

**COUNTY OF EL DORADO, CALIFORNIA
COMMUNITY DEVELOPMENT AGENCY**

TRANSPORTATION DIVISION

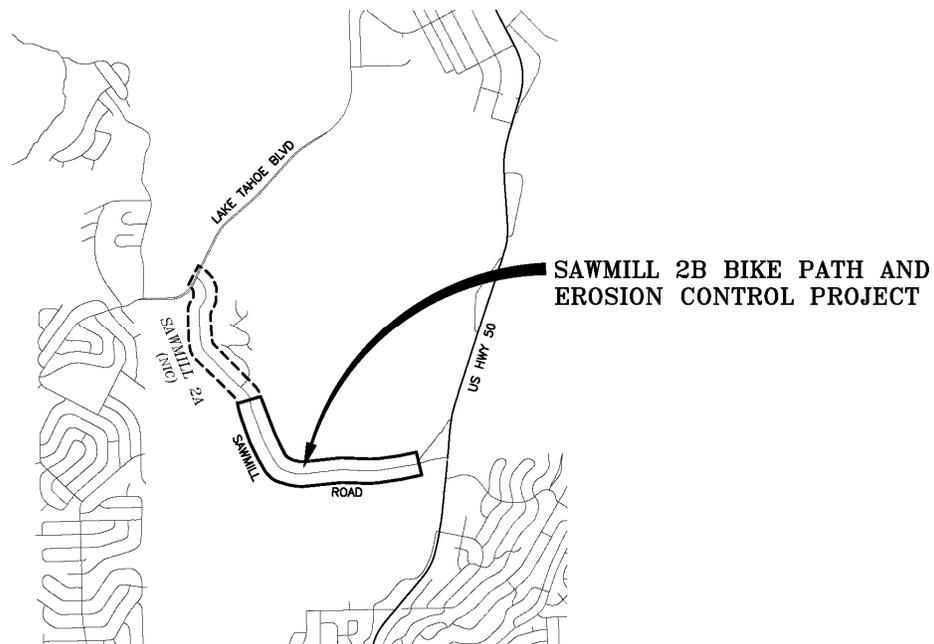
CONTRACT DOCUMENTS

INCLUDING

NOTICE TO BIDDERS, SPECIAL PROVISIONS,
PROPOSAL, AND CONTRACT
FOR

**SAWMILL 2B BIKE PATH
AND EROSION CONTROL PROJECT**

CONTRACT No. PW 11-30593 / CIP No. 95192
Federal Aid No. CML 5925 (121)



FOR USE WITH
STATE OF CALIFORNIA, DEPARTMENT OF TRANSPORTATION, CALTRANS
STANDARD SPECIFICATIONS, MAY 2006
STANDARD PLANS, MAY 2006
AMENDMENTS TO MAY 2006 STANDARD SPECIFICATIONS

BID OPENING DATE: **AUGUST 18, 2014**

**COUNTY OF EL DORADO, CALIFORNIA
COMMUNITY DEVELOPMENT AGENCY**

TRANSPORTATION DIVISION

CONTRACT DOCUMENTS

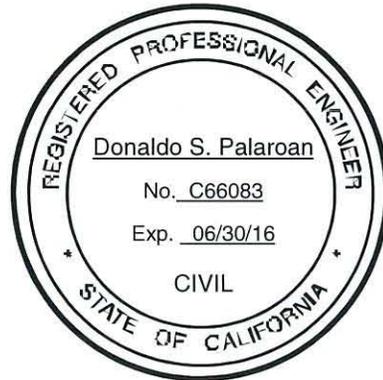
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The various portions of the Contract Documents have been prepared under the direction of the following registered Civil Engineer, in accordance with California Business and Professions Code § 6735.



Donald S. Palaroan, RCE No. C66083

Date 05/30/2014

**COUNTY OF EL DORADO, STATE OF CALIFORNIA
COMMUNITY DEVELOPMENT AGENCY
TRANSPORTATION DIVISION**

**SAWMILL 2B BIKE PATH
AND EROSION CONTROL PROJECT**

CONTRACT NO. PW 11-30593, CIP NO. 95192

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**COUNTY OF EL DORADO, CALIFORNIA
COMMUNITY DEVELOPMENT AGENCY
TRANSPORTATION DIVISION**

NOTICE TO BIDDERS

NOTICE IS HEREBY GIVEN

By the County of El Dorado, State of California, through sealed bids for work in accordance with the Project Plans (Plans) and Contract Documents designated:

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

will be received at the County of El Dorado Community Development Agency, Transportation Division (Transportation Division) office in South Lake Tahoe, California, at 924B Emerald Bay Road, until **August 18, 2014, at 2:00 PM**, at which time bids will be publicly opened and read by the County of El Dorado Community Development Agency, Transportation Division.

