day after issuance, although any delay or failure to do so will not extend the Bid protest deadline described above.

The initial protest must contain a complete statement of the basis for the protest.

The protest must refer to the specific portion of the document that forms the basis for the protest.

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

Only Bidders who the County otherwise determines are responsive and responsible are eligible to protest a Bid; protests from any other Bidder will not be considered.

The party filing the protest must concurrently transmit a copy of the initial protest document and any attached documentation to all other parties with a direct financial interest that may be adversely affected by the outcome of the protest. Such parties shall include all other Bidders who appear to have a reasonable prospect of receiving an award depending upon the outcome of the protest.

The procedure and time limits set forth in this paragraph are mandatory and are Bidder's sole and exclusive remedy in the event of a Bid protest. Bidder's failure to comply with these procedures shall constitute a waiver of any right to further pursue the Bid protest, including filing a Government Code

Claim or legal proceedings. A Bidder may not rely on a protest submitted by another Bidder, but must timely pursue its own protest.

9. WITHDRAWAL OF BIDS

Bidders may withdraw their Bids at any time prior to the Bid opening time fixed in this Information to Bidders, only by written request for the withdrawal of Bid filed with the County at the County's office. Bidder or its duly authorized representative shall execute request to withdraw Bid. The submission of a Bid does not commit the County to award a contract for the Project, to pay costs incurred in the preparation of a Bid, or to procure or contract for any goods or services.

10. TIME FOR EXECUTING CONTRACT AND DAMAGES FOR FAILURE TO EXECUTE

After Notice of Award, the successful Bidder must execute and submit the following documents as indicated below:

- 1. Submit the following documents to County by 2:00 p.m. of the tenth (10) Day following Notice of Award. Execution of Contract by County depends upon approval of these documents, and any other document identified in County's Notice of Award:
 - a. Agreement: To be executed by successful Bidder. Submit four originals, each bearing an original signature.
 - b. Construction Performance Bond: To be executed by successful Bidder and surety, in the amount set forth in Construction Performance Bond. Submit one original.
 - c. Construction Labor and Material Payment Bond: To be executed by successful Bidder and surety, in the amount set forth in Construction Labor and Materials Payment Bond. Submit one original.
 - d. Insurance certificates and endorsements required by Special Conditions Article SC-15, INSURANCE. Submit one original set.
 - e. One complete set of documentary information received or generated by successful Bidder in preparation of Bid prices for its Bid, as set forth in Escrow Bid Documents.
 - f. The Guaranty in the form set forth in Guaranty. Submit four originals, each bearing an original signature.
 - g. Any other item described in Notice of Award (if any).
- 2. County shall have the right to communicate directly with Apparent Low Bidder's proposed performance bond surety, to confirm the performance bond. County may elect to extend the time to receive faithful performance and labor and material payment bonds.
- 3. The damages to the County for such breach will include loss from interference with its construction program and other items whose accurate amount will be difficult or impossible to compute. The amount of the cash, certified check, cashier's check or bidder's bond accompanying the proposal of such bidder shall be forfeited and applied by the Board of Supervisors as liquidated damages for such breach. In the event any bidder whose proposal shall be accepted shall fail or refuse to execute the contract as accepted as hereinbefore provided, the Board of Supervisors may, at its option, determine that such bidder has

abandoned the contract and thereupon his proposal and the acceptance thereof shall be null and void and the County shall be entitled to liquidated damages as provided in the Special Conditions. In such event, the Board of Supervisors may award the contract to the next low responsible bidder or bidders.

11. DETERMINATION OF LOW BIDDER

Except where the Board of Supervisors exercises the right reserved herein to reject any or all proposals, the contract will be awarded by said Board to the responsible bidder who has submitted the lowest bid. Quantities are approximate, only being as a basis for the comparison of bids. The Board of Supervisors reserves the right to increase, decrease or omit portions of the work as may be deemed necessary or advisable by the Engineer.

12. TIME FOR BEGINNING AND COMPLETING THE WORK

The Contractor shall commence work within five (5) calendar days after the date of the Notice to Proceed, and shall complete the work within ninety (90) working days. The date of the Notice to Proceed shall constitute the first working day.

13. PRICES

The prices are to include the furnishing of all materials, plant, equipment, tools, scaffolds, and all other facilities, and the performance of all labor and services necessary or proper for completion of the work, except such as may be otherwise expressly provided in the contract documents.

14. INTERPRETATION OF ADDENDA

Oral interpretations shall not be made to any bidder as to the meaning of any of the contract documents, or be effective to modify any of the provisions of the contract documents. Every request for an interpretation shall be made in writing at least ten (10) calendar days prior to the bid opening and addressed and forwarded to Public Works Engineering, Attn: Charles Covolo, P.E., 1716 Morgan Road, Modesto, California 95358.

15. RIGHT TO MAKE CORRECTIONS

The Engineer/Architect shall have the right to make such corrections and interpretations as may be deemed necessary for the fulfillment of the intent of the specifications. The Contractor shall be responsible for calling apparent errors or omissions to the attention of the Engineer/Architect for his corrections and/or interpretation. The Contractor shall not take advantage of said apparent errors or omissions.

16. SUBSTITUTIONS OF SECURITIES FOR WITHHELD PAYMENTS

Except as otherwise prohibited by law, the Contractor may elect to receive all payments due under the contract pursuant to without any retention. If the Contractor so elects, he shall deposit with the County securities with a value equal to the monies that would otherwise be withheld by the County. Said securities shall be as provided in Section 22300 of the Public Contract Code and shall be approved by the County as to both sufficiency and form.

17. CONSTRUCTION PAYMENT BOND & LABOR AND MATERIALS BOND SURETY

A surety insurer admitted in the State of California by the Department of Insurance shall execute Construction Payment Bond and Construction Labor and Materials Bond. County shall verify Surety's admission by either: (1) printing out information from the website of the Department of Insurance confirming that Surety is an admitted surety insurer; or, (2) obtaining a certificate from the County Clerk confirming that Surety is an admitted insurer. County shall attach such verification to Construction Payment Bond and Construction Labor and Materials Bond.

18. CONFORMED CONSTRUCTION DOCUMENTS

Following Award of Contract, County may prepare a conformed set of Contract Documents reflecting Addenda issued during bidding, which shall, failing objection, constitute the approved set of Contract Documents.

PART III - PROPOSAL

STANISLAUS COUNTY BOARD OF SUPERVISORS

FOR THE CONSTRUCTION OF

Crows Landing Road (Whitmore Avenue to Hatch Road), Federal Aid Project No. HSIPL-5938(238)

NAME OF BIDDER:	
BUSINESS P.O. BOX:	
CITV STATE ZIP:	
BUSINESS STREET ADDRESS:	
	(Please include even if P.O. Box used)
CITY, STATE, ZIP:	
TELEPHONE NO: ()	
Area Code	
FAX NO: ()	
Area Code	
CONTRACTOR LICENSE NO.:	

The work for which this proposal is submitted is for construction in conformance with the special provisions (including the payment of not less than the State general prevailing wage rates or Federal minimum wage rates), the project plans described below, including any addenda thereto, the contract annexed hereto, and also in conformance with the California Department of Transportation Standard Plans, dated 2015, the Standard Specifications, dated 2015, and the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished.

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all items. The bidder shall set forth for each unit basis item of work a unit price and a total for the item, and for each lump sum item a total for the item, all in clearly legible figures in the respective spaces provided for that purpose. In the case of unit basis items, the amount set forth under the "Item Total" column shall be the product of the unit price bid and the estimated quantity for the item.

In case of discrepancy between the unit price and the total set forth for a unit basis item, the unit price shall prevail, except as provided in (a) or (b), as follows:

(a) If the amount set forth as a unit price is unreadable or otherwise unclear, or is omitted, or is the same as the amount as the entry in the item total column, then the amount set forth in the item total column for the item shall prevail and shall be divided by the estimated quantity for the item and the price thus obtained shall be the unit price;

(b) Decimal Errors. If the product of the entered unit price and the estimated quantity is exactly off by a factor of ten, one hundred, etc., or one-tenth, or one-hundredth, etc. from the entered total, the discrepancy will be resolved by using the entered unit price or item total, whichever most closely approximates percentage wise the unit price or item total in the Item Total.

If both the unit price and the item total are unreadable or otherwise unclear, or are omitted, the bid may be deemed irregular. Likewise if the item total for a lump sum item is unreadable or otherwise unclear, or is omitted, the bid may be deemed irregular unless the project being bid has only a single item and a clear, readable total bid is provided.

Symbols such as commas and dollar signs will be ignored and have no mathematical significance in establishing any unit price or item total or lump sums. Written unit prices, item totals and lump sums will be interpreted according to the number of digits and, if applicable, decimal placement. Cent symbols also have no significance in establishing any unit price or item total since all figures are assumed to be expressed in dollars and/or decimal fractions of a dollar. Bids on lump sum items shall be item totals only; if any unit price for a lump sum item is included in a bid and it differs from the item total, the items total shall prevail.

The foregoing provisions for the resolution of specific irregularities cannot be so comprehensive as to cover every omission, inconsistency, error or other irregularity which may occur in a bid. Any situation not specifically provided for will be determined in the discretion of the COUNTY OF STANISLAUS, and that discretion will be exercised in the manner deemed by the COUNTY OF STANISLAUS to best protect the public interest in the prompt and economical completion of the work. The decision of the COUNTY OF STANISLAUS respecting the amount of a bid, or the existence or treatment of an irregularity in a bid, shall be final.

Accompanying this proposal shall be a bidder's bond issued by a California admitted surety, or certified or cashier's check, or cash in the amount of ten percent (10%) of the proposal as a form of bidder's security.

If this proposal shall be accepted and the undersigned shall fail to enter into the contract and furnish the 2 bonds in the sum required by Article SC-14, BONDS, with surety satisfactory to the COUNTY OF STANISLAUS, within ten (10) days, not including Saturdays, Sundays and legal holidays, after the bidder has received notice from the COUNTY OF STANISLAUS that the contract has been awarded, the COUNTY OF STANISLAUS may, at its option, determine that the bidder has abandoned the contract, and thereupon this proposal and the acceptance thereof shall be null and void and the forfeiture of the security accompanying this proposal shall operate and the same shall be the property of the COUNTY OF STANISLAUS.

The undersigned, as bidder, declares that the only persons or parties interested in this proposal as principals are those named herein; that this proposal is made without collusion with any other person, firm, or corporation; that he has carefully examined the location of the proposed work, the annexed proposed form of contract, and the plans therein referred to; and he proposes, and agrees if this proposal is accepted, that he will contract with the COUNTY OF STANISLAUS, in the form of the copy of the contract annexed hereto, to provide all necessary machinery, tools, apparatus and other means of construction, and to do all the work and furnish all the materials specified in the contract, in the manner and time therein prescribed, and according to the requirements of the Engineer as therein set forth, and that he will take in full payment therefore the following prices, to wit:

CONTRACTOR'S BID SHEET

Crows Landing Road (Whitmore Avenue to Hatch Road) Federal Aid Project No. HSIPL-5938(238)

ITEM No.	SPEC No.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
1	SP-06	MOBILIZATION	LS	1		
2	SP-30	LEAD COMPLIANCE PLAN	LS	1		
3	SP-09	TEMPORARY TRAFFIC CONTROL	LS	1		
4	SP-31	PORTABLE CHANGEABLE MESSAGE SIGN	EA	6		
5	SP-02	WATER POLLUTION CONTROL	LS	1		
6	SP-12	RESET MAILBOX	EA	11		
7	SP-13	RELOCATE ROADSIDE SIGN	EA	2		
8	SP-14	ADJUST UTILITY COVER TO GRADE	EA	145		
9	SP-15	CLEARING AND GRUBBING	LS	1		
10	SP-16	REMOVE CONCRETE AND MISCELLANEOUS ITEMS	LS	1		
11	SP-17	REMOVE ROADSIDE SIGN	EA	34		
12	SP-18	COLD PLANE ASPHALT CONCRETE PAVEMENT	SY	11156		
13	SP-19	ROADWAY EXCAVATION (F)	LS	1		
14	SP-20	AGGREGATE BASE (CLASS II)	CY	740		
15	SP-21	HOT MIX ASPHALT (TYPE A)	TON	5413		
16	SP-22	COLD-IN -PLACE RECYCLING - FOAMED ASPHALT (CIR-FA) (3" DEPTH)	SY	45040		
17	SP-22	PG 64-10 (FOAMED ASPHALT) (CIR- FA)	TON	191		
18	SP-22	CEMENT (PORTLAND TYPE II) (CIR- FA)	TON	77		

ITEM No.	SPEC No.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
19	SP-23	MINOR CONCRETE (CURB AND GUTTER)	LF	1090		
20	SP-23	MINOR CONCRETE (RETAINING AND EXTRUDED MEDIAN CURB)	LF	10520		
21	SP-23	MINOR CONCRETE (SIDEWALK)	SF	9330		
22	SP-23	MINOR CONCRETE (CURB RAMP)	SF	2990		
23	SP-23	MINOR CONCRETE (DRIVEWAY)	SF	580		
24	SP-23	MINOR CONCRETE (VALLEY GUTTER)	LF	141		
25	SP-23	MINOR CONCRETE (THRU DRAINS)	SF	1204		
26	SP-23	MINOR CONCRETE (STAMPED CONCRETE)	SF	35195		
27	SP-25	ROADSIDE SIGNS	EA	131		
28	SP-26	WELDED WIRE REINFORCEMENT	SF	490		
29	SP-27	6" THERMOPLASTIC TRAFFIC STRIPE (DETAIL 9)	LF	9580		
30	SP-27	6" THERMOPLASTIC TRAFFIC STRIPE (DETAIL 25A)	LF	9530		
31	SP-27	6" THERMOPLASTIC TRAFFIC STRIPE (DETAIL 27B)	LF	17460		
32	SP-27	6" THERMOPLASTIC TRAFFIC STRIPE (DETAIL 39A)	LF	1180		
33	SP-27	6" THERMOPLASTIC TRAFFIC STRIPE (DETAIL 40)	LF	1745		
34	SP-27	8" THERMOPLASTIC TRAFFIC STRIPE (DETAIL 38A)	LF	1580		
35	SP-27	THERMOPLASTIC PAVEMENT MARKINGS	SF	6826		
36	SP-28	SOLID GREEN PAVEMENT MARKING	SF	3415		
37	SP-07	RE-ESTABLISH SURVEY MONUMENT (TYPE B)	EA	5		
38	SP-29	DETECTABLE WARNING SURFACE	SF	660		
39	SP-36	AS-BUILT DRAWINGS	LS	1		
40	SP-32	INSTALL PROJECT CONSTRUCTION FUNDING SIGN	EA	2		
41	SP-34/ SP-35	TRAFFIC SIGNAL MODIFICATION (WINMOORE WAY AND BUTTE AVE)	LS	1		

ITEM No.	SPEC No.	ITEM DESCRIPTION	UNIT	QUANTITY	UNIT PRICE	TOTAL
42	SP-33	RRFB SYSTEM (COLUSA AVE AND IMPERIAL AVE)	LS	1		
43	SP-35	STREET LIGHTING SYSTEM (CROWS LANDING RD)	LS	1		
	TOTAL PROJECT COST					

(F) DENOTES FINAL PAY ITEM

Note: All line items must have an entry placed in its appropriate box, and this form must be signed for the bid to be accepted as complete.

(SIGNED)

Date:

Note: All line items must have an entry placed in its appropriate box, and this form must be signed for the bid to be accepted as complete.

ADDENDUM SHEET

Crows Landing Road (Whitmore Avenue to Hatch Road) Federal Aid Project No. HSIPL-5938(238)

<u>ADDENDUM</u>	DATED	DATE RECEIVED	<u>INITIALS</u>
Contractor			
Address			
Phone ()	Fax ()	
(SIGNED)		Date:	

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete.

SUBCONTRACTORS LIST

The Bidder shall list the name and address of each subcontractor to whom the Bidder proposes to subcontract portions of the work, as required by the provisions in Section 2-1.33C, "Subcontractor List," of the Standard Specifications. Photocopies of this form may be used for additional subcontractors.

Subcontractor:	License #	DIR/PWCR #	License Classification(s):
Business Address:			DBE (Yes/No):
Bid Item(s):			Amount:
Subcontractor:	License #:	DIR/PWCR #	License Classification(s):
Business Address:			DBE (Yes/No):
Bid Item(s):			Amount:
Subcontractor:	License #:	DIR/PWCR #	License Classification(s):
Business Address:	I		DBE (Yes/No):
Bid Item(s):			Amount:
Subcontractor:	License #:	DIR/PWCR #	License Classification(s):
Business Address:	I		DBE (Yes/No):
Bid Item(s):			Amount:
Subcontractor:	License #:	DIR/PWCR #	License Classification(s):
Business Address:	I	I	DBE (Yes/No):
Bid Item(s):			Amount:

(SIGNED)

Date: _____

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete.

BID DOCUMENTS REQUIRED AT BID OPENING

It is <u>required</u> that the following documents must be completed, signed, and submitted with the Proposal at bid opening. Failure to complete or provide any of the required documents will be deemed an incomplete and rejected bid.

- Contractor's Bid Sheet
- Addendum Sheet
- Subcontractors List
- Insurance Requirements Acknowledgement
- Equal Employment Opportunity Certification (for Contractor and each Subcontractor)
- Non-Discrimination of Individuals with Disabilities
- Noncollusion Affidavit
- Public Contract code
- Debarment and Suspension Certification
- Disclosure of Lobbying Activities
- W-9 Form
- Proposal Signature Sheet
- Bidder's Bond
- Note: The following documents below must be completed, signed, and submitted to 1716 Morgan Road, Modesto, CA 95358 no later than 4:00 p.m. on the 4th business day after bid opening.

DOCUMENT NAME	PAGE
Exhibit 15-G Construction Contract DBE Commitment	III-31
Exhibit 15-H DBE Information – Good Faith Efforts	III-36
Exhibit 12-B Bidder's List of Subcontractors (DBE and Non-DBE)	III-41

COLD-IN-PLACE RECYCLING SUBMITTALS	PAGE
Submittals Requirements for Approval of the Contractor or Subcontractor performing the Cold-In-Place Recycling (CIPR)	

EXHIBIT B

Insurance Requirements for Construction Contracts

Contractor shall procure and maintain for the duration of the contract, and for 3 years thereafter, insurance against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees, or subcontractors.

MINIMUM SCOPE AND LIMIT OF INSURANCE

Coverage shall be at least as broad as:

- Commercial General Liability (CGL): Insurance Services Office Form CG 00 01 covering CGL on an "occurrence" basis, including products and completed operations, property damage, bodily injury and personal & advertising injury with limits no less than \$3,000,000 per occurrence. If a general aggregate limit applies, either the general aggregate limit shall apply separately to this project/location (ISO CG 25 03 or 25 04) or the general aggregate limit shall be twice the required occurrence limit.
- Automobile Liability: Insurance Services Office Form Number CA 0001 covering Code 1 (any auto), with limits no less than \$1,000,000 per accident for bodily injury and property damage.
- Workers' Compensation insurance as required by the State of California, with Statutory Limits, and Employers' Liability insurance with a limit of no less than \$1,000,000 per accident for bodily injury or disease.
- Builder's Risk/Course of Construction (not required for Road Maintenance Projects) insurance utilizing an "All Risk" (Special Perils) coverage form, with limits equal to the completed value of the project and no coinsurance penalty provisions.
- 5. Surety Bonds as described below.
- Professional Liability (if Design/Build), with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.
- Contractors' Pollution Legal Liability and/or Asbestos Legal Liability and/or Errors and Omissions (if project involves environmental hazards) with limits no less than \$1,000,000 per occurrence or claim, and \$2,000,000 policy aggregate.

If the contractor maintains broader coverage and/or higher limits than the minimums shown above, the County requires and shall be entitled to the broader coverage and/or higher limits maintained by the contractor. Any available insurance proceeds in excess of the specified minimum limits of insurance and coverage shall be available to the County.

Application of Excess Liability Coverage: Contractors may use a combination of primary, and excess insurance policies which provide coverage as broad as ("follow form" over) the underlying primary policies, to satisfy the Required Insurance provisions.

Construction Contract 2019 Rev 5/19

Other Insurance Provisions

The insurance policies are to contain, or be endorsed to contain, the following provisions:

Additional Insured Status

The County, its officers, officials, employees, agents and volunteers are to be covered as additional insureds on the CGL and Auto policy with respect to liability arising out of work or operations performed by or on behalf of the Contractor including materials, parts, or equipment furnished in connection with such work or operations and automobiles owned, leased, hired, or borrowed by or on behalf of the Contractor. General liability and Auto liability coverage can be provided in the form of an endorsement to the Contractor's insurance (at least as broad as ISO Form CG 20 10 11 85 or both CG 20 10, CG 20 26, CG 20 33, or CG 20 38; and CG 20 37 forms if later revisions used).

Primary Coverage

For any claims related to this contract, the Contractor's insurance coverage shall be primary coverage at least as broad as ISO CG 20 01 04 13 as respects the County, its officers, officials, employees, agents and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees, agents or volunteers shall be excess of the Contractor's insurance and shall not contribute with it.

Builder's Risk (Course of Construction) Insurance

Contractor may submit evidence of Builder's Risk insurance in the form of Course of Construction coverage. Such coverage shall name the County as a loss payee as their interest may appear.

If the project does not involve new or major reconstruction, at the option of the County, an Installation Floater may be acceptable. For such projects, a Property Installation Floater shall be obtained that provides for the improvement, remodel, modification, alteration, conversion or adjustment to existing buildings, structures, processes, machinery and equipment. The Property Installation Floater shall provide property damage coverage for any building, structure, machinery or equipment damaged, impaired, broken, or destroyed during the performance of the Work, including during transit, installation, and testing at the County's site.

Reporting

Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or its officers, officials, employees, agents or volunteers.

Notice of Cancellation

Each insurance policy required above shall provide that coverage shall not be canceled, except with notice to the County. Notification of insurance cancellation to the County will be contractors' responsibility.

Waiver of Subrogation

Contractor hereby agrees to waive rights of subrogation (except for Professional Liability) which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss. Contractor agrees to obtain any endorsement that may be necessary to affect this waiver of subrogation. The Workers' Compensation policy shall be endorsed with a waiver of subrogation in favor of the County for all work performed by the Contractor, its employees, agents and subcontractors.

Construction Contract 2019 Rev 5/19

Self-Insured Retentions

Self-insured retentions must be declared to and approved by the County. At the option of the County, either: the contractor shall cause the insurer shall reduce or eliminate such self-insured retentions as respects the County, its officers, officials, employees, and volunteers; or the Contractor shall provide a financial guarantee satisfactory to the County guaranteeing payment of losses and related investigations, claim administration, and defense expenses. The policy language shall provide, or be endorsed to provide, that the self-insured retention may be satisfied by either the named insured or County.

Acceptability of Insurers

Insurance is to be placed with California admitted insurers (licensed to do business in California) with a current A.M. Best's rating of no less than A-VII, however, if no California admitted insurance company provides the required insurance, it is acceptable to provide the required insurance through a United States domiciled carrier that meets the required Best's rating and that is listed on the current List of Approved Surplus Line Insurers (LASLI) maintained by the California Department of Insurance.

Claims Made Policies

If any coverage required is written on a claims-made coverage form:

- The retroactive date must be shown, and this date must be before the execution date of the contract or the beginning of contract work.
- Insurance must be maintained and evidence of insurance must be provided for at least five (5) years after completion of contract work.
- If coverage is canceled or non-renewed, and not replaced with another claims-made policy form with a retroactive date prior to the contract effective, or start of work date, the Contractor must purchase extended reporting period coverage for a minimum of five (5) years after completion of contract work.
- 4. A copy of the claims reporting requirements must be submitted to the County for review.
- 5. If the services involve lead-based paint or asbestos identification/remediation, the Contractors Pollution Liability policy shall not contain lead-based paint or asbestos exclusions. If the services involve mold identification/remediation, the Contractors Pollution Liability policy shall not contain a mold exclusion, and the definition of Pollution shall include microbial matter, including mold.

Verification of Coverage

Contractor shall furnish the County with original certificates and amendatory endorsements, or copies of the applicable insurance language, effecting coverage required by this contract. All certificates and endorsements are to be received and approved by the County before work commences. However, failure to obtain the required documents prior to the work beginning shall not waive the Contractor's obligation to provide them. The County reserves the right to require complete, certified copies of all required insurance policies, including endorsements, required by these specifications, at any time.

Construction Contract 2019 Rev 5/19

Subcontractors

Contractor shall require and verify that all subcontractors maintain insurance meeting all the requirements stated herein, and Contractor shall ensure that County is an additional insured on insurance required from subcontractors. For CGL coverage subcontractors shall provide coverage with a format least as broad as CG 20 38 04 13.

Surety Bonds

Contractor shall provide the following Surety Bonds:

- 1. Bid bond
- 2. Performance bond
- 3. Payment bond
- 4. Maintenance bond

The Payment Bond and the Performance Bond shall be in a sum equal to the contract price. If the Performance Bond provides for a one-year warranty a separate Maintenance Bond is not necessary. If the warranty period specified in the contract is for longer than one year a Maintenance Bond equal to 10% of the contract price is required. Bonds shall be duly executed by a responsible corporate surety, authorized to issue such bonds in the State of California and secured through an authorized agent with an office in California.

Special Risks or Circumstances

County reserves the right to modify these requirements, including limits, based on the nature of the risk, prior experience, insurer, coverage, or other circumstances.

Insurance Limits

The limits of insurance described herein shall not limit the liability of the Contractor and Contractor's officers, employees, agents, representatives or subcontractors. Contractor's obligation to defend, indemnify and hold the County and its officers, officials, employees, agents and volunteers harmless under the provisions of this paragraph is not limited to or restricted by any requirement in the Agreement for Contractor to procure and maintain a policy of insurance.

[SIGNATURES SET FORTH ON THE FOLLOWING PAGE]

Exempt from Auto – I will not utilize a vehicle in the perform	ance of my work with the County.	
Exempt from WC – I am exempt from providing workers' co required under section 1861 and 3700 of the California Labor Code.	mpensation coverage as	
I acknowledge the insurance requirements listed above.		
Print Name:	Date:	
Signature:	_Date:	
Vendor Name:		
See Insurance		

Requirements Acknowledgement

	For CEO-Risk Management Division use only	<i>v</i>		
Approved by CEO-Risk Management Division: Watthen Date:	Exception:	Varian Watt	Date:	

Construction Contract 2019 Rev 5/19

INSURANCE REQUIREMENTS ACKNOWLEDGEMENT

Your insurance agent must thoroughly review the contract specifications before he issues the Certificate of Insurance. Insurance requirements are as specified in Article SC-15, INSURANCE.

ACKNOWLEDGEMENT of receipt of, and AGREEMENT to obtain/provide an insurance policy for the subject project as per the requirements set forth herein above by both the Contractor and Insurance Agent as listed in our project specifications, Section SC-15 Insurance.

Signature of Contractor		Date	
Contractor		Federal ID No.	
Street Address		()	
City, State, Zip	Phone Number		
Type of Business: Sole Proprieto	Non-Profit 501 (c)(3)		
Other, please	explain:		
Signature of Insurance Agent	[Date	
Insurance Agent / Firm Name			
Street Address		()	
City, State, Zip () Phone Number			
Insurance Type	Amount	nount Policy Number	
General Liability			
Auto Liability			
Workers Comp/Employers Liability (per State of California)			
All-Risk Course of Construction (if applicable)			
Railroad Protective Liability (if applicable)			

Note: Use copies of this form when more than one broker/agent is used.

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

The bidder proposed , , hereby certifies that he has _____, subcontractor has not , participated in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, or 11246, and that, where required, he has filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filling requirements.

Note: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary 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 under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

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

(SIGNED) _____ Date: _____

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete.

NON-DISCRIMINATION OF INDIVIDUALS WITH DISABILITIES

POLICY STATEMENT

In compliance with 29 U.S.C. 794 and 42 U.S.C. 12132, it is the policy of the County of Stanislaus that it will not aid or perpetuate discrimination against a qualified individual with a disability by funding an agency, organization, or person that discriminates on the basis of handicap disability in providing any aid, benefit, or service to beneficiaries of the program or activity.

The County is committed to provide access to all County services, programs, and meetings open to the public to people with disabilities.

In this regard, County and all of its contractors and subcontractors will take all reasonable steps in accordance with 29 U.S.C. 794 and 42 U.S.C. 12132 to ensure that individuals with disabilities have the maximum opportunity for the same level of aid, benefit, or service as any other individual.

CERTIFICATION

Each agency, organization, or person seeking a bid, contract, or agreement with the County of Stanislaus shall sign a Certification of Compliance with 29 U.S.C. 794 and 42 U.S.C. 12132.

CERTIFICATION OF BIDDER REGARDING NON-DISCRIMINATION OF INDIVIDUALS WITH DISABILITIES

The Bidder hereby certifies that he/she/it is in compliance with 29 U.S.C. 794, 42 U.S.C. 12132,, the applicable administrative requirements promulgated in response thereto, and any other applicable Federal laws and regulations relating to discrimination and participation of individuals with disabilities.

This sheet must be completed and submitted with your bid for your bid to be accepted as complete.

NONCOLLUSION AFFIDAVIT

(Title 23 United States Code Section 112 and Public Contract Code Section 7106)

TO THE COUNTY OF STANISLAUS DEPARTMENT OF PUBLIC WORKS

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

(SIGNED) _____ Date: _____

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete.

PUBLIC CONTRACT CODE

Public Contract Code Section 10285.1 Statement

In conformance with Public Contract Code Section 10285.1 (Chapter 376, Stats. 1985), the bidder hereby declares under penalty of perjury under the laws of the State of California that the bidder has _____, has not _____ been convicted within the preceding three years of any offenses referred to in that section, including any charge of fraud, bribery, collusion, conspiracy, or any other act in violation of any state or Federal 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, including 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 10285.1.

Note: The bidder must place a check mark after "has" or "has not" in one of the blank spaces provided. The above Statement is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

Public Contract Code Section 10162 Questionnaire

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

Has the bidder, any officer of the bidder, or any 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 a safety regulation?

Yes No

If the answer is yes, explain the circumstances in the following space.

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.

(SIGNED)

Date:

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete. Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

DEBARMENT AND SUSPENSION CERTIFICATION

TITLE 49, CODE OF FEDERAL REGULATIONS, PART 29

The bidder, under penalty of perjury, certifies that, except as noted below, he/she or any other person associated therewith in the capacity of owner, partner, director, officer, 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 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 3 years.

If there are any exceptions to this certification, insert the exceptions 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 action.

(SIGNED)

Date:

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete. Providing false information may result in criminal prosecution or administrative sanctions.

NONLOBBYING CERTIFICATION FOR FEDERAL-AID CONTRACTS

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

- (1) No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
- (2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in conformance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

EXHIBIT 10-Q DISCLOSURE OF LOBBYING ACTIVITIES

COMPLETE THIS FORM TO DISCLOSE LOBBYING ACTIVITIES PURSUANT TO 31 U.S.C. 1352

1. Type of Federal Action:2. Status of F	ederal Action: 3. Report Type:		
a. contract b. grant c. cooperative agreement d. loan e. loan guarantee f. loan insurance	b. material change		
4. Name and Address of Reporting Entity 5. If Reporting Entity in No. 4 is Subawardee,			
Enter Name and Address of Prime:			
Congressional District, if known	Congressional District, if known		
6. Federal Department/Agency:	7. Federal Program Name/Description:		
	CFDA Number, if applicable		
8. Federal Action Number, if known:	9. Award Amount, if known:		
10. Name and Address of Lobby Entity 11. Individuals Performing Services			
(If individual, last name, first name, MI)	including address if different from No. 10a (If individual, last name, first name, MI)		
(attach Continuation	Sheet(s) if necessary)		
12. Amount of Payment (check all that apply)	14. Type of Payment (check all that apply)		
 S actual planned 13. Form of Payment (check all that apply): a. cash b. in-kind; specify: nature Value 	a. retainer b. one-time fee c. commission d. contingent fee e deferred f. other, specify		
 15. Brief Description of Services Performed or to be performed and Date(s) of Service, including officer(s), employee(s), or member(s) contacted, for Payment Indicated in Item 11: 16. Continuation Sheet(s) attached: Yes No (attach Continuation Sheet(s) if necessary) 			
17. Information requested through this form is authorized by Title 31 U.S.C. Section 1352. This disclosure of lobbying reliance was placed by the tier above when his transaction was made or entered into. This disclosure is required pursuant to 31 U.S.C.	Signature:		
1352. This information will be reported to Congress semiannually and will be available for public inspection. Any person who fails to file the required disclosure shall be subject	 Title:		
to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.	Telephone No.: Date:		
	Authorized for Local Reproduction		
Federal Use Only: Standard Form LI	Standard Form - LLL		

INSTRUCTIONS FOR COMPLETING EXHIBIT 10-Q DISCLOSURE OF LOBBYING ACTIVITIES

This disclosure form shall be completed by the reporting entity, whether subawardee or prime federal recipient at the initiation or receipt of covered federal action or a material change to previous filing pursuant to title 31 U.S.C. Section 1352. The filing of a form is required for such payment or agreement to make payment to lobbying entity for influencing or attempting to influence an officer or employee of any agency, a Member of Congress an officer or employee of Congress or an employee of a Member of Congress in connection with a covered federal action. Attach a continuation sheet for additional information if the space on the form is inadequate. Complete all items that apply for both the initial filing and material change report. Refer to the implementing guidance published by the Office of Management and Budget for additional information.

- 1. Identify the type of covered federal action for which lobbying activity is or has been secured to influence, the outcome of a covered federal action.
- 2. Identify the status of the covered federal action.
- 3. Identify the appropriate classification of this report. If this is a follow-up report caused by a material change to the information previously reported, enter the year and quarter in which the change occurred. Enter the date of the last, previously submitted report by this reporting entity for this covered federal action.
- 4. Enter the full name, address, city, state, and zip code of the reporting entity. Include Congressional District if known. Check the appropriate classification of the reporting entity that designates if it is or expects to be a prime or subaward recipient. Identify the tier of the subawardee, e.g., the first subawardee of the prime is the first tier. Subawards include but are not limited to: subcontracts, subgrants, and contract awards under grants.
- 5. If the organization filing the report in Item 4 checks "Subawardee" then enter the full name, address, city, state, and zip code of the prime federal recipient. Include Congressional District, if known.
- Enter the name of the federal agency making the award or loan commitment. Include at least one organization level below
 agency name, if known. For example, Department of Transportation, United States Coast Guard.
- 7. Enter the federal program name or description for the covered federal action (item 1). If known, enter the full Catalog of Federal Domestic Assistance (CFDA) number for grants, cooperative agreements, loans and loan commitments.
- 8. Enter the most appropriate federal identifying number available for the federal action identification in item 1 (e.g., Request for Proposal (RFP) number, Invitation for Bid (IFB) number, grant announcement number, the contract grant. or loan award number, the application/proposal control number assigned by the federal agency). Include prefixes, e.g., "RFP-DE-90-001."
- 9. For a covered federal action where there has been an award or loan commitment by the Federal agency, enter the federal amount of the award/loan commitments for the prime entity identified in item 4 or 5.
- 10. Enter the full name, address, city, state, and zip code of the lobbying entity engaged by the reporting entity identified in Item 4 to influence the covered federal action.
- Enter the full names of the individual(s) performing services and include full address if different from 10 (a). Enter Last Name, First Name and Middle Initial (Ml).
- 12. Enter the amount of compensation paid or reasonably expected to be paid by the reporting entity (Item 4) to the lobbying entity (Item 10). Indicate whether the payment has been made (actual) or will be made (planned). Check all boxes that apply. If this is a material change report, enter the cumulative amount of payment made or planned to be made.
- 13. Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
- 14. Check all boxes that apply. If other, specify nature.
- 15. Provide a specific and detailed description of the services that the lobbyist has performed or will be expected to perform and the date(s) of any services rendered. Include all preparatory and related activity not just time spent in actual contact with federal officials. Identify the federal officer(s) or employee(s) contacted or the officer(s) employee(s) or Member(s) of Congress that were contacted.
- **16.** Check whether or not a continuation sheet(s) is attached.
- 17. The certifying official shall sign and date the form, and print his/her name title and telephone number.

Public reporting burden for this collection of information is estimated to average 30-minutes per response, including time for reviewing instruction, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to the Office of Management and Budget, Paperwork Reduction Project (0348-0046), Washington, D.C. 20503. SF-LLL-Instructions Rev. 06-04

LPP 13-01

Page 2 May 8, 2013

Depart	W-9 October 2018) ment of the Treasury al Revenue Service	Request for Taxpayer Identification Number and Certifi Go to www.irs.gov/FormW9 for instructions and the lates			Give Form to the requester. Do not send to the IRS.
Print or type. See Specific Instructions on page 3.	2 Business name/d 3 Check appropriat following seven b Individual/sole single-membe Limited liabilit; Note: Check t LLC if the LLC another LLC ti is disregarded Other (see in: 5 Address (number)	proprietor or C Corporation S Corporation Partnership r LLC or company. Enter the tax classification (C=C corporation, S=S corporation, P=Partner he appropriate box in the line above for the tax classification of the single-member own is classified as a single-member LLC that is disregarded from the owner unless the or nat is not disregarded from the owner for U.S. federal tax purposes. Otherwise, a singl from the owner should check the appropriate box for the tax classification of its owner structions) ►	□ Trust/estate ship) ► her. Do not check wher of the LLC is e-member LLC that	certain en instruction Exempt pa Exemptior code (if ar (Applies to acc	counts maintained outside the U.S.)
City, state, and ZIP code City, state, and ZIP code T List account number(s) here (optional) Part I Taxpayer Identification Number (TIN) Enter your TIN in the appropriate box. The TIN provided must match the name given on line 1 to avoid Social security num				urity numl	per
backu reside entitie <i>TIN</i> , I Note:	p withholding. For ent alien, sole propes, it is your employ ater. If the account is in per To Give the Rec	individuals, this is generally your social security number (SSN). However, for ietor, or disregarded entity, see the instructions for Part I, later. For other er identification number (EIN). If you do not have a number, see <i>How to gei</i> more than one name, see the instructions for line 1. Also see <i>What Name a</i> <i>yuester</i> for guidelines on whose number to enter.	ra a or	identificati	-

Under penalties of perjury, I certify that:

- 1. The number shown on this form is my correct taxpayer identification number (or I am waiting for a number to be issued to me); and
- 2. I am not subject to backup withholding because: (a) I am exempt from backup withholding, or (b) I have not been notified by the Internal Revenue Service (IRS) that I am subject to backup withholding as a result of a failure to report all interest or dividends, or (c) the IRS has notified me that I am no longer subject to backup withholding; and
- 3. I am a U.S. citizen or other U.S. person (defined below); and
- 4. The FATCA code(s) entered on this form (if any) indicating that I am exempt from FATCA reporting is correct.

Certification instructions. You must cross out item 2 above if you have been notified by the IRS that you are currently subject to backup withholding because you have failed to report all interest and dividends on your tax return. For real estate transactions, item 2 does not apply. For mortgage interest paid, acquisition or abandonment of secured property, cancellation of debt, contributions to an individual retirement arrangement (IRA), and generally, payments other than interest and dividends, you are not required to sign the certification, but you must provide your correct TIN. See the instructions for Part II, later.

Sign Here	Signature of		
	U.S. person ►		

General Instructions

Section references are to the Internal Revenue Code unless otherwise noted.

Future developments. For the latest information about developments related to Form W-9 and its instructions, such as legislation enacted after they were published, go to www.irs.gov/FormW9.

Purpose of Form

An individual or entity (Form W-9 requester) who is required to file an information return with the IRS must obtain your correct taxpayer identification number (TIN) which may be your social security number (SSN), individual taxpayer identification number (ITIN), adoption taxpayer identification number (ATIN), or employer identification number (EIN), to report on an information return the amount paid to you, or other amount reportable on an information return. Examples of information returns include, but are not limited to, the following.

Form 1099-INT (interest earned or paid)

Date►

Form 1099-DIV (dividends, including those from stocks or mutual funds)

- Form 1099-MISC (various types of income, prizes, awards, or gross proceeds)
- Form 1099-B (stock or mutual fund sales and certain other transactions by brokers)
- Form 1099-S (proceeds from real estate transactions)
- · Form 1099-K (merchant card and third party network transactions)
- Form 1098 (home mortgage interest), 1098-E (student loan interest), 1098-T (tuition)
- Form 1099-C (canceled debt)
- Form 1099-A (acquisition or abandonment of secured property)
 Use Form W-9 only if you are a U.S. person (including a resident
- alien), to provide your correct TIN.

If you do not return Form W-9 to the requester with a TIN, you might be subject to backup withholding. See What is backup withholding, later.

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By signing the filled-out form, you:

1. Certify that the TIN you are giving is correct (or you are waiting for a number to be issued),

2. Certify that you are not subject to backup withholding, or

3. Claim exemption from backup withholding if you are a U.S. exempt payee. If applicable, you are also certifying that as a U.S. person, your allocable share of any partnership income from a U.S. trade or business is not subject to the withholding tax on foreign partners' share of effectively connected income, and

4. Certify that FATCA code(s) entered on this form (if any) indicating that you are exempt from the FATCA reporting, is correct. See *What is FATCA reporting*, later, for further information.

Note: If you are a U.S. person and a requester gives you a form other than Form W-9 to request your TIN, you must use the requester's form if it is substantially similar to this Form W-9.

 $\mbox{Definition of a U.S. person.}$ For federal tax purposes, you are considered a U.S. person if you are:

An individual who is a U.S. citizen or U.S. resident alien;

 A partnership, corporation, company, or association created or organized in the United States or under the laws of the United States;

- An estate (other than a foreign estate); or

A domestic trust (as defined in Regulations section 301.7701-7).

Special rules for partnerships. Partnerships that conduct a trade or business in the United States are generally required to pay a withholding tax under section 1446 on any foreign partners' share of effectively connected taxable income from such business. Further, in certain cases where a Form W-9 has not been received, the rules under section 1446 require a partnership to presume that a partner is a foreign person, and pay the section 1446 withholding tax. Therefore, if you are a U.S. person that is a partner in a partnership conducting a trade or business in the United States, provide Form W-9 to the partnership to establish your U.S. status and avoid section 1446 withholding on your share of partnership income.

In the cases below, the following person must give Form W-9 to the partnership for purposes of establishing its U.S. status and avoiding withholding on its allocable share of net income from the partnership conducting a trade or business in the United States.

• In the case of a disregarded entity with a U.S. owner, the U.S. owner of the disregarded entity and not the entity;

• In the case of a grantor trust with a U.S. grantor or other U.S. owner, generally, the U.S. grantor or other U.S. owner of the grantor trust and not the trust; and

• In the case of a U.S. trust (other than a grantor trust), the U.S. trust (other than a grantor trust) and not the beneficiaries of the trust.

Foreign person. If you are a foreign person or the U.S. branch of a foreign bank that has elected to be treated as a U.S. person, do not use Form W-9. Instead, use the appropriate Form W-8 or Form 8233 (see Pub. 515, Withholding of Tax on Nonresident Aliens and Foreign Entities).

Nonresident alien who becomes a resident alien. Generally, only a nonresident alien individual may use the terms of a tax treatly to reduce or eliminate U.S. tax on certain types of income. However, most tax treaties contain a provision known as a "saving clause." Exceptions specified in the saving clause may permit an exemption from tax to continue for certain types of income even after the payee has otherwise become a U.S. resident alien for tax purposes.