No Bid may be withdrawn after the time established for receiving bids or before the award and execution of the Contract, unless the award is delayed for a period exceeding sixty (60) calendar days. Bids shall be executed in accordance with the instructions given and forms provided in the bound Contract Documents furnished by the County of El Dorado Community Development Agency, Transportation Division. The Proposal shall not be detached and shall be submitted with the Contract Documents bid package in its entirety. All bids must be submitted in a sealed envelope and clearly marked on the envelope:

**“PROPOSAL FOR THE
SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT”
CONTRACT NO. PW 11-30593, CIP NO. 95192**

TO BE OPENED AT 2:00 PM, Monday, August 18, 2014

LOCATION/DESCRIPTION OF THE WORK

The Project area is located in eastern El Dorado County, in the Tahoe Basin, north of the Upper Truckee River, and west of US Highway 50/ State Route 89.

The Work to be done is shown on the Plans, and generally consists of, but is not limited to:

- A. Construction of a Class 1 bike path, excavation and grading, clearing and grubbing, asphalt concrete paving, tree removal, installing culverts, drainage channels, signing and striping, pavement markings, revegetation, dewatering, traffic control, and temporary erosion control. Other items or details not mentioned above, that are required by the Plans, Standard Specifications, or these Special Provisions, must be performed, constructed, or installed.
- B. Bids are required for the entire Work described herein.
- C. The contract time is **SIXTY (60) WORKING DAYS**.
- D. For bonding purposes the anticipated project cost is less than \$980,000.
- E. A pre-bid meeting is scheduled for this project on Thursday, August 7, 2014 at 2:30 P.M. at the Community Development Agency, Transportation Division in South Lake Tahoe, California, at 924B Emerald Bay Road. Attendance at this meeting is not mandatory.
- F. This project is being formally bid in accordance with the Public Contract Code 22032 and County of El Dorado Ordinance Code section 3.14.040.

OBTAINING OR INSPECTING CONTRACT DOCUMENTS

The Contract Documents book and project Plans may be examined at the County of El Dorado Community Development Agency, Transportation Division or may be purchased in person or by mail from the Transportation

Division, 924B Emerald Bay Road, South Lake Tahoe, California 96150. The purchase price, **checks only**, of each set of Contract Documents book and project Plans (half size plans are included in each set) is NINETY ONE dollars (\$91.00) and is not refundable. To receive Contract Documents book and project Plans by Federal Express, send request and payment prior to shipping and include an additional FIFTY dollars (\$50.00), for a total of ONE HUNDRED FORTY-ONE dollars (\$141.00), to include shipping and handling. For information regarding the purchase of the Contract Documents book and project Plans contact Patty Scott at (530) 573-7900. **Only Contract Documents books and project Plans purchased from the Community Development Agency, Transportation Division will be acceptable for bid submittal.**

Supplemental Project Information is available to Contract Document holders as .pdf files on the DOT's website: <http://www.edcgov.us/Government/DOT/Bids.aspx>. These Supplemental Document(s) include:

- Geotechnical Investigation Report, Kleinfelder West, Inc., November, 2011.

CONTRACTOR'S LICENSE CLASSIFICATION

Bidders shall be properly licensed to perform the Work pursuant to the Contractors' State License Law (Business and Professions Code section 7000 et seq.) and shall possess a **CLASS A** license or equivalent combination of Classes required by the categories and type of Work included in the Contract Documents and Plans at the time the Contract is awarded, and shall maintain a valid license through completion and acceptance of the Work including guarantee and acceptance period. If the Contractor possesses a Class A license instead of the equivalent combination of Classes required by the categories and type of work included in the Contract Documents and Plans, then the Contractor or a subcontractor must also possess a **CLASS C27** "Landscaping Contractor" license. Failure of the successful Bidder to obtain proper and adequate licensing for an award of the Contract shall constitute a failure to execute the Contract, and shall result in forfeiture of the Bidder's security.

BUSINESS LICENSE

The County Business License Ordinance provides that it is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of County of El Dorado without possessing a County Business License unless exempt under County Ordinance Code Section 5.08.070. The Bidder to whom an award is made shall comply with all of the requirements of the County Business License Ordinance, where applicable, prior to beginning work under this Contract and at all times during the term of this Contract.