If you are a U.S. resident alien who is relying on an exception contained in the saving clause of a tax treaty to claim an exemption from U.S. tax on certain types of income, you must attach a statement to Form W-9 that specifies the following five items.

1. The treaty country. Generally, this must be the same treaty under which you claimed exemption from tax as a nonresident alien.

2. The treaty article addressing the income.

3. The article number (or location) in the tax treaty that contains the saving clause and its exceptions.

4. The type and amount of income that qualifies for the exemption from tax.

5. Sufficient facts to justify the exemption from tax under the terms of the treaty article.

Example. Article 20 of the U.S.-China income tax treaty allows an exemption from tax for scholarship income received by a Chinese student temporarily present in the United States. Under U.S. law, this student will become a resident alien for tax purposes if his or her stay in the United States exceeds 5 calendar years. However, paragraph 2 of the first Protocol to the U.S.-China treaty (dated April 30, 1984) allows the provisions of Article 20 to continue to apply even after the Chinese student becomes a resident alien of the United States. A Chinese student becomes a resident alien of the United States. A chinese student becomes a resident alien of the United States. A chinese student becomes a resident alien of the United States. A chinese student hor qualifies for this exception to claim an exemption from tax on his or her scholarship or fellowship income would attach to Form W-9 a statement that includes the information described above to support that exemption.

If you are a nonresident alien or a foreign entity, give the requester the appropriate completed Form W-8 or Form 8233.

Backup Withholding

What is backup withholding? Persons making certain payments to you must under certain conditions withhold and pay to the IRS 24% of such payments. This is called "backup withholding." Payments that may be subject to backup withholding include interest, tax-exempt interest, dividends, broker and barter exchange transactions, rents, royalties, nonemployee pay, payments made in settlement of payment card and third party network transactions, and certain payments from fishing boat operators. Real estate transactions are not subject to backup withholding.

You will not be subject to backup withholding on payments you receive if you give the requester your correct TIN, make the proper certifications, and report all your taxable interest and dividends on your tax return.

Payments you receive will be subject to backup withholding if: 1. You do not furnish your TIN to the requester,

2. You do not certify your TIN when required (see the instructions for

Part II for details),

3. The IRS tells the requester that you furnished an incorrect TIN,

4. The IRS tells you that you are subject to backup withholding because you did not report all your interest and dividends on your tax return (for reportable interest and dividends only), or

5. You do not certify to the requester that you are not subject to backup withholding under 4 above (for reportable interest and dividend accounts opened after 1983 only).

Certain payees and payments are exempt from backup withholding. See *Exempt payee code*, later, and the separate Instructions for the Requester of Form W-9 for more information.

Also see Special rules for partnerships, earlier.

What is FATCA Reporting?

The Foreign Account Tax Compliance Act (FATCA) requires a participating foreign financial institution to report all United States account holders that are specified United States persons. Certain payees are exempt from FATCA reporting. See *Exemption from FATCA reporting code*, later, and the Instructions for the Requester of Form W-9 for more information.

Updating Your Information

You must provide updated information to any person to whom you claimed to be an exempt payee if you are no longer an exempt payee and anticipate receiving reportable payments in the future from this person. For example, you may need to provide updated information if you are a C corporation that elects to be an S corporation, or if you no longer are tax exempt. In addition, you must furnish a new Form W-9 if the name or TIN changes for the account; for example, if the grantor of a grantor trust dies.

Penalties

Failure to furnish TIN. If you fail to furnish your correct TIN to a requester, you are subject to a penalty of \$50 for each such failure unless your failure is due to reasonable cause and not to wilfful neglect. Civil penalty for false information with respect to withholding. If you make a false statement with no reasonable basis that results in no backup withholding, you are subject to a \$500 penalty.

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Criminal penalty for falsifying information. Willfully falsifying certifications or affirmations may subject you to criminal penalties including fines and/or imprisonment.

Misuse of TINs. If the requester discloses or uses TINs in violation of federal law, the requester may be subject to civil and criminal penalties.

Specific Instructions

Line 1

You must enter one of the following on this line; **do not** leave this line blank. The name should match the name on your tax return.

If this Form W-9 is for a joint account (other than an account maintained by a foreign financial institution (FFI)), list first, and then circle, the name of the person or entity whose number you entered in Part I of Form W-9. If you are providing Form W-9 to an FFI to document a joint account, each holder of the account that is a U.S. person must provide a Form W-9.

a. Individual. Generally, enter the name shown on your tax return. If you have changed your last name without informing the Social Security Administration (SSA) of the name change, enter your first name, the last name as shown on your social security card, and your new last name.

Note: ITIN applicant: Enter your individual name as it was entered on your Form W-7 application, line 1a. This should also be the same as the name you entered on the Form 1040/1040A/1040EZ you filed with your application.

b. Sole proprietor or single-member LLC. Enter your individual name as shown on your 1040/1040A/1040EZ on line 1. You may enter your business, trade, or "doing business as" (DBA) name on line 2.

c. Partnership, LLC that is not a single-member LLC, C corporation, or S corporation. Enter the entity's name as shown on the entity's tax return on line 1 and any business, trade, or DBA name on line 2.

d. Other entities. Enter your name as shown on required U.S. federal tax documents on line 1. This name should match the name shown on the charter or other legal document creating the entity. You may enter any business, trade, or DBA name on line 2.

e. Disregarded entity. For U.S. federal tax purposes, an entity that is disregarded as an entity separate from its owner is treated as a "disregarded entity." See Regulations section 301.7701-2(c)(2)(iii). Enter the owner's name on line 1. The name of the entity entered on line 1 should never be a disregarded entity. The name on line 1 should be the name shown on the income tax return on which the income should be reported. For example, if a foreign LLC that is treated as a disregarded entity is a single owner that is a U.S. person, the U.S. owner's name is required to be provided on line 1. If the direct owner of the entity is also a disregarded entity, enter the first owner that is not disregarded entity is a foreign person, the owner of the disregarded entity is a foreign person, the owner of the disregarded entity is a foreign person, the owner of the disregarded entity is a foreign person, the owner of the disregarded entity is a foreign person, the owner of the disregarded entity is a foreign person, the owner of the disregarded entity is a foreign person, the owner was complete an appropriate Form W-8 instead of a Form W-9. This is the case even if the foreign person has a U.S. TIN.

Line 2

If you have a business name, trade name, DBA name, or disregarded entity name, you may enter it on line 2.

Line 3

Check the appropriate box on line 3 for the U.S. federal tax classification of the person whose name is entered on line 1. Check only one box on line 3.

IF the entity/person on line 1 is a(n)	THEN check the box for		
Corporation	Corporation		
 Individual Sole proprietorship, or Single-member limited liability company (LLC) owned by an individual and disregarded for U.S. federal tax purposes. 	Individual/sole proprietor or single- member LLC		
 LLC treated as a partnership for U.S. federal tax purposes, LLC that has filed Form 8832 or 2553 to be taxed as a corporation, or LLC that is disregarded as an entity separate from its owner but the owner is another LLC that is not disregarded for U.S. federal tax purposes. 	Limited liability company and enter the appropriate tax classification. (P= Partnership; C= C corporation or S= S corporation)		
Partnership	Partnership		
Trust/estate	Trust/estate		

Line 4, Exemptions

If you are exempt from backup withholding and/or FATCA reporting, enter in the appropriate space on line 4 any code(s) that may apply to you.

Exempt payee code.

 Generally, individuals (including sole proprietors) are not exempt from backup withholding.

 Except as provided below, corporations are exempt from backup withholding for certain payments, including interest and dividends.

Corporations are not exempt from backup withholding for payments
made in settlement of payment card or third party network transactions.

 Corporations are not exempt from backup withholding with respect to attorneys' fees or gross proceeds paid to attorneys, and corporations that provide medical or health care services are not exempt with respect to payments reportable on Form 1099-MISC.

The following codes identify payees that are exempt from backup withholding. Enter the appropriate code in the space in line 4.

1—An organization exempt from tax under section 501(a), any IRA, or a custodial account under section 403(b)(7) if the account satisfies the requirements of section 401(f)(2)

2-The United States or any of its agencies or instrumentalities

3---A state, the District of Columbia, a U.S. commonwealth or possession, or any of their political subdivisions or instrumentalities

4---A foreign government or any of its political subdivisions, agencies, or instrumentalities

5-A corporation

6---A dealer in securities or commodities required to register in the United States, the District of Columbia, or a U.S. commonwealth or possession

7---A futures commission merchant registered with the Commodity Futures Trading Commission

8—A real estate investment trust

9—An entity registered at all times during the tax year under the Investment Company Act of 1940

10—A common trust fund operated by a bank under section 584(a) 11—A financial institution

12—A middleman known in the investment community as a nominee or custodian

13—A trust exempt from tax under section 664 or described in section 4947

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The following chart shows types of payments that may be exempt from backup withholding. The chart applies to the exempt payees listed above. 1 through 13

IF the payment is for	THEN the payment is exempt for All exempt payees except for 7 Exempt payees 1 through 4 and 6 through 11 and all C corporations. S corporations must not enter an exempt payee code because they are exempt only for sales of noncovered securities acquired prior to 2012.		
Interest and dividend payments			
Broker transactions			
Barter exchange transactions and patronage dividends	Exempt payees 1 through 4		
Payments over \$600 required to be reported and direct sales over \$5,000 ¹	Generally, exempt payees 1 through 5 ²		
Payments made in settlement of payment card or third party network transactions	Exempt payees 1 through 4		

¹ See Form 1099-MISC, Miscellaneous Income, and its instructions.

² However, the following payments made to a corporation and reportable on Form 1099-MISC are not exempt from backup withholding: medical and health care payments, attorneys' fees, gross proceeds paid to an attorney reportable under section 6045(f), and payments for services paid by a federal executive agency.

Exemption from FATCA reporting code. The following codes identify payees that are exempt from reporting under FATCA. These codes apply to persons submitting this form for accounts maintained outside of the United States by certain foreign financial institutions. Therefore, if you are only submitting this form for an account you hold in the United States, you may leave this field blank. Consult with the person requesting this form if you are uncertain if the financial institution is subject to these requirements. A requester may indicate that a code is not required by providing you with a Form W-9 with "Not Applicable" (or any similar indication) written or printed on the line for a FATCA exemption code.

A—An organization exempt from tax under section 501(a) or any individual retirement plan as defined in section 7701(a)(37)

B—The United States or any of its agencies or instrumentalities C—A state, the District of Columbia, a U.S. commonwealth or

possession, or any of their political subdivisions or instrumentalities

D—A corporation the stock of which is regularly traded on one or more established securities markets, as described in Regulations section 1.1472-1(c)(1)(i)

 $E{-\!-}A$ corporation that is a member of the same expanded affiliated group as a corporation described in Regulations section 1.1472-1(c)(1)(i)

F—A dealer in securities, commodities, or derivative financial instruments (including notional principal contracts, futures, forwards, and options) that is registered as such under the laws of the United States or any state

G-A real estate investment trust

H—A regulated investment company as defined in section 851 or an entity registered at all times during the tax year under the Investment Company Act of 1940

I-A common trust fund as defined in section 584(a) J-

A bank as defined in section 581

K-A broker

L—A trust exempt from tax under section 664 or described in section 4947(a)(1)

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M—A tax exempt trust under a section 403(b) plan or section 457(g) plan

Note: You may wish to consult with the financial institution requesting this form to determine whether the FATCA code and/or exempt payee code should be completed.

Line 5

Enter your address (number, street, and apartment or suite number). This is where the requester of this Form W-9 will mail your information returns. If this address differs from the one the requester already has on file, write NEW at the top. If a new address is provided, there is still a chance the old address will be used until the payor changes your address in their records.

Line 6

Enter your city, state, and ZIP code.

Part I. Taxpayer Identification Number (TIN)

Enter your TIN in the appropriate box. If you are a resident alien and you do not have and are not eligible to get an SSN, your TIN is your IRS individual taxpayer identification number (ITIN). Enter it in the social security number box. If you do not have an ITIN, see *How to get a TIN* below.

If you are a sole proprietor and you have an EIN, you may enter either your SSN or EIN.

If you are a single-member LLC that is disregarded as an entity separate from its owner, enter the owner's SSN (or EIN, if the owner has one). Do not enter the disregarded entity's EIN. If the LLC is classified as a corporation or partnership, enter the entity's EIN.

Note: See What Name and Number To Give the Requester, later, for further clarification of name and TIN combinations.

How to get a TIN. If you do not have a TIN, apply for one immediately. To apply for an SSN, get Form SS-5, Application for a Social Security

Card, from your local SSA office or get this form online at www.SSA.gov. You may also get this form by calling 1-800-772-1213. Use Form W-7, Application for IRS Individual Taxpayer Identification Number, to apply for an ITIN, or Form SS-4, Application for Employer Identification Number, to apply for an EIN. You can apply for an EIN online by accessing the IRS website at www.irs.gov/Businesses and clicking on Employer Identification Number (EIN) under Starting a Business. Go to www.irs.gov/Forms to view, download, or print Form W-7 and/or Form SS-4. Or, you can go to www.irs.gov/OrderForms to place an order and have Form W-7 and/or SS-4 mailed to you within 10 business days.

If you are asked to complete Form W-9 but do not have a TIN, apply for a TIN and write "Applied For" in the space for the TIN, sign and date the form, and give it to the requester. For interest and dividend payments, and certain payments made with respect to readily tradable instruments, generally you will have 60 days to get a TIN and give it to the requester before you are subject to backup withholding on payments. The 60-day rule does not apply to other types of payments. You will be subject to backup withholding on all such payments until you provide your TIN to the requester.

Note: Entering "Applied For" means that you have already applied for a TIN or that you intend to apply for one soon.

Caution: A disregarded U.S. entity that has a foreign owner must use the appropriate Form W-8.

Part II. Certification

To establish to the withholding agent that you are a U.S. person, or resident alien, sign Form W-9. You may be requested to sign by the withholding agent even if item 1, 4, or 5 below indicates otherwise.

For a joint account, only the person whose TIN is shown in Part I should sign (when required). In the case of a disregarded entity, the person identified on line 1 must sign. Exempt payees, see *Exempt payee code*, earlier.

Signature requirements. Complete the certification as indicated in items 1 through 5 below.

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1. Interest, dividend, and barter exchange accounts opened before 1984 and broker accounts considered active during 1983. You must give your correct TIN, but you do not have to sign the certification.

2. Interest, dividend, broker, and barter exchange accounts opened after 1983 and broker accounts considered inactive during 1983. You must sign the certification or backup withholding will apply. If you are subject to backup withholding and you are merely providing your correct TIN to the requester, you must cross out item 2 in the certification before signing the form.

3. Real estate transactions. You must sign the certification. You may cross out item 2 of the certification.

4. Other payments. You must give your correct TIN, but you do not have to sign the certification unless you have been notified that you have previously given an incorrect TIN. "Other payments" include payments made in the course of the requester's trade or business for rents, royalties, goods (other than bills for merchandise), medical and health care services (including payments to corporations), payments to a nonemployee for services, payments made in settlement of payment card and third party network transactions, payments to certain fishing boat crew members and fishermen, and gross proceeds paid to attorneys (including payments to corporations).

5. Mortgage interest paid by you, acquisition or abandonment of secured property, cancellation of debt, qualified tuition program payments (under section 529), ABLE accounts (under section 529A), IRA, Coverdell ESA, Archer MSA or HSA contributions or distributions, and pension distributions. You must give your correct TIN, but you do not have to sign the certification.

What Name and Number To Give the Requester

For this type of account:	Give name and SSN of:		
1. Individual	The individual		
2. Two or more individuals (joint account) other than an account maintained by an FFI	The actual owner of the account or, if combined funds, the first individual on the account ¹		
3. Two or more U.S. persons (joint account maintained by an FFI)	Each holder of the account		
 Custodial account of a minor (Uniform Gift to Minors Act) 	The minor ²		
5. a. The usual revocable savings trust (grantor is also trustee)	The grantor-trustee ¹		
b. So-called trust account that is not a legal or valid trust under state law	The actual owner ¹		
Sole proprietorship or disregarded entity owned by an individual	The owner ³		
7. Grantor trust filing under Optional Form 1099 Filing Method 1 (see Regulations section 1.671-4(b)(2)(i) (A))	The grantor*		
For this type of account:	Give name and EIN of:		
8. Disregarded entity not owned by an individual	The owner		
9. A valid trust, estate, or pension trust	Legal entity ⁴		
10. Corporation or LLC electing corporate status on Form 8832 or Form 2553	The corporation		
 Association, club, religious, charitable, educational, or other tax- exempt organization 	The organization		
	The partnership		
Partnership or multi-member LLC	The participant		

For this type of account:	Give name and EIN of
14. Account with the Department of Agriculture in the name of a public entity (such as a state or local government, school district, or prison) that receives agricultural program payments	The public entity
15. Grantor trust filing under the Form 1041 Filing Method or the Optional Form 1099 Filing Method 2 (see Regulations section 1.671-4(b)(2)(i)(B))	The trust

¹ List first and circle the name of the person whose number you furnish. If only one person on a joint account has an SSN, that person's number must be furnished.

² Circle the minor's name and furnish the minor's SSN.

³ You must show your individual name and you may also enter your business or DBA name on the "Business name/disregarded entity" name line. You may use either your SSN or EIN (if you have one), but the IRS encourages you to use your SSN.

⁴ List first and circle the name of the trust, estate, or pension trust. (Do not furnish the TIN of the personal representative or trustee unless the legal entity itself is not designated in the account title.) Also see Special rules for partnerships, earlier.

*Note: The grantor also must provide a Form W-9 to trustee of trust. Note: If no name is circled when more than one name is listed, the number will be considered to be that of the first name listed.

Secure Your Tax Records From Identity Theft

Identity theft occurs when someone uses your personal information such as your name, SSN, or other identifying information, without your permission, to commit fraud or other crimes. An identity thief may use your SSN to get a job or may file a tax return using your SSN to receive a refund.

To reduce your risk:

· Protect your SSN,

Ensure your employer is protecting your SSN, and

Be careful when choosing a tax preparer.

If your tax records are affected by identity theft and you receive a notice from the IRS, respond right away to the name and phone number printed on the IRS notice or letter.

If your tax records are not currently affected by identity theft but you think you are at risk due to a lost or stolen purse or wallet, questionable credit card activity or credit report, contact the IRS Identity Theft Hotline at 1-800-908-4490 or submit Form 14039.

For more information, see Pub. 5027, Identity Theft Information for Taxpayers.

Victims of identity theft who are experiencing economic harm or a systemic problem, or are seeking help in resolving tax problems that have not been resolved through normal channels, may be eligible for Taxpayer Advocate Service (TAS) assistance. You can reach TAS by calling the TAS toll-free case intake line at 1-877-777-4778 or TTY/TDD 1-800-829-4059.

Protect yourself from suspicious emails or phishing schemes. Phishing is the creation and use of email and websites designed to mimic legitimate business emails and websites. The most common act is sending an email to a user falsely claiming to be an established legitimate enterprise in an attempt to scam the user into surrendering private information that will be used for identity theft.

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Form W-9 (Rev. 10-2018)

The IRS does not initiate contacts with taxpayers via emails. Also, the IRS does not request personal detailed information through email or ask taxpayers for the PIN numbers, passwords, or similar secret access information for their credit card, bank, or other financial accounts.

If you receive an unsolicited email claiming to be from the IRS, forward this message to *phishing@is.gov*. You may also report misuse of the IRS name, logo, or other IRS property to the Treasury Inspector General for Tax Administration (TIGTA) at 1-800-366-4484. You can forward suspicious emails to the Federal Trade Commission at *spam@uce.gov* or report them at *www.ftc.gov/complaint*. You can contact the FTC at *www.ftc.gov/idtheft* or 877-IDTHEFT (877-438-4338). If you have been the victim of identity theft, see *www.identityTheft.gov* and Pub. 5027.

Visit www.irs.gov/IdentityTheft to learn more about identity theft and how to reduce your risk.

Privacy Act Notice

Section 6109 of the Internal Revenue Code requires you to provide your correct TIN to persons (including federal agencies) who are required to file information returns with the IRS to report interest, dividends, or certain other income paid to you; mortgage interest you paid; the acquisition or abandonment of secured property; the cancellation of debt; or contributions you made to an IRA, Archer MSA, or HSA. The person collecting this form uses the information on the form to file information returns with the IRS, reporting the above information. Routine uses of this information include giving it to the Department of Justice for civil and criminal litigation and to cities, states, the District of Columbia, and U.S. commonwealths and possessions for use in administering their laws. The information also may be disclosed to other countries under a treaty, to federal and state agencies to enforce civil and criminal laws, or to federal law enforcement and intelligence agencies to combat terrorism. You must provide your TIN whether or not you are required to file a tax return. Under section 3406, payers must generally withhold a percentage of taxable interest, dividend, and certain other payments to a payee who does not give a TIN to the payer. Certain penalties may also apply for providing false or fraudulent information.

PROPOSAL SIGNATURE SHEET

Accompanying this proposal is ______ (insert the words "cash," "cashier's check," "certified check," or "bidder's bond," (\$ _____)," as the case may be) in amount equal to at least ten percent of the total of the bid.

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

If bidder or other interested person is a corporation, state legal name of corporation, also names of the president, secretary, treasurer, and manager thereof; if a copartnership, state true name of firm, also names of all individual copartners composing firm; if bidder or other interested person is an individual, state first and last names in full.

Licensed in conformance with an act providing for the registration of contractors,

License No. _____ Classification(s)_____

Expiration Date _____

<u>ADDENDA</u> – THIS PROPOSAL IS SUBMITTED WITH RESPECT TO THE CHANGES TO THE CONTRACT INCLUDED IN ADDEND NUMBER/S

(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Engineer's Estimate sheets that were received as part of the addenda.)

By my signature on this proposal I certify, under penalty of perjury under the laws of the State of California, that the foregoing 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 Noncollusion 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.

Date:	
	0' (1T'(1 CD'11
	Signature and Title of Bidder
Business Address:	
Place of Business:	
Place of Residence:	

Note: This sheet must be completed and submitted with your bid for your bid to be accepted as complete.

COUNTY OF STANISLAUS DEPARTMENT OF PUBLIC WORKS

BIDDER'S BOND

We, _______as Principal, and ______as Surety are bound unto the County of Stanislaus, State of California, hereafter referred to as "Obligee", in the penal sum of ten percent (10%) of the total amount of the bid of the Principal submitted to the Obligee for the work described below, for the payment of which sum we bind ourselves, jointly and severally,

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal is submitted to the Obligee, for the **Crows Landing Road (Whitmore Avenue to Hatch Road) Federal Aid Project No. HSIPL-5938(238)**, for which bids are to be opened at Stanislaus County Board of Supervisors Office, Tenth Street Place, 1010 10th Street, Room 6709, Public Works, 1716 Morgan Road, Modesto, CA, April 8, 2020.

NOW, THEREFORE, if the Principal is awarded the contract and, within the time and manner required under the specifications, after the prescribed forms are presented to him for signature, enters into a written contract, in the prescribed form, in conformance with the bid, and files two bonds with the Obligee, one to guarantee faithful performance of the contract and the other to guarantee payment for labor and materials as provided by law, then this obligation shall be null and void; otherwise, it shall remain in full force.

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

Dated: _____

Principal

Surety

By:

Attorney-in-fact

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

CERTIFICATE OF ACKNOWLEDGEMENT

ATTACH APPROPRIATE NOTARY CERTIFICATE AND SEAL

Note: A Bidder's Bond must be completed and submitted with your bid for your bid to be accepted as complete.

EXHIBIT 15-G CONSTRUCTION CONTRACT DBE COMMITMENT

1. Local Agency:

2. Contract DBE Goal:

3. Project Description:

4. Project Location:

5. Bidder's Name:

6. Prime Certified DBE: D 7. Bid Amount: 8. Total Dollar Amount for ALL Subcontractors: ______ 9. Total Number of ALL Subcontractors: ______

10. Bid Item Number	11. Description of Work, Service, or Materials Supplied	12. DBE Certification Number	13. DBE Contact Information (Must be certified on the date bids are opened)	14. DBE Dollar Amount
Local	Agency to Complete this Section upon Executio	n of Award		s
21. Local A	gency Contract Number:		15. TOTAL CLAIMED DBE PARTICIPATION	-D
22. Federa	I-Aid Project Number:			%
23. Bid Ope	ening Date:			//
24. Contrac	ct Award Date:		IMPORTANT: Identify all DBE firms being claimed for	or credit
25. Award	Amount:		regardless of tier. Names of the First Tier DBE Subo their respective item(s) of work listed above must be	ontractors and
Local Agency certifies that all DBE certifications are valid and information on this form is complete and accurate.		where applicable with the names and items of the we "Subcontractor List" submitted with your bid. Written each listed DBE is required.	ork in the	
26. Loca	Agency Representative's Signature 27. Date		16. Preparer's Signature 17. Dat	e
28. Loca	Agency Representative's Name 29. Phor	ne	18. Preparer's Name 19. Pho	one
30. Loca	I Agency Representative's Title		20. Preparer's Title	

DISTRIBUTION: 1. Original – Local Agency 2. Copy – Caltrans District Local Assistance Engineer (DLAE). Failure to submit to DLAE within 30 days of contract execution may result in de-obligation of federal funds on contract. 3. Include additional copy with award package.

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Exhibit 15-G

Construction Contract DBE Commitment

ADA Notice: For individuals with sensory disabilities, this document is available in alternate formats. For information call (916) 654-6410 or TDD (916) 654-3880 or write Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814. INSTRUCTIONS – CONSTRUCTION CONTRACT DBE COMMITMENT

CONTRACTOR SECTION

1. Local Agency - Enter the name of the local agency that is administering the contract.

2. Contract DBE Goal - Enter the contract DBE goal percentage as it appears on the project advertisement.

3. Project Location - Enter the project location(s) as it appears on the project advertisement.

4. Project Description - Enter the project description as it appears on the project advertisement (Bridge Rehab, Seismic Rehab, Overlay, Widening, etc).

5. Bidder's Name - Enter the contractor's firm name.

6. Prime Certified DBE - Check box if prime contractor is a certified DBE.

7. Bid Amount - Enter the total contract bid dollar amount for the prime contractor.

8. Total Dollar Amount for <u>ALL</u> Subcontractors – Enter the total dollar amount for all subcontracted contractors.

SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.

9. Total number of <u>ALL</u> subcontractors – Enter the total number of all subcontracted contractors. SUM = (DBEs + all Non-DBEs). Do not include the prime contractor information in this count.

10. Bid Item Number - Enter bid item number for work, services, or materials supplied to be provided.

11. Description of Work, Services, or Materials Supplied - Enter description of work, services, or materials to be provided. Indicate all work to be performed by DBEs including work performed by the prime contractor's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms. 12. DBE Certification Number - Enter the DBE's Certification Identification Number. All DBEs must be certified on the date bids are opened.

13. DBE Contact Information - Enter the name, address, and phone number of all DBE subcontracted contractors. Also, enter the prime contractor's name and phone number, if the prime is a DBE.

14. DBE Dollar Amount - Enter the subcontracted dollar amount of the work to be performed or service to be provided. Include the prime contractor if the prime is a DBE. See LAPM Chapter 9 for how to count full/partial participation.

15. Total Claimed DBE Participation - \$: Enter the total dollar amounts entered in the "DBE Dollar Amount" column. %: Enter the total DBE participation claimed ("Total Claimed DBE Participation Dollars" divided by item "Bid Amount"). If the total % claimed is less than item "Contract DBE Goal," an adequately documented Good Faith Effort

(GFE) is required (see Exhibit 15-H DBE Information - Good Faith Efforts of the LAPM).

16. Preparer's Signature - The person completing the DBE commitment form on behalf of the contractor's firm must sign their name.

17. Date - Enter the date the DBE commitment form is signed by the contractor's preparer.

18. Preparer's Name - Enter the name of the person preparing and signing the contractor's DBE commitment form.

19. Phone - Enter the area code and phone number of the person signing the contractor's DBE commitment form.

20. Preparer's Title - Enter the position/title of the person signing the contractor's DBE commitment form.

LOCAL AGENCY SECTION

21. Local Agency Contract Number - Enter the Local Agency contract number or identifier.

22. Federal-Aid Project Number - Enter the Federal-Aid Project Number(s).

23. Bid Opening Date - Enter the date contract bids were opened.

24. Contract Award Date - Enter the date the contract was executed.

25. Award Amount - Enter the contract award amount as stated in the executed contract.

26. Local Agency Representative's Signature - The person completing this section of the form for the Local Agency must sign their name to certify that the information in this and the Contractor Section of this form is complete and accurate.

27. Date - Enter the date the DBE commitment form is signed by the Local Agency Representative.

28. Local Agency Representative's Name - Enter the name of the Local Agency Representative certifying the contractor's DBE commitment form.

29. Phone - Enter the area code and phone number of the person signing the contractor's DBE commitment form.

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Exhibit 15-G

Construction Contract DBE Commitment

30. Local Agency Representative Title - Enter the position/title of the Local Agency Representative certifying the contractor's DBE commitment form.

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EXHIBIT 17-O DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE

1. Local Age	ncy Contract Number	2. Federal-Aid	Project Number 3. Local Agency			4. Contract Completion Date		
5. Contracto	r/Consultant		6. Bus	siness Address			7. Final Con	ract Amount
8. Contract Item Number	9. DBE Contact II	nformation		10. DBE Certification Number	11. Amount Paid While Certified	12. Certification/ Decertification Date (Letter Attached)	13.	Comments

If there were no changes in the DBE certification of subcontractors/subconsultants, indicate on the form.

I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT				
14. Contractor/Consultant Representative's Signature	15. Contractor/Consultant Representative's Name	16. Phone	17. Date	
I CERTIFY THAT THE CONTRACTING RECORDS AND ON-SITE PERFORMANCE OF THE DBE(S) HAS BEEN MONITORED				
I CERTIFY THAT THE CONTRA	CTING RECORDS AND ON-SITE PERFORMANCE OF THE DBE(S) HAS I	BEEN MONITORED		
I CERTIFY THAT THE CONTRA 18. Local Agency Representative's Signature	CTING RECORDS AND ON-SITE PERFORMANCE OF THE DBE(S) HAS E 19. Local Agency Representative's Name	20. Phone	21. Date	

DISTRIBUTION: Original - Local Agency, Copy - Caltrans District Local Assistance Engineer. Include with Final Report of Expenditures

ADA NOTICE: For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, Local Assistance Procedures Manual TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814. Local Assistance Procedures Manual

INSTRUCTIONS –DISADVANTAGED BUSINESS ENTERPRISES (DBE) CERTIFICATION STATUS CHANGE

1. Local Agency Contract Number - Enter the Local Agency contract number or identifier.

2. Federal-Aid Project Number - Enter the Federal-Aid Project Number.

3. Local Agency - Enter the name of the local or regional agency that is funding the contract.

4. Contract Completion Date - Enter the date the contract was completed.

5. Contractor/Consultant - Enter the contractor/consultant's firm name.

6. Business Address - Enter the contractor/consultant's business address.

7. Final Contract Amount - Enter the total final amount for the contract.

8. Contract Item Number - Enter contract item for work, services, or materials supplied provided. Not applicable for consultant contracts.

9. DBE Contact Information - Enter the name, address, and phone number of all DBE subcontracted contractors/consultants.

10. DBE Certification Number - Enter the DBE's Certification Identification Number.

11. Amount Paid While Certified - Enter the actual dollar value of the work performed by those subcontractors/subconsultants during the time period they are certified as a DBE.

12. Certification/Decertification Date (Letter Attached) - Enter either the date of the Decertification Letter sent out by the Office of Business and Economic Opportunity (OBEO) or the date of the Certification Certificate mailed out by OBEO.

13. Comments - If needed, provide any additional information in this section regarding any of the above certification status changes.

14. Contractor/Consultant Representative's Signature - The person completing the form on behalf of the contractor/consultant's firm must sign their name.

15. Contractor/Consultant Representative's Name - Enter the name of the person preparing and signing the form.

16. Phone - Enter the area code and telephone number of the person signing the form.

17. Date - Enter the date the form is signed by the contractor's preparer.

18. Local Agency Representative's Signature - A Local Agency Representative must sign their name to certify

that the contracting records and on-site performance of the DBE(s) has been monitored.

19. Local Agency Representative's Name - Enter the name of the Local Agency Representative signing the form.

20. Phone - Enter the area code and telephone number of the person signing the form.

21. Date - Enter the date the form is signed by the Local Agency Representative.

EXHIBIT 15-H DBE INFORMATION — GOOD FAITH EFFORTS

DBE INFORMATION - GOOD FAITH EFFORTS

Federal-aid Project No. _____ Bid Opening Date _____

The <u>(City/County of)</u> established a Disadvantaged Business Enterprise (DBE) goal of _____% for this project. The information provided herein shows that a good faith effort was made.

Lowest, second lowest and third lowest bidders shall submit the following information to document adequate good faith efforts. Bidders should submit the following information even if the "Local Agency Bidder DBE Commitment" form indicates that the bidder has met the DBE goal. This will protect the bidder's eligibility for award of the contract if the administering agency determines that the bidder failed to meet the goal for various reasons, e.g., a DBE firm was not certified at bid opening, or the bidder made a mathematical error.

Submittal of only the "Local Agency Bidder DBE Commitment" form may not provide sufficient documentation to demonstrate that adequate good faith efforts were made.

The following items are listed in the Section entitled "Submission of DBE Commitment" of the Special Provisions:

A. The names and dates of each publication in which a request for DBE participation for this project was placed by the bidder (please attach copies of advertisements or proofs of publication):

Publications	Dates of Advertisement		

B. The names and dates of written notices sent to certified DBEs soliciting bids for this project and the dates and methods used for following up initial solicitations to determine with certainty whether the DBEs were interested (please attach copies of solicitations, telephone records, fax confirmations, etc.):

Names of DBEs Solicited	Date of Initial Solicitation	Follow Up Methods and Dates

OB 12-04

Exhibit 15-H	Local Assistance Procedures Manual
DBE Information -Good Faith Effort	

C. The items of work which the bidder made available to DBE firms including, where appropriate, any breaking down of the contract work items (including those items normally performed by the bidder with its own forces) into economically feasible units to facilitate DBE participation. It is the bidder's responsibility to demonstrate that sufficient work to facilitate DBE participation was made available to DBE firms.

Items of Work	Bidder Normally Performs Item (Y/N)	Breakdown of Items	Amount (\$)	Percentage Of Contract

D. The names, addresses and phone numbers of rejected DBE firms, the reasons for the bidder's rejection of the DBEs, the firms selected for that work (please attach copies of quotes from the firms involved), and the price difference for each DBE if the selected firm is not a DBE:

Names, addresses and phone numbers of rejected DBEs and the reasons for the bidder's rejection of the DBEs:

Names, addresses and phone numbers of firms selected for the work above:

E. Efforts made to assist interested DBEs in obtaining bonding, lines of credit or insurance, and any technical assistance or information related to the plans, specifications and requirements for the work which was provided to DBEs:

F. Efforts made to assist interested DBEs in obtaining necessary equipment, supplies, materials or related assistance or services, excluding supplies and equipment the DBE subcontractor purchases or leases from the prime contractor or its affiliate:

G. The names of agencies, organizations or groups contacted to provide assistance in contacting, recruiting and using DBE firms (please attach copies of requests to agencies and any responses received, i.e., lists, Internet page download, etc.):

Name of Agency/Organization	Aethod/Date of Contact	Results
-----------------------------	------------------------	---------

H. Any additional data to support a demonstration of good faith efforts (use additional sheets if necessary):

NOTE: USE ADDITIONAL SHEETS OF PAPER IF NECESSARY.

Local Assistance Procedures Manual

Exhibit 17-F Final Report-Utilization of Disadvantaged Business Enterprises (DBE) and First-Tier Subcontractors

EXHIBIT 17-F FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE) AND FIRST-TIER SUBCONTRACTORS

1. Local Age	1. Local Agency Contract Number 2. Federal	2. Federal-Aid Project Number	3. Local Agency				4. Contract Completion Date	npletion Date
5. Contractor/Consultant	ar/Consultant	6. Business Address				7. Final Contract Amount	act Amount	
8. Contract Item	9. Description of Work, Service, or Materials Supplied	10. Company Name and	9	11. DBE Certification	12. Contract Payments	Payments	13. Date Work	14. Date of Final
Number	אומנפו מוא סטיףוופט	םמאוומאל אלומון מאל		Number	Nan-DBE	DBE	Completed	Payment
15. ORIGINA	15. ORIGINAL DBE COMMITMENT AMOUNT \$			16. TOTAL				
List all first-tiel award, provide	List all first-tier subcontractors/subconsultants and DBEs regardees of tier whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of work) was different than that approved at the time of award, provide comments on an additional page. List actual amount paid to each entity. If no subcontractors/subconsultants were used on the contract, indicate on the form.	nts and DBEs regardiess of tier whether or not the firms were originally listed for goal credit. If actual DBE utilization (or item of w page. List actual amount paid to each entity. If no subcontractors/subconsultants were used on the contract, indicate on the form.	y listed for goal credi consultants were use	it. If actual DBE utilize d on the contract, inc	ation (or item of wor licate on the form.	rk) was different t	han that approved a	tt the time of
		I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT	1ATION IS COMPLE	TE AND CORRECT				
17. Contract	17. Contractor/Consultant Representative's Signature	18. Contractor/Consultant Representative's Name	ative`s Name		19. Phone		20. Date	
	I CERTIFY THAT TH	I CERTIFY THAT THE CONTRACTING RECORDS AND ON SITE PERFORMANCE OF THE DBE(S) HAS BEEN MONITORED	TE PERFORMANCE	: OF THE DBE(S) H	AS BEEN MONITO	RED		
21. Local Ag	21. Local Agency Representative's Signature	22. Local Agency Representative's Name	ame		23. Phone		24. Date	

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For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, Local Assistance Procedures Manual TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

DISTRIBUTION: Original – Local Agency, Copy – Caltrans District Local Assistance Engineer. Include with Final Report of Expenditures

ADA NOTICE:

Local Assistance Procedures Manual

INSTRUCTIONS – FINAL REPORT-UTILIZATION OF DISADVANTAGED BUSINESS ENTERPRISES (DBE) AND FIRST-TIER SUBCONTRACTORS

1. Local Agency Contract Number - Enter the Local Agency contract number or identifier.

2. Federal-Aid Project Number - Enter the Federal-Aid Project Number.

3. Local Agency - Enter the name of the local or regional agency that is funding the contract.

4. Contract Completion Date - Enter the date the contract was completed.

5. Contractor/Consultant - Enter the contractor/consultant's firm name.

6. Business Address - Enter the contractor/consultant's business address.

7. Final Contract Amount - Enter the total final amount for the contract.

8. Contract Item Number - Enter contract item for work, services, or materials supplied provided. Not applicable for consultant contracts.

9. Description of Work, Services, or Materials Supplied - Enter description of work, services, or materials provided. Indicate all work to be performed by DBEs including work performed by the prime contractor/consultant's own forces, if the prime is a DBE. If 100% of the item is not to be performed or furnished by the DBE, describe the exact portion to be performed or furnished by the DBE. See LAPM Chapter 9 to determine how to count the participation of DBE firms.

10. Company Name and Business Address - Enter the name, address, and phone number of all subcontracted contractors/consultants. Also, enter the prime contractor/consultant's name and phone number, if the prime is a DBE.

11. DBE Certification Number - Enter the DBE's Certification Identification Number. Leave blank if subcontractor is not a DBE.

12. Contract Payments - Enter the subcontracted dollar amount of the work performed or service provided. Include the prime contractor/consultant if the prime is a DBE. The Non-DBE column is used to enter the dollar value of work performed by firms that are not certified DBE or for work after a DBE becomes decertified.

13. Date Work Completed - Enter the date the subcontractor/subconsultant's item work was completed.

14. Date of Final Payment - Enter the date when the prime contractor/consultant made the final payment to the subcontractor/subconsultant for the portion of work listed as being completed.

15. Original DBE Commitment Amount - Enter the "Total Claimed DBE Participation Dollars" from Exhibits 15-G or 10-O2 for the contract.

16. Total - Enter the sum of the "Contract Payments" Non-DBE and DBE columns.

17. Contractor/Consultant Representative's Signature - The person completing the form on behalf of the contractor/consultant's firm must sign their name.

18. Contractor/Consultant Representative's Name - Enter the name of the person preparing and signing the form.

19. Phone - Enter the area code and telephone number of the person signing the form.

20. Date - Enter the date the form is signed by the contractor's preparer.

21. Local Agency Representative's Signature - A Local Agency Representative must sign their name to certify that the contracting records and on-site performance of the DBE(s) has been monitored.

22. Local Agency Representative's Name - Enter the name of the Local Agency Representative signing the form.

23. Phone - Enter the area code and telephone number of the person signing the form.

24. Date - Enter the date the form is signed by the Local Agency Representative.

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EXHIBIT 12-B BIDDER'S LIST OF SUBCONTRACTORS (DBE AND NON-DBE)

The bidder shall list all subcontractors (both DBE and non-DBE) in accordance with Title 49, Section 26.11 of the Code of Federal Regulations. This listing is required in addition to listing DBE Subcontractors elsewhere in the proposal. **Photocopy this form for additional firms.**

Firm Name/ Address/ City, State, ZIP	Phone/ Fax	Annual Gross Receipts	Description of Portion of Work to be Performed	Local Agency Use <u>Only</u> (Certified DBE?)
Name	Phone	<pre>\$1 million \$5 million</pre>		□YES □NO
Address	Fax	<pre>\$10 million \$15 million</pre>		<i>If YES list DBE #:</i>
City State ZIP		$\square > \$15$ million		Age of Firm (Yrs.)
Name	Phone	<pre>\$1 million </pre> \$5 million		□YES □NO
Address	Fax	<pre>\$10 million \$\$15 million</pre>	•	If YES list DBE #:
City State ZIP		> \$15 million		Age of Firm (Yrs.)
Name	Phone	<pre>\$1 million </pre> \$5 million		□YES □NO
Address	Fax	$\leq 10 million		If YES list DBE #:
City State ZIP	1 · dit	> \$15 million		Age of Firm (Yrs.)
Name	Phone	<pre>\$1 million </pre> \$5 million		YES
Address	Fax	<pre>\$10 million \$10 million \$15 million \$200 \$200 \$200 \$200 \$200 \$200 \$200 \$20</pre>		If YES list DBE #:
City State ZIP	<i>I'ux</i>	$\square > $15 million$		Age of Firm (Yrs.)

Distribution: 1) Original - Local Agency File

LPP 16-01

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Local Assistance Procedures Manual

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Exhibit-16-Z1 Monthly DBE Trucking Verification

		Exhibit-1	6-Z1 Month	Exhibit-16-Z1 Monthly DBE Trucking Verification	g Verificatio	-		
Contract No.			Month			Year		
Truck Owner	DBE Cert No.	Company Name and Address	Truck No.	California Highway Patrol CA. No.	Commission of Amount Of Amount Paid*	of Date Paid	Lease Arrangement (if applicable)	t
					s		Lease Agreement with NON-DBE with DBE	
					S		Lease Agreement with NON-DBE with DBE	
					ø		Lease Agreement with NON-DBE with DBE	
					s		Lease Agreement with NON-DBE with DBE	
					s		Lease Agreement with NON-DBE with DBE	
					s		Lease Agreement with NON-DBE with DBE	
					ø		Lease Agreement with NON-DBE with DBE	
					\$		Lease Agreement with NON-DBE with DBE	
					s		Lease Agreement with NON-DBE with DBE	
				Total Amount Paid	s			
Prime Contractor		Busin	Business Address		Bu	Business Phone No.		
*Upon Request all Lease	Agreements Shal	*Upon Request all Lease Agreements Shall be made available, in accordance with the special Provisions	ince with the speci	al Provisions				TI
A		I CERTIFY TH	AT THE ABOVE IN	I CERTIFY THAT THE ABOVE INFORMATION IS COMPLETE AND CORRECT	ETE AND CORRECT			
Contractor Kepresentative Signature	tive Signature	litte				Date		

Page 1 of 2

Exhibit 16-Z1 Monthly DBE Trucking Verification
MONTHLY DBE TRUCKING VERIFFICATION
The top of Form CEM-2404(F) contains boxes to put in the Contract Number, the Month of the reporting period and the Year of the
reporting period. The Form CEM-2404(F) has a column to enter the name of the Truck Owner, the DBE Cert. No. (if DBE certified) and the Name and Address of the trucking company. The Form CEM-2404(F) also requires the Truck No. and the California Highway Patrol CA No.
Form CEM-2404(F) is to be submitted prior to the 15th of each month and must show the dollar amount paid to the DBE trucking company(s) for trucking work performed by DBE certified trucks and for any fees or commissions of non DBE trucks utilized each month on the project. The amount paid to each trucking company is to be entered in the column called "Commission or Amount Paid," in accordance with the Special Provisions Section 5-1.X.
Payment information is derived using the following: 1.) 100% for the trucking services provided by the DBE using trucks it owns, operates and insures. 2.) 100% for the trucking services provided by the trucks leased from other DBE firms. 3.) The fee or commission paid to non DBEs for the lease of trucks. The Prime does not receive 100% credit for these services because they are not provided by a DBE company.
The total dollar figure of this column is to be placed in the box labeled "Total Amount Paid." The column "Date Paid" requires a date that each trucking company is paid for services rendered. The next column contains information that must be completed if a lease arrangement is applicable. Located at the bottom of the form is a space to put the name of the "Prime Contractor," their "Business Address" and their "Business Phone No."
At the bottom of the form there is a space for the Contractor or designee "Contractor Representative's Signature, Title and Date" certifying that the information provided on the form is complete and correct.

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Local Assistance Procedures Manual

EXHIBIT 9-F: DISADVANTAGED BUSINESS ENTERPRISE (DBE) RUNNING TALLY OF PAYMENTS

Save this form using the following naming convention. [byyymm]-IPrime's DUNS Number]-[ss],xisx. [ss] is two digit sequential numbering, applicable when consultant or contractor has more than one 9-F form to complete per pay period. For example, a valid save file contractor file one 9-F form to complete per pay period. For example, a valid save file contractor file one 9-F form to complete per pay period. For example, a valid save file could file contractor societators/consultants are required to submit this form to later than the 10th of the following month, after submitting an invoice for the functioners a payment to a DBE. If no payments have been made, do not submit this form to Business Support Unit@dot ca dow with a copy to their local administering agencies. Do not submit this form with the invoice, it will not be processed.

	- AND			The set of the set of the				
	(2) Federal Aid Pr	Aid Project Number		(3) Caltrans District			(4) Local Agency	
(5) Contract Number (6)	(6) Total Contract	(6) Total Contract Award Amount (\$)		(7) DBE Goal Percentage (%)	entage (%)		(8) DBE Committed Percentage (%)	
(9) Prime Contractor/Consultant DUNS Number ((10) Business Name	me		(11) Am ount Prime Invoiced This Period (\$)	Invoiced This Pe	sriod (\$)	(12) Amount Paid to Prime To Date (\$)	(13) Prime Certified DBE?
(14) DBE Subcontractor/Subconsultant Name	(15) DBE Cert. Number	(16) Contract Type	(17) Date of Payment	(18) Amount of This Payment	(19) Amount Paid To Date	(20) Amount Committed To This DBE	(21) Comments	_
			Totals	Ģ	Ģ	Ç.		

By executing this 9-F, Contractor/Consultant represents and warrants, under penalty of perjury, that: Contractor/Consultant contracted with the Disadvantaged Business Enterprise companies (DBEs) as set forth in their awarded bid on Contract number, Contractor/Consultant paid the full amounts listed on their 9-F to the DBEs set forth in Contractor's awarded bid, without reduction or offset.

(24) Date (23) Business Phone Number (22) Prime Contractor/Consultant Manager's Name (Print) COPY DISTRIBUTION: Original - Prime Contractor/Consultant, Copy - E-mail: Business. Support. Unit@dot.ca.gov; Local Administering Agency

ADA NOTICE: For individuals with sensory disabilities, this document is available in alternate formats. For information, call (916) 445-1233, Local Assistance Procedures Manual TTY 711, or write to Records and Forms Management, 1120 N Street, MS-89, Sacramento, CA 95814.

Exhibit 9-F Instructions

I. Purpose:

Title 49 of the Code of Federal Regulations (CFR), Part 26.37(c) requires recipients of federal-aid funding to "provide a running tally of actual attainments, including a means of comparing these attainments to commitments." This requirement does not apply to projects that do not have any federal funding.

II. Policy:

- A. To comply with 49 CFR 26.37(c), the prime contractors/consultants must complete the Exhibit 9-F: Disadvantaged Business Enterprise Running Tally of Payments and email it to business.support.unit@dot.ca.gov and their local administering agencies after submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month. Submission of this Exhibit is required until all DBE subcontracting or material supply activity on the entire project is completed.
- B. Save this form using the following naming convention, [yyyymm]-[Prime's DUNS Number]-[ss].xlsx. [ss] is two digit sequential numbering, applicable when consultant or contractor has more than one 9-F form to complete per pay period. For example, a valid saved file could read: 202001-123456789-01.xlsx

III. Instructions:

- (1) Reporting Period (mm-yyyy): Indicate the month and year of payments being reported.
- (2) Federal Aid Project Number: Enter the 7 digit federal-aid project number of the lead project on the contract. E.g. 5002(123) is a valid Federal-Aid Project Number.
- (3) Caltrans District: Enter the appropriate Caltrans District number as 1 through 12.
- (4) Local Agency: List the local agency's name.
- (5) Contract Number: List the local agency assigned contract agreement number.
- (6) Total Contract Award Amount (\$): Enter the total current contract award amount of the project.
- (7) DBE Goal Percentage (%): Enter the contract DBE goal percentage as it appears on the project advertisement.
- (8) DBE Committed Percentage (%): Enter percentage of the Prime contract committed to DBE firms.
- (9) **Prime Contractor/Consultant DUNS Number**: Enter the unique nine-digit Data Universal Numbering System (DUNS) that Contractors/Consultants should have in order to participate in Federally-funded contracts.
- (10) Business Name: List the name for the prime contractor/consultant as identified in Procedure 9 above.
- (11) Amount Prime's Invoice This Period (\$): Enter the total invoice amount that prime submitted for reimbursement this period.
- (12) Amount Paid to Prime To Date (\$): Enter the total payment that is paid to the Prime to date.
- (13) Prime certified DBE: Enter "Yes" if Prime Contractor/Consultant is certified DBE and "No" otherwise. DBE Prime contractor needs to fill in from procedure (14) to (21) for payments to DBE Subcontractors and DBE Prime's self-performing.
- Note: For Procedures (14) through (21) below, insert rows as needed to list all DBEs included on Exhibits 10-O2 or 15-G, and any other DBEs that were utilized regardless of tier.
- (14) DBE Firm name: List the DBE's firm name.
- (15) DBE Cert. Number: List the DBE's certification number as listed in the California Unified Certification Program (CUCP) database.
- (16) Contract Type: Select the most appropriate Subcontractor's contract type (Agent, Consultant, Joint Venture, Manufacturer, Prime, Regular Dealer, Subcontractor, Truck/Haul, Service Provider from dropdown list.)
- (17) Date of Payment: List current check date when a check is issued to the DBE for work performed by the DBE.
- (18) Amount of This Payment: List the total amount paid to the DBE this period.
- (19) Amount Paid to Date: List the total amount paid to this DBE to date. This should be a total of past payments plus payment for the current work just invoiced to the Local Agency.
- (20) Amount Committed to This DBE Firm: Copy the information from the agency signed Exhibit 10-O2 or 15-G. If the listed DBE was not originally committed to, type "0."
- (21) Comments: Add appropriate notes if a DBE subcontract was terminated, a DBE subcontract was added, if change orders impacted the DBE's payments (include good faith efforts the prime contractor/consultant implemented), if task orders weren't issued, etc.
- (22) Prime Contractor/Consultant Manager's Name: Enter the manager's name of the prime contractor/consultant of the project.
- (23) Business Phone Number: Enter the manager's business phone number of the prime contractor/consultant.
- (24) Date: Provide the date this form was prepared.
- (25) Copy Distribution: The prime contractor/consultant will need to maintain a copy with the contract file (electronic and/or paper). The prime contractor/consultant will need to e-mail this form as provided in the Section II. Policy, paragraphs A as stated above. Local agency will need to keep a copy with the contract file.

RELATIONS WITH RAILROAD

This project does not involve work with railroad.

STATE PREVAILING WAGE RATES

For current rates go to the California Department of Industrial Relations webpage at the following:

http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm

FEDERAL MINIMUM WAGE RATES

For current Federal Minimum Wage Rates go the Davis Bacon California County webpage at the following:

https://beta.sam.gov/search?index=wd

Navigate to Stanislaus County and select the appropriate wage rate.

PART IV – SAMPLE AGREEMENT, BONDS, AND GUARANTEE COUNTY OF STANISLAUS CONSTRUCTION AGREEMENT

THIS AGREEMENT, entered into by and between ______whose place of business is located at ______("Contractor"), and the County of Stanislaus ("County"), acting under and by virtue of the authority vested in the County by the laws of the State of California.

Enter Name of Project County Contract Number:

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, Contractor and County agree as follows:

Article 1. Work

1.1 Contractor shall complete all Work specified in the Contract Documents, in accordance with the Specifications, Drawings, and all other terms and conditions of the Contract Documents.

Article 2. Architect/Engineer and Project Manager

2.2 County has designated the Public Works Construction Manager as its Project Manager to act as County's Representative in all matters relating to the Contract Documents.

Article 3. Contract Time and Liquidated Damages

- 3.1 Contractor shall commence Work on the date established in the Notice to Proceed. County reserves the right to modify or alter the Commencement Date of the Work.
- 3.2 Contractor shall achieve Final Completion of the entire Work and be ready for Final Payment in accordance with Contract Closeout ______ Working Days from the date when the Contract Time commences to run as provided in the Agreement.
- 3.3 Liquidated Damages shall comply with SC-08 of the Special Conditions and 8-1.10 of the Standard Specifications.

- 3.4 Liquidated damages shall apply cumulatively and except as provided below, shall be presumed to be the damages suffered by County resulting from delay in completion of the Work.
- 3.5 Liquidated damages for delay shall only cover administrative, overhead, interest on bonds, and general loss of public use damages suffered by County as a result of delay. Liquidated damages shall not cover the cost of completion of the Work, damages resulting from Defective Work, lost revenues or costs of substitute facilities, or damages suffered by others who then seek to recover their damages from County (for example, delay claims of other contractors, subcontractors, tenants, or other third-parties), and defense costs thereof.

Article 4. Contract Sum

4.1 County shall pay Contractor the Contract Sum ______ **Dollars** (\$______) for completion of Work in accordance with Contract Documents as set forth in Contractor's Bid (Exhibit A).

Article 5. Contractor's Representations

In order to induce County to enter into this Agreement, Contractor makes the following representations and warranties:

- 5.1 Contractor has visited the Site and has examined thoroughly and understood the nature and extent of the Contract Documents, Work, Site, locality, actual conditions, as-built conditions, and all local conditions, and federal, state and local laws and regulations that in any manner may affect cost, progress, performance or furnishing of Work or which relate to any aspect of the means, methods, techniques, sequences or procedures of construction to be employed by Contractor and safety precautions and programs incident thereto.
- 52 Contractor has examined thoroughly and understood all reports of exploration and tests of subsurface conditions, as-built drawings, drawings, products specifications or reports, available for Bidding purposes, of physical conditions, including Underground Facilities, which have been made available for Bidders or which may appear in the Drawings. Contractor accepts the determination set forth in these Documents of the limited extent of the information contained in such materials upon which Contractor may be entitled to rely. Contractor agrees that except for the information so identified, Contractor does not and shall not rely on any other information contained in such reports and drawings.
- 53 Contractor has conducted or obtained and has understood all such examinations, investigations, explorations, tests, reports and studies (in addition to or to supplement those referred to in Section 5.2 of this Document that pertain to the subsurface conditions, as-built conditions, Underground Facilities and all other physical conditions at or contiguous to the Site or otherwise that may affect the cost, progress, performance or

furnishing of Work, as Contractor considers necessary for the performance or furnishing of Work at the Contract Sum, within the Contract Time and in accordance with the other terms and conditions of the Contract Documents, including specifically the provisions of the Special Conditions; and no additional examinations, investigations, explorations, tests, reports, studies or similar information or data are or will be required by Contractor for such purposes.

5.4 Contractor has correlated its knowledge and the results of all such observations, examinations, investigations, explorations, tests, reports and studies with the terms and conditions of the Contract Documents.

Article 6. Contract Documents

6.1 Contract Documents consist of the following documents, including all changes, addenda, and modifications thereto:

Agreement Encroachment Permit (if applicable) Form FHWA-1273 (if applicable) Project Plans Project Specifications State Standard Specifications and Standard Plans

Article 7. Indemnity

- 7.1 County and each of its officers, employees, consultants and agents including, but not limited to the Board, Architect/Engineer and each County Representative, shall not be liable or accountable in any manner for loss or damage that may happen to any part of the Work; loss or damage to materials or other things used or employed in performing the Work; injury, sickness, disease, or death of any person; or damage to property resulting from any cause whatsoever except their sole negligence, willful misconduct or active negligence, attributable to performance or character of the Work, and Contractor releases all of the foregoing persons and entities from any and all such claims.
- 7.2 To the furthest extent permitted by law (including without limitation California Civil Code Section 2782), Contractor shall assume defense of, and indemnify and hold harmless, County and each of its officers, employees, consultants and agents, including but not limited to the Board, Architect/Engineer and each County representative, from claims, suits, actions, losses and liability of every kind, nature and description, including but not limited to claims and fines of regulatory agencies and attorney's fees and consultant's fees, directly or indirectly arising out of, connected with or resulting from performance of the Work, failure to perform the Work, or condition of the Work which is caused in whole or part by any act or omission of Contractor, Subcontractors, anyone directly or indirectly employed by any of them or anyone for whose acts any of them may be liable, regardless of whether it is caused in part by the negligence of County or by any person or entity required to be indemnified hereunder.

- 7.3 With respect to third-party claims against Contractor, Contractor waives any and all rights to any type of express or implied indemnity against County and each of its officers, employees, consultants and agents including, but not limited to County, the Board, Architect/Engineer and each County representative.
- 7.4 Approval or purchase of any insurance contracts or policies shall in no way relieve from liability nor limit the liability of Contractor, its Subcontractors of any tier, or the officers or agents of any of them.
- 7.5 To the furthest extent permitted by law (including, without limitation, Civil Code Section 2782), the indemnities, releases of liability and limitations of liability, claims procedures, and limitations of remedy expressed throughout the Contract Documents shall apply even in the event of breach of contract, negligence (active or passive), fault or strict liability of the party(is) indemnified, released, or limited in liability, and shall survive the termination, rescission, breach, abandonment, or completion of the Work or the terms of the Contract Documents. If Contractor fails to perform any of these defense or indemnity obligations, County may in its discretion back charge Contractor for County's costs and damages resulting therefrom and withhold such sums from progress payments or other contract moneys which may become due.
- 7.6 The indemnities in the Contract Documents shall not apply to any indemnified party to the extent of its sole negligence or willful misconduct; nor shall they apply to County or other indemnified party to the extent of its active negligence.

Article 8. Miscellaneous

- 8.1 Terms and abbreviations used in this Agreement are defined in Special Conditions, Section 1: DEFINITIONS AND TERMS and will have the meaning indicated therein.
- 82 It is understood and agreed that in no instance are the persons signing this Agreement for or on behalf of County or acting as an employee, agent, or representative of County, liable on this Agreement or any of the Contract Documents, or upon any warranty of authority, or otherwise, and it is further understood and agreed that liability of the County is limited and confined to such liability as authorized or imposed by the Contract Documents or applicable law.
- 83 Contractor shall not assign any portion of the Contract Documents, and may subcontract portions of the Contract Documents only in compliance with the Subcontractor Listing Law, California Public Contract Code §4100 *et seq.*
- 84 The Contract Sum includes all allowances (if any).
- 85 In entering into a public works contract or a subcontract to supply goods, services or materials pursuant to a public works contract, Contractor or Subcontractor offers and agrees to assign to the awarding body all rights, title and interest in and to all causes of

action it may have under Section 4 of the Clayton Act (15 U.S.C. §15) or under the Cartwright Act (Chapter 2 (commencing with §16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time County tenders final payment to Contractor, without further acknowledgment by the parties.

- 86 Copies of the general prevailing rates of per diem wages for each craft, classification, or type of worker needed to execute the Contract, as determined by Director of the State of California Department of Industrial Relations, are deemed included in the Contract Documents and on file at County's Office, and shall be made available to any interested party on request. Pursuant to California Labor Code §1861, Contractor represents that it is aware of the provisions of Section 3700 of the Labor Code which require every employer to be insured against liability for workers' compensation or to undertake selfinsurance in accordance with the provisions of that Code, and Contractor shall comply with such provisions before commencing the performance of the Work of the Contract Documents.
- 87 Should any part, term or provision of this Agreement or any of the Contract Documents, or any document required herein or therein to be executed or delivered, be declared invalid, void or unenforceable, all remaining parts, terms and provisions shall remain in full force and effect and shall in no way be invalidated, impaired or affected thereby. If the provisions of any law causing such invalidity, illegality or unenforceability may be waived, they are hereby waived to the end that this Agreement and the Contract Documents may be deemed valid and binding agreements, enforceable in accordance with their terms to the greatest extent permitted by applicable law. In the event any provision not otherwise included in the Contract Documents is required to be included by any applicable law, that provision is deemed included herein by this reference (or, if such provision is required to be included in that portion).
- 88 This Agreement and the Contract Documents shall be deemed to have been entered into in the County of Stanislaus, State of California, and governed in all respects by California law (excluding choice of law rules). The exclusive venue for all disputes or litigation hereunder shall be in Stanislaus County Superior Court. Contractor accepts the Claims Procedure in Special Conditions, Article SC-16, WORK DISPUTES, as a claims procedure by agreement under the California Government Code, Title 1, Division 3.6, Part 3, Chapter 5.
- 89 Notices: Any notices, documents, correspondence or other communications concerning this Agreement or the work hereunder may be provided by personal delivery, facsimile or mail and shall be addressed as set forth below. Such communication shall be deemed served or delivered: a) at the time of delivery if such communication is sent by personal delivery; b) at the time of transmission if such communication is sent by facsimile; and c) 48 hours after deposit in the U.S. Mail as reflected by the official U.S. postmark if such communication is through regular United States mail. sent

If to County:

If to Contractor:

Chris Brady, Deputy Director Stanislaus County Public Works 1716 Morgan Road Modesto, CA 95358

IN WITNESS WHEREOF the parties have executed this Agreement in quadruplicate the day and year first above written.

COUNTY OF STANISLAUS

Department of Public Works

ENTER CONTRACTOR'S NAME

By:_ David A. Leamon, PE, MPA Director By:

APPROVED AS TO FORM:

Thomas E. Boze, County Counsel

By:_ Todd James Deputy County Counsel

END OF AGREEMENT

CONSTRUCTION PERFORMANCE BOND

sum of	which is one hundre ted below to ensure the f	aithful performance of the (m, and is entered into Construction Contract
listed below. This Bond cor following page. Any sin considered plural where applica	isists of this page and the igular reference to("Surety") County	of Stanislaus ("County")	ions as stated on the ("Contractor"), r other party shall be
considered plural where application	able.	of Stamsfaus (County), o	i other party shall be
CONTRACTOR:		SURETY:	
Name		Name	
Address		Principal Place of Busine	SS
City/State/Zip		City/State/Zip	
CONSTRUCTION CONTI	RACT:		
CONTRACT NUM	MBER:		
Dated	in the Amount of \$		_ (the "Penal Sum").
CONTRACTOR:		SURETY:	
Company: (Corp. Seal)		Company: (Corp. Seal)	
Signature		Signature	
Name		Name	
Title		Title	

CONSTRUCTION PERFORMANCE BOND TERMS AND CONDITIONS

- 1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to County for the complete and proper performance of the Construction Contract, which is incorporated herein by reference.
- 2. If Contractor completely and properly performs all of its obligations under the Construction Contract, Surety and Contractor shall have no obligation under this Bond.
- 3. If there is no County Default, Surety's obligation under this Bond shall arise after:
 - 3.1 County has declared a Contractor Default under the Construction Contract pursuant to the terms of the Construction Contract; and
 - 3.2 County has agreed to pay the Balance of the Contract Sum:
 - 3.2.1 To Surety in accordance with the terms of this Bond and the Construction Contract; or
 - 3.2.2 To a contractor selected to perform the Construction Contract in accordance with the terms of this Bond and the Construction Contract.
- 4. When County has satisfied the conditions of Paragraph 3, Surety shall promptly (within thirty (30) Days) and at Surety's expense elect to take one of the following actions:
 - 4.1 Arrange for Contractor, with consent of County, to perform and complete the Construction Contract (but County may withhold consent, in which case the Surety must elect an option described in Paragraphs 4.2, 4.3 or 4.4, below); or
 - 4.2 Undertake to perform and complete the Construction Contract itself, through its agents or through independent contractors; provided, that Surety may not select Contractor as its agent or independent contractor without County's consent; or
 - 4.3 Undertake to perform and complete the Construction Contract by obtaining bids from qualified contractors acceptable to County for a contract for performance and completion of the Construction Contract and, upon determination by County of the lowest responsive and responsible Bidder, arrange for a contract to be prepared for execution by County and the contractor selected with County's concurrence, to be secured with performance and payment bonds executed by a qualified surety equivalent to the bonds issued on the Construction Contract; and, if Surety's obligations defined in Paragraph 6, below, exceed the Balance of the Contract Sum, then Surety shall pay to County the amount of such excess; or
 - 4.4 Waive its right to perform and complete, arrange for completion, or obtain a new contractor and with reasonable promptness under the circumstances and, after investigation and consultation with County, determine in good faith its monetary obligation to County under Paragraph 6, below, for the performance and completion of the Construction Contract and, as soon as practicable after the amount is determined, tender payment therefore to County with full explanation of the payment's calculation. If County accepts Surety's tender under this Paragraph 4.4, County may still hold Surety liable for future damages then unknown or unliquidated resulting from the Contractor Default. If County disputes the amount of Surety's tender under this Paragraph 4.4, County may exercise all remedies available to it at law to enforce Surety's liability under Paragraph 6, below.
- 5. If Surety does not proceed as provided in Paragraph 4, then Surety shall be deemed to be in default on this Bond ten (10) Days after receipt of an additional written notice from County to Surety demanding that Surety perform its obligations under this Bond. At all times County shall be entitled to enforce any remedy available to County at law or under the Construction Contract including, without limitation, and by way of example only, rights to perform work, protect Work, mitigate damages, advance critical Work to mitigate schedule delay, or coordinate Work with other consultants or contractors.
- 6. Surety's monetary obligation under this Bond is limited by the amount of this Bond identified herein as the Penal Sum. This monetary obligation shall augment the Balance of the Contract Sum. Subject to these limits, Surety's obligations under this Bond are commensurate with the obligations of Contractor under the Construction Contract. Surety's obligations shall include, but are not limited to:
 - 6.1 The responsibilities of Contractor under the Construction Contract for completion of the Construction Contract and correction of Defective Work;
 - 6.2 The responsibilities of Contractor under the Construction Contract to pay liquidated damages, and for damages for which no liquidated damages are specified in the Construction Contract, actual damages caused by non-performance of the Construction Contract including, but not limited to, all valid and proper backcharges, offsets, payments, indemnities, or other damages;
 - 6.3 Additional legal, design professional and delay costs resulting from Contractor Default or resulting from the actions or failure to act of the Surety under Paragraph 4, above (but excluding attorney's fees incurred to enforce this Bond).
- 7. No right of action shall accrue on this Bond to any person or entity other than County or its successors or assigns.
- 8. Surety hereby waives notice of any change, alteration or addition to the Construction Contract or to related subcontracts, purchase orders and other obligations, including changes of time. Surety consents to all terms of the Construction Contract, including provisions on changes to the Contract. No extension of time, change, alteration, Modification, deletion, or addition to the Contract Documents, or of the Work required thereunder, shall release or exonerate Surety on this Bond or in any way affect the obligations of Surety on this Bond.
- 9. Any proceeding, legal or equitable, under this Bond shall be instituted in any court of competent jurisdiction where a proceeding is pending between County and Contractor regarding the Construction Contract, or in the courts of the County of Stanislaus, or in a court of competent jurisdiction in the location in which the Work is located. Communications from County to Surety under Paragraph 3.1 of this Bond shall be deemed to include the necessary agreements under Paragraph 3.2 of this Bond unless expressly stated otherwise.
- 10 All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to County shall be mailed or delivered as provided in the Agreement. Actual receipt of notice by Surety, County or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing addresses.
- 11. Any provision in this Bond conflicting with any statutory or regulatory requirement shall be deemed deleted herefrom and provisions conforming to such statutory requirement shall be deemed incorporated herein.
- 12. Definitions
 - 12.1 Balance of the Contract Sum: The total amount payable by County to Contractor pursuant to the terms of the Construction Contract after all proper adjustments have been made under the Construction Contract, for example, deductions for progress payments made, and increases/decreases for approved Modifications to the Construction Contract.
 - 12.2 Construction Contract: The agreement between County and Contractor identified on the signature page of this Bond, including all Contract Documents and changes thereto.
 - 12.3 Contractor Default: Material failure of Contractor, which has neither been remedied nor waived, to perform or otherwise to comply with the terms of the Construction Contract including, but not limited to, "default" or any other condition allowing a termination for cause as provided in Section 8-1.11 of the State of California, Department of Transportation, Standard Specifications.
 - 12.4 County Default: Material failure of County, which has neither been remedied nor waived, to pay Contractor progress payments due under the Construction Contract or to perform other material terms of the Construction Contract, if such failure is the cause of the asserted Contractor Default and is sufficient to justify Contractor termination of the Construction Contract.

CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND

This Construction Labor and Material Bond ("Bond") dated Payment is in the penal sum of which is one hundred percent of the Contract Sum, and is entered into by and between the parties listed below to ensure the faithful performance of the Construction Contract listed below. This Bond consists of this page and the Bond Terms and Conditions as stated on the following page. Any singular reference to ("Contractor"), ("Surety"), County of Stanislaus ("County"), or other party shall be considered plural where applicable.

CONTRACTOR:

Name

Address

City/State/Zip

CONSTRUCTION CONTRACT:

CONTRACT NUMBER:

Dated ______ in the Amount of \$______ (the "Penal Sum").

CONTRACTOR:

Company: (Corp. Seal)

SURETY:

Company: (Corp. Seal)

Signature

Name

Title

Signature

Name

Title

Name

SURETY:

Principal Place of Business

City/State/Zip

CONSTRUCTION LABOR AND MATERIAL PAYMENT BOND TERMS AND CONDITIONS

- 1. Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to County and to Claimants, to pay for labor, materials and equipment furnished for use in the performance of the Construction Contract, which is incorporated herein by reference.
- 2. With respect to County, this obligation shall be null and void if Contractor:
 - 2.1 Promptly makes payment, directly or indirectly, for all sums due Claimant; and
 - 2.2 Defends, indemnifies and hold harmless County from all claims, demands, liens or suits by any person or entity who furnished labor, materials or equipment for use in the performance of the Construction Contract, provided County has promptly notified Contractor and Surety (at the address set forth on the signature page on this Bond) or any claims, demands, lien or suits and tendered defense of such claims, demands, liens or suits to Contractor and Surety, and provided there is no County Default.
- 3. With respect to Claimants, this obligation shall be null and void if Contractor promptly makes payment, directly or indirectly through its Subcontractors, for all sums due Claimants. If Contractor or its Subcontractors, however, fail to pay any of the persons named in Section 3181 of the California Civil Code, or amounts due under the Unemployment Insurance Code with respect to Work or labor performed under the Contract, or for any amounts required to be deducted, withheld, and paid over to the Employment Development Department form the wages of employees of Contractor or Subcontractors pursuant to Section 13020 of the Unemployment Insurance Code, with respect to such work and labor, then Surety shall pay for the same, and also, in case suit is brought upon this Bond, a reasonable attorney's fee, to be fixed by the court.
- 4. Consistent with the California's Mechanic's Lien Law, Civil Code §3082, *et seq.*, Surety shall have no obligation to Claimants under this Bond unless the Claimant has satisfied all applicable notice requirements.
- 5. Surety's total obligation shall not exceed the amount of this Bond, and the amount of this Bond shall be credited for any payments made in good faith by Surety under this Bond.
- 6. Amounts due Contractor under the Construction Contract shall be applied first to satisfy claims, if any, under any Construction Performance Bond and second, to satisfy obligations of Contractor and Surety under this Bond.
- 7. County shall not be liable for payment of any costs, expenses, or attorney's fees of any Claimant under this Bond, and shall have under this Bond no obligation to made payments to, give notices on behalf of, or otherwise have obligations to Claimants under this Bond.
- 8. Surety hereby waives notice of any change, including changes to time, to the Construction Contract or to related subcontracts, purchase orders and other obligations. Surety further hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Construction Contract, or to the Work to be performed thereunder, or materials or equipment to be furnished thereunder or the Specifications accompanying the same, shall in any way affect its obligations under this Bond, and it does hereby waive any requirement of notice or any such change, extension of time, alteration or addition to the terms of the Construction Contract or to the Specifications or any other changes.
- 9. Suit against Surety on this Bond may be brought by any Claimant, or its assigns, at any time after the Claimant has furnished the last of the labor or materials, or both, but, per Civil Code §3249, must be commenced before the expiration of six (6) months after the period in which stop notices may be filed as provided in Civil Code §3184.
- 10. All notices to Surety or Contractor shall be mailed or delivered (at the address set forth on the signature page of this Bond), and all notices to County shall be mailed or delivered as provided in Agreement. Actual receipt of notice by Surety, County or Contractor, however accomplished, shall be sufficient compliance as of the date received at the foregoing address.
- 11. This Bond has been furnished to comply with the California Mechanic's Lien Law including, but not limited to, Civil Code §3247, 3248, *et seq.* Any provision in this Bond conflicting with said statutory or other legal requirements shall be deemed incorporated herein. The intent is that this Bond shall be construed as a statutory bond and not as a common law bond.
- 12. Upon request by any person or entity appearing to be a potential beneficiary of this Bond, Contractor shall promptly furnish a copy of this Bond or shall permit a copy to be made.
- 13. Definitions:
 - 13.1 Claimant: An individual or entity having a direct contract with Contractor or with a Subcontractor of Contractor to furnish labor, materials or equipment for use in the performance of the Contract, as further defined in California Civil Code §3181. The intent of this Bond shall be to include without limitation in the terms "labor, material or equipment" that part of water, gas, light, heat, oil, gasoline, telephone service or rental equipment used in the Construction Contract, architectural and engineering services required for performance of the Work of Contractor and Contractor's Subcontractors, and all other items for which a stop notice might be asserted. The Term Claimant shall also include the Unemployment Development Department as referred to in Civil Code §3248(b),
 - 13.2 Construction Contract: The agreement between County and Contractor identified on the signature page of this Bond, including all Contract Documents and changes thereto.
 - 13.3 County Default: Material failure of County, which has neither been remedied nor waived, to pay the Contractor as required by the Construction Contract, provided that failure is the cause of the failure of Contractor to pay the Claimants and its sufficient to justify termination of the Construction Contract.

GUARANTEE

TO:	The	County	of	Stanislaus	("County"),	for	construction	of	the

The undersigned guarantees all construction performed on this Project and also guarantees all material and equipment incorporated therein.

Contractor hereby grants to County for a period of one (1) year following the date of Final Acceptance of the Work completed, or such longer period specified in the Contract Documents, its unconditional warranty of the quality and adequacy of all of the Work including, without limitation, all labor, materials and equipment provided by Contractor and its Subcontractors of all tiers in connection with the Work.

Neither final payment nor use nor occupancy of the Work performed by the Contractor shall constitute an acceptance of Work not done in accordance with this Guarantee or relieve Contractor of liability in respect to any express warranties or responsibilities for faulty materials or workmanship. Contractor shall remedy any defects in the Work and pay for any damage resulting therefrom, which shall appear within one year, or longer if specified, from the date of Final Acceptance of the Work completed.

If within one (1) year after the date of Final Acceptance of the Work completed, or such longer period of time as may be prescribed by laws or regulations, or by the terms of Contract Documents, any Work is found to be Defective, Contractor shall promptly, without cost to County and in accordance with County's written instructions, correct such Defective Work. Contractor shall remove any Defective Work rejected by County and replace it with Work that is not Defective, and satisfactorily correct or remove and replace any damage to other Work or the work of others resulting therefrom. If Contractor fails to promptly comply with the terms of such instructions, or in an emergency where delay would cause serious risk of loss or damage, County may have the Defective Work corrected or the rejected Work removed and replaced. Contractor shall pay for all claims, costs, losses and damages caused by or resulting from such removal and replacement. Where Contractor fails to correct Defective Work, or defects are discovered outside the correction period, County shall have all rights and remedies granted by law.

Inspection of the Work shall not relieve Contractor of any of its obligations under the Contract Documents. Even though equipment, materials, or Work required to be provided under the Contract Documents have been inspected, accepted, and estimated for payment, Contractor shall, at its own expense, replace or repair any such equipment, material, or Work found to be Defective or otherwise not to comply with the requirements of the Contract Documents up to the end of the guarantee period.

All abbreviations and definitions of terms used in this Agreement shall have the meanings set forth in the Contract Documents, including, without means of limitation, Special Provisions.

The foregoing Guarantee is in addition to any other warranties of Contractor contained in the Contract Documents, and not in lieu of, any and all other liability imposed on Contractor under the Contract Documents and at law with respect to Contractor's duties, obligations, and performance under the Contract Documents. In the event of any conflict or inconsistency between the terms of this Guarantee and any warranty or obligation of the Contractor under the Contract Documents or at law, such inconsistency or conflict shall be resolved in favor of the higher level of obligation of the Contractor.

(SIGNATURE NEXT PAGE)

Date: _____

Contractor's Name

Signature

Print Name

Title

Street Address

City, State, Zip Code

COUNTY OF STANISLAUS DEPARTMENT OF PUBLIC WORKS

PART V - SPECIAL CONDITIONS

SC-01 DEFINITIONS AND TERMS

The work herein shall be done in accordance with the Standard Specifications, and the Standard Plans dated 2015, of the California Department of Transportation insofar as the same may apply and these Special Provisions.

In case of conflict between the Standard Specifications and these Special Provisions, the Special Provisions shall take precedence.

Whenever in the Standard Specifications, Standard Plans, Special Provisions, Invitation to Bidders, Proposal, Contract, or other contract documents the following terms are used, the intent and meaning shall be interpreted as follows:

State or State of California - County of Stanislaus

Department of Transportation - Stanislaus County, Department of Public Works

Director of Transportation - Stanislaus County, Director of Public Works

District Director - Stanislaus County, Director of Public Works

Engineer - Resident Engineer

Attorney General - Stanislaus County, County Counsel

Contract - Agreement

Amendments to the Standard Specifications set forth in these Specifications shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.02, "Contract Components," of the Standard Specifications. Whenever either the term "Standard Specifications is amended" or the term "Standard Specifications are amended" is used in the Special Provisions, the indented text or table following the term shall be considered an amendment to the Standard Specifications. In case of conflict between such amendments and the Standard Specifications, the amendments shall take precedence over and be used in lieu of the conflicting portions.

Attention is directed to Section 1 of the Standard Specifications and to the following additional and qualifying definitions:

Board of Supervisors – Board of Supervisors, Stanislaus County, State of California.

 $\underline{Contractor}$ – Any person or persons, firm, partnership, corporation or a combination thereof who have entered into a contract with any person, corporation, company, special district, the County of Stanislaus as a party or parties of the second part, or his or their legal representatives, for the construction of any capital improvement within the County of Stanislaus.

County – County of Stanislaus, a political subdivision of the State of California.

<u>Design Engineer</u> – Any person or persons, firm, partnership or corporation legally authorized to practice civil engineering in the State of California who prepares improvement plans and specifications for any improvement or portion of any improvement within the County of Stanislaus.

<u>Department</u> – Department of Public Works, County of Stanislaus.

<u>Developer/Subdivider</u> – A person, firm, partnership, corporation, association, or agent thereof who causes land to be divided into a subdivision or causes existing property to be developed for himself or for others.

<u>Director</u> – The Public Works Director of County of Stanislaus, acting either directly or through properly authorized agents, such agents acting within the scope of the particular duties delegated to them.

<u>Standards and Specifications</u> – Improvement Specifications and Standards of the County of Stanislaus, Public Works Department. In case of conflicts, The Standard Specifications and Standard Plans of the State of California and Special Provisions should take precedence over The Improvement Specifications and Standards of The County of Stanislaus.

Laboratory – Any testing agency or quality control firm licensed to practice in the State of California.

<u>Owner</u> – County of Stanislaus.

<u>Project Plans</u> – The project plans are specific details and dimensions peculiar to the work and are supplemented by the Standard Plans and Standard Drawings insofar as they may apply.

<u>Special Provisions</u> – The special provisions are specific clauses setting forth conditions or requirements peculiar to the work and supplementary to the Standard Specifications of the State of California.

<u>Standard Plans</u> – Standard Plans 2015 of the State of California Department of Transportation unless otherwise noted on the Project Plans.

<u>Standard Details</u> – Standard Details of the County of Stanislaus, unless otherwise noted on The Project Plans.

<u>Standard Specifications</u> – Standard Specifications 2015 of the State of California, Department of Transportation unless otherwise noted.

SC-02 PROPOSAL REQUIREMENTS AND CONDITIONS

The bidder's attention is directed to the provisions in Section 2, "Bidding," of the Standard Specifications and these Special Conditions for the requirements and conditions which the bidder must observe in the preparation of the proposal form and the submission of the bid.

In addition to the subcontractors required to be listed in conformance with Section 2-1.10, "Subcontractor List," of the Standard Specifications, each proposal shall have listed therein the portion of work that will be done by each subcontractor listed. A sheet for listing the subcontractors is included in Part III.

The form of Bidder's Bond mentioned in Section 2-1.34, "Bidder's Security," of the Standard Specifications will be found in Part III.

In conformance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in Part III.

The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate. Each subcontract signed by the bidder must include this assurance.

SC-03 BLANK

SC-04 BLANK

SC-05 EXCAVATION SAFETY PLANS

Attention is directed to Section 7-1.02K(6)(b), "Excavation Safety" of the Standard Specifications and these Special Conditions.

The Contractor's attention is directed to the provisions, which require submitting a shoring/bracing plan for County's Review and approval.

Approval by the Engineer of the shoring drawings or shoring inspection performed by the Engineer shall in no way relieve the Contractor of full responsibility for adequacy of the shoring.

When construction is taking place in a public area, the Contractor shall take all necessary precautions to protect the public from the hazards of open excavations. Trenches shall be covered at night, on weekends, and during non-working hours.

SC-06 CONTROL OF MATERIALS

Attention is directed to Section 6-1.01 of the Standard Specifications.

The Contractor shall comply with Section 6-1.02, "Department-Furnished Materials," of the Standard Specifications and these Special Conditions. The following materials shall be furnished to the Contractor:

NONE

The Contractor shall be responsible for Quality Control. Contractor Quality Control shall comply with 6-2.02 of the Standard Specifications.

The County will perform Quality Assurance testing per 6-2.03 of the Standard Specifications and according to the County's Quality Assurance program.

SC-07 LEGAL RELATIONS AND RESPONSIBILITY

Prevailing Wage and Certified Payrolls

The Contractor shall comply with Section 7-1.02K(2) "Wages" and Section 7-1.02K(3) "Certified Payroll Records" of the Standard Specifications.

The general prevailing wage rates determined by the Director of Industrial Relations, for the County in which the work is to be done, are available at the County of Stanislaus Department of Public Works,

Construction Division, 1716 Morgan Road, Modesto, CA 95358 and the Division of Labor Statistics and Research web page:

http://www.dir.ca.gov/DLSR/statistics research.html

These wage rates are not included in the Proposal and Agreement for the project. Changes, if any, to the general prevailing wage rates will be available at the same location.

The County does not accept Certified Payroll Submittals by electronic filing.

Immediate changes:

- Duty to notify DIR when awarding a contract for a public works project, using the online <u>PWC-100 form</u>. This requirement, found in Labor Code Section 1773.3, now applies to *all* public works projects. Previously it applied to projects subject either to apprenticeship or DIR compliance monitoring requirements.
- Elimination of the obligation to pay DIR for compliance monitoring on state bond-funded projects and other projects that required use of DIR's Compliance Monitoring Unit (CMU). DIR will continue to monitor compliance on these projects but will not charge awarding bodies for any services provided on or after June 20, 2014 [the effective date of SB 854]. The alternative of using a DIR-approved Labor Compliance Program (LCP) or a project labor agreement in lieu of the CMU on one of these projects has also been eliminated. However, for ongoing projects that were using one of the alternatives, monitoring should continue until the project is completed.

Phased-in changes:

I. Public Works Contractor Registration Program

• All contractors and subcontractors who bid or work on a public works project must register and pay an annual fee to DIR. The phase-in timetable is as follows:

July 1, 2014: Registration program became effective and first contractors registered. Initial registrations will be valid through June 30, 2015.

March 1, 2015: No contractor or subcontractor may be listed on a bid proposal for a public works project unless registered with DIR.

April 1, 2015: No contractor or subcontractor may work on a public works project unless registered with DIR. All projects bid before March 1, 2015, or awarded prior to April 1, 2015 will not trigger the registration requirements.

- Once the registration requirement becomes mandatory (March 1, 2015 for bids and April 1, 2015 for projects awarded), an awarding body may not accept a bid or enter into a contract for public work with an unregistered contractor.
 - DIR maintains an up-to-date <u>listing of registered contractors</u>.
 - There are *exceptions* to the registration requirement for bidders in circumstances where a CSLB license would not be required at the time of bidding.
 - Additional exceptions and protections are included in the registration laws to limit bid challenges, allow some violations to be cured through payment of penalty fees, and allow unregistered contractors to be replaced with registered ones.

II. NOTICE REQUIREMENTS

- January 1, 2015: The call for bids and contract documents must include the following information:
 - No contractor or subcontractor may be listed on a bid proposal for a public works project (submitted on or after March 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5 [with limited exceptions from this requirement for bid purposes only under Labor Code section 1771.1(a)].
 - No contractor or subcontractor may be awarded a contract for public work on a public works project (awarded on or after April 1, 2015) unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5.
 - This project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
- **[To be determined]:** The awarding body must post or require the prime contractor to post job site notices prescribed by regulation. (*See* 8 Calif. Code Reg. §16451(d) for the notice that previously was required for projects monitored by the CMU.)