SUBCONTRACTORS LIST

Each Proposal shall have listed therein the name, contractor's license number and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of 0.5% of the total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act (Act), commencing with Section 4100 of the Public Contract Code. The Bidder shall also describe in the Subcontractor List the work to be performed by each subcontractor listed. The work to be performed by the subcontractor shall be shown by listing the bid item number, bid item description, and portion of the work to be performed by the subcontractor in the form of a percentage (not to exceed 100%) calculated by dividing the work to be performed by the subcontractor by the respective bid item amount(s) (not by the total bid price). The percentage of each bid item subcontracted may be submitted with the Bidder's bid or sent via email or fax to Donald o Palaroan, County of El Dorado Community Development Agency, Transportation Division, email-donald.o.paloroan@edcgov.us, Fax-(530) 541-7049 by 4:00 p.m. on the first business day after the bid opening. The email or fax shall contain the name of each subcontractor submitted with the Bidder's bid along with the bid item number, bid item description, and the percentage of each bid item subcontracted, as described above. At the time the contract is awarded, all listed subcontractors shall be properly licensed to perform their designated portion of the work. The bidder's attention is directed to other provisions of the Act related to the imposition of penalties for failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

BUY AMERICA

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 and the Moving Ahead for Progress in the 21st Century Act (MAP-21).

DISADVANTAGED BUSINESS ENTERPRISE (DBE) PARTICIPATION

The County of El Dorado affirms that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation.

Bidder will take all necessary affirmative steps to assure that minority firms, women's business enterprises and labor surplus firms are used when possible.

Bidders are advised that, as required by federal law, the County of El Dorado has implemented Disadvantaged Business Enterprise requirements for Disadvantaged Business Enterprises (DBE). Section 2, "Proposal Requirements and Conditions," under subsection titled "Disadvantaged Business Enterprises (DBE)" and Section 5, "General," under subsection titled "Performance of Subcontractors" of these special provisions cover the DBE requirements.

Bidder will take all necessary affirmative steps to assure that minority firms, women's business enterprises and labor surplus area firms are used when possible.

The Disadvantaged Business Enterprise (DBE) contract goal is **14%**.

Bidder's attention is directed to the DBE Good Faith Effort Submittal Information Handout at: <http://www.edcgov.us/Government/DOT/DBE.aspx>. The problems and solutions listed in the Handout apply to DBE Good Faith Efforts Submittals.

NONDISCRIMINATION

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOVERNMENT CODE SECTION 12990)

Attention is further directed to the "Nondiscrimination Clause", set forth in Section 7-1.01A(4), "Labor Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt State contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The specifications are applicable to all nonexempt State construction contracts and subcontracts of \$5,000 or more.

Attention is also directed to the Special Provisions and to the draft Agreement contained in these Contract Documents for additional nondiscrimination and fair employment practices provisions that will apply to this federal-aid Contract.

The Community Development Agency, Transportation Division hereby notifies all Bidders that it will affirmatively ensure that in any contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, national origin, religion, age, or disability in consideration for the award.

In accordance with Federal Law and U.S. Department of Agriculture policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.)

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

PREVAILING WAGE REQUIREMENTS

In accordance with the provisions of California Labor Code Sections 1770 et seq., including but not limited to sections 1773, 1773.1, 1773.2, 1773.6, and 1773.7, the general prevailing rate of wages in the county in which the Work is to be done has been determined by the Director of the California Department of Industrial Relations. These wage rates appear in the California Department of Transportation publication entitled General Prevailing Wage Rates.

Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, PO Box 420603, San Francisco, CA 94142-0603, Telephone (415) 703-4708, or by referring to the website at <http://www.dir.ca.gov/OPRL/PWD>. The rates at the time of the bid advertisement date of a project will remain in effect for the life of the project in accordance with the California Code of Regulations, as modified and effective January 27, 1997.

Copies of the general prevailing rate of wages in the county in which the Work is to be done are also on file at the Community Development Agency, Transportation Division's principal office, and are available upon request, and in the case of projects involving federal funds, federal wage requirements as predetermined by the United States Secretary of Labor have been included in the Contract Documents. Addenda to modify the Federal minimum wage rates, if necessary, will be issued as described in the Project Administration section of this Notice to Bidders.

In accordance with the provisions of Labor Code 1810, eight (8) hours of labor shall constitute a legal day's work upon all work done hereunder, and Contractor and any subcontractor employed under this Contract shall conform to and be bound by the provisions of Labor Code Sections 1810 through 1815.

In the case of federally funded projects, where federal and state prevailing wage requirements apply, compliance with both is required. This project is funded in whole or in part by federal funds. Contractor's attention is directed to Section 14 of the Special Provisions and the requirements of, and compliance with the Copeland Act (18 U.S.C. 874 and 29 CFR Part 3), the Davis-Bacon Act (40 U.S.C. 276a to 276a-7 and 29 CFR Part 5), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330 and 29 CFR Part 5).

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, Contractor and subcontractors shall pay not less than the higher wage rate. The Community Development Agency, Transportation Division 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 subcontractors 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 (USDOT) provides a toll-free "hotline" service to report bid rigging activities. Bid rigging activities can be reported Mondays through Fridays, between 8:00 a.m. and 5:00 p.m., Eastern Time, at (800) 424-9071. Anyone with knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the "hotline" to report these activities. The "hotline" is part of the USDOT's continuing effort to identify and investigate highway construction contract fraud and abuse and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

BID SECURITY

A bid security shall be provided with each bid. Bid security shall be in an amount of not less than ten percent (10%) of the total amount of the Bid and shall be cash, a certified check, or cashier's check drawn to the order of the County of El Dorado or a Bidder's Bond executed by a surety satisfactory to the County of El Dorado **on the form provided in the Proposal section of these Contract Documents (do not detach the form)**.