III. FURNISHING OF ELECTRONIC CERTIFIED PAYROLL RECORDS TO LABOR COMMISSIONER

• All contractors and subcontractors must furnish electronic certified payroll records directly to the Labor Commissioner (aka Division of Labor Standards Enforcement). The phase-in timetable for this requirement is as follows:

June 20, 2014 [immediate]: Any project that was being monitored by the CMU/Labor Commissioner prior to the adoption of SB 854 will continue to be monitored by the Labor Commissioner afterward; and the contractors on those projects must continue to furnish certified payroll records to the Labor Commissioner until the project is complete.

April 1, 2015: For all new projects awarded on or after this date, the contractors and subcontractors must furnish electronic certified payroll records to the Labor Commissioner.

Anytime: For projects besides those listed above, the Labor Commissioner may at any time require the contractors and subcontractors to furnish electronic certified payroll records. The Labor Commissioner anticipates requiring this for green energy school projects that receive Proposition 39 funding.

January 1, 2016: The requirement to furnish electronic certified payroll records to the Labor Commissioner will apply to all public works projects, whether new or ongoing.

Exceptions: The Labor Commissioner may (but is not required to) excuse contractors and subcontractors from furnishing electronic certified payroll records to the Labor Commissioner on a project that is under the jurisdiction of one of the four legacy DIR-approved labor compliance programs (Caltrans, City of Los Angeles, Los Angeles Unified School District, and County of Sacramento) or that is covered by a qualifying project labor agreement.

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

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Ongoing projects that were subject to Labor Compliance Program (LCP) or Compliance Monitoring Unit (CMU) requirements prior to the adoption of SB 854:

Older projects (contract for public work was awarded prior to January 1, 2012): The LCP requirements and alternatives that applied to projects funded by Propositions 47, 55, or 84 and to certain design-build projects *remain in effect*. These monitoring and compliance requirements must continue to be observed through the end of the project, even if the Labor Commissioner starts monitoring the project pursuant to SB 854.

More recent projects (contract for public work was awarded on or after January 1, 2012): All requirements for state bond-funded projects and other design-build and specially authorized projects to use the CMU or a specified alternative *have been repealed*. However, it is important to note the following:

- Any project that was being monitored by the CMU/Labor Commissioner prior to the adoption of SB 854 will continue to be monitored by the Labor Commissioner after; and the contractors on those projects must continue to furnish certified payroll records to the Labor Commissioner until the project is complete.
- Bond funding agencies (such as the State Allocation Board) may still require that awarding bodies demonstrate past compliance with DIR requirements in order to qualify for retroactive funding. In particular, awarding bodies may need to show that they notified DIR of the project using the PWC-100.
- The LCP requirement for past, present, and future projects funded by Proposition 84 (Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006) *remains in effect*. This LCP requirement must continue to be observed, even if the Labor Commissioner also monitors the project pursuant to SB 854.

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

Apprentices

The Contractor shall comply with Section 7-1.02K(4) "Apprentices" of the Standard Specifications" to ensure compliance and complete understanding of the law regarding apprentices.

Water Pollution

Water pollution Control shall comply with SP-02, "Water Pollution Control" of the Special Provisions.

Sound Control Requirements

Sound control shall conform to the provisions in Section 14-8.02, "Noise Control," of the Standard Specifications and these Special Conditions.

The noise level from the Contractor's operations, between the hours of 9:00 p.m. and 6:00 a.m., shall not exceed 86 DBA at a distance of 50 feet. This requirement shall not relieve the Contractor from responsibility for complying with local ordinances regulating noise level.

The noise level requirement shall apply to the equipment on the job or related to the job, including but not limited to trucks, transit mixers or transient equipment that may or may not be owned by the Contractor. The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

Full compensation for conforming to the requirements of this section shall be considered as included in the prices paid for the various contract items of work involved and no additional compensation will be allowed there for.

Permits

The Contractor shall conform to the requirements of Section 5-1.20B "Permits, Licenses, Agreement, and Certification" of Standard Specifications and these Special Conditions. The Contractor shall conform to the requirements of:

None

Compensation for conforming to the requirements of "Permits" shall be included in the various items of work, and no additional compensation will be allowed.

Notice and Removal of Asbestos and Hazardous Substances

When the presence of asbestos or hazardous substances are not shown on the plans or indicated in the specifications and the Contractor encounters 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. The contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

Contractor shall give a written Notice of Hazardous Materials Condition to County promptly, before any of the following conditions are disturbed (except in an emergency as required by Article SC-22, Emergencies, and in no event later than twenty four (24) hours after first observance of any:

- a. Material that Contractor believes may be hazardous waste or hazardous material, as defined in Section 25117 of the Health and Safety Code (including, without limitation, asbestos, lead, PCBs, petroleum and related hydrocarbons, and radioactive material) that is required to be removed to a Class I, Class II, or Class III disposal site in accordance with provisions of existing law ("hazardous material"); or
- b. Other material that may present an imminent substantial danger to persons or property exposed thereto in connection with Work at the Site ("other materials").

Except as otherwise provided in the Contract Documents or as provided by applicable law, Contractor shall not be required to give any notice for the disturbance or observation of any such hazardous materials or other materials where such matter is disturbed or observed as part of the scope of Work under the Contract Documents (such as hazardous waste or hazardous material investigation, remediation or disposal activities which are identified as the subject of Work under the Contract Documents), where Contractor complies with all requirements in the Contract Documents and applicable law respecting such materials.

Contractor's Notice of Hazardous Materials Condition shall indicate whether the hazardous materials or other materials were shown or indicated in the Contract Documents to be within the scope of Work, and whether the hazardous materials or other materials were brought to the Site by Contractor, its Subcontractors, suppliers, or anyone else for whom Contractor is responsible.

Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed hazardous waste or materials if:

- a. Contractor knew of the existence of such hazardous materials or other materials at the time Contractor submitted its Bid; or
- b. Contractor should have known of the existence of such hazardous material or other materials as a result of its having the responsibility to obtain additional or supplementary examinations, investigation, explorations, tests, studies, and data concerning the conditions at or contiguous to the Site prior to submitting its Bid; or
- c. Contractor failed to give the written notice within the time required by this Article.

If County determines that conditions involve hazardous materials or other materials and that a change in Contract Document terms is justified, County will issue either a Request for Proposal or Construction Change Directive under the procedures described in the Contract Documents, including without limitation Article SC-17 Alterations and Modifications. If County determines that conditions do not involve hazardous materials or other materials or that no change in Contract Document terms is justified, County will notify Contractor in writing, stating the reasons for its determination.

If County and Contractor are unable to agree on entitlement to or as to the amount or length of any adjustment in the Contract Sum or Contract Time required under this section, Contractor shall proceed with the Work as directed by County and may make a claim as provided in Article SC-16, WORK DISPUTES.

In addition to the parties' other rights under this section, if Contractor does not agree to resume Work based on a reasonable belief that it is unsafe, or does not agree to resume Work under special conditions, County may order the disputed portion of Work deleted from the Work, or performed by others, or County may invoke its right to terminate Contractor's right to proceed under the Contract Documents in whole or in part, for convenience or for cause as the facts may warrant. If Contractor does not agree with County's determination of any adjustment in the Contract Sum or Contract Time as a result, Contractor may make a claim as provided in Article SC-16, WORK DISPUTES.

In conformance with Section 25914.2 of the Health and Safety Code, removal of asbestos or hazardous substances including exploratory work to identify and determine the extent of the asbestos or hazardous substance will be performed by separate contract.

If exploratory or removal work delays the current controlling operation, the delay will be considered a right-of-way delay and the Contractor shall be compensated for the delay in conformance with the provisions in Section 8-1.07, "Delays" of the Standard Specifications.

Public Convenience

Where work is to be performed in residential or commercial driveways, suitable provisions approved by the Engineer shall be made by the Contractor prior to commencing work. The Contractor shall minimize the duration of said blocking and notify the property owners of this need at least forty-eight (48) hours in advance.

Contractor shall provide access to each residential or commercial establishment each evening. No driveway shall be closed over a weekend. No driveway shall be closed for more than a total of eight (8) hours. Where concrete has been removed, a temporary surface shall be placed suitable to provide vehicular access to the property if reconstruction has not been completed by that evening. Access to private property shall be provide at all times during construction except when access must be denied to protect forms or to permit

improvements to be constructed. The County may require grading to the back of the new driveway approach so as to provide adequate access. Such work shall be done at no additional compensation.

Public Safety

The Contractor shall provide for the safety of traffic and the public in conformance with the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications and these Special Conditions.

Except for installing, maintaining and removing traffic control devices, whenever work is performed or equipment is operated in the following work areas, the Contractor shall close the adjacent traffic lane unless otherwise provided in the Standard Specifications and these Special Conditions:

Approach Speed of Public Traffic Posted Limit Miles Per Hour	Work Areas
45	Within 6 feet of a traffic lane but not on a traffic lane
35 to 45	Within 3 feet of a traffic lane but not on a traffic lane

The lane closure provisions of this section shall not apply if the work area is protected by permanent or temporary railing or barrier.

When traffic cones or delineators are used to delineate a temporary edge of a traffic lane, the line of cones or delineators shall be considered to be the edge of the traffic lane, however, the Contractor shall not reduce the width of an existing lane to by more than two (2) feet without written approval from the Engineer.

When work is not in progress on a trench or other excavation that required closure of an adjacent lane, the traffic cones or portable delineators used for the lane closure shall be placed off of and adjacent to the edge of the traveled way. The spacing of the cones or delineators shall be not more than the spacing used for the lane closure.

Suspended loads or equipment shall not be moved nor positioned over public traffic or pedestrians.

The Contractor shall install temporary railing (Type K) between a lane open to public traffic and an excavation, obstacle or storage area when the following conditions exist:

- A. The near edge of the excavation is 15' or less from the edge of the lane, except:
 - i. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - ii. Excavations protected by existing barrier or railing.
 - iii. Trenches less than 1' wide for irrigation pipe or electrical conduit, or excavations less than 1' in depth.
- B. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
- C. Excavations in side slopes, where the slope is steeper than 4:1 (horizontal:vertical).

- D. Temporarily Unprotected Permanent Obstacles. The work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and the Contractor elects to install the obstacle prior to installing the protective system; or the Contractor, for the Contractor's convenience and with permission of the Engineer, removes a portion of an existing protective railing at an obstacle and does not replace such railing complete in place during the same day.
- E. Storage Areas. Material or equipment is stored within 12' of the lane and the provisions of the Standard Specifications and these Special Conditions do not otherwise prohibit the storage.

The approach end of temporary railing (Type K), installed in conformance with the provisions in this section "Public Safety" and in Section 7-1.04 "Public Safety," of the Standard Specifications, shall be offset a minimum of 15' from the edge of the traffic lane open to public traffic. The temporary railing shall be installed on a skew toward the edge of the traffic lane of not more than 1' transversely to 10' longitudinally with respect to the edge of the traffic lane. If the 15' minimum offset cannot be achieved, the temporary railing shall be installed on the 10:1 skew to obtain the maximum available offset between the approach end of the railing and the edge of the traffic lane, and an array of temporary crash cushion modules shall be installed at the approach end of the temporary railing.

Temporary railing (Type K) shall conform to the provisions in Section 12-3.20 "Type K Temporary Railing," of the Standard Specifications. Temporary railing (Type K) conforming to the details shown on 2015 Standard Plan T3A and T3B may be used.

Temporary crash cushion modules shall conform to the provisions in Section 12-3.22, "Temporary Crash Cushion Module" of the Standard Specification.

Full compensation for conforming to the provisions in this section "Public Safety," including furnishing and installing temporary railing (Type K) and temporary crash cushion modules, shall be considered as included in the contract prices paid for the various items of work involved and no additional compensation will be allowed therefore.

Cooperation

The Contractor shall conform to the requirements of Section 5-1.20 "Coordination with Other Entities" of the Standard Specifications and these Special Conditions.

Compensation for conforming to the requirements of "Cooperation" shall be included in the various items of work and no additional compensation will be allowed.

SC-08 PROSECUTION AND PROGRESS

Subcontracting

Attention is directed to the provisions in Section 5-1.13, "Subcontracting," of the Standard Specifications, and SC-2, "Proposal Requirements and Conditions," of these Special Conditions.

Pursuant to the provisions of Section 1777.1 of the Labor Code, the Labor Commissioner publishes and distributes a list of contractors ineligible to perform work as a subcontractor on a public works project. This list of debarred contractors is available from the Department of Industrial Relations web site at:

http://www.dir.ca.gov/DLSE/Debar.html

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in SC-12 of these Special Conditions. This requirement shall be enforced as follows:

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

Prosecution

The Contractor shall comply with the provisions in Section 8-1.04B, "Standard Start," Section 8-1.05, "Time," and Section 8-1.10, "Liquidated Damages," of the Standard Specifications and these Special Provisions.

Liquidated Damages

The County will withhold liquidated damages per calendar day as described in Section 8-1.10, "Liquidated Damages" of the Standard Specifications. The actual daily withhold will be determined according to the chart in Section 8-1.10A, "General" of the Standard Specifications.

The amount specified may, at the option of the County, be deducted from any payments due or to become due to the Contractor.

County may deduct from any money due or to become due to Contractor subsequent to time for completion of entire Work and extensions of time allowed pursuant to provisions hereof, a sum representing thenaccrued liquidated damages. Should Contractor fall behind the approved Progress Schedule, County may deduct liquidated damages based on its estimated period of late completion. County need not wait until Final Completion to withhold liquidated damages from Contractor's progress payments. Should money due or to become due to Contractor be insufficient to cover aggregate liquidated damages due, then Contractor forthwith shall pay the remainder of the assessed liquidated damages to County.

Preconstruction Conference

Prior to the issuance of the Notice to Proceed, a pre-construction conference shall be held at the County of Stanislaus, Department of Public works, Engineering Division, 1716 Morgan Road, Modesto, California, for the purpose of discussing with the Contractor the scope of work, contract drawings, specifications, existing conditions, materials to be ordered, equipment to be used, 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.

All work within the channel shall be completed between November 1 and February 15. The N/A has reserved the right, by agreement, to give forty eight (48) hour notice and flood the channel after February 15. This provision is exercised only in drought conditions. The CONTRACTOR is encouraged to accelerate his schedule to complete in channel work by February 15. However, the CONTRACTOR is at liberty to communicate with N/A, to receive potential updates on the possibility of flooding of the channel by February 15, and adjust the project schedule accordingly. All irrigation line work shall be completed by February 15. The liquidated damage clause will be exercised for non-completion of irrigation line work by February 15.

SC-09 MEASUREMENT AND PAYMENT

Payment

The County makes contract payments according to Section 9, "Payment" of the Standard Specifications.

Withholds

The County may withhold payment for noncompliance per Section 9-1.16E, "Witholds" of the Standard Specifications.

Progress Payments

Attention is directed to Section 9-1.16, "Progress Payments," and 9-1.17, "Payment After Contract Acceptance," of the Standard Specifications and these Special Conditions.

For the purpose of making progress payments pursuant to Section 9-1.16, "Progress Payments," of the Standard Specifications, the amount set forth for the contract items of work hereinafter listed shall be deemed to be the maximum value of said contract item of work which will be recognized for progress payment purposes.

NONE

After acceptance of the contract pursuant to Section 5-1.46, "Final Inspection and Contract Acceptance," of the Standard Specifications, the amount, if any, payable for a contract item of work in excess of the maximum value for progress payment purposes hereinabove listed for said item, will be included for payment in the first estimate made after acceptance of the contract.

No partial payment will be made for any materials on hand which are furnished but not incorporated in the work.

Withholding of Retention Monies

Pursuant to and in accordance with the provisions of Public Contract Code Section 20146, the County shall retain 5 percent of the estimated value of the work done and 5 percent of the value of materials so estimated to have been furnished and delivered and unused or furnished and stored as aforesaid as part security for the fulfillment of the contract by the Contractor.

Payment of Withheld Funds

Pursuant to and in accordance with the provisions of Public Contract Code Section 22300, the contractor may elect to substitute securities for retention monies withheld by the County or to request payment of retention monies earned to an escrow agent.

Final Payment and Claims

Attention is directed to Section 9-1.17D, "Final Payment and Claims," of the Standard Specifications.

SC-10 GEOTECHNICAL DATA AND EXISTING CONDITIONS

The following geotechnical data and existing conditions data is provided to assist the bidder in preparing their bid. This data is supplied for informational purposes. These materials are not contract documents and Contractor shall not in any manner rely on the information in these materials. Subject to the foregoing, Contractor shall make its own independent investigation of all conditions affecting the Work and must not rely on information provided by County.

Pavement Design Report by Crawford & Associates, Inc. dated February 27, 2019. Refer to ATTACHMENT 1.

SC-11 SITE DATA

The following site data is provided to assist the bidder in preparing their bid. This data is supplied for informational purposes. These materials are not contract documents and Contractor shall not in any manner rely on the information in these materials. Subject to the foregoing, Contractor shall make its own independent investigation of all conditions affecting the Work and must not rely on information provided by County.

Pavement Design Report by Crawford & Associates, Inc. dated February 27, 2019. Refer to ATTACHMENT 1.

SC-12 FEDERAL AID CONSTRUCTION CONTRACTS

The Contractors attention is directed to the following Federal Requirements for Federal-Aid Construction Projects:

The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any Cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal Agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure of Lobbying Activities," in conformance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less that \$10,000 and not more than \$100,000 for each such failure.

The prospective participant also agrees by submitting his or her bid or proposal that he or she shall require that the language or this certification be included in all lower tier subcontracts which exceed \$100,000 and that all such subrecipients shall certify and disclose accordingly.

The bidder shall complete the Disclosure of Lobbying Activities form included in Part III, "Proposal" which shall be submitted with its bid.

Federal Lobbying Restrictions

Section 1352, Title 21, United States Code prohibits Federal funds being expended by the recipient or any lower tier sub recipient of a Federal-aid contract to pay for any person for influencing or attempting to influence a Federal agency or Congress in connection with the awarding of any Federal-aid contract, the making of any Federal grant or loan, or the entering into of any cooperative agreement.

If any funds other than Federal funds have been paid for the same purpose in connection with this Federalaid contract, the recipient shall submit an executed certification and, if required, submit a completed disclosure form as part of the bid documents.

A certification for Federal-aid contracts regarding payment of funds to lobby Congress or a Federal agency is included in the Proposal. Standard Form – LLL, "Disclosure of Lobbying Activities," with instructions for completion of the Standard Form is also included in the Proposal. Signing the Proposal shall constitute signature of the Certification.

The above referenced certification and disclosure of lobbying activities shall be included in each subcontract and any lower-tier contracts exceeding \$100,000. All disclosure forms, but not certifications, shall be forwarded from tier to tier until received by the Engineer.

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, subcontractors and any lower-tier contractors. An event that materially affects the accuracy of the information reported includes:

A cumulative increase if \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or

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

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

Disadvantaged Business Enterprise (DBE)

This project is subject to Title 49 CFR 26.13(b):

The Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The Contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of BOT-assisted contracts. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the recipient deems appropriate.

Take necessary and reasonable steps to ensure that DBEs have opportunity to participate in the contract (49 CFR 26).

To ensure equal participation of DBEs provided in 49CFR 26.5, the County shows a goal for DBEs.

Make work available to DBEs and select work parts consistent with available DBE subcontractors and suppliers.

Meet the DBE goal shown in the Invitation to Bidders or demonstrate that you made adequate good faith efforts to meet this goal.

It is your responsibility to verify that the DBE firm is certified as DBE at date of bid opening. For a list of DBEs certified by the California Unified Certification Program, go to:

http://www.dot.ca.gov/hq/bep/find_certified.htm

All DBE participation will count towards the Agency's Annual Anticipated DBE Participation Level and the California statewide goal.

Credit for materials or supplies you purchase from DBEs counts towards the goal in the following manner:

- 1. 100 percent counts if the materials or supplies are obtained from a DBE manufacturer.
- 2. 60 percent counts if the materials or supplies are obtained from a DBE regular dealer.
- 3. Only fees, commissions, and charges for assistance in the procurement and delivery of materials or supplies count if obtained from a DBE that is neither a manufacturer or regular dealer. 49 CFR 26.55 defines "manufacturer" and "regular dealer."

You receive credit towards the goal if you employ a DBE trucking company that performs a commercially useful function as defined in 49 CFR 26.55(d)(1) through (4) and (6).

DBE Commitment Submittal

Submit DBE information on the "Construction Contract DBE Commitment", Exhibit 15-G form included in Part III, "Proposal". If the form is not submitted with the bid, remove the form from the Bid book before submitting your bid.

If the DBE Commitment form is not submitted with the bid, the apparent low bidder, the 2nd low bidder, and the 3rd low bidder must complete and submit the DBE Commitment form to the Agency. DBE Commitment form must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

Other bidders do not need to submit the DBE Commitment form unless the Agency requests it. If the Agency requests you to submit a DBE Commitment form, submit the completed form within 4 business days of the request.

Submit written confirmation from each DBE stating that it is participating in the contract. Include confirmation with the DBE Commitment form. A copy of a DBE's quote will serve as written confirmation that the DBE is participating in the contract.

If you do not submit the DBE Commitment form within the specified time, the Agency finds your bid nonresponsive.

Good Faith Efforts Submittal

If you have not met the DBE goal, complete and submit the "DBE Information - Good Faith Efforts," Exhibit 15-H, form with the bid showing that you made adequate good faith efforts to meet the goal. Only good faith efforts directed towards obtaining participation by DBEs will be considered. If good faith efforts documentation is not submitted with the bid, it must be received by the Agency no later than 4:00 p.m. on the 4th business day after bid opening.

If your DBE Commitment form shows that you have met the DBE goal or if you are required to submit the DBE Commitment form, you must also submit good faith efforts documentation within the specified time to protect your eligibility for award of the contract in the event the Agency finds that the DBE goal has not been met.

Good faith efforts documentation must include the following information and supporting documents, as necessary:

- 1. Items of work you have made available to DBE firms. Identify those items of work you might otherwise perform with its own forces and those items that have been broken down into economically feasible units to facilitate DBE participation. For each item listed, show the dollar value and percentage of the total contract. It is your responsibility to demonstrate that sufficient work to meet the goal was made available to DBE firms.
- 2. Names of certified DBEs and dates on which they were solicited to bid on the project. Include the items of work offered. Describe the methods used for following up initial solicitations to determine with certainty if the DBEs were interested, and the dates of the follow-up. Attach supporting documents such as copies of letters, memos, facsimiles sent, telephone logs, telephone billing statements, and other evidence of solicitation. You are reminded to solicit certified DBEs through all reasonable and available means and provide sufficient time to allow DBEs to respond.
- 3. Name of selected firm and its status as a DBE for each item of work made available. Include name, address, and telephone number of each DBE that provided a quote and their price quote. If the firm selected for the item is not a DBE, provide the reasons for the selection.
- 4. Name and date of each publication in which you requested DBE participation for the project. Attach copies of the published advertisements.
- 5. Names of agencies and dates on which they were contacted to provide assistance in contacting, recruiting, and using DBE firms. If the agencies were contacted in writing, provide copies of supporting documents.
- 6. List of efforts made to provide interested DBEs with adequate information about the plans, specifications, and requirements of the contract to assist them in responding to a solicitation. If you have provided information, identify the name of the DBE assisted, the nature of the information provided, and date of contact. Provide copies of supporting documents, as appropriate.
- 7. List of efforts made to assist interested DBEs in obtaining bonding, lines of credit, insurance, necessary equipment, supplies, and materials, excluding supplies and equipment that the DBE subcontractor purchases or leases from the prime contractor or its affiliate. If such assistance is provided by you, identify the name of the DBE assisted, nature of the assistance offered, and date assistance was provided. Provide copies of supporting documents, as appropriate.
- 8. Any additional data to support demonstration of good faith efforts.

The Agency may consider DBE commitments of the 2^{nd} and 3^{rd} bidders when determining whether the low bidder made good faith efforts to meet the DBE goal.

Subcontractor and disadvantaged Business Enterprise Records

Use each DBE subcontractor as listed on Exhibit 12-B, "Bidder's List of Subcontractors (DBE and Non-DBE) and Exhibit 15-G, "Construction Contract DBE Commitment", form unless you receive authorization for a substitution.

The Agency requests the Contractor to:

- 1. Notify the Engineer of any changes to its anticipated DBE participation
- 2. Provide this notification before starting the affected work
- 3. Maintain records including:
 - a. Name and business address of each 1st-tier subcontractor
 - b. Name and business address of each DBE subcontractor, DBE vendor, and DBE Trucking company, regardless of tier
 - c. Date of payment and total amount paid to each business

If you are a DBE contractor, include the date of work performed by your own forces and the corresponding value of the work.

After submitting an invoice for reimbursement that includes a payment to a DBE, but no later than the 10th of the following month, Contractor shall complete and email the Exhibit 9-F: Disadvantaged Business Enterprise Running Tally of Payments to <u>business.support.unit@dot.ca.gov</u> with a copy to Mark Hamblin at <u>hamblinm@stancounty.com</u>. Exhibit 9-F lists accurate payment amount, total amount paid to date, and total commitment amount for each DBE on the federal-aid highway project. It also includes contract award amount and total payment to date to Contractor.

Before the 15th of each month, submit a Monthly DBE Trucking Verification form.

If a DBE is decertified before completing its work, the DBE must notify you in writing of the decertification date. If a business becomes a certified DBE before completing its work, the business must notify you in writing of the certification date. Submit the notifications. On work completion, complete a Disadvantaged Business Enterprises (DBE) Certification Status Change, Exhibit 17-O form. Submit the form within 30 days of contract acceptance.

Upon work completion, complete Exhibit 17-F, "Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors." Submit it within 90 days of contract acceptance. The Agency will withhold \$10,000 until the form is submitted. The Agency releases the withhold upon submission of the completed form.

Performance of Disadvantaged Business Enterprises

DBEs must perform work or supply materials as listed in the Exhibit 15-G, "Construction Contract DBE Commitment" form, included in the Bid.

Do not terminate or substitute a listed DBE for convenience and perform the work with your own forces or obtain materials from other sources without authorization from the Agency.

The Agency authorizes a request to use other forces or sources of materials if it shows any of the following justifications:

- 1. Listed DBE fails or refuses to execute a written contract based on plans and specifications for the project.
- 2. You stipulated that a bond is a condition of executing the subcontract and the listed DBE fails to meet your bond requirements.
- 3. Work requires a contractor's license and listed DBE does not have a valid license under Contractors License Law.
- 4. Listed DBE fails or refuses to perform the work or furnish the listed materials.
- 5. Listed DBE's work is unsatisfactory and not in compliance with the contract.
- 6. Listed DBE is ineligible to work on the project because of suspension or debarment.
- 7. Listed DBE becomes bankrupt or insolvent.
- 8. Listed DBE voluntarily withdraws with written notice from the Contract.
- 9. Listed DBE is ineligible to receive credit for the type of work required.
- 10. Listed DBE owner dies or becomes disabled resulting in the inability to perform the work on the Contract.
- 11. Agency determines other documented good cause.

Notify the original DBE of your intent to use other forces or material sources and provide the reasons. Provide the DBE with 5 days to respond to your notice and advise you and the Agency of the reasons why the use of other forces or sources of materials should not occur. Your request to use other forces or material sources must include:

- 1. One or more of the reasons listed in the preceding paragraph.
- 2. Notices from you to the DBE regarding the request.
- 3. Notices from the DBEs to you regarding the request.

If a listed DBE is terminated or substituted, you must make good faith efforts to find another DBE to substitute for the original DBE. The substitute DBE must perform at least the same amount of work as the original DBE under the contract to the extent needed to meet the DBE goal.

The substitute DBE must be certified as a DBE at the time of request for substitution.

Unless the Agency authorizes (1) a request to use other forces or sources of materials or (2) a good faith effort for a substitution of a terminated DBE, the Agency does not pay for work listed on the Exhibit 15-G,

"Construction Contract DBE Commitment", form unless it is performed or supplied by the listed DBE or an authorized substitute.

Buy America Requirements

Furnish steel and iron materials to be incorporated into the work with certificate of compliance. Steel and iron materials must be produced in the U.S. except:

- 1. Foreign pig iron and processed, pelletized, and reduced iron ore may be used in the domestic production of the steel and iron materials [60 Fed Reg 15478 (03/24/1995)];
- 2. If the total combined cost of the materials does not exceed the greater of 0.1 percent of the total bid or \$2,500, materials produced outside the U.S. may be used.

Production includes:

- 1. Processing steel and iron materials, including smelting or other processes that alter the physical form or shape (such as rolling, extruding, machining, bending, grinding, and drilling) or chemical composition;
- 2. Coating application, including epoxy coating, galvanizing, and painting, that protects or enhances the value of steel and iron materials.

Prompt Payment of Withheld Funds to Subcontractors

The agency shall hold retainage from the prime contractor and shall make prompt and regular incremental acceptances of portions, as determined by the agency of the contract work and pay retainage to the prime contractor based on these acceptances. The prime contractor or subcontractor shall return all monies withheld in retention from all subcontractors within 30 days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the agency. Any delay or postponement of payment may take place only for good cause and with the agency's prior written approval. Any violation of these provisions shall subject the violating prime contractor to the penalties, sanctions, and other 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.

Female and Minority Goals

To comply with Section II, "Nondiscrimination," of the "Required Contract Provisions Federal-Aid Construction Contracts," the following are goals for female and minority utilization goals for Federal-Aid construction contracts and subcontracts that exceed \$10,000:

- 1. The nationwide goal for female utilization is 6.9 percent.
- 2. The goal for minority utilization [45 Fed Reg 65984 (10/3/1980)] in Stanislaus County is 12.3%.

For each July during which work is performed under the contract, the Contractor and each non materialsupplier subcontractor with a subcontract of \$10,000 or more must complete form FHWA PR-1391 (Appendix C to 23 CFR 230). Submit the forms by August 15th.

Federal Trainee Program

Not applicable.

Title VI Assurances

During the performance of this Agreement, the contractor, for itself, its assignees and successors in interest (hereinafter collectively referred to as CONTRACTOR) agrees as follows:

- 1. <u>Compliance with Regulations</u>: CONTRACTOR shall comply with the regulations relative to nondiscrimination in federally assisted programs of the Department of Transportation, Title 49, Code of Federal Regulations, Part 21, as they may be amended from time to time, (hereinafter referred to as the REGULATIONS), which are herein incorporated by reference and made a part of this agreement.
- 2. <u>Nondiscrimination</u>: CONTRACTOR, with regard to the work performed by it during the AGREEMENT, shall not discriminate on the grounds of race, color, sex, national origin, religion, age, or disability in the selection and retention of sub-applicants, including procurements of materials and leases of equipment. CONTRACTOR shall not participate either directly or indirectly in the discrimination prohibited by Section 21.5 of the Regulations, including employment practices when the agreement covers a program set forth in Appendix B of the Regulations.
- 3. <u>Solicitations for Sub-agreements, Including Procurements of Materials and Equipment</u>: In all solicitations either by competitive bidding or negotiation made by CONTRACTOR for work to be performed under a Sub-agreement, including procurements of materials or leases of equipment, each potential sub-applicant or supplier shall be notified by CONTRACTOR of the CONTRACTOR'S obligations under this Agreement and the Regulations relative to nondiscrimination on the grounds of race, color, or national origin.
- 4. <u>Information and Reports</u>: CONTRACTOR shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to its books, records, accounts, other sources of information and its facilities as may be determined by the California Department of Transportation or FHWA to be pertinent to ascertain compliance with such Regulations or directives. Where any information required of CONTRACTOR is in the exclusive possession of another who fails or refuses to furnish this information, CONTRACTOR shall so certify to the California Department of Transportation or the FHWA as appropriate, and shall set forth what efforts CONTRACTOR has made to obtain the information.
- 5. <u>Sanctions for Noncompliance</u>: In the event of CONTRACTOR's noncompliance with the nondiscrimination provisions of this agreement, the California Department of Transportation shall impose such agreement sanctions as it or the FHWA may determine to be appropriate, including, but not limited to:
 - a. withholding of payments to CONTRACTOR under the Agreement within a reasonable period of time, not to exceed 90 days; and/or
 - b. cancellation, termination or suspension of the Agreement, in whole or in part.
- 6. <u>Incorporation of Provisions</u>: CONTRACTOR shall include the provisions of paragraphs (1) through (6) in every sub-agreement, including procurements of materials and leases of equipment, unless exempt by the Regulations, or directives issued pursuant thereto.

CONTRACTOR shall take such action with respect to any sub-agreement or procurement as the California Department of Transportation or FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance, provided, however, that, in the event CONTRACTOR becomes involved in, or is threatened with, litigation with a sub-applicant or supplier as a result of such direction, CONTRACTOR may request the California Department of Transportation enter into such litigation to protect the interests of the State, and, in addition, CONTRACTOR may request the United States to enter into such litigation to protect the interests of the United States.

Maintain records and submit reports documenting your performance under this section.

Required Federal Contract Provisions

See the following pages for provisions.

FHWA-1273 -- Revised May 1, 2012

REQUIRED CONTRACT PROVISIONS FEDERAL-AID CONSTRUCTION CONTRACTS

- General
- Nondiscrimination П.
- III. Nonsegregated Facilities
- Davis-Bacon and Related Act Provisions IV
- V. Contract Work Hours and Safety Standards Act Provisions
- VI. Subletting or Assigning the Contract Safety: Accident Prevention
- VII
- VIII. False Statements Concerning Highway Projects Implementation of Clean Air Act and Federal Water
- IX. Pollution Control Act
- Compliance with Governmentwide Suspension and X. **Debarment Requirements**
- Certification Regarding Use of Contract Funds for XI. Lobbying
- XII Cargo Preference Act 1954 (CPA)

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under Title 23 (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services)

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider

Form FHWA-1273 must be included in all Federal-aid designbuild contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services purchase orders, rental agreements and other agreements for supplies or services). The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in bid proposal or request for proposal documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's

immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract

A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors.

II. NONDISCRIMINATION

The provisions of this section related to 23 CFR Part 230 are applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR 60, 29 CFR 1625-1627, Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding \$10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR 60, and 29 CFR 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with Title 23 USC Section 140, the Rehabilitation Act of 1973, as amended (29 USC 794), and Title VI of the Civil Rights Act of 1964, as amended, and related regulations including 49 CFR Parts 21, 26 and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR 230, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal employment opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (28 CFR 35, 29 CFR 1630, 29 CFR 1625-1627, 41 CFR 60 and 49 CFR 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23

U.S.C. 140 shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR 35 and 29 CFR 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract.

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-thejob training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action, or who are substantially involved in such action, will be made fully cognizant of, and will implement, the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means. 4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees, and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to insure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs, i.e., apprenticeship, and on-the-job training programs for the geographical area of contract performance. In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

 c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, national origin, age or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, national origin, age or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency. 8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established there under. Employees must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, national origin, age or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

 The contractor shall notify all potential subcontractors and suppliers and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurance Required by 49 CFR 26.13(b):

a. The requirements of 49 CFR Part 26 and the State DOT's U.S. DOT-approved DBE program are incorporated by reference.

b. The contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of DOT-assisted contracts. Failure by the contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as the contracting agency deems appropriate.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

 The number and work hours of minority and nonminority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women;

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project, indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on <u>Form FHWA-1391</u>. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of \$10,000 or more.

The contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location, under the contractor's control, where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms, and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding \$2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size). The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. Contracting agencies may elect to apply these requirements to other projects.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 "Contract provisions and related matters" with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages

a. All laborers and mechanics employed or working upon the site of the work, will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics.

Contributions made or costs reasonably anticipated for bona fide fringe benefits under section 1(b)(2) of the Davis-Bacon

Act on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.d. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics shall be paid the appropriate wage rate and fringe benefits on the wage determination for the classification of work actually performed, without regard to skill, except as provided in 29 CFR 5.5(a)(4). Laborers o mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein. Provided, That the employer's payroll records accurately set forth the time spent in each classification in which work is performed The wage determination (including any additional classification and wage rates conformed under paragraph 1.b. of this section) and the Davis-Bacon poster (WH-1321) shall be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b.(1) The contracting officer shall require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract shall be classified in conformance with the wage determination. The contracting officer shall approve an additional classification and wage rate and fringe benefits therefore only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is utilized in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken shall be sent by the contracting officer to the Administrator of the Wage and Hour Division, Employment Standards Administration, U.S. Department of Labor, Washington, DC 20210. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(3) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer shall refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Wage and Hour Administrator for determination. The Wage and Hour Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30-day period that additional time is necessary.

(4) The wage rate (including fringe benefits where appropriate) determined pursuant to paragraphs 1.b.(2) or 1.b.(3) of this section, shall be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

c. Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor shall either pay the benefit as stated in the wage determination or shall pay another bona fide fringe benefit or an hourly cash equivalent thereof.

d. If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, Provided, That the Secretary of Labor has found, upon the written request of the contractor, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

2. Withholding

The contracting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contract or under this contract, or any other Federall contract with the same prime contractor, or any other federallyassisted contract subject to Davis-Bacon prevailing wage requirements, which is held by the same prime contractor, so much of the accrued payments or advances as may be considered necessary to pay laborers and mechanics, including apprentices, trainees, and helpers, employed by the contractor or any subcontractor the full amount of wages required by the contract. In the event of failure to pay any laborer or mechanic, including any apprentice, trainee, or helper, employed or working on the site of the work, all or part of the wages required by the contract, the contracting agency may, after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

3. Payrolls and basic records

a. Payrolis and basic records relating thereto shall be maintained by the contractor during the course of the work and preserved for a period of three years thereafter for all laborers and mechanics working at the site of the work. Such records shall contain the name, address, and social security number of each such worker, his or her correct classification, hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in section 1(b)(2)(B) of the Davis-Bacon Act), daily and weekly number of hours worked, deductions made and actual wages paid. Whenever the Secretary of Labor has found under 29 CFR 5.5(a)(1)(iv) that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a

plan or program described in section 1(b)(2)(B) of the Davis-Bacon Act, the contractor shall maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits. Contractors employing apprentices or trainees under approved programs shall maintain written evidence of the registration of apprenticeship programs and certification of trainee programs, the registration of the apprentices and trainees, and the ratios and wage rates prescribed in the applicable programs.

b.(1) The contractor shall submit weekly for each week in which any contract work is performed a copy of all payrolls to the contracting agency. The payrolls submitted shall set out accurately and completely all of the information required to be maintained under 29 CFR 5.5(a)(3)(i), except that full social security numbers and home addresses shall not be included on weekly transmittals. Instead the payrolls shall only need to include an individually identifying number for each employee (e.g., the last four digits of the employee's social security number). The required weekly payroll information may be submitted in any form desired. Optional Form WH-347 is available for this purpose from the Wage and Hour Divisio Web site at http://www.dol.gov/esa/whd/forms/wh347instr.htm or its successor site. The prime contractor is responsible for the submission of copies of payrolls by all subcontractors. Contractors and subcontractors shall maintain the full social security number and current address of each covered worker, and shall provide them upon request to the contracting agency for transmission to the State DOT, the FHWA or the Wage and Hour Division of the Department of Labor for purposes of an investigation or audit of compliance with prevailing wage requirements. It is not a violation of this section for a prime contractor to require a subcontractor to provide addresses and social security numbers to the prime contractor for its own records, without weekly submission to the contracting agency.

(2) Each payroll submitted shall be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor or his or her agent who pays or supervises the payment of the persons employed under the contract and shall certify the following:

(i) That the payroll for the payroll period contains the information required to be provided under §5.5 (a)(3)(ii) of Regulations, 29 CFR part 5, the appropriate information is being maintained under §5.5 (a)(3)(i) of Regulations, 29 CFR part 5, and that such information is correct and complete;

(ii) That each laborer or mechanic (including each helper, apprentice, and trainee) employed on the contract during the payroll period has been paid the full weekly wages eamed, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in Regulations, 29 CFR part 3;

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification of work performed, as specified in the applicable wage determination incorporated into the contract. (3) The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 shall satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(2) of this section.

(4) The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under section 1001 of title 18 and section 231 of title 31 of the United States Code.

c. The contractor or subcontractor shall make the records required under paragraph 3.a. of this section available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and shall permit such representatives to interview employees during working hours on the job. If the contractor or subcontractor fails to submit the required records or to make them available, the FHWA may, after written notice to the contractor, the contracting agency to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available may be grounds for debarment action pursuant to 29 CFR 5.12.

4. Apprentices and trainees

a. Apprentices (programs of the USDOL).

Apprentices will be permitted to work at less than the predetermined rate for the work they performed when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship Training, Employer and Labor Services, or with a State Apprenticeship Agency recognized by the Office, or if a person is employed in his or her first 90 days of probationary employment as an apprentice in such an apprenticeship program, who is not individually registered in the program, but who has been certified by the Office of Apprenticeship Training, Employer and Labor Services or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice.

The allowable ratio of apprentices to journeymen on the job site in any craft classification shall not be greater than the ratio permitted to the contractor as to the entire work force under the registered program. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated above, shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed. Where a contractor is performing construction on a project in a locality other than that in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyman's hourly rate) specified in the contractor's or subcontractor's registered program shall be observed.

Every apprentice must be paid at not less than the rate specified in the registered program for the apprentice's level of progress, expressed as a percentage of the journeymen hourly rate specified in the applicable wage determination. Apprentices shall be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringes shall be paid in accordance with that determination.

In the event the Office of Apprenticeship Training, Employer and Labor Services, or a State Apprenticeship Agency recognized by the Office, withdraws approval of an apprenticeship program, the contractor will no longer be permitted to utilize apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

b. Trainees (programs of the USDOL).

Except as provided in 29 CFR 5.16, trainees will not be permitted to work at less than the predetermined rate for the work performed unless they are employed pursuant to and individually registered in a program which has received prior approval, evidenced by formal certification by the U.S. Department of Labor, Employment and Training Administration.

The ratio of trainees to journeymen on the job site shall not be greater than permitted under the plan approved by the Employment and Training Administration.

Every trainee must be paid at not less than the rate specified in the approved program for the trainee's level of progress, expressed as a percentage of the journeyman hourly rate specified in the applicable wage determination. Trainees shall be paid fringe benefits in accordance with the provisions of the trainee program. If the trainee program does not mention fringe benefits, trainees shall be paid the full amount of fringe benefits listed on the wage determination unless the Administrator of the Wage and Hour Division determines that there is an apprenticeship program associated with the corresponding journeyman wage rate on the wage determination which provides for less than full fringe benefits for apprentices. Any employee listed on the payroll at a trainee rate who is not registered and participating in a training plan approved by the Employment and Training Administration shall be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any trainee performing work on the job site in excess of the ratio permitted under the registered program shall be paid not less than the applicable wage rate on the wage determination for the work actually performed.

In the event the Employment and Training Administration withdraws approval of a training program, the contractor will no longer be permitted to utilize trainees at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

c. Equal employment opportunity. The utilization of apprentices, trainees and journeymen under this part shall be in conformity with the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

d. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeymen shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract.

6. Subcontracts. The contractor or subcontractor shall insert Form FHWA-1273 in any subcontracts and also require the subcontractors to include Form FHWA-1273 in any lower tier subcontracts. The prime contractor shall be responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract.

9. Disputes concerning labor standards. Disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility.

a. By entering into this contract, the contractor certifies that neither it (nor he or she) nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of section 3(a) of the Davis-Bacon Act or 29 CFR 5.12(a)(1).

c. The penalty for making false statements is prescribed in the U.S. Criminal Code, 18 U.S.C. 1001.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

The following clauses apply to any Federal-aid construction contract in an amount in excess of \$100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchmen and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph (1.) of this section, the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such liquidated damages shall be computed with respect to each individual laborer or mechanic, including watchmen and guards, employed in violation of the clause set forth in paragraph (1.) of this section, in the sum of \$10 for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the

3. Withholding for unpaid wages and liquidated damages. The FHWA or the contacting agency shall upon its own action or upon written request of an authorized representative of the Department of Labor withhold or cause to be withheld, from any moneys payable on account of work performed by the contractor or subcontractor under any such contract or any other Federal contract with the same prime contractor, or any other federally-assisted contract subject to the Contract Work Hours and Safety Standards Act, which is held by the same prime contractor, or unpaid wages and liquidated damages as provided in the clause set forth in paragraph (2.) of this section.

4. Subcontracts. The contractor or subcontractor shall insert in any subcontracts the clauses set forth in paragraph (1.) through (4.) of this section and also a clause requiring the subcontractors to include these clauses in any lower tier subcontractors. The prime contractor shall be responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs (1.) through (4.) of this section.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term "perform work with its own organization" refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions:

 the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;

(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and (4) the prime contractor remains ultimately responsible for

the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract.

2. The contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. The contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contract ing agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

 The 30% self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements.

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

 In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C.3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federalaid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honesity as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 1, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

By submission of this bid/proposal or the execution of this contract, or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, or subcontractor, as appropriate, will be deemed to have stipulated as follows:

1. That any person who is or will be utilized in the performance of this contract is not prohibited from receiving an award due to a violation of Section 508 of the Clean Water Act or Section 306 of the Clean Air Act.

or Section 306 of the Clean Air Act. 2. That the contractor agrees to include or cause to be included the requirements of paragraph (1) of this Section X in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost \$25,000 or more – as defined in 2 CFR Parts 180 and 1200.

1. Instructions for Certification - First Tier Participants:

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transaction, and all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<u>https://www.epls.gov/</u>), which is compiled by the General Services Administration.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

 Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency;

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

2. Instructions for Certification - Lower Tier Participants:

(Applicable to all subcontracts, purchase orders and other lower tier transactions requiring prior FHWA approval or estimated to cost \$25,000 or more - 2 CFR Parts 180 and 1200)

a. By signing and submitting this proposal, the prospective lower tier is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180 and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. "First Tier Covered Transactions" refers to any covered transaction between a grantee or subgrantee of Federal funds and a participant (such as the prime or general contract). "Lower Tier Covered Transactions" refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). "First Tier Participant" refers to the participant who has entered into a covered transaction with a grantee or subgrantee of Federal funds (such as the prime or general contractor). "Lower Tier Participant" refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors). "Lower Tier

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the \$25,000 threshold.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the Excluded Parties List System website (<u>https://www.epls.gov/</u>), which is compiled by the General Services Administration.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

* * * * *

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

1. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency.

 Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed \$100,000 (49 CFR 20).

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$10,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed \$100,000 and that all such recipients shall certify and disclose accordingly.

XII. CARGO PREFERENCE ACT OF 1954(CPA)

The provisions of this section related to 46 CFR 381.7(a) (1, 2) & 381.7 (b) (1, 2, 3) applies to federally funded highway construction projects. This requirement applies to materials or equipment acquired for specific Federal –aid Highway projects. The clauses required by this part shall provide that at least 50 percent of the freight revenue and tonnage of cargo generated by the U.S. Government Grant, Guaranty, Loan or Advance of Funds be transported on privately owned United States-flag commercial vessels. The following are suggested acceptable clauses with respect to the use of United States-flag vessels to be incorporated in the Grant, Guaranty, Loan and/or Advance of Funds Agreements as well as contracts and subcontracts resulting therefrom:

(a) Agreement Clauses. "Use of United States-flag vessels:

"(1) Pursuant to Pub. L. 664 (43 U.S.C. 1241(b)) at least 50 percent of any equipment, materials or commodities procured, contracted for or otherwise obtained with funds granted, guaranteed, loaned, or advanced by the U.S. Government under this agreement, and which may be transported by ocean vessel, shall be transported on privately owned United States-flag commercial vessels, if available.

"(2) Within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (a)(1) of this section shall be furnished to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590."

(b) Contractor and Subcontractor Clauses. "Use of United States-flag vessels: The contractor agrees—

"(1) To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels.

"(2) To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, 'on-board' commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b) (1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Division of National Cargo, Office of Market Development, Maritime Administration, Washington, DC 20590. "(3) To insert the substance of the provisions of

"(3) To insert the substance of the provisions of this clause in all subcontracts issued pursuant to this contract."

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS

This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

 During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

 The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region. 6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

SC-13 BLANK

SC-14 BONDS

At or before the date indicated in Part II – INFORMATION TO BIDDERS, Contractor shall file with County the following bonds:

- a. Corporate surety bond, in the form of Construction Performance Bond, in the penal sum of 100% of the Contractor's Bid as accepted, to guaranty faithful performance of the Work; and
- b. Corporate surety bond, in the form of Construction Labor and Material Payment Bond, in the penal sum of 100% of the Contractor's Bid as accepted, to guaranty payment of wages for services engaged and of bills contracted for materials, supplies, and equipment used in performance of Contract Documents.

Sureties shall be satisfactory to County. Corporate sureties on these bonds and on bonds accompanying Bids shall be duly licensed to do business in the State of California and shall have an A.M. Best Company financial rating of [A,VII] or better in termination of the contract.

SC-15 INSURANCE

At or before the date specified in Instructions to Bidders, Contractor shall furnish to County satisfactory proof that Contractor has in force continuously for the entire period covered by the Contract the classes of insurance in the form and with limits and deductibles *as specified in Exhibit B*.

SC-16 WORK DISPUTES

All disputes shall comply with the provisions of Assembly Bill No. 626 (an act to add and repeal Section 9204 of the Public Contract Code, relating to public contracts. Approved by the Governor: September 29, 2016) and requirements set forth in section 5-1.43, "Potential Claim and Dispute Resolution," of the Standard Specifications.

SC-17 ALTERATIONS AND MODIFICATIONS

The County reserves the right to make changes to the plans and specifications in accordance with section 4-1.05, "Changes and Extra Work," of the Standard Specifications.

SC-18 DISCOVERY OF CONFLICTS, ERRORS, OMISSIONS, OR DISCREPANCIES

In case of discovery by Contractor of conflict, discrepancies, errors, or omissions among the various Contract Documents the matter shall be submitted in writing by Contractor to Engineer for clarification. Any work affected by Contractor prior to clarification by Engineer shall be at Contractor's risk.

SC-19 DIFFERING SITE CONDITIONS

See Section 4-1.06, "Differing Site Conditions" of the Standard Specifications.

If either of the following conditions is encountered at Site when digging trenches or other excavations that extend deeper than four (4) feet below the surface, Contractor shall give a written Notice of Differing Site Conditions to County promptly before conditions are disturbed, except in an emergency as required by Article SC-22, Emergencies, and in no event later than seven (7) days after first observance of:

a. Subsurface or Latent physical conditions which differ materially from those indicated in the Contract Documents; or

b. Unknown physical conditions of an unusual nature or which differ materially from those ordinarily encountered and generally recognized as inherent in work of the character provided for in the Contract Documents.

In response to Contractor's Notice of Differing Site Conditions under this paragraph, County will investigate the identified conditions, and if they differ materially and cause increase or decrease in Contractor's cost of, or time required for, performance of any part of the Work, County will issue either a Request for Proposal or a Construction Change Directive under the procedures described in the Contract Documents, including without limitation Article SC-17 Alterations and Modifications. If County determines that physical conditions at the Site are not latent or are not materially different from those indicated in Contract Documents or that no change in terms of the Contract Documents is justified, County will so notify Contractor in writing, stating reasons.

Contractor shall not be entitled to any adjustment in the Contract Sum or Contract Time regarding claimed Latent or materially different Site conditions (whether above or below grade) if:

- a. Contractor knew of the existence of such conditions at the time Contractor submitted its Bid; or
- b. Contractor should have known of the existence of such conditions as a result of having complied with the requirements of Contract Documents, or
- c. Contractor was required to give written Notice of Differing Site Conditions and failed to do so within the time required.

SC-20 BLANK

SC-21 TIME ADJUSTMENT AND ENTITLEMENTS FOR DELAYS

Contractor may receive a time extension and be compensated for delays caused directly and solely by the County. Submit an RFI per 8-1.07, "Delays" of the Standard Specifications.

All delay related time adjustments shall be per Section 8-1.07B, "Time Adjustments" of the Standard Specifications.

All delay related payment adjustments shall be per Section 8-1.07C, "Payment Adjustment" of the Standard Specifications.

SC-22 EMERGENCIES

In emergencies affecting the safety or protection of persons or Work or property at the Site or adjacent thereto, Contractor, without special instruction or authorization from County, is obligated to act to prevent threat and damage, injury or loss, until directed otherwise by County. Contractor shall give County prompt written notice if Contractor believes that any significant changes in Work or variations from Contract Documents have been caused thereby. If County determines that a change in the Contract Documents is required because of the action taken by Contractor in response to such an emergency, a Change Order or Construction Change Directive will be issued to document the consequences of such action.

SC-23 WORKING DAYS AND LEGAL HOLIDAYS

County will provide inspectors during work days at no cost to the Contractor. Work days shall be defined as hours between 7 a.m. and 5 p.m. any day Monday through Friday of any week, excluding the following legal holidays:

New Year's Day, January 1 Martin Luther King Day, January, third Monday President's Day, February, third Monday Memorial Day, May, last Monday Independence Day, July 4 Labor Day, September, first Monday Veteran's Day, November, first Monday Veteran's Day, November 11 Thanksgiving Day, November, fourth Thursday Friday after Thanksgiving Day Christmas Eve, 1PM -5PM Christmas Day, December 25

If the Contractor elects to schedule work outside normal hours of work, the Contractor shall request the additional days or hours at least forty-eight (48) hours prior to the work. No work shall be done outside of the normal working hours, without the prior consent of the County. The Contractor shall be responsible for payment to the County for providing inspectors for those days or hours. Inspector costs shall be the full reimbursable rate established by the County. Rates will be available to the Contractor at the pre-construction meeting if requested.

SC-24 SUBMITTALS

Each submittal should meet the requirements of Section 5-1.23, "Submittals" of the Standard Specification and these Special Conditions.

Each Submittal must include:

- 1. Contract Number.
- 2. Designation as an "Action" or "Informational" Submittal
- 3. Sequential submittal number
- 4. A concise description of the material or item submitted
- 5. Be referenced to the bid item and Specification section

Submittals may be rejected if they are missing required information or do not meet the requirements of the Specification.

COUNTY OF STANISLAUS DEPARTMENT OF PUBLIC WORKS

PART VI – SPECIAL PROVISIONS

SP-01 ORDER OF WORK

Attention is directed to Section 7-1.04, "Public Safety," of the Standard Specifications.

Within ten (10) working days of the date shown on the Notice to Proceed the Contractor shall provide submittals to the Engineer as specified in these special provisions. The submittals shall consist of manufacturer's shop drawings, specifications, and the performance characteristics of the equipment specified on the Plans and in these Special Provisions.

The Engineer shall have a maximum of ten (10) working days in which to review and approve or reject each submittal from the Contractor.

The contractor shall submit the traffic signal, street light, and Rectangular Rapid Flashing Beach (RRFB) equipment specifications for review and approval.

The contractor shall place the order for traffic signal equipment, street light, and RRFB equipment within two (2) working days of submittal approval.

The Contractor shall complete constructing curb ramp, curb and gutter, and sidewalk improvements prior to the initiation of Cold-In-Place Recycling (CIPR) process and pavement work.

The contractor shall submit a Water Pollution Control Plan and Project Schedule prior to beginning the contract work.

The contractor must submit a Staging Plan and a Traffic Control Plan for review and approval by the Engineer. Construction staging is to occur within the Public Right-of-Way. The Staging Plan and Traffic Control Plan must be approved prior to commencement of construction activities. Road closure or Detour is not allowed for this project.

The contractor shall submit a Lead Compliance Plan for review and approval by the Engineer prior to removal of any striping.

The contractor shall notify the adjacent residents and businesses of the project in writing 48 hours in advance. The written notice shall include the time and date that the road work may affect the residents and businesses. The contractor shall submit to the Engineer a sample of the notification flyer for review and approval prior to distribution. Contractor shall adjust work schedule to accommodate waste pickup days.

Contractor to provide a reasonable means for property owners adjacent to construction to access

properties at all times. At least one side of the sidewalk shall always be open for pedestrian use during construction. A minimum of one driveway shall remain open at all times per shopping center during construction. Contractor to coordinate any driveway closures with property owners before removing access.

Contractor shall take pictures at every curb ramp location prior to demolition. Digital pictures shall be submitted as an informational to the engineer and shall be digitally stored until construction is completed.

The Contractor shall lower all frames, covers, existing survey monument wells, manholes, water valves, and grates and other facilities to finished grade.

The Contractor shall contact the service department at Turlock Irrigation District (TID) via phone at (209) 883-8222 to obtain forms necessary to establish work orders, light numbers, and additional information required.

The Contractor shall coordinate with Turlock Irrigation District (TID) Underground Inspector at (209) 606-0136 to access existing District service boxes for Point of Connection (POC) during service connection and conduit installation.

Contractor shall pull all electrical wires for signal and lighting prior to placing final lift of pavement.

The Contractor shall raise all frames, covers, existing survey monument wells, manholes, water valves, and grates and other facilities to finished grade.

The Contractor shall wait a minimum of 7 days prior to placing Hot Mix Asphalt (HMA) after performing Cold In Place Recycling (CIPR) process.

SP-02 WATER POLLUTION CONTROL

The project disturbs less than one acre of land surface and is not part of a larger common plan or development so therefore it is exempt from the requirements of the NPDES General Permit for "Storm Water Discharges Associated with Construction and Land Disturbance Activities" (Order No. 2009-0009-DWQ, NPDES No. CAS000002).

The Contractor shall submit a water pollution control plan to the Engineer for approval prior to beginning construction activities. The Contractor shall use the Caltrans WPCP Template to develop their WPCP. A copy of the template can be found at the following website:

https://dot.ca.gov/programs/construction/storm-water-and-water-pollution-control/manuals-and-handbooks

Full compensation for preparing, submitting for approval, monitoring, updating, and implementing the water pollution control plan as specified in these special provisions and as directed by the Engineer shall be considered as included in the contract lump sum price paid for **Water Pollution Control**, and no additional compensation will be allowed.

SP-03 PROJECT SCHEDULE

Critical Path Method Baseline Schedule and weekly progress schedules are required for this contract and shall be submitted in conformance with the provisions in Section 8-1.02, "Schedule," of the Standard Specifications, unless otherwise authorized in writing by the Engineer.

SP-04 EXISTING FACILITIES

Work involving existing property and facilities shall conform to Section 5-1.36, "Property and Facility Preservation," and Section 15, "Existing Facilities" of the Standard Specifications and these Special Provisions.

Prior to construction, the Contractor shall locate all utility boxes, manhole covers, etc., and establish swing ties or temporary markers.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least three (3) working days, but not more than ten (10) working days, prior to performing any excavation or other work close to any underground facility. Regional notification centers include, but are not limited to, the following:

Underground Service Alert Northern California (USA) 811, or 1-800-227-2600

Adjustment to grade of the following utility facilities will require coordination with the Contractor's operations. The Contractor shall make the necessary arrangements with the utility company, through the Engineer, and shall submit a schedule of work, verified by a representative of the utility company, to the Engineer.

Utility	Location
AT&T Manhole/Box	Various locations along Crows Landing Road between Whitmore Avenue and Hatch Road
PG&E Manhole/Valve	Various locations along Crows Landing Road between Whitmore Avenue and Hatch Road
United States Postal Service Mail Box	About 190' north of Butte Avenue on the west side of Crows Landing Road

Full compensation for performing all work associated with **Existing Facilities** shall be considered as included in the contract price paid for the various items of work, and no additional compensation will be allowed.

SP-05 DUST CONTROL

Dust Control work shall conform to Section 10-5 "Dust Control" of the Standard Specifications.

Full compensation for performing all work associated with **Dust Control** shall be considered as included in the contract price paid for the various items of work, and no additional compensation will be allowed.

SP-06 MOBILIZATION

Mobilization shall conform to the provisions in Section 9-1.16D, "Mobilization," of the Standard Specifications.

Full compensation for performing all work associated with Mobilization shall be considered as included in the contract price paid for **Mobilization**, and no additional compensation will be allowed.

SP-07 MONUMENT PRESERVATION

Contractor shall review section 8771 and section 8725 of the business and professions code and section 605 of the California Penal Code to ensure that monument conservation has been properly addressed. This section will require a Licensed Surveyor.

The contractor is responsible for perpetuating, preserving, and re-establishing all survey monumentation. All monuments destroyed by construction shall be reset in their original position. If the monument is inside an existing monument box, the contractor shall attempt to reuse the box. If the box is not reusable contractor shall obtain new monument boxes and lids from Stanislaus County Public Works at 1716 Morgan Road. After roadway construction is complete contractor shall have a Licensed Surveyor to mark the location for the placement of the monument box and contractor shall install the monument box and lid to finished grade then the contractor shall have a Licensed Surveyor install the monument inside the existing box, and complete post construction record of survey for all monuments within the project shall be filed at the completion of the project.

Measurement and Payment

Full compensation for furnishing all labor, materials, tools, equipment, Licensed Surveyor Fees and incidentals for doing all work involved in preserving and re-establishing the survey monument, including post construction record of survey, shall be considered included in the contract unit price paid for by **Re-establish Survey Monument (Type B)**, and no additional compensation will be allowed.

SP-08 CONSTRUCTION STAKING

Stanislaus County shall provide construction staking services in accordance with the provisions in "Construction Surveys - Attachment B" available on Public Works website at <u>www.stancounty.com/publicworks/</u>. The "Attachment B" is hereby made part of these special provisions and the contractor shall follow staking request procedures as outlined in the document.

SP-09 TEMPORARY TRAFFIC CONTROL

Flagging, construction area signs, temporary rail (type K), and all other traffic control devices furnished, installed, maintained, and removed when no longer required shall conform to the provisions in Section 12, "Temporary Traffic Control," of the Standard Specifications and these Special Provisions.

The Contractor shall submit traffic control plans. Said plans shall be approved by the Engineer before the affected item of work is begun. Traffic control plans shall show the placement of all signs, barricades, delineators and other traffic control devices required by the Contractor's operation. The contractor shall specify dates and times of lane closures, lane restrictions, access closures and daily access restrictions if any, and shall ensure that adequate access will be provided for emergency vehicles.

Traffic Control Systems and construction area traffic control devices shall be in accordance with the current California Manual on Uniform Traffic Control Devices. The traffic control system for lane closures and full closures shall be in accordance with Standard Plans T-11, T-12 and T-13.

If components in the traffic control system are displaced or cease to operate or function as specified, from any cause, during the progress of the work, the Contractor shall immediately repair the components to the original condition or replace the components and shall restore the components to the original location.

The Contractor may be required to cover certain signs during the progress of the work. Signs that are no
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longer required or that convey inaccurate information to the public shall be immediately covered or removed, or the information shall be corrected. Covers for construction area signs shall be of sufficient size and density to completely block out the complete face of the signs. The retroreflective face of the covered signs shall not be visible either during the day or at night. Covers shall be fastened securely so that the signs remain covered during inclement weather. Covers shall be replaced when they no longer cover the signs properly.

Attention is directed to Sections 7-1.03, "Public Convenience," 7-1.04, "Public Safety," of the Standard Specifications and to "Public Safety" of these Special Provisions. Nothing in these Special Provisions shall be construed as relieving the Contractor from the responsibilities of providing such additional devices or taking such measures as may be necessary as specified in Section 7-1.04, "Public Safety," of the Standard Specifications.

The Contractor shall provide pilot cars to maintain traffic as needed during lane closures.

The provisions in this section shall not relieve the Contractor from his responsibility to provide such additional devices or take such measures as may be necessary to comply with the provisions in Section 7-1.04, "Public Safety," of the Standard Specifications and these Special Provisions.

Personal vehicles of the Contractor's employees shall not be parked on the traveled way or shoulder.

In the event a temporary road, ramp or driveway closure is necessary, the Contractor shall give the property owners and business owners 48 hours advance notice prior to closure. All road closures must be approved by the engineer 72 hours prior to the closure. Notification of County transportation permit office is required 7 days in advance.

Advance warning signs if any shall be furnished, installed and maintained by the Contractor.

When lane closures are made for work periods only, at the end of each work period, all components of the Traffic Control System, except portable delineators placed along open trenches or excavation adjacent to the traveled way shall be removed from the traveled way and shoulder.

The Contractor shall furnish, erect and maintain all construction area traffic control devices within the project and at all public road entrances to the project.

The Contractor's attention is directed that all work be performed at <u>**night**</u>, unless approved by the Engineer.

Construction operations shall be conducted in such a manner as to cause as little inconvenience as possible to abutting property owners. The Contractor will insure that utility services to customers in the project are maintained.

Sufficient traffic control devices, including signs and flaggers, shall be utilized to route traffic and minimize impacts on the general public. The Contractor's attention is directed to the following work requirements:

- 1. All work shall be performed at night (7:00 p.m. to 6:00 a.m.), unless approved by the Engineer.
- 2. The entire roadway width of all streets within the limits of the project shall be open for traffic from 6:00 a.m. to 7:00 p.m., during weekends, on holidays, and during other times when work is not in progress. For work done before 6:00 a.m. or after 7:00 p.m., or during

all daylight hours between 7:00 p.m. Friday to 6:00 a.m. Monday, arrangements shall be made with the property owners in advance and approved by the Engineer.

- 3. A minimum of one paved traffic lane in each direction, not less than twelve (12) feet wide, shall be open for use by public traffic at all times during working hours, unless controlled by "Flagging." When construction operations are not actively in progress, the entire width of all streets within the limits of the project shall be open for traffic.
 - i.At the end of each work period, all components of the Traffic Control System, except portable delineators placed along open trenches or excavation adjacent to the traveled way shall be removed from the traveled way and shoulder.
 - ii.Steel plates or other approved methods shall be used to cover all open excavations in roadways during non-working hours.
- 4. In the event that a lane closure is needed during non-working hours, a maximum of one (1) lane closure shall be allowed as directed by the Engineer; otherwise, the entire roadway width of all streets within the limits of the project shall be kept open for traffic at all times.
- 5. The Contractor shall provide pilot cars to maintain traffic as needed during lane closures.
- 6. The Contractor shall provide reasonable means of access to all properties adjacent to construction. A minimum of one driveway shall remain open per shopping center during construction. The Contractor shall take precautions so as not to entrap vehicles on private property during the progress of the work. Contractor to coordinate any driveway closures with property owners before removing access.
- 7. Vehicle and pedestrian access to driveways and commercial businesses along the streets and easements within the limits of the project shall be maintained. Access for emergency vehicles shall be available along all streets within the construction area at all times.
- 8. Construction on the curb ramps must be prosecuted in a manner that allows for the continued use by pedestrians at the intersection being worked on. The Contractor will be allowed to only work at up to two (2) corners at any one time of any one intersection, or at up to four (4) corners of any two adjacent intersections, all on the same side of the primary street being worked on. Additionally, no work will be allowed at the two (2) adjacent intersections to do this work until the curb ramps are fully constructed. Sidewalks signs indicating that the sidewalk and/or curb ramp, are closed to through pedestrian traffic are required. In order for the sidewalk to be considered open there must be at least a four-foot (4') path of travel around the sidewalk corner.
- 9. The curb ramp construction areas must be closed to the public with the use of barricades and caution tape along the sidewalk edges and appropriate traffic cones on the street edges. These protective devices must be maintained continuously during the period that the curb ramp is closed to pedestrian traffic.
- 10. All signalized intersections shall remain signalized throughout the length of the project. The contractor shall coordinate work to ensure that signalization is maintained, including protection of conduits in excavated areas.

even condition for passage of public traffic, furnishing, installing, and maintaining such signs, lights, flares necessary to expedite passage of public traffic through or around the work, and providing pilot cars as needed, all as specified in Sections 7-1.03, "Public Convenience," and 7-1.04, "Public Safety," of the Standard Specifications and as directed by the Engineer will be considered as included in the contract lump sum price paid for **Temporary Traffic Control**, and no additional compensation will be allowed.

SP-10 TEMPORARY PAVEMENT DELINEATION

Temporary pavement delineation shall be furnished, placed, maintained, and removed in conformance with the provisions in Section 12-3, "Temporary Traffic Control Devices," of the Standard Specifications and these Special Provisions. Nothing in these Special Provisions shall be construed as reducing the minimum standards specified in the Manual of Uniform Traffic Control Devices published by State of California Department of Transportation, or as relieving the Contractor from his responsibility as provided in Section 7-1.04, "Public Safety," of the Standard Specifications.

Whenever the work causes obliteration of pavement delineation, temporary or permanent pavement delineation shall be in place prior to opening the traveled way to public traffic. Laneline or centerline pavement delineation shall be provided at all times for traveled ways open to public traffic.

Whenever lanelines and centerlines are obliterated, the minimum laneline and centerline delineation to be provided shall be temporary raised pavement markers placed at longitudinal intervals of not more than 24 feet. The temporary raised pavement markers shall be the same color as the laneline or centerline the markers replace.

Temporary raised pavement markers shall be placed in conformance with the manufacturer's instructions and shall be cemented to the surfacing with the adhesive recommended by the manufacturer, except epoxy adhesive shall not be used to place pavement markers in areas where removal of the markers will be required.

Temporary laneline or centerline delineation consisting entirely of temporary raised pavement markers placed on longitudinal intervals of not more than 24 feet shall be used on lanes open to public traffic for a maximum of 14 calendar days. Prior to the end of the 14 calendar days, the permanent pavement delineation shall be placed. If the permanent pavement delineation is not placed within the 14 calendar days, additional temporary pavement delineation shall be provided at the Contractor's expense. The additional temporary pavement delineation to be provided shall be equivalent to the pattern specified for the permanent pavement delineation for the area or as directed by the Engineer.

Work necessary, including required lines or marks, to establish the alignment of temporary pavement delineation shall be performed by the Contractor. Surfaces to receive temporary pavement delineation shall be dry and free of dirt and loose material. Temporary pavement delineation shall not be applied over existing pavement delineation or other temporary pavement delineation. Temporary pavement delineation shall be maintained until superseded or replaced with a new pattern of temporary pavement delineation or permanent pavement delineation.

Temporary pavement markers and removable traffic tape which conflicts with a new traffic pattern or which is applied to the final layer of surfacing or existing pavement to remain in place shall be removed when no longer required for the direction of public traffic, as determined by the Engineer.

Full compensation for furnishing, placing, maintaining, and removing temporary pavement delineation, including temporary raised pavement markers used for temporary laneline and centerline delineation and for providing equivalent patterns of permanent traffic lines for these areas when required, shall be considered as included in the contract price paid for **Temporary Traffic Control**, and no additional compensation will be allowed.

SP-11 WATERING

Watering must comply with Section 10-6 "Watering" of the Standard Specifications and these Special Provisions. The Contractor shall be responsible for developing a water supply and furnishing all water required for the work. Water must be non-potable. Non-potable water must be recycled or other sources in accordance with State Standards and Regulations.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved with watering and dust control all in accordance with the Standard Specifications and these Special Provisions shall be considered as included in the contract price paid for the various items of work involved and no additional compensation will be allowed.

SP-12 RESET MAILBOX

The Contractor shall relocate existing mailboxes, including joint/gang mailboxes, which interfere with construction operations. Existing mailboxes shall be accessible for delivery at all times. Existing mailboxes shall either be installed on posts set in the ground or installed on temporary supports approved by the engineer.

The Contractor is responsible for coordination of the USPS mail box on the west side of Crows Landing Road north of Butte Avenue, which serves 1641 Crows Landing Road as well as other properties at that location. Contractor will be responsible for contacting USPS to temporarily remove the mailbox during construction and then to coordinate the mail box installation. Contractor will be responsible for contacting the impacted properties to inform them that their mail will be held at the local post office.

When construction is complete, the existing mailboxes shall be installed in final position on posts or supports equivalent to the original.

Newspaper boxes on individual posts, attached to fences, or other supports will be considered as separate mailboxes for measurement and payment. Additional compensation will not be allowed for newspaper boxes attached to existing mailbox posts.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with removing existing mailboxes as necessary (regardless of the number of moves required), and for furnishing new posts, planks and hardware as necessary to reset the mailboxes, shall be considered as included in the contract price paid for the **Reset Mailbox** and no additional compensation will be allowed.

SP-13 RELOCATE ROADSIDE SIGN

Existing roadside signs shall be removed and relocated at new locations shown on the plans. Each roadside sign shall be installed at the new location on the same day said sign is removed from its original location.

When construction is complete the signs shall be installed in final position on posts or supports equivalent to the original.

Roadside sign relocation is quantified by the number of posts or supports.

Full compensation for furnishing all labor materials, tool, equipment and incidentals for doing all work involved with relocating roadside signs, all in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract price paid for the **Relocate Roadside Sign** and no additional compensation will be allowed.

SP-14 ADJUST UTILITY COVER TO GRADE

All frames, covers and grates of existing utilities including, but not limited to storm drain and sewer manholes, water valves, grates, electrical boxes or other facilities shall be lowered as necessary to avoid damage by Cold-In-Place Recycling operations. Following Cold-In-Place Recycling operations, contractor to adjust frames, covers and grates to finished grade in accordance with the provisions in Section 71-5, "Adjust Drainage Structures", of the Standard Specifications, and section 3.21, "Final Adjustment of Utility Covers", of Stanislaus County Standards and Specifications, and these Special Provisions.

The Contractor shall adjust to final grade covers of all manholes, water valves and other facility covers existing in the roadway at the time paving takes place within 10 working days after the pavement has been placed.

Where existing utility boxes are in the work area, their frames and covers shall be removed before subgrade compaction is made and a cover shall be placed to prevent dirt and loose material from entering the facility. Base and surface material shall be placed over the covers, after which the frames and covers shall be set to finish grade.

Contractor shall be responsible for coordinating with each of the respective agencies in order to not delay or cause additional expense to the project. Contractor to contact City of Modesto, Robert Davalos at 209-571-5869, 24 hours prior to adjusting water valve frame and covers to grade. Adjust water valve frames and covers to grade in accordance with City of Modesto Standard Specifications.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with adjusting frames, covers and grates below grade, and to finished grade all in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract price paid for various **Adjust Utility Cover To Grade** and no additional compensation will be allowed.

SP-15 CLEARING AND GRUBBING

Clearing and grubbing shall conform to the provision in Section 17-2, "Clearing and Grubbing," and Section 15, "Existing Facilities" of the Standard Specifications and these Special Provisions.

It shall be the Contractor's responsibility to remove all objectional material within the right of way which interfere with the work shown on the drawings. The location of the obstructions shown on the plans is figurative only. The County does not guarantee the exact location of items shown. It shall be the Contractor's responsibility to determine which items are going to interfere with this work.

All improvements remaining either wholly or partially within the right of way that interfere with the work, including, but not limited to, trees, stumps, roots, tree trimming, orchard and landscaping irrigation pipes, storm drainage inlets, valves and hose bibs shall be cleared and removed as part of the work included under clearing and grubbing unless otherwise directed by the Engineer.

The contract lump sum price for **Clearing and Grubbing** shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with clearing and grubbing and no additional compensation will be allowed.

REMOVAL OF TRAFFIC STRIPES AND MARKINGS

Work shall be done per Section 84-9.03B "Remove Traffic Stripes and Pavement Markings" of the Standard Specifications.

Full compensation for conforming to the requirements of this section shall be considered as included in the contract lump sum price paid for in **Clearing and Grubbing** and no additional compensation will be allowed.

SP-16 REMOVE CONCRETE AND MISCELLANEOUS ITEMS

Curb and gutter, valley gutter, median, sidewalk, curb ramps, and bollards designated on the plans to be removed, shall be removed and disposed of by the Contactor. Removed miscellaneous items will be the Contractor's responsibility.

Removed curb and gutter, valley gutter, median, sidewalk, curb ramps and bollards shall conform to Section 15-1.03B, "Removing Concrete" of the Standard Specifications.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with removing curb and gutter, valley gutter, median, sidewalk, curb ramps, and concrete bollards all in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract lump sum price paid for **Remove Concrete and Miscellaneous Items** and no additional compensation will be allowed.

SP-17 REMOVE ROADSIDE SIGN

Remove Road Signs shall conform to the provisions in Section 82-9, "Existing Roadside Signs and Markers" of the Standard Specifications and these Special Provisions. Contractor shall remove roadside signs from the project and deliver to the County's maintenance yard at:

Stanislaus County Department of Public Works 1716 Morgan Road Modesto, CA 95358 Contact: Sign Shop Phone Number: (209)-525-4130

Full compensation for furnishing all labor materials, tools, equipment and incidentals for doing all work involved with removing roadside sign in accordance with the plans, the Standard Specifications and these Special Provisions, and delivering to the County's maintenance yard, shall be considered as included in the contract price paid for the **Remove Roadside Sign** and no additional compensation will be allowed.

SP-18 COLD PLANE ASPHALT CONCRETE PAVEMENT

Cold plane asphalt concrete shall conform into the requirements of Section 39-3.04 "Cold Planing Asphalt Concrete Pavement" of the Standard Specifications and these Special Provisions.

Existing asphalt concrete pavement shall be cold planed at the locations and to the dimensions shown on the plans as a grind.

Planing asphalt concrete pavement shall be performed by the cold planing method. Planing of the asphalt concrete pavement shall not be done by the heater planing method.

Cold planing machines shall be equipped with a cutter head not less than 30 inches in width and shall be operated so that no fumes or smoke will be produced. The cold planing machine shall plane the pavement without requiring the use of a heating device to soften the pavement during or prior to the planing operation.

The depth, width, and shape of the cut shall be as shown on the construction detail plans or as designated by the Engineer. The final cut shall result in a uniform surface conforming to the typical cross sections. The outside lines of the planed area shall be neat and uniform. Planing asphalt concrete pavement operations shall be performed without damage to the surfacing to remain in place and shall be the entire width of the area to be surfaced.

Planed widths of pavement shall be continuous except for intersections at cross streets where the planing shall be carried around the corners and through the conform lines. Following planing operations, a drop-off of more than 0.15-foot will not be allowed between adjacent lanes open to public traffic.

Where transverse joints are planed in the pavement at conform lines no drop-off shall remain between the existing pavement and the planed area when the pavement is opened to public traffic. If asphalt concrete has not been placed to the level of existing pavement before the pavement is to be opened to public traffic a temporary asphalt concrete taper shall be constructed. Asphalt concrete for temporary tapers shall be placed to the level of the existing pavement and tapered on a slope of 1:30 (Vertical: Horizontal) or flatter to the level of the planed area.

Asphalt concrete for temporary tapers shall be commercial quality and may be spread and compacted by any method that will produce a smooth riding surface. Temporary asphalt concrete tapers shall be completely removed, including the removal of loose material from the underlying surface, before placing the permanent surfacing.

Operations shall be scheduled so that not more than 7 days shall elapse between the time when transverse joints are planed in the pavement at the conform lines and the permanent surfacing is placed at the conform lines.

The material planed from the roadway surface, including material deposited in existing gutters or on the adjacent traveled way, shall be disposed of in conformance with the provisions in Section 5-1.20B of the Standard Specifications. Removal operations of cold planed material shall be concurrent with planing operations and follow within 50 feet of the planer, unless otherwise directed by the Engineer.

Cold plane asphalt concrete pavement will be measured by the square yard. The quantity to be paid for will be the actual area of surface cold planed irrespective of the number of passes required to obtain the depth shown on the plans.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in cold planing asphalt concrete surfacing and disposing of planed material, including furnishing the asphalt concrete for and constructing, maintaining, removing, and disposing of temporary asphalt concrete tapers, as specified in the Standard Specifications and these Special Provisions shall be included in the contract unit price paid for **Cold Plane Asphalt Concrete Pavement** and no additional compensation will be allowed.

SP-19 ROADWAY EXCAVATION

Earthwork shall conform to Section 19, "Earthwork," of the Standard Specifications and these Special Provisions.

The Contractor shall excavate only as much trench as can be effectively backfilled in the same day. All trenches in the roadway area shall be paved with temporary paving the same day the pavement cut is made. All trenches shall be backfilled so that traffic can cross at the close of each days work or protected to the satisfaction of the Engineer. There shall be no open trench left in the roadway area after normal working hours.

Material Testing shall be per SC-6, "Control of Materials" of the Special Conditions.

Remove all existing pavement within the limits of roadway excavation. Pavement removal must comply with Section 39 "Asphalt Concrete" and Section 41 "Existing Concrete Pavement" of the Standard Specifications.

Street embankments and cut areas shall be graded and compacted as described herein. After all utilities and storm sewers have been installed, the subgrade shall be fine graded and restored to required grade, and then proof-rolled, utilizing a fully loaded tandem axle truck having a gross weight not less than 40,000 pounds and with the tires inflated to not less than 70 psi.

The quantities of structure excavation and structure backfill involved in excavation and backfilling pipe and other structures as shown on the Plans shall be considered included in the unit prices paid for the various items of work for which it applies and no separate payment will be made therefore.

Full compensation for Earthwork necessary for construction of Minor Concrete shall be considered as included in the cost of the contract items for which it is related, and no additional compensation will be allowed.

The lump sum price paid for **Roadway Excavation** shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all the work involved in excavating, grading roadway ditch, embankment, transporting, filling, compacting and disposing of material, including filling between the back of walk and right of way, proof rolling, sawcuts, earthwork required for construction of asphalt concrete paving, concrete facilities, and roadway drainage as shown on the Plans and as specified in these Special Provisions shall be considered as included in the contract price paid for **Roadway Excavation (F)** and no separate payment will be allowed.

The quantity of Roadway Excavation shall be considered a final pay quantity as per Section 9-1.02C, "Final Pay Item Quantities," of the Standard Specifications.

SP-20 AGGREGATE BASE (CLASS II)

Aggregate base must comply with Section 26, "Aggregate Bases," of the Standard Specifications and these Special Provisions.

Aggregate Base shall be Class 2.

Aggregate Base will be paid by the ton per Section 9 "Payment" and Section 26-1.04 "Payment" of the Standard Specifications.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing aggregate base, complete in place, as specified in the Standard Specifications and these Special Provisions, and as directed by the Engineer shall be considered as included in the contract unit price paid for Aggregate Base (Class II), and no additional compensation will be allowed.

SP-21 HOT MIX ASPHALT (TYPE A)

This SP section of Hot Mix Asphalt (HMA) specifications <u>ONLY</u> shall conform to 2010 Caltrans Standard Specifications.

This work shall consist of furnishing and placing asphalt concrete in conformance with Section 39, "Hot Mix Asphalt" (HMA) of the Standard Specifications and these Special Provisions.

HMA shall be Type A.

The asphalt binder shall be grade PG 64-10 as specified in the Standard Specifications, unless Crows Landing Road (Whitmore Avenue to Hatch Road) Federal Aid Project No. HSIPL-5938(238) April 2020 otherwise noted on the plans or approved by the Engineer. Aggregate Gradations shall be as specified in Section 39-1.02E, "Aggregate," of the Standard Specifications, except maximum aggregate size shall be ³/₄ inch.

A maximum of 15% Reclaimed Asphalt Pavement (RAP) is allowed.

Use Method Compaction for placement of all HMA as specified in Section 39-3, "Method Construction Process", of the Standard Specifications. Material testing shall be per SC-06, "Control of Materials" of the Special Conditions.

A drop off of more than 0.15-foot will not be allowed at any time between adjacent lanes open to public traffic. The final lift of HMA for all streets shall be placed after all work related to underground facilities, excavations, reconstruction, trench pavement, and pre-paving work has been completed.

HMA smoothness requirements shall conform to 39-1.12B, "Straightedge", of the Standard Specifications. Profilograph shall not apply.

The completed surfacing shall be true to grade and cross section, of uniform smoothness and texture, compacted firmly, and free from depressions, humps or irregularities.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for all work performed under this section "Hot Mix Asphalt," including the placement of HMA, miscellaneous surface preparation, tack coats, dikes, and various HMA items, shall be considered as included in the contract unit price paid for **Hot Mix Asphalt (Type A)**, and no additional compensation will be allowed.

SP-22 COLD-IN-PLACE RECYCLING-FOAMED ASPHALT (CIR-FA) (3" DEPTH)

DESCRIPTION

Submittals - The Contractor shall furnish the following information regarding the Cold In-Place Recycling (CIPR) to the Engineer. Approval of the Contractor or Subcontractor performing the CIPR is at the discretion of the Engineer.

1) Description and specification of the proposed CIR recycling unit and support equipment, construction method, expected production rates, and planned sequence of construction.

2) The Contractor (or Subcontractor) shall have completed a minimum of three (3) CIR projects in the last three (3) years. Submit project name, agency/owner, project engineer, and construction dates.
3) The CIR recycling unit shall demonstrate the ability to crush, size and screen the RAP used in the CIR process.

4) Verification the CIR recycling unit meets the proportioning requirements of California Department of Transportation Material and Plant Quality Program (MPQP) and the applicable Air Quality Control district permits.

Contractor Responsibility - The Contractor shall be responsible for the final product and shall make any quality control, adjustments and corrections necessary to obtain the final product accepted by the Engineer. The Contractor shall perform process and quality control sampling and testing and exercise management and control the work of his/her subcontractors, technicians and workers to ensure that the milling, transporting, recycling, spreading, compaction, and finishing processes conform to these Specifications. The proficiency of testing laboratories and sampling and testing personnel shall be reviewed and approved by the Engineer prior to providing services to the project. The Engineer shall have unrestricted access to the laboratory, sampling, testing sites, and all information resulting from mix design and quality control activities. All Quality Control testing results shall be submitted to the Engineer on a daily basis

Scope - This work shall consist of milling the existing asphalt concrete pavement to the length, depth and width as shown on the plans, crushing, screening, and sizing the Reclaimed Asphalt Pavement (RAP) material to an aggregate blend with a maximum size. The properly sized RAP to be recycled shall then be blended with a bituminous recycling agent (asphalt foam), and other additives, such as cement, as required by the Contractor's Mix Design, to produce a recycled asphalt concrete. This material shall then be placed and compacted in accordance with the Plans and Specifications, and as directed by the Engineer.

The Contractor shall be responsible for providing Quality Control of the cold in-place recycling process and provide documentation to the Engineer demonstrating conformance to the Contractor's Quality Control Program. A Contractor's Quality Control Plan shall be submitted to the Engineer. The Quality Control Plan shall address: 1) equipment conformance with the specifications and calibration to required tolerances, 2) Quality control parameters for recycling agent and other CIR additives, 3) Conformance to Mix Design. The Agency shall provide Geotechnical Engineering testers for Quality Assurance.

Just In Time Training - Attending a 2-hour minimum Just-In-Time Training (JITT) shall be mandatory, and consist of a formal joint training class on cold recycled asphalt materials, required special equipment, placement and compaction methods, and quality control. Construction operations for cold recycling shall not begin until the Contractor's and the Engineer's personnel have completed the JITT. The JITT training class shall be conducted at a project field location convenient for both the Contractor and the Engineer. The JITT class shall be completed not more than 7 days prior to the start of cold recycling operations. The class shall be held during normal working hours. The Contractor shall provide the JITT instructor. The instructor shall be experienced in the construction methods, materials, and test methods associated with construction of cold recycle asphalt projects. A copy of the course syllabus, handouts, and presentation material shall be submitted to the Engineer at least 7 days before the day of the training. The Contractor and the Engineer shall mutually agree to the course instructor, course content, and training site. Just-In-Time Training shall not relieve the Contractor of responsibility under the contract for the successful completion of the work in conformance with the requirements of the plans and specifications.