BID PROTEST PROCEDURE

The protest procedure is intended to handle and resolve disputes related to the bid award for this project pursuant to Title 7 Code of Federal Regulations Chapter XXX Part 3016.36 (b)(12)(i)-(ii) and Title 49 Code of Federal Regulations Part 18 Section 18.36 (b)(12)(i)-(ii) and County of El Dorado policies and procedures. A protestor must exhaust all administrative remedies with the County of El Dorado before pursuing a protest with a Federal Agency. Reviews of protests by the Federal agency will be limited to:

- (i.) Violations of Federal law or regulations and the standards of 7 CFR Chapter XXX Part 3016.36 (b)(12) (i)-(ii) and 49 CFR Part 18 Subpart C Section 18.36 (b)(12)(i)-(ii). Violations of State of

California or local law will be under the jurisdiction of the State of California or the County of El Dorado; and

(ii.) Violation of the County of El Dorado's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to the County of El Dorado.

The protest procedure is an extension of the formal bid process and allows those who wish to protest the recommendation of an award after bid the opportunity to be heard.

Policy: Upon completion of the bid evaluation, the Community Development Agency, Transportation Division shall notify all bidders of the recommendation of award, the basis therefore, and the date and time on which the recommendation for award will be considered and acted upon by the Board of Supervisors. All bidders may attend the Board of Supervisors meeting at the time the agenda item is considered, address the Board of Supervisors, and be heard.

Procedure: If a bidder wishes to protest the award, the procedure shall be as follows:

1. The Community Development Agency, Transportation Division will review the bids received in a timely fashion under the terms and conditions of the Notice to Bidders, and notify the bidders in writing, at the address designated in the bid, of its recommendation including for award or rejection of bids ("All Bidders Letter").

2. Within five (5) working days from the date of the "All Bidders Letter," the bidder protesting the recommendation for award shall submit a letter of protest to the County of El Dorado, Community Development Agency, Transportation Division, Attention Donald Palaroan, 924B Emerald Bay Road, South Lake Tahoe, CA 96150, and state in detail the basis and reasons for the protest. The bidder must provide facts to support the protest, including any evidence it wishes to be considered, together with the law, rule, regulation, or criteria on which the protest is based.

3. If Community Development Agency, Transportation Division finds the protest to be valid, it may modify its award recommendations and notify all bidders of that decision. If the Community Development Agency, Transportation Division does not agree with the protest, or otherwise fails to resolve the protest, the Community Development Agency, Transportation Division will notify the bid protestor and all interested parties of its decision and the date and time that the recommendation for award will be agendaized for the Board of Supervisors' consideration and action. The Community Development Agency, Transportation Division shall also include in its report the details of the bid protest.

4. The bidder may attend the Board of Supervisors meeting at which the recommendation and bid protest will be considered. The Board of Supervisors will take comment from the bidder, staff, and members of the public who wish to speak on the item. In the event that the bidder is not in attendance at that time, the bid protest may be dismissed by the Board of Supervisors without further consideration of the merits; and,

The decision of the Board of Supervisors on the bid protest will be final.

AWARD OF CONTRACT

Bids will be considered for award by the Board of Supervisors. The County of El Dorado reserves the right after opening bids to reject any or all bids, to waive any irregularity in a bid, or to make award to the lowest responsive, responsible Bidder and reject all other bids, as it may best serve the interest of the County.

As a condition of award, the successful Bidder will be required to submit bonds and evidence of insurance prior to execution of the Agreement by the County. Failure to meet this requirement shall constitute abandonment of the Bid by the Bidder and forfeiture of the Bidder's security. Award will then be made to the next lowest, responsive, responsible Bidder.

RETAINAGE FROM PAYMENTS

The Contractor may elect to receive one hundred percent (100%) of payments due under the Contract from time to time, without retention of any portion of the payment by the County, by depositing securities of equivalent value with the County in accordance with the provisions of Section 22300 of the Public Contract Code. Securities

eligible for deposit hereunder shall be limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

PROJECT ADMINISTRATION

All communications relative to the Contract Documents and Plans shall be directed to Donaldo Palaroan in the County of El Dorado Community Development Agency, Transportation Division, 924B Emerald Bay Road, South Lake Tahoe, CA 96150, telephone: (530) 573-7920. No oral responses to any questions concerning the content of the Plans and Contract Documents will be given. All responses will be in the form of written addenda to the Contract Documents and Plans or written responses to bidders' inquiries. Responses and addenda will be posted on the Department of Transportation website at www.edcgov.us/Government/DOT/Bids.aspx. It is the Bidders' responsibility to check this website for responses and addenda during the bid period.