Mix Design – A mix design shall be submitted by the Contractor using representative samples of the asphalt concrete to be recycled obtained directly from the Project site. The mix design shall be certified by a licensed Civil Engineer or AASHTO Approved Laboratory experienced in cold recycled pavements. Asphalt foam recycling agent mix design shall be conducted in accordance with the Appendix A. The job mix formula shall meet the criteria of Table 1 for Foamed Asphalt Recycling Agent and be approved by the Engineer.

Table 1 – Foamed Asphalt Recycling Agent

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CIR Mixture Design Requirements	Requirement
Gradation of Reclaimed Asphalt Pavement (RAP): CT 202	1-inch maximum
Asphalt Content of RAP: ASTM D 2172 Method B	Report
Bulk Specific Gravity of Compacted Samples ^{a, b} : AASHTO T245	Report
Maximum Theoretical Specific Gravity b: AASHTO T209	Report
Air Voids of Compacted and Cured Specimens ^b : AASHTO T269	Report
Indirect Wet Tensile Strength, Cured Specimen °: CT 371, Section J	31.5 psi
Indirect Dry Tensile Strength, Cured Specimen °: CT 371, Section J	Report
Tensile Strength Ratio (%): CT 371	Report
Ratio of Bituminous Residue to Cement (min)	2.5

Notes:

^a 4-inch diameter mold compaction based on either 75 blow Marshall on each side or gyratory compactor at 30 gyrations.

^b Test specimens after 140°F curing to constant weight between 16 hours and 48 hours.

^c Fabricate 6 indirect tensile strength specimens under AASHTO T245. Fabrication of indirect tensile strength specimens must be completed within 30 minutes after materials have been mixed. Cure the specimens at 100 degrees F for 72 hours and allow the specimens to cool to room temperature. Test 3 specimens for dry tensile strength under California Test 371. Test 3 specimens for wet tensile strength under California Test 371 after moisture conditioning.

The mix design reports for a foamed asphalt recycling agent shall include the following:

- a. Percent by weight of foamed asphalt cement to be added to the mix.
- b. Optimum percent by weight of water to be added to the asphalt cement for the foaming process.
- c. Minimum Foamed Asphalt Expansion Characteristics required.
- d. Temperature of asphalt cement at the time of injection.
- e. Percent by weight of Portland cement, if any, to be added to the mix.
- f. Gradation of the RAP
- g. Optimum compaction moisture content
- h. Design wet indirect splitting tensile strength
- i. Maximum dry density

For the recycling agent and any cement if used include the designation, company name, location, residue content, and Certificates of Compliance.

Materials

Foamed Asphalt Recycling Agent. Asphalt used in the cold foam in-place recycling process shall conform to the provisions in the Standard Specifications. The grade of asphalt shall be determined by the mix design and approved by the Engineer. The asphalt shall not be heated above a temperature of 375 deg F. Asphalt provided to the job shall have no additives or properties which will inhibit the ability to produce asphalt foam with a minimum expansion ratio (volume of foamed asphalt to residual, un-foamed asphalt) of 8 and a half-life (time for the foamed asphalt to lose half its expanded volume) of not less than 6 seconds.

A Certificate of Compliance from the asphalt manufacturer shall accompany each shipment to the Project. The Contractor shall perform an expansion ratio and half-life test for each load utilized in the recycle unit. A one-quart sample of Asphalt shall be obtained from each delivery vehicle to the job and turned over to the Engineer at the end of the day, or retained by the Contractor at the direction of the Engineer. The sample shall be sealed and the container clean and dry when the sample is taken. The sample bottle shall be marked with the date and time the sample was taken, the name of the supplier, and the bill of lading number from the load delivery ticket. The asphalt shall be handled with care.

Reclaimed Asphalt. Reclaimed asphalt pavement from the existing pavement surface shall be processed and graded material with the resultant blend consisting of 100% of the crushed RAP passing a 1-inch sieve and shall be clean, free of contamination of dirt, base, concrete or other deleterious materials.

Rubberized crack filler, pavement markers, loop wires, thermoplastic markers, fabric (if encountered) and other like materials that may be incorporated into the RAP as it is removed from the roadway shall be removed by the screening process. A minor amount of these residual materials that cannot be completely removed from the processed RAP may be incorporated into the recycled mix if the Contractor can demonstrate that those added materials will not adversely affect the performance of the recycled asphalt pavement. Any such materials retained in the mix shall be appropriately sized and blended so as not to adversely affect the appearance or strength of the recycled pavement.

Cement – Cement may be added at the Contractor's option to the recycled pavement mixture to aid in curing and early strength gain. Cement shall be a Type II Portland Cement and shall conform to the Standard Specifications. The cement source and percentage used shall be described in the job mix formula submittal. Include the process for incorporating cement into the CIR mixture in the job mix formula submittal.

A Certificate of Compliance from the cement manufacturer shall accompany each shipment to the Project.

Water - Water may be added to facilitate the uniform mixing of the recycling agent and the processed RAP. Water added to the recycled asphalt concrete shall be potable, clean and free from deleterious concentrations of acids, alkalis, salts, sugar and other organic or chemical substances. The water shall not contain an amount of impurities that will cause a reduction in the strength of the recycled asphalt concrete. If the water is of questionable quality, it shall be tested in accordance with AASHTO T26.

Water used specifically in the COLD FOAM apparatus for foaming the asphalt shall be purified so that upon evaporation no deposits or residue are left behind that might clog or impede water flow to the foaming nozzles of the recycle unit.

Construction Methods

Surface Preparation - Before any recycling work begins, the Contractor shall prepare the existing roadway by:

- 1) Removing from the roadway dirt, vegetation, standing water, combustible materials, oils, raised roadway markings, and other objectionable materials by sweeping, blading, or another approved method.
- 2) Adjusting affected utilities down or prior to recycling. Refer to Special Provision SP-14, "Adjust Utility Cover to Grade" for clarification.
- 3) Accurately referencing the profile and cross slope as shown on the plans for the finished surface of the recycled pavement material.

Contractor Responsibility – The Contractor may make adjustments in the field to the actual application rate of recycling agent or any cement as needed and as provided by these Special Provisions. Any changes made by the Contractor shall be documented in conformance with these Special Provisions and the Contractor's Quality Control Plan.

The Contractor shall perform process and quality control sampling and testing, and exercise management control to ensure that cold in-place recycling and placement conforms to these Specifications. The Contractor shall provide a Qualified Technician, testing laboratory and personnel to

perform process and quality control sampling and testing during the cold in-place recycling, spreading, compaction, and finishing. The proficiency of testing laboratories and sampling and testing personnel shall be reviewed and approved by the Engineer prior to providing services to the project.

Sampling and testing shall be performed at a rate sufficient to ensure that cold in-place recycling, placement, compaction, and finishing conforms to these specifications. The Engineer shall have unrestricted access to the laboratory, sampling, testing sites, and all information resulting from mix design and quality control activities. All Quality Control testing results shall be submitted to the Engineer on a daily basis.

The project shall be divided into lots of not greater than 3,000 square yards. The contractor shall control the CIR operation as follows:

- 1. The Contractor shall measure and record the actual recycle depth at each end of the milling drum at least once every 350 feet along the cut length.
- 2. The amount of recycling agent shall be within 0.5 percent of the job mix formula percentage established in the mix design for the cold in-place recycled asphalt concrete mixture. Recycling agent usage shall be recorded for each lot. The percent of recycling agent shall be determined based on the ratio of recycling agent used to the theoretical dry weight of the millings processed.
- **3**. The amount of cement, if used, shall be within 2.5 percent of the job mix formula percentage established in the mix design for the cold in-place recycled asphalt concrete mixture. Cement usage shall be recorded for each lot. The percent of cement shall be determined based on the ratio of recycling agent used to the theoretical dry weight of the millings processed.
- 4. The Contractor shall measure and report in-place density, and relative compaction for the lot, and shall rework or reprocess any lot not meeting the requirements of these specifications.
- 5. Sample the recycled material behind the recycling equipment or the sized reclaimed asphalt pavement prior to the addition of the emulsified recycling agent for each lot. If the reclaimed asphalt pavement does not meet the allowable maximum particle size, the test results shall be reported immediately to the Engineer. The Contractor shall reprocess the material or take other corrective actions to attain conformance.
- 6. On the first sample and every fourth sample thereafter, the Contractor shall perform a wet field gradation for material passing the 1-inch to No. 4 sieves. The Contractor shall compare the sieved sample to the gradation band determined from the mix design and adjust the recycling agent as needed.

Some sections of the pavement being recycled may require field adjustment for optimum results. For any changes made by the Contractor from one lot to the next, the Contractor shall document the reason for the change and identify each lot where such changes were made.

Test Strip and Start up Procedures -The first day of operations, the Contractor shall construct within the limits to be cold in-place recycled a test strip of a single lane width and no more than 1000 feet in length. The test strip section shall:

- A. Demonstrate that the equipment, materials, and processes proposed can produce a recycled pavement material layer that conforms to the requirements of these special provisions;
- B. Determine the optimal rates for recycling agent, any cement, and water recommended for the reclaimed asphalt pavement; and

C. Determine the sequence and manner of rolling necessary to obtain the density requirements of these special provisions.

The Contractor shall provide a sequence and manner of rolling which will define maximum compaction by establishing a rolling vs. density chart that shows the progress of densification from initial lay down through maximum obtainable density at the "break over point". The Contractor shall determine relative compaction on the quantity within the test strip by measurement with a properly calibrated nuclear density gauge. If the relative compaction of quantity within the test strip or any lot does not meet the density requirements of these special provisions, the Contractor shall construct additional test strips to determine the maximum density obtainable for the recycled material being produced and site conditions.

CIR operations may continue through the first day, unless the Contractor's equipment and process fail to meet the requirements for successful completion of CIR operations in conformance with these special provisions. Recycling operations shall not continue beyond the first day unless a test strip conforming to the special provisions has been constructed and approved by the Engineer. Test strips that do not conform to the special provisions shall be reworked, re- compacted, or removed and replaced at the Contractor's expense.

Upon acceptance of the test strip by the Engineer, the Contractor shall use the same equipment, materials, and construction methods for the remainder of recycling operations, unless adjustments made by the Contractor are approved by the Engineer. If adjustments are made, the Contractor will produce a new test strip to define the maximum density.

Weather Limitations – Cold In-place Recycling operations shall not be performed during wet conditions or if rain is imminent or predicted to exist. "Imminent or predicted" is defined as being forecasted within a 48-hour period on the National Weather Service Web Site http://www.wrh.noaa.gov for the most representative and nearest location listed where recycling is to begin and end.

When using Foamed Asphalt Recycling Agent, recycling and placement operations shall not be performed unless the ambient temperature is a minimum of 45°F and unless the National Weather Service Web Site forecasts the ambient temperature will remain above 45°F throughout the recycling operation until all initial compaction and protection efforts have been completed for that day's run.

In the event CIR operations are initiated and weather conditions deteriorate soon after, it is then a requirement that all traffic stay off the recycled mat until weather conditions improve (temperature rises and humidity drops) and the recycled section has "cured" sufficiently for secondary compaction to take place in accordance with the **Cure and Maintenance** requirements of this specification. The Contractor will be responsible for maintaining and protecting the recycled surface. Any recycled asphalt surfacing damaged by inclement weather shall be replaced by the Contractor at the Contractor's expense as directed by the Engineer.

All CIR mixing and placement operations shall be completed a minimum of 2 hours before sunset toallow for compaction and protection operations.

Milling, Sizing and Mixing - The recycling train shall be capable of milling, crushing, and screening the existing asphalt pavement. The equipment used for mixing the RAP with the recycling agent and any cement shall be capable of producing a homogeneous and uniformly coated recycled pavement mixture. The equipment used for placement of the recycled pavement mixture shall be capable of placement to the lines, grades, and requirements specified in these special provisions and shown on the plans. The

Contractor shall have available on the site of the work all equipment and materials to be used for recycling operations.

The pavement milling machine shall be self-propelled. The primary milling equipment shall have a minimum 12.5-feet cutter capable of removing the existing pavement to the depths shown in the plans. Milling equipment shall be equipped with automatic depth controls capable of maintaining the cutting depth to within ¼-inch of the desired depth, and shall have a positive means for controlling cross slope. The milling operation shall not disturb or damage the underlying material. The use of a heating device to soften the pavement will not be permitted. A smaller milling machine may be used to mill the shoulders and miscellaneous areas.

The RAP shall be sized using crushing and screening equipment capable of producing reclaimed asphalt pavement to the size required. After the crushing and sizing, the recycled material shall be processed in a mixing unit capable of processing the sized RAP, recycling agent, water and any cement to a homogeneous mixture to produce recycled asphalt concrete. The mixing unit shall be equipped with a belt scale for the continuous weighing of the RAP and a coupled/interlocked computer-controlled liquid metering device. The mixing unit shall be an on-board completely self-contained counter rotating twin shaft pugmill appropriately rated by the manufacturer for the production levels used by the Contractor. The liquid metering device shall be capable of automatically adjusting the flow of recycling agent to compensate for any variation in the weight of the RAP introduced into the pugmill. Recycling agent shall be metered by weight of RAP using a mass flow, coriolis effect, type meter that will accurately measure the amount of recycling agent to within 0.5 percent of the amount required by the mix design or as adjusted in the field and approved by the Engineer. The recycle train shall have an independent source of water to properly disperse the recycling agent. Automatic digital readings shall be displayed for both the flow rate and total amount of RAP, recycling agent, and cements in appropriate units of weight and time.

If an asphalt foam recycling agent is used, the system shall be equipped with a heating system capable of maintaining the temperature of asphalt flow components above 300 degrees F. The RAP belt scale shall be coupled/interlocked with two microprocessor controlled systems, complete with two independent pumping systems and spray bars, to regulate the application of foamed asphalt separate from water that is used to increase the moisture content for compaction. The two spray bars shall be fitted with self-cleaning nozzles at a maximum spacing of one nozzle for each 6-inch width of the mixing chamber. The foamed asphalt shall be produced at the spray bar in individual expansion chambers into which hot asphalt, water, and air are injected under pressure through individual and small orifices that promote atomization. The rate of addition of water into the hot asphalt shall be kept at a constant percent by mass of asphalt by the same microprocessor. An inspection or test nozzle shall be fitted at one end of the spray bar to produce a representative sample of foamed asphalt.

The recycling agent, any cement and water shall be incorporated into the graded RAP at the initial rate determined by the mix design and approved by the Engineer. Adjustments in the rate of recycling agent, cement and water shall be determined by the Qualified Technician and made as necessary based on the coating and compaction properties of the recycling agent. Sampling variations and mix design may determine the necessity of different levels of recycling agent and/or cement in various sections of the project.

When a paving fabric is encountered during the cold milling operation, the CIR Contractor shall make the necessary changes in equipment or operations so that incorporation of the shredded fabric in the recycled material does not affect the performance parameters of the recycled asphalt concrete, or inhibit placing or compaction of the CIR pavement. No fabric piece incorporated into the recycled section shall have any dimension exceeding a length of 2-inches. The Contractor shall be required to remove and properly dispose of oversized pieces of paving fabric as directed by the Engineer. Similarly, loop wires, pavement markers, rubberized crack fill materials, thermoplastic marking materials, milled concrete, and other

materials that may be incorporated into the RAP through the milling process shall be removed from the recycled material unless the Contractor can demonstrate that minor amounts of residual materials that remain will not compromise the integrity of the recycled asphalt.

Mixing and Spreading of Cement - Cement slurry shall be produced at the jobsite as required by these specifications. The Contractor shall provide the Engineer with batch logs daily. Cement slurry may be added directly to the pugmill or sprayed over the cutting teeth of the milling machine.

Portland cement slurry storage and supply equipment shall have agitators or similar equipment to keep the cement or lime slurry in suspension when held in the slurry feed tank. Cement slurry shall be kept in suspension during transport using agitator equipment.

Dry cement shall be spread upon the existing asphalt concrete surface no more than 100 feet ahead of the recycling train. If cement is spread ahead of the milling operation, the distance between the spreader and the recycling train shall be reduced appropriately during windy days. In no case shall cement be allowed to remain exposed at the end of the workday. Dust control measures shall be employed to minimize fugitive dust. No traffic other than the recycling equipment shall be allowed to pass over the spread cement until the recycling operation is complete

Placement – Recycled pavement shall be spread using a self-propelled track-paver having electronic grade and cross slope control for the screed. The equipment shall be of sufficient size and power (minimum 170 hp) to spread the recycled material in one continuous pass, without segregation, to the lines and grades established by the Engineer and according to Plans. Heating of the paver screed is not permitted. A pick-up machine shall be used for transferring the recycled material from a windrow to the receiving hopper of the paver, the pick-up machine shall be capable of removing and transferring the entire windrow of recycled mix in a single pass.

Handwork of CIR pavement shall be minimized and care shall be taken to prevent segregation. The wings of the paver shall be emptied regularly to prevent buildup and to minimize segregation.

Compaction - Compacting the recycled mix shall be completed using self-propelled rollers, complete with properly operating scrapers and water spray systems. Rollers of the vibratory-steel drum and pneumatic tired type shall be used. They shall be in good condition, capable of operating at slow speeds to avoid displacement of the mixture.

Compaction operations shall start no more than 15 minutes behind the paver, or at the direction of the Qualified Technician and/or Engineer. The number, weight and types of rollers shall be as necessary to obtain the required compaction. At a minimum the following rollers shall be used:

At least one pneumatic roller with a minimum gross operating weight of not less than 25 tons. Tires on the pneumatic rollers shall be evenly inflated and matched in size and profile so as to maximize compactive effort.

At least one double drum steel vibratory roller with a gross operating weight of not less than 10 tons with a minimum drum diameter of at least 60-inches.

Rolling patterns shall be established in the field by the Contractor and verified by the Engineer to achieve a <u>maximum</u> density determined by nuclear density testing. A rolling pattern for compaction shall be determined such that no increase in density is shown on successive nuclear density tests (per ASTM D 2950) for any additional passes of the compaction equipment once the maximum density pattern has been identified ("break over point"). Nuclear density testing shall be repeated throughout the time compaction is being completed to continuously verify the compaction is within 5% of the maximum density

established via a rolling vs. density chart that shows the progress of densification from initial breakdown compaction through maximum obtainable density at the break over point.

Care shall be taken not to over compact the mat. A Qualified Technician shall be on site and observing all compaction efforts, monitoring density gauge readings, and approving areas as they reach maximum density. The <u>minimum</u> rolling pattern shall be as follows:

Two complete coverages with the double drum steel vibratory roller immediately after the recycled mix is placed. The first coverage shall be made without the vibratory unit turned on and the second with the vibratory unit operating.

Two complete coverages with the pneumatic-tired roller shall be made after the initial passes of the steel roller.

Final rolling, before cure, to eliminate pneumatic tire marks and to achieve maximum density shall be done by the double drum steel roller, either operating in a static or vibratory mode.

The recycled mat shall be continuously observed during compaction efforts. If moisture cracking occurs under the vibratory compaction mode, the vibrators shall be turned off and static rolling only applied. If moisture cracking of the mat continues under static steel rolling, steel drum compaction shall cease, the mat shall be allowed to cure for a time in order for some moisture to escape, and pneumatic rolling commenced, followed by steel rolling to iron out irregularities from the rubber-tired roller(s). This procedure shall be followed until there is no longer any displacement of the mat observed by roller action on the recycled surface.

The selected rolling pattern shall be followed unless changes in the recycled mix or placement conditions occur and a new rolling pattern is established at that time. Any type of rolling that causes cracking, major displacement and/or any other type of pavement distress shall be discontinued until such time as the problem can be resolved. Discontinuation and commencement of rolling operations shall be at the discretion of the Engineer.

Extra care shall be taken to ensure that aggregate from the recycled mixture does not stick to the drums or wheels of the rollers. Water shall be uniformly applied to the wheels and drums, along with mechanical means to keep aggregate from sticking. Sufficient water shall be applied to keep rollers and tires clean, but not so much that water pools or ponds on the recycled surface.

Rollers shall not be started or stopped on uncompacted recycled material. Rolling patterns shall be established so that starting and stopping shall be on previously compacted material or the adjacent, existing surfacing.

Cure and Maintenance – After the completion of compaction of the recycled material, no traffic, including that of the Contractor, shall be permitted on the recycled material for at least two hours. This may be reduced if sufficient care is established for traffic that will not initiate raveling. A fog seal of dilute (1:1) SS-1h emulsion, emulsified recycling agent or equivalent (0.08 to 0.12 gallon per square yard) shall be applied after initial compaction or after the secondary compaction, as outlined below, to all areas opened to significant traffic depending on curing of the CIR pavement. If necessary to prevent pickup of the fog seal, the recycled pavement surface shall be covered with sand at a rate of 1.0 to 2.0 pounds per square yard. Excess sand shall be removed from the pavement surface by careful sweeping. Sand shall be free from clay or organic material. Fog sealing and/or sanding shall be initiated at the Engineer's direction.

After opening to traffic, the surface of the recycled pavement shall be maintained in a condition suitable Crows Landing Road (Whitmore Avenue to Hatch Road) VI-21 Federal Aid Project No. HSIPL-5938(238) Special Provisions April 2020 for the safe movement of traffic. Before placing the final surfacing, the recycled surface shall remain inplace:

- For a minimum of 2 days and until there is less than 2.0 percent moisture remaining in the recycled pavement mixture; or
- A minimum of 10 days without rainfall.

The Contractor shall protect and maintain the recycled surface from nuisance water, other deleterious substances, and/or any other damage. Any damage to the completed recycled material shall be repaired by the Contractor prior to the placement of new asphalt concrete or final surface sealing. Areas damaged shall be excavated to the depth directed by the Engineer and/or filled and compacted with new asphalt concrete. All loose particles that may develop on the pavement surface shall be removed prior to the final surface course. No direct payment will be made and costs shall be included elsewhere for protection and maintenance of the recycled asphalt concrete pavement.

Prior to any overlay with asphalt concrete, the recycled pavement should be carefully swept of all loose material to create a dry clean surface. A tack coat of SS-1h emulsion, emulsified recycling agent or equivalent (0.05 gallon per square yard minimum) shall be applied to all surface areas.

Smoothness – The finished surface and grade of the recycled material shall be checked regularly during placement using a level. The smoothness shall not vary more than ¹/₄ inch from a 10-foot straight edge placed on the surface. The Contractor shall correct humps or depressions exceeding this tolerance. High points may be trimmed if approved by the Engineer in the field.

Method of Measurement

Quantities of the produced CIR pavement shall be measured by the square yards completed and accepted by the Engineer for the depths specified. Recycling agent and cement weight shall be based upon Certified delivery weight tickets, less any unused portion. Water used in this operation will not be paid for directly and shall be considered subsidiary to the bid item.

Basis of Payment

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals; for doing all the work involved in cold in-place recycling, complete in-place; for milling, screening, crushing, mixing, blending, placing, and compacting the recycled pavement mixture; for protection and maintenance of the recycled layer; for performing all QC testing including mix design; for fog sealing, sanding and sweeping if necessary; for obtaining measurements and recording results of all tests as shown on the plans and as directed by the Engineer shall be considered as included in the contract unit price paid for **Cold In Place Recycling-Foamed Asphalt (CIR-FA) (3" Depth)** and no additional compensation will be allowed.

Recycling agent will be paid for at the contract unit price for PG 64-10 (Foamed Asphalt) (CIR-FA). No adjustment of compensation will be made for any increase or decrease in the quantities of emulsified recycling agent required, regardless of the reason for the increase or decrease.

Cement, if necessary, will be paid for at the contract unit price for **Cement (Portland Type II) (CIR-FA)**. No adjustment of compensation will be made for any increase or decrease in the quantities of cement required, regardless of the reason for the increase or decrease.

APPENDIX A

METHOD OF TEST FOR DETERMINING THE PERCENT OF FOAMED ASPHALT RECYCLING AGENT TO USE FOR COLD RECYCLING OF ASPHALT CONCRETE

1. SCOPE

This method is used to determine the optimum foamed asphalt application rates for cold recycling (CR) using foamed asphalt.

2. **REFERENCES**

AASHTO T 209	Method of Test for Theoretical Maximum Specific Gravity and Density of
	Hot Mix Asphalt (Method A)
AASHTO T 269	Method of Test for Determining Air Voids
AASHTO T 283	Standard Method of Test for Resistance of Compacted Asphalt Mixtures to
	Moisture-Induced Damage

3. APPARATUS

- 1. The laboratory material production method should closely simulate full-scale foamed asphalt production. Laboratory equipment should be capable of producing foamed asphalt at a rate from 50 grams to 500 grams per second. The laboratory equipment should have a thermostatically controlled chamber or vessel capable of holding at least 22 lbs. of asphalt at a temperature from 285°F to 340°F. The laboratory equipment should have a compressed air supply capable of delivering from 0 to 100 psi. The laboratory equipment should have a system for adding from 0 % to 4 % cold water by weight of asphalt. All metering devices shall be calibrated annually in accordance with the manufacturers manual, laboratory accreditation standards, and/or Caltrans Independent Assurance Standards.
- 2. An air cabinet capable of maintaining a temperature of $104^{\circ}F \pm 5^{\circ}F$.
- 3. Water Bath: A water bath of sufficient size for immersing samples in accordance with AASHTO T 209 (Methods A). The water bath must be maintained at 77° F $\pm 2^{\circ}$ F by suitable methods, and have an overflow system for maintaining a constant water level during sample emersion.
- 4. A pugmill style mixer capable of mixing up to 55 lbs. of aggregate, sand, and fines as included in the sample of reclaimed asphalt pavement (RAP) collected from the job site. The mixer shall be able to mix the material in a suspended state, and allow for the foamed asphalt to be injected into the pugmill apparatus during mixing. The mixer shall also be able to provide an evenly distributed foamed asphalt material after 2 minutes of mixing.
- 5. Calipers to measure the length and diameter of test specimens to the nearest 0.02 inch.
- 6. A thermometer capable of measuring temperatures from 32°F to 120°F.
- 7. Gyratory Compactor OR Marshall Compactor

- 8. A mechanical or hydraulic testing machine as specified in AASHTO T 283 to provide a range of accurately controllable rates of vertical deformation, including 2.0 inches per minute.
- 9. Lottman Breaking Head.

10. Air tight containers capable of holding 1,500-grams and 50 lbs of asphalt pavement materials.

4. ASPHALT BINDER SELECTION AND FOAMED ASPHALT PARAMETERS

Laboratory production of the foamed asphalt must use the same asphalt binder that will be used during construction, including grade as specified in the project's special provisions and asphalt supplier as chosen by the contractor.

- 1. Calibrate laboratory asphalt foaming equipment in compliance with the manufacturer's instructions and laboratory accreditation requirements.
- 2. Select 3 asphalt temperatures at 18°F increments bracketing the expected optimum temperature. The expected optimum temperature can be determined based on previous experience or a temperature of 320°F can be used. If 320°F is selected, the 3 asphalt temperatures tested would be 302°F, 320°F, and 338°F.
- 3. For each asphalt temperature, use at least 3 foamed asphalt water percentages of 2.0 %, 3.0 %, and 4.0 % in the foamed asphalt laboratory equipment to determine:
 - 3.1 Expansion ratio: The ratio of maximum volume of foamed asphalt relative to original volume of asphalt.
 - 3.2 Half-life: The time measured in seconds for foamed asphalt to subside to half of the maximum volume from the time the foam nozzle shuts off.
- 4. Calculate the product of expansion ratio and half-life (expansion ratio x half-life) for each water percentage. The water percentage with the highest product of expansion ratio and half-life is the optimum foamed asphalt water percentage at the selected temperature. If there is not at least one test performed at foamed asphalt water percentages above and below the determined optimum, repeat steps 3 and 4 increasing or decreasing the foamed asphalt water percentages in 0.5 % increments.
- 5. The temperature with the highest product of expansion ratio and half-life at the optimum foamed asphalt water percentage is the optimum temperature.
- 6. The required minimum half-life and expansion ratio will depend on the recycled material temperature during construction. If the recycled material temperature is between 50°F and 60°F, select the asphalt temperature and water percentage with a minimum expansion ratio of 10:1 and half-life of at least 8 seconds. If the material temperature is above 60°F, select a water percentage with a minimum expansion ratio of 8:1 and a half-life of at least 6 seconds. If the expansion and half-life at the optimum foamed asphalt water percentage at the optimum temperature do not meet these requirements, select the temperature and foamed asphalt water percentage with the highest product of expansion ratio and half-life that does meet the requirements.

5. PREPARATION OF RECYCLED MATERIALS

- 1. Dry each sample of RAP to a constant weight in accordance with AASHTO T 329. Samples will be dried to a constant weight at 104±4°F
- 2. Perform a sieve analysis on the course portion of the milled samples and a washed sieve analysis on fine portion of the samples in accordance with AASHTO T 27.
- 3. Prepare RAP samples for both fine gradation and coarse gradation by recombining the RAP material in the laboratory to meet the following gradation requirements:

Sieve	% Passing -	% Passing -
Size	Fine	Coarse
1"	100	100
3/4"	100	85
1/2"	90	55
No. 4	62	35
No. 30	28	13

6. OPTIMUM FOAMED ASPHALT CONTENT DETERMINATION

Using four 30-pound portions from the fine gradation from section E above, prepare approximately 120 lbs. of recycled material for the determination of the optimum foamed asphalt content.

- 1. Quarter the material into four 30-pound bulk samples, and place in air tight containers. Containers represent material to be tested at foamed asphalt contents of 2.00%, 2.25%, 2.50%, and 2.75%.
- 2. Determine the active filler content to maintain a 2.5:1 asphalt to cement ratio for each sample. Weigh the required amount of cement for each sample.
- 3. Place one 30-pound bulk sample into the pug mill mixer. Add the required active filler content and thoroughly mix a sufficient amount of water to achieve 75 percent of OMC as determined in Section H for material with the target active filler content.
- 4. Move pugmill to proper location to receive foamed asphalt through opening in pugmill lid. Start mixer, and blend 2.0 percent foamed asphalt. Allow mixer to blend material for 60 seconds.
- 5. Remove the material from the pug mill, and split the processed material down to 6, 1,000g 1,250g specimens. Typically, between 1,000g-1,250g of material is sufficient, when compacting asphalt-stabilized materials using the foamed asphalt method. The target final specimen height should be 2.5 ± 0.1 inch. Place the 1,000 to 1,250g samples into air tight containers.
- 6. Add the remaining 25 percent water required to bring the material to the OMC determined earlier in this test method. Water must be equally distributed to each of the six samples by

stirring vigorously for 15 to 20 seconds.

- 7. Place 1,100 grams of material in a 150mm (4-inch) diameter Marshall or Gyratory mold and rod the material 10-15 times with a 1/8" rod in a circular motion, making sure to evenly distribute the rodding across the entire sample.
- 8. Compact the specimen using the Marshall compactor and applying 75 blows on each side of the specimen or using the gyratory compactor at 30 gyrations.
- 9. Gently extrude the specimen from the Marshall or Gyratory mold and record the height, diameter and weight of the specimen.
- 10. Repeat steps 3 through 9, three additional times, using the remaining 3 bulk samples to fabricate specimens at 2.25%, 2.50%, and 2.75% foamed asphalt with the appropriate amount of active filler to maintain a 2.5:1 ration of foamed asphalt to active filler.
- 11. Repeat steps 1 through 10 using the coarse gradation samples from section E above, using the 4 bulk samples to fabricate specimens at 2.00%, 2.25%, 2.50%, and 2.75% foamed asphalt with the appropriate amount of active filler to maintain a 2.5:1 ratio of foamed asphalt to active filler.
- 12. Cure the compacted specimens in a forced draft oven at 104°F for 72 hours. If after the 72-hour cure, the specimens have not reached constant mass, allow the samples to continue to cure until constant mass is reached checking each additional hour. Note the additional time required for cure.
- 13. Remove specimens from oven, and allow the specimens to cool to ambient temperature 77°F±5°F. Once they have cooled, record weight and height for each specimen.
- 14. Select 3 specimens from each asphalt content and determine the Indirect Tensile Strength (ITS) under AASHTO T 283. Record the peak breaking loads. Do not discard sample material.
- 15. Place the 3 remaining specimens from each asphalt content in a water bath with a temperature of $77 \pm 3^{\circ}$ F for 24 hours. Water level must be a minimum of 4.0 inches above the specimens' surface and specimens must not be stacked. Water level must be a minimum of 4.0 inches above the specimens' surface. Specimens must not be stacked or touching and should allow for water penetration from every angle.
- 16. After the 24-hour soaking period, remove the specimens from the water and let stand for 15 minutes.
- 17. Cover specimens with damp cloth or a plastic sheet to prevent excessive evaporation.
- 18. Determine the Indirect Tensile Strength (ITS) of the soaked specimens under AASHTO T 283. Record the peak breaking loads. Do not discard the material.
- 19. Calculate average wet (ITSwet), and dry (ITSdry) of each subset and record the results.
- 20. Determine Tensile Strength Ratio (TSR) of each subset and record the results:

TSR = ITSwet / ITSdry

- 21. Select the asphalt content with test results of minimum ITSwet \geq 30 psi.
- 22. When one or more asphalt content complies with the minimum test results, select the lower asphalt content.

7. THEORETICAL MAXIMUM SPECIFIC GRAVITY AND DENSITY OF CR FOAMED ASPHALT MATERIAL

- 1. Take the 3 soaked specimens of material selected for optimum foamed asphalt content.
- 2. Use California Test 309, Section H, Supplemental Dry Back Procedure, to determine the Theoretical Maximum Specific Gravity and Density of the CR Foamed Asphalt Material.
- 3. Report test results of the 3 specimens as an average.

8. **REPORTING OF RESULTS**

Each mix design submittal must consist of:

- 1. Proposed Mix Design on Contractor Cold In-place Recycling Using Foamed Asphalt Mix Design form
- 2. Safety Data Sheets (SDS) for:
 - 2.1 Asphalt Binder
 - 2.2 Cement or other active fillers
- 3. Manufacture's Certificate of Compliance for (COC) for:
 - 3.1 Asphalt Binder
 - 3.2 Cement or other active fillers

SP-23 MINOR CONCRETE

Minor concrete shall conform to the provisions in Section 73, "Concrete Curbs and Sidewalks," of the Standard Specifications, sections 3.16 and 3.20, "Concrete Curbs and Sidewalks" and "Disabled Access Curb Ramps", of the Stanislaus County Standards and Specifications, and these Special Provisions. Miscellaneous minor concrete work shall include constructing concrete curb and gutter, retaining and extruded median curb, sidewalk, curb ramps, driveways, valley gutter, thru drains and stamped concrete as shown on the plans.

Minor concrete shall conform to the provisions in Section 90-2, "Minor Concrete", of the Standard Specifications.

Reinforcement in minor concrete shall conform to the provisions in Section 52, "Reinforcement", of the Standard Specifications.

All concrete work shall be allowed to cure prior to any adjacent road work.

Contractor shall comply to County Standard Detail 3-E1 and 3-E2 when constructing concrete valley gutter.

Surface of curb ramps and flared sides shall have broom finish transverse to the path of travel and shall be of contrasting finish to that of adjacent sidewalk.

Minor Concrete (Stamped Concrete)

Stamped concrete shall conform to the provisions in Section 73-4, "Textured Concrete and Colored Concrete Surfaces", of the Standard Specifications. When installing stamped concrete, the median color shall be Bomanite Sedona and shall be installed per the Manufacturer's recommendations. The color shall be uniform throughout. The stamp pattern shall be 12" slate.

Stamped concrete surfaces are measured parallel to the concrete surface.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing minor concrete and reinforcement, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer shall be considered as included in the contract unit price paid for **Minor Concrete (Curb and Gutter)**, **Minor Concrete (Retaining and Extruded Median Curb)**, **Minor Concrete (Sidewalk)**, **Minor Concrete (Curb Ramp)**, **Minor Concrete (Driveway)**, **Minor Concrete (Valley Gutter)**, **Minor Concrete (Thru Drains)**, and **Minor Concrete (Stamped Concrete)** and no additional compensation will be allowed. Concrete pad for USPS mailbox as detailed on Sheet 19 of Plans shall be considered as included in the contract unit price paid for **Minor Concrete (Sidewalk)** and no additional compensation will be allowed.

SP-24 CONTROLLED LOW STRENGTH MATERIAL

Controlled low strength material shall consist of a workable mixture of aggregate, cementitious materials, and water and shall conform to the provisions for slurry cement backfill in Section 19-3.02E, "Slurry Cement Backfill," of the Standard Specifications and these Special Provisions.

At the option of the Contractor, controlled low strength material may be used as structure backfill for pipe culverts, except that controlled low strength material shall not be used as structure backfill for culverts having a diameter or span greater than 20 feet.

When controlled low strength material is used for structure backfill, the width of the excavation shown on the plans may be reduced so that the clear distance between the outside of the pipe and the side of the excavation, on each side of the pipe, is a minimum of 12 inches. This minimum may be reduced to 6 inches when the height of cover is less than or equal to 20 feet or the pipe diameter or span is less than 42 inches.

Controlled low strength material in new construction shall not be permanently placed higher than the basement soil. For trenches in existing pavements, permanent placement shall be no higher than the bottom of the existing pavement permeable drainage layer. If a drainage layer does not exist, permanent placement in existing pavements shall be no higher than one inch below the bottom of the existing asphalt concrete surfacing or no higher than the top of base below the existing portland cement concrete pavement. The minimum height that controlled low strength material shall be placed, relative to the culvert invert, is 0.5 diameters or 0.5 heights for rigid culverts and 0.7 diameters or 0.7 heights for flexible culverts.

When controlled low strength material is proposed for use, the Contractor shall submit a mix design and test data to the Engineer for approval prior to excavating the trench for which controlled low strength material is proposed for use. The test data and mix design shall provide for the following:

- A. A 28-day compressive strength between 50 pounds per square inch and 100 pounds per square inch for pipe culverts having a height of cover of 20 feet or less and a minimum 28-day compressive strength of 100 pounds per square inch for pipe culverts having a height of cover greater than 20 feet. Compressive strength shall be determined in conformance with the requirements in ASTM Designation: D 4832.
- B. Cement shall be any type of portland cement conforming to the requirements in ASTM Designation: C 150; or any type of blended hydraulic cement conforming to the requirements in ASTM Designation: C 595M or the physical requirements in ASTM Designation: C 1157M. Testing of cement will not be required.
- C. Admixtures may be used in conformance with the provisions in Section 90-1.02E, "Admixtures," of the Standard Specifications. Chemical admixtures containing chlorides as Cl in excess of one percent by weight of admixture, as determined in conformance with the requirements of California Test 415, shall not be used. If an air-entraining admixture is used, the maximum air content shall be limited to 20 percent. Mineral admixtures shall be used at the Contractor's option.

Materials for controlled low strength material shall be thoroughly machine-mixed in a pugmill, rotary drum or other approved mixer. Mixing shall continue until the cementitious material and water are thoroughly dispersed throughout the material. Controlled low strength material shall be placed in the work within 3 hours after introduction of the cement to the aggregates.

When controlled low strength material is to be placed within the traveled way or otherwise to be covered by paving or embankment materials, the material shall achieve a maximum indentation diameter of 3 inches prior to covering and opening to public traffic. Penetration resistance shall be measured in conformance with the requirements in ASTM Designation: D 6024.

Controlled low strength material used as structure backfill for pipe culverts will be considered structure backfill for compensation purposes.

Full compensation for furnishing and installing controlled low strength material shall be considered as included in the contract price paid for the various items of work and no additional compensation will be allowed.

SP-25 ROADSIDE SIGNS

Roadside signs shall conform to the provisions in Section 82, "Signs and Markers," of the Standard Specifications and shall be installed at the locations shown on the plans or as directed by the Engineer.

Roadside sign sheeting shall be Type III/IV, High Intensity, Prismatic sheeting, 3M-3930 series or approved equal by the Engineer.

Full compensation for furnishing all labor materials, tools, equipment and incidentals for doing all work involved with construction of roadside signs all in accordance with the plans, the Standard Specifications, and these Special Provisions shall be considered as included in the contract unit price paid for **Roadside Signs** and no additional compensation will be allowed.

SP-26 WELDED WIRE REINFORCEMENT

Welded wire reinforcement shall conform to the provisions in Section 52, "Reinforcement," of the Standard Specifications and Stanislaus County standard plate 3-F5.

Full compensation for furnishing all labor, materials, tools, equipment and incidentals for doing all work involved with the installation of welded wire reinforcement all in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract unit price paid for **Welded Wire Reinforcement**, and no additional compensation will be allowed.

SP-27 THERMOPLASTIC TRAFFIC STRIPES AND PAVEMENT MARKINGS

Thermoplastic traffic stripes (traffic lines) and pavement markings shall be applied in conformance with the provisions in Section 84-2, "Traffic Stripes and Pavement Markings" of the Standard Specifications and these Special Provisions.

For each batch of thermoplastic material for traffic stripes and pavement markings, the Contractor shall submit to the Engineer:

- 1. Certificate of Compliance under section 6-1.07, "Certificates of Compliance," of the Standard Specifications.
- 2. Department's Materials Engineering and Testing Services notification letter stating that the material is approved for use.
- 3. Material Safety Data Sheet

Thermoplastic material shall be free of lead and chromium, and shall conform to the requirements in Standard Specification PTH-02ALKYD.

Where striping joins existing striping, as shown on the plans, the Contractor shall begin and end the transition from the existing striping pattern into or from the new striping pattern a sufficient distance to ensure continuity of the striping pattern.

Thermoplastic traffic stripes and pavement markings shall be free of runs, bubbles, craters, drag marks, stretch marks, and debris.

Thermoplastic traffic stripes will be measured by the linear foot for each striping detail, regardless of the number, widths and patterns of stripes in the detail.

Limit and yield line pavement markings shall be placed 4' from any crosswalk.

Retroflective Marker (Blue Type X Marker) shall be placed along striping @ fire hydrants.

Retroflective Marker shall be the permanent type listed on the Pre-Qualified and Tested Signing and Delineation Materials.

Full compensation for furnishing and installing "Retroflective Marker (Blue)" shall be considered as included in the contract unit paid for **Thermoplastic Traffic Stripe and Pavement Markings** and no additional compensation will be allowed.

All Thermoplastic Traffic Stripe shall be enhanced wet-night visibility type and conform to the following specifications:

Thermoplastic material for traffic stripes and pavement markings shall be applied at a minimum thickness of 0.90 inch.

Thermoplastic traffic stripes and pavement markings with enhanced wet-night visibility shall consist of a single uniform layer of thermoplastic and a layer of bonded core elements and a layer of glass beads as follows:

The 1st layer of bonded core elements shall be 3M Bonded Core All Weather Reflective Elements for use in thermoplastic traffic stripes and pavement markings. The color of the bonded core elements shall match the color of the stripe or marking to which they are being applied.

The 2nd layer of glass beads shall comply with AASHTO M247 Type 2.

Both bonded core elements and glass beads must be surface treated for use with thermoplastic under the manufacturer's instructions.

The bonded core elements (surface-drop) shall contain either clear or yellow tinted microcrystalline ceramic beads bonded to the opacified core. *These elements shall not be manufactured using lead, chromate or arsenic.* All "dry performing" microcrystalline ceramic beads bonded to the core shall have a minimum index of refraction of 1.8 when tested using the liquid oil immersion method. All "wet performing "microcrystalline ceramic beads bonded to the core shall have a minimum index of refraction of 2.30 when tested using the oil immersion method.

Gradations for the bonded core elements are shown below.

						
	Element Gradations					
Mas	Mass Percent Passing (ASTM					
	D12	214)				
US	US Micron "S" series					
Mesh	Micron	5 series				
12	1700	85-100				
14	1410	70-96				
16	16 1180 50-90					
18	18 1000 5-60					
20	20 850 0-25					
30	30 600 0-7					

A sample of bonded core reflective elements supplied by the manufacturer shall show resistance to corrosion of their surface after exposure to a 1 % solution (by weight) of sulfuric acid. The 1 % acid solution shall be made by adding 5.7 cc of concentrated acid into 1000 cc of distilled water.

The bonded core elements shall be surface treated to optimize embedment and adhesion to the thermoplastic binder.

Minimum retroreflectivity values $[mcd(ft^2)(fc)]$ metric equivalent $[mcd(m^2)(lux)]$ are shown below: **Property/test method Series Dry, Dry**

	White	Yellow
Dry (ASTM E1710)	700	500
Wet recovery (ASTM E2177)	275	225
Wet continuous (ASTM E2176)	200	150

Note: Increased element drop may be necessary to compensate for increased surface area characteristic of rough pavement surfaces.

Mobile truck mounted applicators shall be capable of traveling at a uniform, predetermined speed over variable road grades to produce uniform application of striping material, following straight lines and making normal curves in a true arc. The equipment shall be capable of air blasting the pavement, applying the stripe and immediately dropping the bonded core elements and glass beads in a single pass at speeds of up to 8 MPH.

Walk-behind cart applicators shall be capable of uniform application of striping material at walking speeds, following straight lines and making tight turns symbols and legends. Mobile equipment must be available to air blast the areas immediately prior to hand cart application. The walk-behind cart shall be capable of applying the molten binder and immediately dropping the bonded core elements and glass beads in a single pass at walking speeds.

The equipment shall be capable of application of bonded core elements and glass beads to the surface of the pavement marking by double drop application. The element dispenser for the first drop shall be attached to the striping machine in such a manner that the elements are dispensed closely behind the binder application device. The bead dispenser for the second drop shall be attached to the striping machine in such a manner that the beads are dispensed immediately after the first drop (bonded core elements).

The applicator for the bonded core elements and glass beads shall be capable of delivering a uniform drop rate at required application speeds.

The bonded core elements and glass beads are applied such that they appear uniform on the entire traffic marking.

The specified reflective media shall be dropped immediately after binder application. Reflective media consists retroreflective elements followed by glass beads commonly called "Double-Drop" and shall be applied to achieve the application rates shown below.

Units	Minimum for smooth pavement surfaces
Pounds per 4-inch Linear foot	0.018 lbs
Pounds per mile 4-inch	95.4 lbs.
Grams per 4-inch Linear foot	8 gr per 4 in lf
Pounds per 6-inch Lineal foot	0.027 lbs.
Pounds per mile 6-inch	142.6 lbs
Grams per 6-inch Linear foot	12 gram per 6 in lf

Bonded Core Element Application Rates for Thermoplastic Binders

Note: Increased element drop may be necessary to compensate for increased surface area characteristic of rough pavement surfaces

Application Rates for Glass Bead

Units	AASHTO M247 Type 2
Pounds per 4-inch Linear Foot	0.048 lbs
Grams per 4-inch Linear Foot	22 gr
Pounds/100 Sq Ft	14.4 lbs
Pounds per 6-inch Linear Foot	0.072 lbs
Grams per 6-inch Linear Foot	33 gr
Pounds/100 Sq. Ft.	14.4 lbs.

Note: Increased glass bead may be necessary to compensate for increased surface area characteristic of rough pavement surfaces

Within 3-7 days of applying a thermoplastic traffic stripe or pavement marking with enhanced wet-night visibility, the Contractor shall test the retroreflectivity using a reflectometer in the presence of the Engineer under ASTM E1710. For continuous lines, reflectance measurements must be made at approximately 200 feet intervals. For skip lines, measurements must be taken at two random locations on each skip. The Contractor shall provide all equipment necessary to conduct field tests.

Retroreflective pavement markers to be installed along with thermoplastic traffic striping shall conform to the provisions in Section 85-1.05, "Retroreflective Pavement Markers," of the Standard Specifications and these special provisions.

Full compensation for furnishing and installing retroreflective pavement markers shall be considered as included in the contract unit price paid for the various thermoplastic traffic striping requiring retroreflective pavement markers, and no additional compensation will be allowed.

Full compensation for furnishing and installing Thermoplastic Traffic Stripe shall be considered as included in the contract unit price paid for various **Thermoplastic Traffic Stripes** and no additional compensation will be allowed.

Full compensation for furnishing and installing Thermoplastic Pavement Markings shall be considered as included in the contract unit price paid for **Thermoplastic Pavement Markings** and no additional compensation will be allowed.

SP-28 SOLID GREEN PAVEMENT MARKING

Street coloring in this project shall be a durable, colorized, slip and skid resistant coating suitable for delineating areas for preferred use of bicycle lanes and pedestrian traffic areas. The products approved on this project are Streetbond CL, Ride-A-Way, Zebraflex or equal.

Materials used for the coating of the asphalt or concrete pavement shall consist of the following:

The product shall be an epoxy-modified polymer coating. It is specifically designed for application on asphalt or concrete pavements to provide a safe, durable, long lasting color and

texture to the pavement surface. The coating shall be environmentally safe and meets EPA requirements for Volatile Organic Compounds (VOC). The selected color shall be highly concentrated, high quality, UV stable pigment blend.

The proposed color is "Shamrock Green" for bicycle lanes.

" Shamrock Green "

Hex triplet: #00FF00 <u>SrgbB (r, g, b)</u>: (0, 255, 0) <u>HSV (h, s, v</u>): (120°, 100%, 100%)

The daytime chromaticity coordinates for the color used for bike lanes colored pavement shall be per FHWA requirements:

1		2		3		Z	1
х	у	х	у	х	у	х	у
0.230	0.754	0.266	0.500	0.367	0.500	0.444	0.555

The daytime luminance factor (Y) shall be at least 7, but no more than 35.

The nighttime chromaticity coordinates for the color used for bike lanes colored pavement per FHWA requirements:

1		2		3		2	1
х	у	х	У	х	у	х	У
0.230	0.754	0.336	0.540	0.450	0.500	0.479	0.520

The performance properties and requirements of the street coatings shall meet the following:

 TABLE 1: Performance Properties of street coating

Characteristics	Test Specification	Measured Result
Durability: Taber Abrasion	ASTM D-4060 <1 day cure, H-10 wheel cycles (dry)	<1.5g/1000
Water Sensitivity	ASTM D570 Water absorption after 9 days Remaining absorption after 1 hour of recovery	<10% <10%

Colour Stability	ASTM G-155 QUV 2,000(CIE units)	Brick Colour $\Delta E < 1.5$
Flexibility: Mandrel Bend	ASTM D522-93A Flexibility as measured by Mandrel bend 0.5mm thick sample passes 10 mm at 21°C	
Chemical Resistance	ASTM D-2486 Modified MEK scrubs 16 dry mils, number of scrubs until 50% substrate exposed	>5000
Adhesion to Asphalt	ASTM D-4541	Substrate failure<
Friction Wet	ASTM E-303 British Pendulum Test	>55
Environmental Sensitivity	EPA 24 ASTM D3960-05 Volatile Organic Compounds	VOC < 150

The street coating shall be supplied and applied by an experienced applicator in accordance with the plans and specifications.

Pavement markings may be removed by water-blasting, as the approved mechanical method. The removal method should, to the fullest extent possible, cause no significant damage to the pavement surface. The engineer shall determine if the removal of the markings is satisfactory for the application of street coating. Work shall not proceed until this approval is granted.

The asphalt concrete pavement surface shall be dry and free from all foreign matter, including but not limited to dirt, dust, and chemical residue.

Primer is not required for new asphalt pavements, but Primer maybe required on existing asphalt. The contractor shall use primer as need for proper application of the street coating.

The applicator shall apply street coating only when the air temperature is at least 50°F within 8 hours of application of the coating material. There should be no precipitation expected within the 2 hours after the final layer of street coating is dry to touch. Each application of street coating material shall be the same color and shall be allowed to dry completely before applying the next layer.

There will be 4 passes of street coating, thickness is as outlined in the table:

	Thickness (approx)			
	Wet		Dry	
Spray Passes	mm	mil	mm	mil
4	0.87	34.3	0.48	18.9

TABLE – COATING THICKNESS

Air Temperature	Relative Humidity	Time to Dry (approx)		
60°F	80%	8 hours		
80°F	57%	4 hours		
120°F	5%	2 hours		

Minimally, the street coating must be 100% dry before traffic is permitted.

Substrate temperature, wind and humidity can affect dry times.

Full compensation for conforming to the requirements of this section and furnishing all labor materials, tools, equipment and related to the installation of street colorized coating for bicycle lanes and pedestrian areas shall be considered as included in the bid price for the item **Solid Green Pavement Marking** and no additional allowance will be made therefore.

SP-29 DETECTABLE WARNING SURFACE

The Contractor shall furnish and install detectable warning tiles (truncated domes-yellow) to existing and proposed curb ramps per Caltrans Std. Plan A88A and manufacturer recommendations. The Contractor must submit type and size for review and approval by the Engineer prior to installation. The Contractor also must grind any existing lip at the gutter flow line to create a flush transition to curb ramp with smoothness similar to existing concrete.

Detectable warning surface shall be a minimum of 36" in length on the full width of the ramp. When the ramp has a slope less than 1:20 (5.0% slope), detectable warning surface shall be required on the full width and depth of the ramp within the grooved borders, excluding the flared sides.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals for doing all work involved with the installation of detectable warning surface at curb ramps in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract price paid for the **Detectable Warning Surface** and no additional compensation will be allowed.

SP-30 ENVIRONMENTAL MITIGATION

Environmental reevaluation will be required if the scope of the project changes to include additional areas of activities, or if previously unknown cultural or other sensitive resources are discovered.

A lead compliance plan for worker health and safety must be prepared by a Certified Industrial Hygienist and must be implemented prior to the start of construction activities. This plan is needed in order to minimize worker exposure to lead chromate or lead while handling grindings containing thermoplastics.

The Contractor is responsible for disposal of thermoplastic grindings. Stanislaus County will provide a temporary EPA ID number and sign the manifest prior to properly disposing of hazardous waste.

Full compensation for preparation, submittal, and implementation of a lead compliance plan shall be considered as included in the contract lump sum price paid for **Lead Compliance Plan**, and no additional compensation will be allowed.

SP-31 PORTABLE CHANGEABLE MESSAGE SIGN

The Contractor shall furnish, place, operate, and maintain six (6) Portable Changeable Message Signs as shown on the Traffic Control Plans or where designated by the Engineer in conformance with the provisions of Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications for the duration of the project or as directed by the Engineer.

Full compensation for furnishing, placing and maintaining six (6) Portable Changeable Message Signs as specified in this special provision or as directed by the Engineer shall be considered as included in the contract price paid for the **Portable Changeable Message Sign**, and no additional compensation will be allowed.

SP-32 INSTALL PROJECT CONSTRUCTION FUNDING SIGN

This section includes specifications for installing construction project funding signs furnished by the County. Sign panels provided by the County will be 0.080" thick, unframed, single sheet aluminum and will be made available to the contractor at 1716 Morgan Road. The contractor shall contact County at (209) 525-4146, two weeks prior to pick up of signs.

Keep construction project funding signs clean and in good repair at all times.

Contractor must provide all remaining materials required for installation of project funding sign, such as aluminum or wooden post and fastening/mounting hardware, as directed by the Engineer. Construction project funding signs must be installed at the locations designated by the Engineer on aluminum or wood single post and must be in accordance to Caltrans Specifications 82-2 Sign Panels, 82-3 Roadside Signs and Caltrans Standard Plan RS1 and RS2. Construction Project Funding signs must be installed before starting major work activities visible to drivers.

When authorized, remove and salvage construction project funding signs upon completion of project to the County at 1716 Morgan Road.

Full compensation for furnishing all labor, materials, tool, equipment, and incidentals for doing all work involved with installing, maintaining, removing and salvaging construction project funding signs in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract price paid for the **Install Project Construction Funding Sign** and no additional compensation will be allowed.

SP-33 RECTANGULAR RAPID FLASHING BEACONS (RRFB)

Hard-wired RRFB installation is planned at two crossings along Crows Landing Road at Imperial Avenue and Colusa Avenue, work shall be in conformance with the provisions in Section 86 "Electrical Work" and Section 87 "Electrical Systems" of the Standard Specifications and these Special Provisions.

Both RRFB systems shall be hard-wired to a proposed service pedestal as shown on the project plans. Extra conduits shall be installed at the intersections as shown on the plans for future use.

A. RRFB System shall operate as following:

1. Each RRFB shall consist of two rectangular-shaped yellow indications, each with an LED-array based light source and a minimum of approximately 5 inches wide by approximately 2 inches high. All RRFB shall be double-sided.

- 2. The two RRFB indications shall be aligned horizontally, with the longer dimension horizontal and with a minimum space between the two indications of approximately seven inches (7 in), measured from inside edge of one indication to inside edge of the other indication.
- 3. All RRFBs associated with a given crosswalk shall normally be dark. When activated via pedestrian actuation, all RRFBs associated with a given crosswalk shall simultaneously commence operation of their alternating rapid flashing indications at a predetermined time, and cease operation simultaneously through the wireless communication unit.
- 4. When activated, the two yellow indications in each RRFB shall flash in FHWA-approved patterns. The duration of a predetermined period of operation of the RRFBs following each actuation should be based on the latest CAMUTCD procedures for timing of pedestrian clearance times for pedestrian signals.
- 5. The light intensity of the yellow indications shall meet the Society of Automotive Engineers (SAE) standard J595 requirements for peak luminous intensity (candelas) for Class 1.
- 6. Each RRFB pole shall be supplemented with W11-2 (Pedestrian) warning sign with a diagonal downward arrow (W16-7p) plaque facing each side. Signs shall conform to the latest CAMUTCD standards.
- 7. The outside edges of the RRFB indications, including any housings, shall not project beyond the outside edges of the W11-2 sign and shall be located between the bottom of the W11-2 sign and the top of the W16-7p plaque.
- 8. ADA compliant Accessible Pedestrian System (APS) shall be used to actuate the RRFBs, a pedestrian instruction sign with the legend PUSH BUTTON TO TURN ON WARNING LIGHTS should be mounted adjacent to or integral with each pedestrian pushbutton. The APS shall be XAV2-LED or approved equal
- 9. When activated, the APS shall deliver this warning message: "Yellow lights are flashing, traffic may not stop, use caution."
- 10. The RRFB shall provide web-based monitoring and alert options.

B. Installation of all electrical components

Installation of all electrical components shall be performed by a licensed electrician and adhere to manufacturers installation instructions. The system will be hard-wired to a service pedestal near the crosswalk and shall have all circuit breakers required for fully operating system.

Full compensation for furnishing all labor materials, tool, equipment and incidentals for doing all work involved with construction of rectangular rapid flashing beacon all in accordance with the plans, specifications and these Special Provisions shall be considered as included in the contract unit price paid for **RRFB System (Colusa Ave and Imperial Ave)** and no additional compensation will be allowed.

SP-34 TRAFFIC SIGNAL LOOP

All in-ground loops at the intersection of Crows Landing Ave & Butte Ave and Crows Landing Ave & Winmoore Way are to be either abandoned in place or removed if pavement excavation is to happen. Remove all detector loop cables in conduits. Detection system is to be switched to a video detection system. See guidance in Section SP-35 of these special provisions.

Existing detector loops on Crows Landing Ave at Whitmore Ave and Hatch Road may be damaged or removed during construction. Contractor shall abandon all loops on approaches and re-install new detector loops as shown on plans.

Loop Detectors shall conform to the specifications under the title of "Loop Detectors" within SP-35 Traffic Signal and Street Lighting.

Payment for this item shall be considered as included in the contract unit price paid for **Traffic Signal Modification (Winmoore Way and Butte Ave)** and no additional compensation will be allowed.

SP-35 TRAFFIC SIGNAL AND STREET LIGHTING

<u>General</u>

This work shall include the furnishing of all labor, materials, tools, and equipment to construct and complete in an efficient and workmanlike manner the installation of the traffic signal system in accordance with:

- these Special Provisions,
- the approved plans,
- included Revised Standard Plans,
- included Revised Standard Specifications,
- 2015 Standard Plans, and
- 2015 Standard Specifications.

ATTENTION: The special provisions for Traffic Signal and Lighting section may reference a different version of the RSS. All Traffic Signal and Lighting work, both direct and incidental, shall be performed in accordance with the list of standards in General, Paragraph 1 of this special provision.

Traffic signal installation work is to be performed at the following intersections:

Crows Landing Rd at Winmoore Ave

The Contractor shall furnish all labor, materials and equipment necessary to complete the work as shown on the Plans, as specified in these Special Provisions, and in strict accordance with the conditions of the Contract. All incidental work not shown on the Plans or specified herein which is necessary to complete the work necessary to provide the system described, or shown, shall be furnished and installed as part of this contract at no additional cost to the County. The work shall be complete and ready for service as shown on the Plans and/or specified to the satisfaction of the Engineer.

The Contractor shall bear the cost of any utility interruption, temporary relocation, modification, or other modifications as needed to install or remove any traffic signal equipment.

The controller cabinet schematic wiring diagram and intersection sketch shall be combined into one drawing, so that, when the cabinet door is fully open, the drawing is oriented with the intersection.

The Contractor shall furnish, in a three-ring binder, a maintenance manual for all auxiliary equipment, and vehicle detector sensor units, control units, and amplifiers. The maintenance manual and operation manual may be combined into one manual. The maintenance manual or combined maintenance and operation manual shall be submitted at the time the controllers are delivered for testing or, if ordered by

the Engineer, previous to purchase. The maintenance manual shall include, but need not be limited to, the following items:

- (a) Specifications
- (b) Design characteristics
- (c) General operation theory
- (d) Function of all controls
- (e) Trouble shooting procedure (diagnostic routine)
- (f) Block circuit diagram
- (g) Geographical layout of components
- (h) Schematic diagrams
- (i) List of replaceable component parts with stock numbers

No signal standard shall be delivered on-site until Contractor has all signal materials on hand.

Signal heads shall not be installed before traffic signal cabinet is installed and wired.

Maintaining Existing And Temporary Electrical Systems

Existing traffic signal system shutdowns shall be limited to periods between the hours of 9:00 a.m. and 3:00 p.m.

The Contractor shall place "STOP AHEAD" and "STOP" signs to direct vehicle and pedestrian traffic through the intersection during traffic signal system shutdown. All signal faces shall be covered if the system must be shut down for a 24-hour period. Contractor must request in writing the Engineer's approval 48 hours prior to a 24-hour signal system shutdown. The Contractor shall wait for the Engineer's approval, in writing, prior to any 24-hour signal system shutdown. If written approval is not received by the Contractor within 48 hours of request, Contractor will assume the request has been denied. Temporary "STOP AHEAD" and "STOP" signs shall be either covered or removed when the system is turned on.

One "STOP AHEAD" sign and one "STOP" sign shall be placed for each direction of traffic. For twolane approaches, two "STOP" signs shall be placed. Location of the signs shall be as directed by the Engineer.

"STOP AHEAD" and "STOP" signs shall be furnished by the Contractor and shall conform to the provisions in Section 12-3.06, "Construction Area Signs," of the RSS except that the base material for the signs shall not be plywood.

Upon approval of the Engineer, all existing electrical systems, including, but not limited to, flashing beacons, solar flashing beacons, or electroliers shall be removed and salvaged and delivered the Stanislaus County Public Works Morgan Yard at 1716 Morgan Road, Modesto, CA 95358.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work as required in this section shall be considered as included in the contract lump sum price paid for Traffic Control, and no additional compensation will be allowed.

Regulations And Code

All work and materials shall conform to the latest codes, rules, and regulations of the following:

- (a) State Codes and Ordinances
- (b) Local City and/or County Ordinances

- (c) National Electrical Code
- (d) Uniform Building Code

Nothing in these Specifications is to be construed to permit work not conforming to the above; expense for compliance with the above shall be paid for by the Contractor. Whenever the Plans and Specifications require higher standards or larger sizes than those required by the Ordinances and Statutes, the Plans and Specifications shall take priority.

The Contractor shall have Special Dispensation from the California Occupational Safety and Health Administration to conduct operations no closer than 6 feet, but within 10 feet, of a high voltage line prior to erecting signal standards.

Cabinet Assembly

The Contractor shall furnish controller-ready cabinet assemblies consisting of a fully wired Model 332L cabinets and all auxiliary equipment required to control the signal indications as shown on the Plans and as specified in these Special Provisions for each location. The Traffic Signal Controller will be an Agency Furnished Material. The controller-ready assemblies shall be furnished complete with all equipment conforming to the requirements in the "Transportation Electrical Equipment Specifications," (TEES) issued by the State of California. Cabinets, equipment, and all modifications thereto shall be type approved by the State of California Testing Laboratory, and shall have California State Quality Product listing.

The controller cabinet layout and component locations shall conform to the requirements for Model 332L cabinet in the "Transportation Electrical Equipment Specifications," and addendum thereto, issued by the State of California. All compression connectors that terminate inside controller cabinets for low voltage circuits shall be soldered.

Section 6.4.5.2 of TEES regarding Output File #1 with:

6.4.5.2 Output File #1L

6.4.5.2.1 Containing

The output file shall be capable of containing 12 Model 200 Switch Packs, 4 Flash Transfer Relays, and the Model 2010ECLip Monitor Unit. Six Flash Transfer Relays and 1 2010ECLip Conflict Monitor Unit shall be furnished with each output file. Model 200 Switch Packs shall be provided to operate the phases as shown on the plans. 4 Flash Transfer Relays shall be provided.

6.4.5.2.2 Output Circuits

The red and yellow output circuits of switch packs 1, 2, 3, 4, 5, 6, 7, 8 shall be made available at individual pack Molex receptacle /plug connection for flash selectability. Eight (8) red & four (4) yellow Molex Plugs shall be provided.

6.4.5.2.3 Model 2010ECLip Monitor Unit

It shall be possible to remove the Model 2010ECLip Monitor Unit without causing the intersection to go into flashing operation. The cabinet shall be wired so that with the front cabinet door closed and with the monitor unit removed, the intersection shall go into flashing operation (See One Line Diagram). The cabinet shall contain a conspicuous warning against operation with the Model 2010ECLip Monitor Unit removed.

6.4.5.2.4 Monitor Unit Compartment

The monitor unit compartment including the housed Model 2010ECLip Monitor Unit exclusive of handle shall extend no farther than 1.25 in front of the 19-in rack front surface. The switch pack socket connector front surface shall be no more than 8.5 inches in depth from the front surface of the output file.

SUBMITTAL REQUIREMENTS:

The submittal for the Traffic Signal System shall include detailed cabinet assembly drawings and wiring diagrams showing all accessory equipment.

Cabinets shall be aluminum and have the additional following items installed:

- 1. LED Cabinet lighting with door switches on both doors.
- 2. Auto/manual control with police panel cord.
- 3. Pull-out drawer/shelf assembly
- 4. Corbin lock, keyed "State #2."
- 5. EDI Model 2010ECLip IP Addressable Conflict Monitor or Approved Equal.
- 6. 1U rackmount detector test panel
- 7. DIN rail mounted Hardened Managed Ethernet Switch
- 8. Multiple AC Outlet Strip
- 9. DC Terminal Block

Add to the end of section 86-1.02Q(3) of the RSS:

86-1.02Q(3)(a) Multiple AC Outlet Strip

The multiple AC outlet strip must:

- 1. Be 19 inch, rack mountable
- 2. Have a minimum of 6 receptacle outlets
- 3. Be rated for 15 A, 125 V(ac)
- 4. Have internal 12 A, 125 V(ac) circuit breaker
- 5. Rated for 36,000 A surge current protection Hot to Neutral
- 6. UL 1449 rating for 400 V minimum
- 7. Cord 6 feet minimum
- 8. Tripp-Lite PDUMH15-ISO, Atlantic Scientific part: 35326, or Approved Equal

86-1.02Q(3)(d) DC Terminal Block

The DC terminal block must:

- 1. Be rated for 250 V(ac)/DC voltage and 30 A current
- 2. Have an operating temperature from -13 to 122 degrees F
- 3. Have a maximum size of 3.9 inches (D) by 2.7 inches (W) by 2.7 inches (H)
- 4. Have a wire size for the input terminals of 26-10 AWG solid/strand
- 5. Have a wire size for the output terminals of 26-12 AWG solid/strand
- 6. Have a torque of at least 4.4 in-lb

The Contractor shall arrange to have a representative from the County Traffic Engineering Division and a signal technician, qualified to work on the units and employed by the manufacturer or their representative for the following equipment at the time the equipment is turned on:

- ATC controller unit. County Traffic Engineering Department to provide contact information for scheduling purposes. County must be notified 14 days in advance of scheduled turn-on for coordination.; and
- Cabinet assembly.; and
- Video detection system; and
- Ethernet Switch.

The convenience receptacle shall have ground-fault circuit interruption as defined by the Code. Circuit interruption shall occur on 6 milliamperes of ground-fault current and shall not occur on less than 4 milliamperes of ground-fault current.

Contractor shall furnish a certificate of compliance from a state approved testing laboratory indicating the unit has been fully bench tested.

Service Enclosure

Traffic signal service enclosure with integrated Battery Backup System (BBS) shall be installed as shown on the plans. Voltage ratings of the service equipment shall conform to the service voltages indicated on the plans.

Service Enclosure shall conform to the provisions in Sections 86-1.02P, "Enclosures," of the RSS and as indicated on the plans.

Replace the 14th paragraph of Section 86-1.02P(2) of the RSS for section 86 with:

Circuit breakers used as disconnects must have a minimum interrupting capacity of 42,000 A, rms, for 120/240 V(ac) services and 30,000 A, rms, for 480 V(ac) services.

Battery Backup System

The battery backup system (BBS) shall be mounted inside the Controller cabinet. Batteries shall be Nickel-Zinc. A minimum of 1000W battery panels shall be provided, with rack mountable inverter/controller.

BBS shall provide four hours of normal traffic signal operation followed by eight hours of all-red flash operation. The BBS shall be configured to automatically return the traffic signal system to line power when power is restored. BBS shall be furnished with a minimum, two-year warranty, with the two year warranty period starting on the date of the signal turn-on.

The BBS controller shall include an Ethernet port for connection to a laptop computer or network. Software for the interfacing of the BBS controller shall be provided. A bypass switch shall be provided to allow removal of batteries without interruption of line power flow to the traffic signals.

BBS shall provide line conditioning for protection against power surges or brownouts.

The supplied batteries for the BBS shall be dated within <u>3 months</u> of the turn on date.

Approved Models

- Econolite Zinc Blue 2
- Zinc Five UPStealth 2

Overhead Sign Structures, Standards, And Poles

Overhead Sign Structures, Standards, and Posts shall conform to Section 56 "Overhead Sign Structures, Standards and Poles", of the RSS.

The sign mounting hardware, as shown on Detail U of Standard Plan ES-7N, shall be installed at the locations shown on the plans.

Where the plans refer to the side tenon detail at the end of the signal mast arm, the applicable tip tenon detail may be substituted.

Standards and Poles shall have two-piece base covers to cover anchor bolts.

Standards for signals, lighting, and flashing beacons, poles for closed circuit television, pedestals for cabinets, posts for extinguishable message sign and posts for pedestrian push button assemblies must comply with Section 56-3 "Standards and Poles," of the RSS.

Signal Heads and Mounting

Signal Heads shall conform to Section 86-1.02R "Signal Heads", of the RSS.

All signal head equipment shall be/have:

- 12" in size
- Plastic
- Black in color
- Light Emitting Diode (LED) signal modules per 86-1.02R(4)(b)
- Top openings of signal heads shall be sealed in the interior with neoprene gaskets.
- Slip-fitters and terminal compartments shall be cast bronze. All parts of signal mounting assembly shall be black in color.

Add to the list in the 2nd paragraph of section 86-1.02r(4) of the RSS:

4. Be made of Plastic

Luminaries

Luminaries shall be/have:

- 1. LED Type
- 2. Rated to operate under a supplied voltage of single phase 120V/240V.
- 3. Factory BUG rating of B3 U0 G3 and shall not require external shields to achieve such rating.
- 4. Color Temperature of light output shall be 4000K
- 5. Factory furnished with a Control Ready 7-wire Photo-control receptacle and Twist Lock Shorting Cap.
- 6. Luminaire drive current shall not exceed 66% of the current rating of the supplied LED Driver chip.
- 7. Luminaires shall be factory furnished with a mounting bracket suitable for Round horizontal pole mounting.

All luminaries shall be LED Cobra Head Models:

HPS Equivalency	Minimum Lumen Output	Model
150w	8,500	Leotek GCM2-30H-MV-NW-3R-GY-700 or Approved Equal
200w	11,000	Leotek GCM2-30H-MV-NW-3R-GY-1A or Approved Equal
250w	14,000	Leotek GCM2-40H-MV-NW-3R-GY-950 or Approved Equal
310w	20,000	Leotek GCL1-80G-MV-NW-3R-GY-700 or Approved Equal

Photoelectric Controls

Photoelectic Control Unit shall be AcuityControls/DTL brand DLL127F1.5CUL J1 or approved equal:

- 1. Extra Long Life type (20 year UV Protection)
- 2. LED in-rush protection with triac assisted relay
- 3. Long life capacitors
- 4. Type V Control Type unless shown otherwise on plans.
- 5. Furnished and installed at the location shown on the plans.

There shall only be one photoelectric control unit installed on a single lighting control circuit.

Pedestrian Signal Heads

Pedestrian Signal Heads shall conform to section 86-1-02S "Pedestrian Signal Heads", of the RSS.

Accessible Pedestrian Signal (APS)

Accessible Pedestrian Signal (APS) shall conform to Section 86-1.02T, "Accessible Pedestrian Signals," of the RSS.

The APS sign shall be a 9" x 12" R10-3 as shown in the 2014 CA MUTCD Revision 3.

Replace Paragraph 2 of Section 86-1.02T of the RSS for section 86 with:

An accessible pedestrian signal must function with the agency-furnished rackmount ATC Controller.

Add to the end of section 87-1.03T of the RSS for section 87:

A manufacturer's representative must program the accessible pedestrian signals at the following intersections:

- 1. Intersection of Crows Landing Rd and Winmoore Ave
- 2. Intersection of Crows Landing Rd and Imperial Ave
- 3. Intersection of Crows Landing Rd and Colusa Ave

When the extended pushbutton press is used, program the signals with messages for each street as follows:

1. During the pedestrian clearance interval, the message heard must be *Wait to cross <u>Crows Landing</u>* <u>*Road, Wait.*</u> 2. During the pedestrian clearance interval, the message heard must be *Wait to cross <u>Winmoore Ave</u>*, *Wait*.

-- END RSS REPLACE--

Push Button Assemblies

Push Button Assemblies shall conform to Section 86-1.02U "Push Button Assemblies," of the RSS.

ADVANCED VIDEO DETECTION SYSTEM

Advanced Video Detection systems shall detect a minimum of 500' beyond the unit for approaching vehicles and shall be able to determine vehicle speed.

Advanced video detection system shall route detector outputs to the cabinet/controller assembly through:

• Through ATC Controller's NEMA TS2 Type 1 SDLC interface

Approved Advanced Detection Systems:

	Econolite	Iteris Vantage Vector w/Next	Other
Advanced Sensor	Autogoone Vision Senson	Vantage Vector PoE Sensor	
Image Processor	Autoscope Vision Sensor		
Extension Modules	Autoscope Vision Comm	Rackmount NEXT processor	
Communications	Manager		
Wire	Econolite 3-wire-only 3#18 polyethylene jacketed cable	Iteris PoE	Approved Equal
Other Hardware	Surge Protection	Surge Panel Rack-mounted, slide-out 17" LCD Color Monitor w/dual BNC video input	

Loop Detectors

Loop wire shall be Type 1.

Detector loops shall be six feet by six feet in size unless otherwise noted on the Plans.

Unless shown otherwise, each loop shall consist of three turns of loop conductor.

Loop Detectors shall be installed prior to the placement of the final lift of Hot Mix Asphalt.

Conductor of each loop shall be run continuous, without splice, to the termination pull box where splice to detector lead-in cable is made. Conductors from loop to termination pull box shall be twisted together three turns per foot, before inserting in the saw cut slot and conduit.

Each loop shall be installed with the conductor wound in a clockwise rotation. Each individual conductor shall be banded "Start" and "End" in the termination pull box.

Each pair of loop conductors shall be identified and banded together in pairs, by lane, in the termination pull box. A minimum of five feet of loop conductors shall be provided, after splicing, in a termination pull box.

All banding shall be of the permanent, waterproof type.

Upon completion of the loop, and prior to connecting the loop to the lead-in cable, each loop shall be megohm tested and tested for continuity in the presence of the Engineer. The insulation resistance of the loop conductors, lead-in cables, and splices shall not be less than 100 megohms. In addition, testing shall meet the requirements under subsection titled "Testing" of these Special Provisions .

Final loop connections shall be made such that each loop section is wound in the opposite rotation to an adjacent loop, whether such loop is in the same lane or in the adjacent lane.

The loops shall be joined in combination of series-parallel so that optimum sensitivity is obtained at the detector sensor unit, and shall be in accordance with the detector unit manufacturer's recommendation regarding series-parallel combinations.

Final splices between loops and lead-in cable shall not be made until the operation of the loops under actual traffic conditions is approved by the Engineer.

Loop detector lead-in cable shall be Type B. Splices to lead-in cable shall be soldered, insulated and installed in heat-shrink tubing, or approved equal.

Each loop detector lead-in cable shall be identified and banded in each pull box and in the controller cabinet.

Installation of Inductive Loop Detectors shall conform to section 87-1.03V "Detectors", of section 87 of the RSS.

The sealant for filling slots shall be an Elastomeric Sealant, and shall conform to Sections 86-1.02W(3) "Elastomeric Sealant," and 87-1.03W "Sealants" of the RSS.

Sealant shall be 3M Loop Detector Sealant 5000 (Black) or Approved Equal.

Wireless Broadband Radio Communication Device

GENERAL

The Wireless Broadband Radio Communications Device shall meet the following minimum specifications:

- 1. Operating Conditions:
 - a. Temperature @ 90% relative humidity: -40°C to +80°C
 - b. IP67 Weatherproof Rating
- 2. Communications Protocol and Features:
 - a. Compatible with any manufacturer's broadband radio network
 - b. Wireless Protocol support 802.11a/n/ac
 - c. Minimum range of 20 miles
 - d. Minimum 300 Mbps transfer rate
 - e. Operating Band: 5.8Ghz (5.180-5.825 GHz)
 - f. Dual Antenna (internal or external)
 - g. Multiple Topology operating modes: Point-to-Point, Point-to-Multipoint
 - h. Power over Ethernet
- 3. Power over Ethernet (PoE) Protocol and Features:

- a. IEEE 802.3af/at
- b. PoE Gigabit Injector w/surge suppression device (built-in or external)

IEEE PROTOCOLS AND FEATURES

- 1. 802.11e WWM and QOS
- 2. 802.11h DFS and TPC
- 3. 802.1d Ethernet Bridging
- 4. 802.1p Traffic Prioritization
- 5. 802.1q VLAN
- 6. 802.1s Spanning Tree
- 7. 802.1w Rapid Spanning Tree
- 8. 802.3-1998 Ethernet
- 9. 802.3ab Gigabit Ethernet
- 10. 802.3ac Extended Frame Size for 802.1q & 802.1p Support
- 11. 802.3ad Link Aggregation/Port Bonding/Port Trunking
- 12. 802.3i 10 Mbps Ethernet
- 13. 802.3u 100 Mbps Ethernet and Auto-Negotiation
- 14. 802.3x Full Duplex and Flow Control
- 15. RJ-45 Gigabit 10/100/1000Base-TX Ethernet Port

SECURITY PROTOCOLS AND FEATURES

- 1. 802.11i-WPA-PSK
- 2. 802.11i-WPA2-PSK
- 3. 802.11i-WPA-EAP
- 4. 802.11i-WPA2-EAP
- 5. 802.11i-TKIP
- 6. 802.11i-AES-CCM
- 7. 802.11i-802.1x
- 8. 802.11i-RSN
- 9. MAC Access Control List

I/O SOFTWARE SUITE

Shall include I/O management software suite to manage the configuration of the device and network features:

- 1. Profile based configuration
- 2. Built-in Diagnostics tools
- 3. Built-in alignment tools
- 4. Network mapping
- 5. Security configuration
- 6. Device mapping of other manufacturer's radio hardware

OTHER FEATURES

- 1. Built-in LED alignment indicator
- 2. Built-in GPS for location

APPROVED PRODUCTS

The Wireless Broadband Radio shall be:

- Encom Wireless E-Lite 450 Dual Int
- Intuicom Axiom Dual Int
- Approved Equal

Network HD Camera (PTZ IP Camera)

GENERAL

The Network HD Camera shall be a Remote-IP High Definition (HD) Pan-Tilt-Zoom (PTZ) Dome Camera (Camera) and shall be installed to the manufacturer's specifications on the Luminaire Mast Arm (LMA). Per the manufacturer's recommendation, the exact mounting location on the LMA may differ from the location shown on the project plans, but must remain mounted on the LMA identified.

Manufacturer's recommended mounting shall be part of the submittal for the Traffic Signal System and considered as an informational submittal. The Engineer shall approve the installation location.

Equipment and materials used shall be standard components that are manufactured and available for purchase as standard replacement parts as long as the product is commercially available from the manufacturer.

All manufactured products shall be thoroughly tested and proven in actual use.

All manufactured products shall include, at no additional cost, online support services and availability of a toll-free (U.S. and Canada), 24-hour technical assistance program (TAP) for emergencies.

The manufacturer shall repair or replace without charge, manufactured products proven defective in material or workmanship for the stated warranty period from the date of shipment.

Camera Specifications

The Camera shall be a dome type with:

a.	Pan Movement	360° continuous pan rotation
b.	Pan Speed	Variable between 400 per second continuous pan to 0.1° per second
c.	Vertical Tilt	Unobstructed tilt of $+1^{\circ}$ to -90°
d.	Manual Control Speed	Pan speed of 0.1° to 80° per second and pan at 150° per second in turbo mode; tilt operation shall range from
	0.1°	
		to 40° per second
e.	Automatic Preset Speed	Pan speed of 280° and a tilt speed of 160° per second
f.	Presets	64 positions
g.	Tours	8 tours
h.	Preset Accuracy	$\pm 0.1^{o}$
i.	Proportional Pan/Tilt Speed	Speed decreases in proportion to the increasing depth of zoom
j.	Motor	Continuous duty and variable speed, operating at 18 to
5	32	
		VAC, 24 VAC nominal
k.	Window Blanking	32 blanked windows
1.	Auto Flip	Rotates dome 180° at bottom of tilt travel
	1. Dome Drive Compatibility	All dome drives are compatible with all back box
		configurations
	2. Power Consumption	Nominal 23 VA (without heater and blower running)
		Nominal 73 VA (with heater and blower running)
m.	Stainless Steel, Environmental	back box and lower dome
	1. Connection to Dome Driv	e Quick, positive mechanical and electrical

. Connection to Dome Drive Quick, positive mechanical and electrical disconnect without the use of any tools

2.	Installation	Quick-mount pole adapter
3.	Cable Entry	Through 1.5-inch NPT fitting
4.	Environmental Features	Factory-installed heaters, blowers, and sun shroud
5.	Operating Temperatures	Maximum temperature range of (-60°F to 140°F)
		(-51°C to 60°C) for two hours and a continuous
		operating range of -50°F to 122°F (-45°C to 50°C)
6.	Construction	Stainless Steel
7.	Trim Ring Connection	2 screws
Ge	neral Specifications	
Co	nstruction	
1.	Dome Drive	Aluminum, thermo plastic
2.	Lower Dome	Acrylic
Lig	tht Attenuation	
1.	Smoked	f/0.5 light loss
2.	Clear	f/0.0 light loss
	3. 4. 5. 6. 7. Ge Co 1. 2. Lig 1.	 Cable Entry Environmental Features Operating Temperatures Construction Trim Ring Connection General Specifications Construction Dome Drive Lower Dome Light Attenuation Smoked

The Camera shall have the following Video Specifications:

n.

a.	Video Encoding	H.264 in High, Main, or Base profiles and
1	Video Stucours	MJPEG
b.	Video Streams	Up to 2 simultaneous streams, the second stream is variable based on the setup of the
		primary stream
c.	Frame Rate	Up to 30, 25, 15, 12.5, 10, 8.333, 7.5, 6, 5,
		3, 2.5, 2, 1 (depending upon coding, resolution, and stream configuration)
d.	Available Resolutions	
	1. 16:9 Aspect Ratio	2.07 MPx (1920 x 1080)
	0.92 MPx (1280 x 720)	
	0.36 MPx (800 x 448)	
	0.23 MPx (640 x 352)	
	0.13 MPx (480 x 272)	
9	0.06 MPx (320 x 176) Supported Protocols	TCP/IP, UDP/IP (Unicast, Multicast IGMP),
e.	Supported Protocols	UPnP, DNS, DHCP, RTP, RTSP, NTP, IPv4,
		IPv6, SNMP v2c/v3, QoS, HTTP, HTTPS, LDAP
		(client), SSH, SSL, SMTP, FTP, and
		802.1x (EAP)
f.	Users	
	1. Unicast	Up to 20 simultaneous users
	2. Multicast	Unlimited H.264
g.	Security Access	Password protected
h.	Software Interface	Web browser view and setup

The Camera shall provide multiple independent output video streams configurable for H.264 and MJPEG video output.

Camera shall receive power by Power Over Ethernet (POE) bus. Power shall be injected by power injector or by ethernet switch capable of supplying POE IEEE802.3af standard.

The Camera manufacturer shall support open architecture best practices with a published API available to third-party network video recording and management systems and shall provide a software development Crows Landing Road (Whitmore Avenue to Hatch Road) VI-50 Federal Aid Project No. HSIPL-5938(238) Special Provisions April 2020

kit (SDK) for allowing 3rd party developers all necessary tools for integrating the Camera Positioning System into the users control system environment.

The Camera offer multiple simultaneous video streams with 2.1 megapixel (MPx) 1920 x 1080 resolution, auto iris with 30X optical, and 12X digital zoom.

The Camera shall support standard IT protocols.

The Camera shall provide a 100Base-TX network interface over shielded CAT5E Cable.

The Camera shall use a standard Web browser interface for remote administration and configuration of camera parameters. The browser interface shall provide PTZ control including preset and pattern and on-screen display (OSD) for access to camera programming.

The Camera shall support 32 window blanks to conceal user-defined privacy areas that cannot be viewed by an operator.

The Camera shall support multiple user-programmable presets.

The Camera shall support multiple user-programmable tours.

The Camera shall support proportional pan/tilt functions dependent on the depth of view of the zoom lens.

The Camera shall provide the ability backup and restore camera settings through an embedded Web browser.

The Camera shall provide Wide Dynamic Range (WDR) up to 80dB with selections for on/off available through the embedded Web browser.

The Camera shall provide Back Light Compensation with selections for on/off available through the embedded Web browser.

The Camera shall provide dynamic White Balance adjustments through the embedded Web browser.