The list of plan holders will also be posted on the Community Development Agency, Transportation Division website at: www.edcgov.us/Government/DOT/Bids.aspx

Inquiries or questions based on alleged patent ambiguity of the plans, specifications, or estimate must be communicated as a bidder inquiry prior to bid opening. These inquiries or questions, submitted after bid opening will not be treated as a bid protest.

BY ORDER OF the Director of the Community Development Agency, County of El Dorado, State of California.

Authorized by the Board of Supervisors on July 15, 2014, at Placerville, California.

By_____

Steven M. Pedretti, Director
Community Development Agency

COMPLETING BID IN PENCIL, ERASURES, OVERWRITES, AND USE OF CORRECTION FLUID OR TAPE ARE NOT ACCEPTABLE. BID PROPOSALS WITH PENCIL, ERASURES, OVERWRITES, OR USE OF CORRECTION FLUID OR TAPE WILL BE REJECTED. ALL CHANGES MUST BE LINED OUT AND CORRECTIONS INSERTED ADJACENT TO AND INITIALED BY THE BIDDER'S AUTHORIZED REPRESENTATIVE.

PROPOSAL

(to be attached to and submitted with this bound Contract Document bid package)

**TO: COUNTY OF EL DORADO, STATE OF CALIFORNIA
COMMUNITY DEVELOPMENT AGENCY
TRANSPORTATION DIVISION**

for the construction of the

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

NAME OF BIDDER _____

MAILING ADDRESS _____

CITY, STATE, ZIP _____

PHYSICAL ADDRESS _____

(Please include even if Mailing Address used)

CITY, STATE, ZIP _____

TELEPHONE NO: AREA CODE () _____

FAX NO: AREA CODE () _____

EMAIL ADDRESS _____

The work for which this Proposal is submitted is for the construction in accordance with these Contract Documents (including the payment of not less than the State general prevailing wage rates or Federal minimum wage rates set forth herein), the Project Plans described below, including any addenda thereto, the Contract annexed hereto, and also in accordance with the California Department of Transportation Standard Plans, dated May 2006, the Standard Specifications, dated May 2006, Amendments to the May 2006

Standard Specifications, standard drawings from the Design and Improvement Standards Manual of the County of El Dorado, revised March 8, 1994 including Resolutions 199-91 and 58-94 to adopt changes to the Design and Improvement Standards Manual, the Labor Surcharge and Equipment Rental Rates in effect on the date the work is accomplished, and in accordance with the General Prevailing Wage rates. The Project Plans and Contract Documents for the work to be done are entitled:

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

Bids are to be submitted for the entire work. The amount of the bid for comparison purposes will be the total of all the 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 this 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 item 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 of the entry in the item total column, then the amount set forth in the 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 Community Development Agency, Transportation Division's Final Estimate of cost.

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. Cents 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 at the discretion of the County of El Dorado, and that discretion will be exercised in the manner deemed by the County of El Dorado to best protect the public interest in the prompt and economical completion of the work. The decision of the County of El Dorado respecting the amount of a bid, or the existence or treatment of any irregularity in a bid, shall be final.

If this Proposal is accepted and the undersigned Bidder shall fail to enter into the Contract and furnish the two bonds in the sums required by the State Contract Act, with surety satisfaction to the County of El Dorado in accordance with the Special Provisions within five (5) days, not including Saturdays, Sundays, and legal holidays, of the date of the letter notice from the County of El Dorado that the Contract has been awarded, the County of El Dorado 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 such security accompanying this Proposal shall operate and the same shall be the property of the County of El Dorado.

The undersigned, as Bidder, declares under penalty of perjury under the laws of the State of California 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 it has carefully examined the location of the proposed work, the annexed proposed form of Contract, and the Project Plans therein referred to; and that it proposes, and agrees if this Proposal is accepted, that it will contract with the County of El Dorado, in the form of the copy of the Sample 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 it will take in full payment therefore the following item prices, to wit:

**PROPOSAL PAY ITEMS AND BID PRICE SCHEDULE
SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

| ITEM NO. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT OF MEASURE | UNIT PRICE (in Figures) | ITEM TOTAL (in Figures) |
|----------|---|--------------------|-----------------|-------------------------|-------------------------|
| 1 | Mobilization | 1 | LS | | |
| 2 | Traffic Control | 1 | LS | | |
| 3 | Sweeping | 60 | DAY | | |
| 4 | Trench and Excavation Safety | 1 | LS | | |
| 5 | Humus for Topsoil Mix | 125 | CY | | |
| 6 | Mulch and Mulch Application | 250 | CY | | |
| 7 | Tackifier and Tackifier Application | 81,000 | SF | | |
| 8 | Install and Maintain Tire Wash Area (Off Pavement) | 4 | EA | | |
| 9 | Install and Maintain Concrete Wash Area | 2 | EA | | |
| 10 | Install and Maintain Weighted Fiber Rolls or Gravel-Filled Rolls | 5 | EA | | |
| 11 | Install and Maintain Filter Fence | 60 | LF | | |
| 12 | Install and Maintain Visqueen with Gravel Bags or Gravel-Filled Rolls | 1,130 | LF | | |
| 13 | Install and Maintain Sediment Trap and Drainage Inlet Protection | 8 | EA | | |
| 14 | Install and Maintain Wooden Tree Trunk Protection | 81 | EA | | |
| 15 | Install and Maintain Tree Protection and Construction Limit Fence | 9,158 | LF | | |
| 16 | Tree Removal | 116 | EA | | |
| 17 | 15" x 21" Arch CMP (In Pavement) | 97 | LF | | |
| 18 | 15" x 21" Arch CMP (Out of Pavement) | 200 | LF | | |
| 19 | 20" x 28" Arch CMP (In Pavement) | 24 | LF | | |

| ITEM NO. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT OF MEASURE | UNIT PRICE (in Figures) | | ITEM TOTAL (in Figures) | |
|----------|--------------------------------------|--------------------|-----------------|-------------------------|--|-------------------------|--|
| 20 | 20" x 28" Arch CMP (Out of Pavement) | 31 | LF | | | | |
| 21 | 15" x 21" Arch FES | 7 | EA | | | | |
| 22 | 20" x 28" Arch FES | 1 | EA | | | | |
| 23 | 36" Sediment Trap | 5 | EA | | | | |
| 24 | 48" Sediment Trap | 3 | EA | | | | |
| 25 | Log Sediment Barrier | 200 | LF | | | | |
| 26 | Coir Log | 2 | EA | | | | |
| 27 | Modified Grass-Lined Swale | 48 | LF | | | | |
| 28 | Sod Salvage and Transplant | 310 | SF | | | | |
| 29 | Rock-Lined Channel | 1,053 | LF | | | | |
| 30 | Rock Bowl | 283 | SF | | | | |
| 31 | Rock Dissipator | 279 | SF | | | | |
| 32 | Rock Slope Protection | 793 | SF | | | | |
| 33 | Class 1 Bike Path | 5,336 | LF | | | | |
| 34 | Striping and Markings | 475 | SF | | | | |
| 35 | Bike Path Signs | 10 | EA | | | | |
| 36 | Chain Link Fence | 1,338 | LF | | | | |
| 37 | Chain Link 10' Drive Gate | 3 | EA | | | | |
| 38 | Chain Link 4' Walk Gate | 2 | EA | | | | |
| 39 | Metal Rail Fence | 665 | LF | | | | |
| 40 | Misc Grading | 9 | CY | | | | |

| ITEM NO. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT OF MEASURE | UNIT PRICE (in Figures) | | ITEM TOTAL (in Figures) | |
|------------------|---|--------------------|-----------------|-------------------------|--|-------------------------|--|
| 41 | Misc AC Paving | 100 | SF | | | | |
| 42 | R&R AC Driveway | 1,627 | SF | | | | |
| 43 | Existing AC Pavement Removal (F) | 28 | SF | | | | |
| 44 | Dewatering Area 1 | 1 | EA | | | | |
| 45 | Dewatering Area 2 | 1 | EA | | | | |
| 46 | Dewatering Area 3 | 1 | EA | | | | |
| 47 | Dewatering Area 4 | 1 | EA | | | | |
| 48 | Dewatering Area 5 | 1 | EA | | | | |
| 49 | Dewatering Area 6 | 1 | EA | | | | |
| 50 | Overexcavate and Remove Unsuitable Material | 100 | CY | | | | |
| 51 | Rock Fracturing and Removal | 100 | CY | | | | |
| 52 | Winterization | 1 | LS | | | | |
| TOTAL BID | | | | | | | |

(F) Denotes Final Pay Item, (LS) Denotes Lump Sum

(NOTICE: Bidder's failure to execute the questionnaires and statements contained in this Proposal as required by applicable laws and regulations, or the determinations by County of El Dorado based upon those questionnaires and statements, may prohibit award of the subject Contract to the Bidder.)

(THE BIDDER'S EXECUTION ON THE SIGNATURE PORTION OF THIS PROPOSAL SHALL ALSO CONSTITUTE AN ENDORSEMENT AND EXECUTION OF THOSE CERTIFICATIONS WHICH ARE A PART OF THIS PROPOSAL)

EQUAL EMPLOYMENT OPPORTUNITY CERTIFICATION

| | <u>Has</u> | <u>Has Not</u> |
|---------------------------------|------------|----------------|
| The Bidder _____ | _____ | _____ |
| Proposed Subcontractor(s) _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |
| _____ | _____ | _____ |

hereby certifies the above information regarding participation in a previous contract or subcontract subject to the equal opportunity clauses, as required by Executive Orders 10925, 11114, 11246, and 11375, and as supplemented by 41 CFR 60, 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 filing 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.

SMALL BUSINESS STATUS

Are you certified as a Small Business by the Office of Small and Business of the Department of General Services of the State of California?

Please check one of the following: yes, no, unsure.

(Note: This small business questionnaire is included for statistical reporting only, and your answer neither affects your bid on this contract, nor will it be cause for penalty.)

PUBLIC CONTRACT CODE SECTION 10162 QUESTIONNAIRE

In accordance with Public Contract Code Section 10162, the Bidder shall complete, under penalty of perjury under the laws of the State of California, 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 SECTION 10232 STATEMENT

In accordance with Public Contract Code Section 10232, the Bidder hereby states under penalty of perjury under the laws of the State of California, that no more than one final unappealable finding of contempt of court by a Federal Court has been issued against the Bidder within the immediate preceding two year period because of the Bidder's failure to comply with an order of a Federal Court which orders the Bidder to comply with an order of the National Labor Relations Board.

NOTE: The above Statement and Questionnaire are part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Statement and Questionnaire.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

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

In conformance with Title 23 United States Code, Section 112, and Public Contract Code Section 7106, the Bidder declares that the bid is not made in the interest of, or on behalf of, any undisclosed person, partnership, company, association, organization, or corporation; that the bid is genuine and not collusive or sham; that the Bidder has not directly or indirectly induced or solicited any other Bidder to put in a false or sham bid, and has not directly or indirectly colluded, conspired, connived, or agreed with any Bidder or anyone else to put in a sham bid, or that anyone shall refrain from bidding; that the Bidder has not in any manner, directly or indirectly, sought by agreement, communication, or conference with anyone to fix the bid price of the Bidder or any other Bidder, or to fix any overhead, profit, or cost element of the bid price, or of that of any other Bidder, or to secure any advantage against the public body awarding the Contract of anyone interested in the proposed Contract; that all statements contained in the bid are true; and, further, that the Bidder has not, directly or indirectly, submitted his 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.

NOTE: The above Noncollusion Affidavit is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Noncollusion Affidavit.

Bidders are cautioned that making a false certification may subject the certifier to criminal prosecution.

IRAN CONTRACTING ACT CERTIFICATION

Public Contract Code Section 2200 *et seq.*

As required by California Public Contract Code Section 2204, you certify subject to penalty for perjury that the option checked below relating to your status in regard to the Iran Contracting Act of 2010 (Public Contract Code Section 2200 *et seq.*) is true and correct:

- You are not:
 - (i) identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203; or
 - (ii) a financial institution that extends, for 45 days or more, credit in the amount of \$20,000,000 or more to any other person or entity identified on the current list of persons and entities engaging in investment activities in Iran prepared by the California Department of General Services in accordance with subdivision (b) of Public Contract Code Section 2203, if that person or entity uses or will use the credit to provide goods or services in the energy sector in Iran.

- The Authority has exempted you from the requirements of the Iran Contracting Act of 2010 after making a public finding that, absent the exemption, the Authority will be unable to obtain the goods and/or services to be provided pursuant to the contract.

- The amount of the contract payable to the you for the work does not exceed \$1,000,000.

Signed _____

Titled _____

Firm _____

Date _____

Note: In accordance with Public Contract Code Section 2205, false certification of this form shall be reported to the California Attorney General and may result in civil penalties equal to the greater of \$250,000 or twice the contract amount, termination of the contract and/or ineligibility to bid on public contracts for three years.

**DEBARMENT AND SUSPENSION CERTIFICATION, UNITED STATES DEPARTMENT OF
AGRICULTURE (USDA) UNIFORM FEDERAL ASSISTANCE REGULATIONS, 7 CFR 3016, UNIFORM
ADMINISTRATIVE REQUIREMENTS FOR GRANTS AND COOPERATIVE AGREEMENTS TO STATE
AND LOCAL GOVERNMENTS, AND EXECUTIVE ORDER 12549**

The Bidder, under penalty of perjury, certifies that, except as noted below, he/she or any 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 may result in denial of award, and will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applied, initiating agency, and dates of action.

Bidder further agrees by submitting this Proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where any lower tier participant is unable to certify to this statement, it shall attach an explanation to its proposal to the prime contractor.