The Camera shall provide a freeze frame feature that freezes a camera image as a preprogrammed preset is called+, providing a live view once positioned. Selections for on/off shall be available through the embedded Web browser.

The Camera shall provide image stabilization to compensate for vibration introduced into the camera.

The Camera shall provide Pan and Tilt limit stops with settings available through the embedded Web browser.

The Camera shall provide 802.1x port security to establish point-to-point access through a wired or wireless port using Extensible Authentication Protocol (EAP). Supported EAP methods shall include EAP-MD5, EAP-TLS, EAP-TTLS, EAP-PEAP and EAP-FAST.

The Camera shall support IPv6 configurations in conjunction with IPv4.

The Camera shall provide user-selectable configurations for day/night auto mode.

The Camera shall provide User and Group settings to assign permissions and access levels to the camera. The camera shall provide local management where the camera manages the access levels or remote mode where the camera authenticates the user through a Lightweight Directory Access Protocol (LDAP) server.

The Dome Camera shall provide a 1.5-inch NPT conduit attachment for pendant mounted applications

The Dome Camera shall provide a 3/4-inch NPT conduit attachment in the back box for in-ceiling applications.

The Dome Camera shall be NEMA-4X, IP66 rated.

Power Input

P		
1.	Port	RJ-45 for 100Base-TX; Auto MDI/MDI-X;
2.	Cabling Type	Cat5 cable or better for 100Base-TX
3.	Input Voltage	24 VDC nominal; 22 to 27 VDC
4.	Input Power	
	a. PoE	IEEE802.3af (without heater and blower)
	b. 24 VDC nominal	0.7 A nominal (without heater and blower);
		3 A nominal (with heater and blower)
5.	Earth Ground; Continuity sh	all be provided through the shield of the CAT5e
	Ethernet/PoE++ cable, and the	shield of the multi-conductor cable, to chassis ground of
	the Base Enclosure. Connecting	ng either, or both, of these shields to earth ground at the

control side shall apply earth ground to chassis ground of the Base enclosure.

Warrantv

Warranty shall be provided beginning the date of the signal turn on for 36-months, including parts and labor.

Approved Products

The discreet camera dome system shall be:

- Pelco Spectra Enhanced S6230-EGL0 Network Dome Positioning Camera; or, •
- IVC PTZ-HD30-16-30-POEu; or, •
- Approved Equal.

Hardened Managed Ethernet Switch

GENERAL

A DIN rail mounted Ethernet switch shall be furnished and installed by a manufacturer's representative.

The Ethernet switch shall be hardened for field use and shall meet the following specifications/features:

Operating Environment:

- Minimum Operating temperature range: -40°C to 70°C (-40°F to 158°F)
- Ambient Relative Humidity: 5% to 95%

Power

- <u>Input connection:</u> Terminal Block
- <u>Input Voltage:</u> +48VDC nominal
- <u>POE Output Power (if equipped)</u>: IEEEE802.3af: up to 15W/port
- <u>Protection:</u> Reverse polarity protection
- <u>Power Supply:</u> DIN Rail Mounted AC-DC Industrial Power Supply as specified by manufacturer. Typically Meanwell SDR series or Omron S8VK Series.

Interface:

- <u>Total Ethernet Ports:</u> 6 or more RJ45 ports
 - $\overline{0}$ 10/100BASE-TX: 4 or more RJ45 (PoE Optional)
 - 10/100/1000 Gigabit: 2 or more RJ45
- LED Indicators:
 - <u>Per Port</u>: Link/Activity (green)
 - <u>Per PoE Port</u>: PoE (orange) (if equipped)
 - <u>Per Unit</u>: Power

Software Management and Security:

- Support DHCP Server/Client
- CLI, Telnet, and Web Browser interface
- Port mirroring: TX/RX and both
- NTP (Network Time Protocol) time synchronization
- Enable/Disable port
- MAC Address filtering
- SSH for CLI and Telnet security
- SSL for web security
- System Log
- Multi-level user account/password against unauthorized configuration

Layer 2 Features

- Auto-negotiation for port speed and duplex mode
- Flow Control
 - IEEE802.3x full duplex mode
 - Back-Pressure half duplex mode
- Redundant Protocol
 - IEEE802.1D Spanning Tree Protocol (STP)
 - IEEE802.1w Rapid Spanning Tree Protocol (RSTP)
 - IEEE802.1s Multiple Spanning Tree Protocol (MSTP)
- VLANs
 - Port-based VLANs
 - o IEEE802.1Q Tag VLANs (128 groups, 4096 VID)
 - GVRP (GARP VLAN Registration Protocol)
 - GMRP (GARP Multicast Registration Protocol)

Other

- <u>Installation:</u> Din-Rail (Top hat type 35mm)
- <u>Cooling</u>: Fanless

Approved Products

- MOXA EDS-P510A
- Ruggedcom i802-M-U-CG01-XX
- Ruggedcom RS900G
- EtherWAN EX78402-01B-T

Conductors And Cable

Conductors And Cable shall conform to Sections 86-1.02F and 87-1.03F "Conductors and Cable" of the RSS.

Conductors shall be cabled in bundles, by phase, and identified by phase with permanent labels in the controller cabinet and at terminal pull boxes.

COLOR	SIGNAL STANDARD	DLC/VIDEO
Brown	A	Phase 1
Red	В	Phase 2
Orange	С	Phase 3
Yellow	D	Phase 4
Green	Е	Phase 5
Blue	F	Phase 6
Violet	G	Phase 7
Gray	Н	Phase 8
White	Ι	OVL A
Black	J	OVL B

Multiple conductor cable and detector lead-in/video cables shall be color coded as follows:

Signal Interconnect Cable (SIC) shall be Superior Essex Sealpic cable, or approval equal 19 AWG 6-pair cable with white/blue, white/orange, white/green, white/brown, white/slate, and red/blue color coding. No other color coding is acceptable.

Conductor and Cable Splices

General

Conductor and Cable Splices shall conform to Section 86-1.02H "Splicing Materials" and 87-1.03H "Conductor and Cable Splices", of the RSS.

Multiple lighting conductors, signal light grounded conductors, and bonding conductors only, may be spliced.

Materials

Replace Paragraph 2 of Section 86-1.02H "Splicing Materials" with: "Connectors must be C-shaped compression type." Insulation shall be Type THW PVC, and shall comply with Section 86-1.02H, "Splicing Materials," of the RSS.

Construction

Items 2, 3, and 4 in the list in the first paragraph of Section 87-1.03H(1), "General," of the RSS are deleted.

Splices shall be insulated by "Method B" of Section 87-1.03H(2)," "Splice Insulation Methods," of the RSS except detector lead-in cables.

Fused Splice Connectors

Fused splice connectors will not be required.

Bonding And Grounding

Grounding Electrodes shall conform to Section 86-1.020 "Grounding Electrodes", of the RSS.

Grounding jumper shall be attached by a 3/16 inch or larger brass bolt in the signal standard or controller pedestal and shall be run to the conduit, ground rod or bonding wire in adjacent pull box.

Grounding jumper shall be visible after cap has been poured on foundation.

Equipment grounding conductors will not be required in conduit containing loop lead-in cables only.

Green Wire #6 (cabinet ground) shall have a separate ground rod in pull box nearest to cabinet, with no other wire attached.

Conduit

Conduit shall be Type 1 hot-dip galvanized rigid steel or Type 3 rigid PVC and shall conform to the provisions in Section 86-1.02B, "Conduit and Accessories," of the RSS and these Special Provisions.

If Type 3 rigid PVC conduit is used it shall be installed with a rigid galvanized metal elbow and riser into the termination pullbox, service, cabinet, and all other termination locations.

Conduit to be installed under pavement shall be installed by bore and jacking, directional drilling, or other approved methods which do not damage pavement.

When a standard coupling cannot be used for coupling metal-type conduit, a UL listed threaded union coupling shall be used.

Insulated bonding bushings will be required on metal conduit. All conduit shall be grounded together in all pull boxes and cabinets by means of a grounding jumper.

After conductors have been installed, the ends of conduits terminating in pull boxes, and in service and controller cabinets shall be sealed with an approved type of sealing compound.

Pull Boxes And Detector Handholes

Pull Boxes and Detector Handholes shall conform to Section 86-1.02C "Pull Boxes" and Section 87-1.03C "Installation of Pull Boxes," of the RSS.

Replace Line 1 of Paragraph 4 of Section 86-1.02C(1) General with: "The cover marking must include COUNTY and one of the following:"

Pull boxes shall have a polymer concrete ring and fiber reinforced polymer body with a ring color of concrete gray. The bottoms of pull boxes shall be grouted.

The TID (Turlock Irrigation District) pull boxes shall be TID #U-1346-8 Service Box Small.

Existing detector hand holes in pavement reconstruction areas shall be removed and replaced with new detector hand holes in accordance with Standard Plan ES-5D. Hand holes shall be Type A. Pull box lids associated with detector hand holes shall be stamped "Detector."

Electronic Markers and Locators

Electronic Markers and Locators shall conform to Section 86-1.02X "Electronic Markers and Locators" of the Standard Specifications.

Communication Cables

Add to the end of section 87-1.03F(2)(b)(ii) Category 5E and 6 Cables of the RSS:

When shown on the plans, Shielded Category 5E/6 cable shall be shielded and meet ISO/IEC 11801 Standards for F/UTP shielding or as specified by the Manufacturer.

Foundations

Portland cement concrete shall conform to Section 90-2, "Minor Concrete," of the RSS and shall contain no less than 470 pounds of cement per cubic yard, except concrete for reinforced pile foundations shall contain not less than 564 pounds of cement per cubic yard.

<u>Signs</u>

Signs shall be furnished and installed by the Contractor as shown on the Plans and as specified in the California Manual of Traffic Control Devices, 2014 Edition Revision 4.

The G7 street name signs shall be on diamond-grade reflective sheeting.

Street name text shall be white with 12-inch upper case, first character followed by 10-inch lower case characters for each word (ex... "County Road"), Clearview font, on a green background. Block numbers and arrows shall be white, four inches high, on a green background. Block numbers and arrow shall be located on the right hand side of the sign. Arrows shall be orientated toward the highest block number. The block shall be located above the arrow, see detail on the plans. Messages shall be on both sides of the signs unless otherwise indicated on the plans.

The Contractor shall provide and install signs as called for on the plans.

Two wraps of stainless steel Band-It-Band strapping 3/4" thick shall be used to hang all overhead signs. Band-It-Band buckles type 201 stainless steel shall be used with strapping. Hawkins Swing Sign Brackets 250 Series, Part Number M10J-OCB250AL and M10J-OCB250FL with Adjustable Length Swing Sign Bracket M10J-OCB250AL or approved equal shall be used. Signs shall have 2" x 2" x 1/8" "L" aluminum bracket for additional support.

Testing

The Contractor shall make the signals fully operational including all peripheral equipment.

The Contractor shall have present, a qualified field technician, who shall be qualified to perform testing and servicing on all systems of the installation. Prior to scheduled turn on, the field technician shall perform all testing assignments.

This testing shall include the measurement of each loop installation utilizing a field loop tester/analyzer where inductive loops are installed. Based on the measurement of each loop, the final loop configuration shall be established in such manner as to generate a unique frequency for each adjacent loop system, (detector channel). This unique frequency shall be set such that in the natural state and in the detect state, the frequency does not enter the frequency range of any adjacent loop system. In addition to the frequency setting and adjustments, the loop configuration shall be such that peak tuning characteristics shall be maximized; i.e., the detect state shall be a minimum of a 3.0 reference value based on natural state reference. For loops rated less than a 3.5 reference value, the loops shall be configured to maximize the sensitivity of the loop closest to the stop bar.

The Contractor shall provide the Engineer with the detector test report as provided. This report shall include each detector as labeled on the drawing, and shall show the final loop configuration, the natural state frequency, the detect frequency, and the calculated reference value of each loop system.

In the presence of the Engineer, the Contractor shall flash test all circuits of each signal phase and both circuits of each pedestrian phase to confirm that the signal is wired properly before the signal is requested to be energized. The Contractor shall provide the Engineer with the signal flash report as provided.

Signal Energizing

The Contractor, after fully testing the new traffic signal equipment, will contact the Engineer to schedule signal energizing. Signals will only be allowed to be put into operation on Tuesdays, Wednesdays, and Thursdays. The Contractor will have the signal fully tested at least 24 hours before the signal is energized.

Functional Testing

Field Testing of the Signal and Lighting System should conform to the Section 87-1.01D(2) "Quality Control," of the RSS.

The functional test for each lighting system shall consist of not less than 14 days. If unsatisfactory performance of the system develops, the conditions shall be corrected and the test shall be repeated until the 14 days of continuous, satisfactory operation is obtained.

<u>Service</u>

Service shall conform to the provisions in Section 87-1.03L, "Utility Service", of the Standard Specification and these Special Provisions.

The Contractor shall include in his bid any and all costs due to the service installation. Metering shall be per standard plans. The Contractor shall coordinate with the utility agency for service connection.

Emergency Vehicle Detector System

Existing Emergency vehicle Detection system to remain. Contractor shall test EVP system in the presence of the engineer prior to any signal modifications. Contractor shall test after all modifications are completed to confirm the continued operation. If the system passes initial testing but does not perform after modifications have been made, it shall be the contractor's sole responsibility to fix the system or replace the system in its entirety such that it functions sufficiently.

SIGNAL FLASH TEST REPORT

Intersection Of: <u>Crows Landing Rd at Winmoore Ave</u> Date: _____

Tested By:

PHASES	RED	AMBER	GREEN
PHASE 1			
PHASE 2			
PHASE 3			
PHASE 4			
PHASE 5			
PHASE 6			
PHASE 7			
PHASE 8			

PEDESTRIAN PHASES	WALK	DON'T WALK
PHASE 2		
PHASE 4		
PHASE 6		
PHASE 8		

DETECTOR LOOP TEST REPORT

Intersection Of: _____ Date: _____

Tested By:

LOOP	FREQUENCY NO CALL	FREQUENCY WITH CALL	LOOP	FREQUENCY NO CALL	FREQUENCY WITH CALL
1I1U			5J1U		
1I1L			5J1L		
1I9U			5J9U		
2I2U			6J2U		
2I2L			6J2L		
2I3U			6J3U		
2I3L			6J3L		
2I4U			6J4U		
2I4L			6J4L		
3I5U			7 J 5U		
3I5L			7J5L		
319L			7J9L		
4I6U			8J6U		
416L			8J6L		
4I7U			8J7U		
4I7L			8J7L		
4I8U			8J8U		
4I8L			8J8L		

Measurement And Payment

Per the requirements of Section 9-1.16B "Schedule of Values", of the RSS, and Section 86-1.01C "Submittals" of the RSS, the Contractor shall submit to the County a cost breakdown of the items of work included in the lump sum price for Traffic Signal and Lighting, at the locations specified, within 15 days after contract approval. This cost breakdown shall be provided to the Engineer for review and approval prior to commencement of the project. The reviewed and approved cost breakdown will be used to determine and justify partial payments during the progress of the work.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work required in this section shall be considered as included in the contract lump sum price paid for **Traffic Signal Modification (Winmoore Way and Butte Ave)** and **Street Lighting System (Crows Landing Rd)**, and at the locations specified, and no additional compensation will be allowed.

SP-36 AS-BUILT DRAWINGS

The Contractor shall maintain a neatly marked set of full-size as-built record drawings showing all changes to the plans. As-built record drawings shall reflect change orders, and modifications to all improvements constructed. Where necessary, supplemental drawings shall be prepared and submitted by the Contractor.

Prior to acceptance of the project, the Contractor shall deliver to the Engineer, two sets of neatly marked as-built record drawings, including a scanned "PDF" file, showing the information required above. As-built record drawings shall be reviewed, and the complete as-built record drawing set shall be current with all changes and deviations redlined as a precondition to the final progress payment approval and/or final acceptance. Submittal of acceptable As-built Drawings may be considered as a controlling operation of work.

The Contract lump sum price for As-built Drawings shall include full compensation for furnishing all labor, materials, tool, equipment, and incidentals for doing all work involved with **As-built Drawings** and no additional compensation will be allowed.

COUNTY OF STANISLAUS DEPARTMENT OF PUBLIC WORKS

PART VII – DRAWINGS & PERMITS

DRAWINGS: Crows Landing Road (Whitmore Avenue to Hatch Road), Project No. HSIPL-5938 (238)

Sheet 1:	TITLE SHEET
Sheet 2:	GENERAL NOTES
Sheet 3:	TYPICAL SECTIONS
Sheet 4:	PROJECT CONTROL
Sheet 5-9:	PLAN AND PROFILE
Sheet 10-16:	CONSTRUCTION DETAILS
Sheet 17-19:	UTILITY PLAN
Sheet 20:	CONSTRUCTION AREA SIGNAGE
Sheet 21-23:	SIGNAGE AND STRIPING
Sheet 24-26:	SUMMARY OF QUANTITIES
Sheet 27:	EQUIPMENT REMOVAL
Sheet 28:	SIGNAL MODIFICATION PLAN
Sheet 29:	CONDUCTOR & EQUIPMENT SCHEDULES
Sheet 30:	RRFB INSTALLATION
Sheet 31:	RRFB INSTALLATION DETAILS
Sheet 32:	DETECTOR LOOP INSTALLATION PLAN
Sheet 33-35:	STREET LIGHTING PLAN

ATTACHMENTS:

Attachment 1 - Pavement Design Report by Crawford & Associates, Inc. dated February 27, 2019

PERMITS:

None.

PAVEMENT DESIGN REPORT

Crows Landing Corridor Improvement Project Stanislaus County, California

Prepared by:



2019

Prepared for:



7571 North Remington Avenue, Suite 102 Fresno, CA 93711



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File No. 17-419.1 February 27, 2019

Ed Noriega, PE Mark Thomas & Company, Inc. 7571 North Remington Avenue, Suite 102 Fresno, CA 93711

Subject: **PAVEMENT DESIGN REPORT** Crows Landing Corridor Improvement Project Stanislaus County, California

Dear Mr. Noriega,

Crawford & Associates, Inc is pleased to submit this Pavement Design Report for the Crows Landing Corridor Improvement Project located in Stanislaus County, California. We prepared this report in accordance with our October 4, 2017 agreement. This report is intended to support the design team during design and construction of the proposed corridor project.

Thank you for selecting CAInc to be on your design team. Please call with questions.

Sincerely,

CRAWFORD & ASSOCIATES, INC.,

David P. Castro, PE Associate Project Manager



Reviewed by,

W. Eric Nichols, CEG, PE Senior Project Manager





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APPENDIX

Laboratory Test Results Core Photo Log





I INTRODUCTION

1.1 PURPOSE

Crawford & Associates, Inc. (CAInc) prepared this Pavement Design Report for the Crows Landing Corridor Improvement Project in Stanislaus County, California. The purpose of this Pavement Design Report is to provide recommendations for the proposed pavement rehabilitation/grading and to support the County, Mark Thomas (MTH), and the design team during project design and construction. Do not use this report for different locations or improvements without the written consent of CAInc.

1.2 SCOPE OF GEOTECHNICAL SERVICES

To prepare this Pavement Design Report, CAInc:

- Discussed the proposed improvements with James Loy and Kevin Gross with MTH;
- Reviewed the project limits exhibit and AutoCAD files by MTH;
- Completed 15 pavement cores on November 30 and December 1, 2017 within the roadway;
- Obtained subgrade samples during our coring operations for potential mix design testing; and
- Performed pavement calculations and engineering analysis to develop our recommendations.

1.3 SITE DESCRIPTION

The Crows Landing Corridor is located in an urban area in south Modesto west of Ceres. Crows Landing Road is aligned north-south. There are many commercial properties within the project corridor. We show the project extents and vicinity map on Figure 1.

Site topography within the project limits is relatively flat with a slight decrease in elevation from north to south along Crows Landing Road. Roadway elevations are slightly higher than the existing ground surface. The roadway within the corridor is improved with existing curb and gutter throughout with 2 traffic lanes in each direction and an open median lane (5 lanes total). The roadway width is about 80 ft with no shoulders. Surface elevations range from about 96 ft to 89 ft above Mean Sea Level (MSL). Rural residential and commercial properties are located in the project vicinity. Overhead and underground utilities exist throughout the project limits.

1.4 PROJECT DESCRIPTION

The project is about 1.2 miles long and generally includes the following proposed improvements:

- Traffic signals at some intersections;
- New medians throughout;
- Pavement rehabilitation; and
- Roadway restriping.





The project extents were originally from Whitmore Avenue to School Road. The County has revised the northern extent to Hatch Road due to the ongoing City of Modesto project between Hatch and SR99. Stanislaus County is coordinating with the City of Modesto as the Crows Landing Corridor is within both County and City right-of-way.

2 STUDY PROCEDURES

CAInc completed an office study for this project including review of published geologic/topographic mapping and preliminary project data provided by MTH.

Field work included 15 shallow pavement cores (C1 to C15) up to 4.5 ft deep and excavated with hand-operated drill equipment on November 30 and December 1, 2017 to obtain information on the existing pavement sections and subgrade conditions within the project limits. The subgrade soils were logged and samples collected at each core location for laboratory testing. Laboratory tests included particle size analysis for classification and R-value testing for pavement design. Laboratory test results and core photo log are found in the Appendix.

The pavement core locations are shown on Figure 1. Manuel V. Gutierrez, Project Geologist supervised the field work.

3 SITE GEOLOGY AND SOIL SURVEY DATA

3.1 SITE GEOLOGY

The site is located within the Great Valley geomorphic province of California. CAInc reviewed published geologic mapping (D.L. Wagner, E.J. Bortugno, and R.D. McJunkin, Geologic Map of the San Francisco - San Jose Quadrangle California Geological Survey, Regional Geologic Map No. 5A, 1:250,000 scale, 1991) and found the site to be mapped as underlain by the Modesto Formation. The Modesto Formation generally consists of alluvial materials with interbedded layers of silts and sands. The site is not located within an Alquist-Priolo Seismic Hazard Zone.

No evidence of significant hazards (such as faulting, settlement, very soft soils, severe erosion, subsidence) was observed in the project vicinity.

3.2 SOIL SURVEY DATA

CAInc reviewed the United States Department of Agriculture Natural Resources Conservation Service, Web Soil Survey (websoilsurvey.nrcs.usda.gov/app, accessed December 19, 2017) and found the near surface soils to be mapped along the project corridor as Tujunga Loamy Sand (TuA), Silty Sand, 20% passing No. 200 in the upper 5 ft; and Hanford Sandy Loam (HdA/HdsA), Silty Sand, 29 to 68% passing No. 200 in the upper 5 ft.

4 EXISTING PAVEMENT AND SUBGRADE CONDITIONS

CAInc determined the condition of the existing pavement by walking the roadway segments and noting surface conditions within the project limits. Overall pavement conditions within the project limits is in poor condition with isolated areas of fair to good condition. Throughout the corridor, we observed low to moderate severity rutting, moderate to high severity alligator cracking and high severity transverse and longitudinal cracking. There are isolated areas of pavement in fair





PAVEMENT DESIGN REPORT	CAInc
Crows Landing Corridor Improvement Project	File: 17-419.1
Stanislaus County, California	February 27, 2019

condition such as at the intersection of Hatch Road and Crows Landing Road. There are extensive pavement failures near or adjacent to the utility trench repairs.

To evaluate existing pavement sections, we used an R-value of 50 for the subgrade soil. Use of high quality import (R-value = 50) would be required for local replacement of unsuitable subgrade materials identified during construction. We summarize the existing pavement sections and subgrade soils encountered and the R-value test result in Table 1.

				sting Pavem			Subgrade	R-
Location	Core #	HMA (ft)	AB (ft)	Section Thickness (ft)	Estimated Existing TI ¹	Estimated Average TI	Soil Description	Value Test Result
	C1	0.50	0.67	1.17	9.5			
	C2							
	C3	0.52	0.48	1.00	8.5			
	C4	0.60	0.61 ³	1.21	10.2			
	C5	0.50	0.58	1.08	9.0			
	C6	0.56	0.56	1.13	9.5			64²
	C7	0.48	0.52	1.00	8.3			
Crows Landing Rd	C8	0.54	0.71	1.25	10.2	9.5	SILTY SAND	
_	C9	0.52	0.56	1.08	9.0			
	C10	0.52	0.83	1.35	10.7			
	C11	0.51	0.82	1.33	10.6			
	C12	0.50	0.58	1.08	9.0			
	C13	0.48	0.52	1.00	8.3			
	C14	0.67	0.67	1.34	11.3			
	C15	0.54	0.63	1.17	9.7			

Notes: HMA = Hot Mix Asphalt; AB = Aggregate Base.

- 1) TI = Traffic Index estimated for existing pavement sections based on subgrade R-value = 50, calculated using equations outlined in Caltrans Highway Design Manual.
- 2) Composite bulk sample consisting of soil from locations C6, C7, C8, C9.
- 3) AB measured in the field was 2.5 ft, however it is located within a utility trench patch and therefore an average AB thickness of 0.61 was used in our analysis.





The subgrade soils we encountered within the cores (C1 to C15) consist of brown silty sand (about 85% sand) to maximum depth explored of 4.5 ft. Native soils encountered are consistent with the USDA Web Soil Survey results. Based on our field observations and soil survey mapping we anticipate the subgrade soils in the proposed corridor areas to be consistent with our subsurface observations within the County and City right-of-ways. Groundwater was not encountered during our explorations.

5 CONCLUSIONS AND DISCUSSION

Along Crows Landing Road New Hot Mix Asphalt (HMA) overlay options in Table 2 are provided based on the existing HMA section thicknesses encountered. The existing HMA thicknesses along Crows Landing Road are thick enough to make the overlay options discussed in Section 6 feasible, however grade restraints (curb and gutter) on both sides of the roadway may limit their use. Full Depth Recycle (FDR) may be feasible depending on existing utility depths. Based on our conversations with MTH the Crows Landing Corridor pavement area is over 300,000 sq-ft.

In Table 3 we provide thicknesses for reclaimed asphalt sections if Cold-In-Place Recycling (CIR) is feasible. CIR may be a viable option to reclaim and recycle the existing pavement. After Installation of the reclaimed asphalt section is complete a new HMA cap section as shown in Table 3 will be needed. If CIR is not feasible due to limiting existing pavement area and thickness, then FDR sections in Table 4 are recommended using a traditional new HMA cap.

CIR typically requires a minimum of 200,000 square feet of existing pavement recycling area to be feasible. CIR will likely be more cost effective than traditional remove and replace pavement construction methods. Extra reclaimed asphalt pavement (RAP) may be available from the initial milling and used in the new pavement areas to further reduce new HMA costs.

FDR is often a cost effective solution if structural pavement section increases are desirable to meet higher TI requirements. The FDR method stabilizes and improves the base and sub-base to increase the structural pavement section by increasing the total depth and strength of the structural section. Therefore, FDR is typically a good solution when grade and drainage requirements cannot be met with HMA overlay options. FDR can decrease environmental impacts by removing truck hauling traffic compared to a traditional remove and replace option. FDR can typically be completed in one lane while keeping the other lane open for traffic, which can help relieve some traffic congestion during construction.

6 PAVEMENT RECOMMENDATIONS

Based on our pavement cores, R-value equal to 50 and analysis, the current pavement sections support Traffic Index (TI) values of about 8.3 to 11.3 within the project limits. Below we present our pavement recommendations for the design team to consider. The pavement sections below are the required minimum thicknesses to meet the requested traffic indexes at each labeled roadway segment.

6.1 HMA OVERLAY

CAInc provides the following overlay options for consideration for Crows Landing Road. However, an overlay may not be feasible due to drainage and grade requirements. Table 2 shows the required overlay to achieve TI between 9 and 12 using new HMA. However, an





overlay may not be feasible due to drainage and grade requirements Overlays shown in Table 2 are the additional asphalt thicknesses required for each TI after the existing asphalt is milled to the depth shown. To calculate the overlay thicknesses below we use a gravel factors of 1.9 new HMA material.

Stanislaus County requested overlay options at road segments with existing TI at 9 and above. We show the three roadway segment and corresponding overlay option in Table 2 for Stanislaus County's consideration.

Roadway Segment	New Traffic Index	Mill Depth (ft)	New HMA Overlay ¹ (ft)	Grade Increase ² (ft)
	9	0.20	0.25	0.05
Crows Landing Rd	10	0.15	0.30	0.15
(Whitmore to Hatch)	11	0.25	0.45	0.20
	12	0.10	0.40	0.30
Crows Landing Rd (Winmoore to Olivero)	10	0.15	0.20	0.05
Crows Landing Rd (Colusa to Olivero)	10	0.15	0.25	0.10
Crows Landing Rd (Algen to Glen)	10	0.15	0.25	0.10

Table 2: New HMA Overlay Options

¹New HMA wearing coarse

²Grade increase from existing grade required for new TI

Roadway Segment	New Traffic Index	New HMA Overlay ¹ (ft)	CIR Section ² (ft)	Total Overlay Thickness ³ (ft)
Crows Landing	10	0.15	0.10	0.25*
Corridor	11	0.15	0.15	0.30

Table 3: HMA Overlay Options with CIR

¹New HMA wearing coarse, ²Cold-in-Place Recycling (CIR)

³Mill Depth equals total overlay thickness

*Reflective cracking minimum requirement for 10-yr design life





6.2 FULL DEPTH RECYCLE (FDR)

FDR is the process of recycling the existing pavement section (HMA, AB, and subgrade) with cement and water. The FDR mix is then graded as required and compacted, typically to 92% to 95% relative compaction (per CTM 231) at least 2% above optimum moisture content. FDR does not have the skid resistance of HMA, therefore a wearing coarse is required. All exposed surfaces should be kept moist or bituminous cure sealed if exposure is expected to be greater than 3 days. We recommend micro-cracking the finished recycled section prior to HMA placement; this will help prevent shrinkage cracks from propagating through the HMA section. The FDR section should be proof rolled for stability prior to placing the HMA wearing coarse. The recommended FDR sections for TI between 9 and 12 are shown in Table 4.

Traffic Index	R-Value	HMA ¹ (ft)	Full Depth Recycled Section ² (ft)	Total Pavement Thickness (ft)
9		0.40	0.60	1.00
10	50	0.45	0.70	1.15
11		0.50	0.80	1.30
12		0.55	0.85	1.40

Table 4: Full Depth Recycled Recommendations

¹New HMA wearing coarse.

²Full Depth Recycling method ($G_f = 1.3$) based on a minimum developed unconfined compressive strength of 300 psi (CTM 373).

6.3 REMOVE AND REPLACE

Using an R-value of 50 and Chapter 600 of the Caltrans Highway Design Manual (CHDM), 5th Edition, we recommend the pavement sections in Table 5 for design of new pavement sections. We provide two alternatives in Table 5, conventional and full depth HMA.

Table 5: New Pavement Sections (R-Value = 50)									
Lover		Thickness (ft)							
Layer	TI = 9 TI = 10		TI = 11		TI = 12				
HMA*	0.45	0.75	0.50	0.80	0.55	0.90	0.60	0.95	
AB	0.55	0.0	0.65	0.0	0.75	0.0	0.85	0.0	
Total Thickness	1.00	0.75	1.15	0.80	1.30	0.90	1.45	0.95	

Notes: HMA = New Hot Mix Asphalt; AB = Class 2 Aggregate Base; TI = Traffic Index *A maximum of 0.20 ft of HMA may be replaced with gap graded rubberized hot mix asphalt.





Prior to placing aggregate base, compact the subgrade to a minimum 95% relative compaction based on CTM 231. The subgrade should be stable under the weight of a fully loaded water truck. Mitigate unstable areas as recommended by CAInc.

7 GRADING RECOMMENDATIONS

Assuming all native soil material or import fill has an R-value greater than 50, we recommend the following grading and earthwork procedures.

7.1 GRADING AND EARTHWORK

Where referenced in this report, use the most current CTM 231 procedures to determine relative compaction and optimum moisture. Compacted soil should not be considered suitable (even if it meets relative compaction requirements) if it is unstable and pumps or flexes excessively under construction equipment loads, as determined by CAInc.

7.2 SOIL EXCAVATABILITY

Based on our experience and the conditions observed during our fieldwork, the on-site soil should be excavatable with typical grading equipment such as scrapers, dozers, backhoes and excavators.

7.3 CLEARING AND STRIPPING

Prior to any site grading, demolish and clear the site to remove vegetation, tree roots, debris, abandoned utilities, soft or unstable areas, or other deleterious materials. If grading operations encounter unknown buried structures/utilities; disturbed soils associated with the removal of these facilities should be excavated to full depth and replaced to new subgrade level with engineered fill. Engineered fill will meet the requirements in Section 7.5.

7.4 SCARIFICATION AND COMPACTION

Process and compact the exposed subgrade areas as follows:

- 1. Scarify to a depth of approximately 6-inches.
- 2. Moisture condition subgrade soil to within 2% of optimum moisture content and compact it to a minimum 95% of CTM 231 test procedure.

7.5 FILL PLACEMENT

On-site soil may be used for fill provided it contains no rock fragments larger than 3" in maximum dimension and is free of concentrations of debris and vegetation.

If import material is required, it should meet the following criteria:

- Contain no concentration of organics, debris or deleterious materials,
- Maximum particle size of 3" with at least 50% passing the No. 4 Sieve,
- Expansion Index \leq 30, per ASTM D4829, and
- R-value <u>></u> 50.





Import fill must be observed and tested by CAInc prior to its approval.

Place fill in maximum 8 inch loose lifts, moisture condition to within 2% of optimum and compact to a minimum 90% relative compaction. Compact materials within 30 inches of finished grade to a minimum 95% relative compaction. Compact subgrade soil below the pavement per Section 7.4. Compaction may be reduced to a minimum of 85% relative compaction in landscape areas.

7.6 OVER-OPTIMUM SOIL MOISTURE

Excessively over-optimum (wet) soil conditions can make proper compaction difficult or impossible. Wet soil is commonly encountered during the winter and spring months, or in excavations where ground water or perched ground water is encountered.

In general, wet soil can be mitigated by:

- Discing the soil during prolonged periods of dry weather,
- Over-excavating and replacement with drier material,
- Stabilization using aggregate and stabilization fabric or grid.

8 **RISK MANAGEMENT**

Our experience, and that of our profession, clearly indicates that the risks of costly design, construction, and maintenance problems can be significantly lowered by retaining the Geotechnical Engineer of Record to provide additional services during design and construction. For this project, CAInc should be retained as the Geotechnical Engineer of Record to:

- Review and provide comments on the civil plans and specifications prior to construction;
- Monitor construction to check and document our report assumptions. At a minimum, CAInc should monitor grading, scarification and compaction of the roadway subgrade;
- Update this report if design changes occur, 2 years or more lapse between this report and construction, and/or site conditions have changed.

If we are not retained to perform the above applicable services, we are not responsible for any other party's interpretation of our report, and subsequent addendums, letters, and discussions.

9 LIMITATIONS

CAInc performed services in accordance with generally accepted geotechnical engineering principles and practices currently used in this area. Where referenced, we used ASTM or Caltrans <u>standards</u> as a general (not strict) *guideline* only. We do not warranty our services.

CAInc based this report on the current site conditions. We assumed the soil, AB and HMA conditions encountered during our fieldwork are representative of the subsurface and pavement conditions at the site. Actual conditions between core and boring locations can be different.

Our scope did not include evaluation of on-site hazardous materials, site geology, site seismicity and flooding potential.

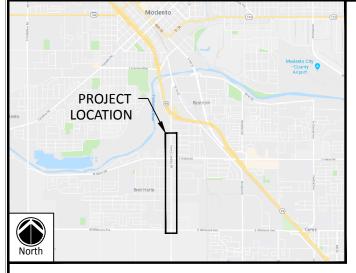


The pavement core locations shown on Figure 1 are based on visual comparisons made in the field between site features and features shown on aerial mapping, therefore they are approximate.

Modern design and construction are complex, with many regulatory restrictions, involved parties, and construction alternatives. It is common to experience changes and delays. The owner should set aside a reasonable contingency fund based on complexities and cost estimates to cover changes and delays.







WHITMORE AVE

ALGEN AVE



FLAMINGO DRIVE

COLUSA AVENUE

BUTTE AVENUE

AMADOR AVENUE



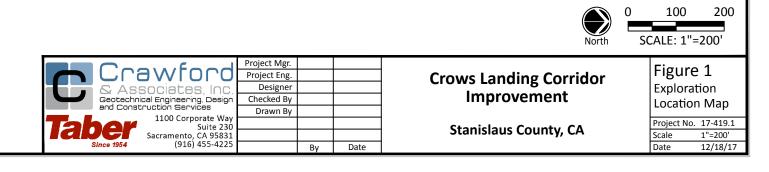
WINMOORE WAY

BAROZZI AVENUE

KENDEE ROAD









GLENN AVENUE

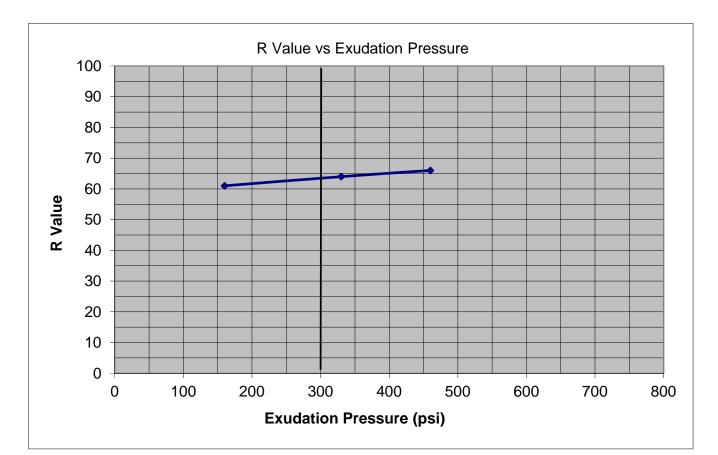
HATCH ROAD

RIO GRANDE AVENUE

APPENDIX

Laboratory Test Results Core Photo Log



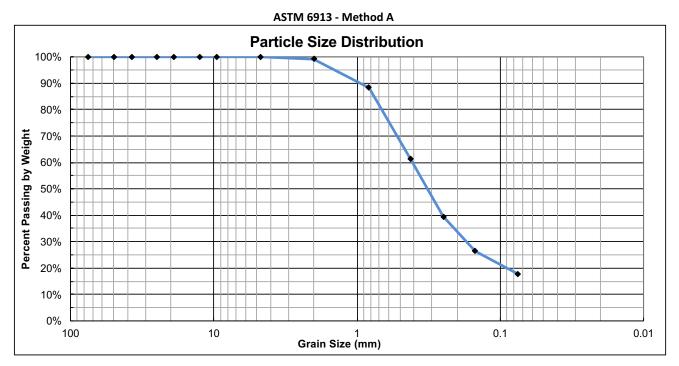


Sample ID & Description				
Boring Number	C-6,C-7,C-8,C-	.9		
Sample Depth (feet)				
Material Description	Reddish brown	Silty SAND		
Test Data				
Specimen	G	Н		
Exudation Pressure (psi)	160	330	460	
Expansion Dial (.0001")	0	0	0	
Expansion Pressure (psf)	0	0	0	
Resistance 'R' Value	61	64	66	
Moisture at test (%)	8.3	7.3	6.3	
Dry density at test (pcf)	123.7	125.5	125.7	
R Value at 300 psi exudati	ion pressure	6	4]
R Value by expansion pres	ssure (TI=5.0)	-	-	1

R Value By Exudation			
Project:	Crawford Lab 17-419.1		
Location:			
Number:	S9763-05-90		
Figure:			



Project Name: Crows Landing Corridor CAInc File No: 17-419.1 Date: 12/27/17 Technician: CAP Sample ID: BULK 13,12,10 Depth: 0'-3' USCS Classification: Silty Sand

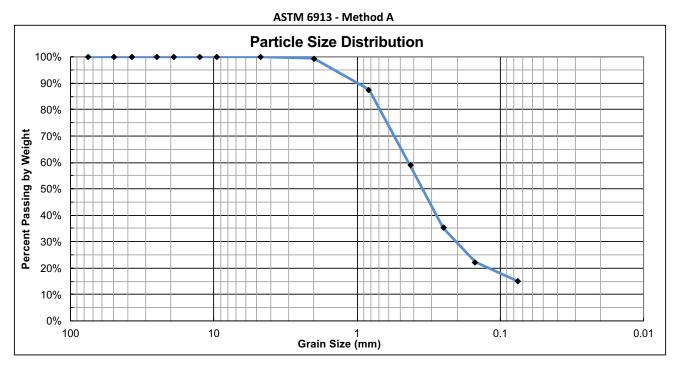


% Cobble	% Gravel		% Gravel % Sand					% Fines
% cobble	Coarse	Fine	Coarse	Medium	Fine	Silt/Clay		
	0	0	1	38	43			
0	()	82			18		

		Sieve #	Opening mm	Cummulative Mass Retained (g)	% Passing %
	Cobbles		75	0.0	100%
	2"	50	0.0	100%	
	Coarse	1-1/2"	37.5	0.0	100%
	Coarse	1"	25.0	0.0	100%
Gravel		3/4"	19.0	0.0	100%
		1/2"	12.5	0.0	100%
	Fine	3/8"	9.50	0.0	100%
		#4	4.75	0.0	100%
	Coarse	#10	2.00	1.6	99%
	Medium	#20	0.825	22.3	88%
Sand	wiedlum	#40	0.425	73.7	61%
Sallu		#60	0.250	116.0	39%
	Fine	#100	0.150	140.7	26%
		#200	0.075	157.5	18%



Project Name: Crows Landing Corridor CAInc File No: 17-419.1 Date: 1/10/17 Technician: CAP Sample ID: BULK 2,11,14 Depth: 0'-3' USCS Classification: Silty Sand



% Cobble	% Gravel		% Sand			% Fines
	Coarse	Fine	Coarse	Medium	Fine	Silt/Clay
	0	0	1	40	44	
0	0		85			15

		Sieve #	Opening mm	Cummulative Mass Retained (g)	% Passing %
Cobbles		3"	75	0.0	100%
Gravel	Coarse	2"	50	0.0	100%
		1-1/2"	37.5	0.0	100%
		1"	25.0	0.0	100%
		3/4"	19.0	0.0	100%
		1/2"	12.5	0.0	100%
	Fine	3/8"	9.50	0.0	100%
		#4	4.75	0.0	100%
Sand	Coarse	#10	2.00	1.5	99%
	Medium	#20	0.825	27.0	88%
	iviedium	#40	0.425	88.9	59%
		#60	0.250	140.0	35%
	Fine	#100	0.150	168.1	22%
		#200	0.075	184.0	15%

CORE PHOTO LOG

Core: 1 Soil: SM



Core: 4 Soil: SM

HMA: 7.3 in AB: 30.5 in

HMA: 6 in



Core: 2 Soil: SM HMA: 6.8 in AB: 5.3 in



 Core: 5
 HMA: 6.0 in

 Soil: SM
 AB: 7.0 in



Core: 3 Soil: SM HMA: 6.3 in AB: 5.8 in







CORE PHOTO LOG



Core: 10

Soil: SM



Core: 8 Soil: SM



Core: 9 Soil: SM HMA: 6.3 in **AB:** 6.8 in





HMA: 6.3 in

AB: 10.0 in

Core: 11

HMA: 6.1 in

HMA: 6.5 in





CORE PHOTO LOG

Core: 13 Soil: SM HMA: 5.8 in AB: 6.3 in



Core: 14 **Soil:** SM

HMA: 8.0 in AB: 8.0 in



Core: 15 HMA: 6.5 in Soil: SM AB: 7.5 in