NOTES: Providing false information may result in criminal prosecution or administrative sanctions. The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

**DEBARMENT, SUSPENSION, INELIGIBILITY, AND VOLUNTARY EXCLUSION CERTIFICATION,
UNITED STATES DEPARTMENT OF TRANSPORTATION (USDOT) 2 CODE OF FEDERAL
REGULATIONS (CFR) 1200 FEDERAL AGENCY REGULATIONS FOR GRANTS AND AGREEMENTS
AND EXECUTIVE ORDER 12549**

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

- is not currently under suspension, debarment, voluntary exclusion, or determination of ineligibility by any Federal agency;
- has not been suspended, debarred, voluntarily excluded or determined 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 may result in denial of award, and will be considered in determining Bidder responsibility. For any exception noted above, indicate below to whom it applied, initiating agency, and dates of action.

Bidder further agrees by submitting this Proposal that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where any lower tier participant is unable to certify to this statement, it shall attach an explanation to its proposal to the prime contractor.

NOTES: Providing false information may result in criminal prosecution or administrative sanctions. The above Certification is part of the Proposal. Signing this Proposal on the signature portion thereof shall also constitute signature of this Certification.

NON-LOBBYING CERTIFICATION FOR FEDERAL-AID CONTRACTS

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

- 1) No federal or state 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 or state agency, a member of the State Legislature or United States Congress, or an employee of a Member of the Legislature or Congress in connection with the awarding of any state or federal contract, including this Contract, the making of any federal grant, the making of any state or federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any state or 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 Contract, grant, loan, or cooperative agreement, the Bidder shall complete and submit Standard Form–LLL, “Disclosure of Lobbying Activities,” in accordance with the form 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 bid or proposal that he 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.

INSTRUCTIONS FOR COMPLETION OF SF-LLL, 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 and/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.
6. 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. (a) 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.
(b) 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 (MI).
11. 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.
12. Check the appropriate box(es). Check all boxes that apply. If payment is made through an in-kind contribution, specify the nature and value of the in-kind payment.
13. Check the appropriate box(es). Check all boxes that apply. If other, specify nature.
14. 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.
15. Check whether or not a continuation sheet(s) is attached.
16. The certifying official shall sign and date the form, 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. 06-04-90

PUBLIC CONTRACT CODE SECTION 10285.1 STATEMENT

In accordance 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.

Accompanying this Proposal are _____
(NOTICE: INSERT THE WORDS "CASH(\$_____),"CASHIER'S CHECK," "CERTIFIED CHECK," OR "BIDDERS BOND," AS THE CASE MAY BE)

in amounts equal to at least ten percent of the total of the Bid.

The names of all persons interested in the forgoing Proposal as principals are as follows:

IMPORTANT NOTICE: If the Bidder or other interested person is a corporation, state legal name of corporation and place of incorporation, also names of the president, secretary, treasurer, and executive officer thereof; if a partnership, state name of partnership, also names of all individual partners; if Bidder or other interested person is an individual, state first and last names in full.

Licensed in accordance with an act providing for the registration of Contractors,

License No. _____ Classification(s) _____
(A Copy of the afore-referenced license must be attached hereto)

ADDENDA: This Proposal is submitted with respect to the changes to the Contract included in addenda number(s) _____

(Fill in addenda numbers if addenda have been received and insert, in this Proposal, any Proposal Pay Items and Bid Price Schedules 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 I have complied with the requirements of Section 4104 of the Subletting and Subcontracting Fair Practices Act, and that I have complied with the requirements of Section 8103 of the Fair Employment and Housing Commission Regulations (Chapter 5, of Division 4 of Title 2 of the California Code of Regulations). 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; I ran Contracting Act Certification, and Debarment and Suspension Certification and Debarment, Suspension, Ineligibility and Voluntary Exclusion Certification are true and correct. 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 Equal Employment Opportunity Certification, the Small Business Status questionnaire, the Non-Lobbying Certification for Federal Aid Contracts, and the questionnaire regarding Disclosure of Lobbying Activities are true and correct.

The person or persons executing this Proposal on behalf of a corporation or partnership, shall be prepared to demonstrate by resolution, article, or otherwise, that such person is or that such persons are appropriately authorized to act in these regards for such corporation or partnership. Such authority shall be demonstrated to the satisfaction of the County of El Dorado.

If the signature is by an agent other than an officer of a corporation or a member of a partnership, a power of attorney authorizing said act by the agent on behalf of his principal shall be submitted with the bid forms, otherwise the bid may be disregarded as irregular and unauthorized.

The Bidder's execution on the signature portion of this Proposal shall constitute an endorsement and execution of those affidavits, declarations and certifications which are part of this Proposal.

Executed this _____ day of _____, 20 _____

at _____ County, State of _____

Date: _____



Signature of Bidder

Name and Title of Bidder _____

Name of Firm _____

END OF PROPOSAL

Distribution: (1) Original – Local agency files

INSTRUCTIONS - LOCAL AGENCY BIDDER
DBE COMMITMENT (CONSTRUCTION CONTRACTS)

ALL BIDDERS:

PLEASE NOTE: This information may be submitted with your bid. If it is not, and you are the apparent low bidder or the second or third low bidder, it must be submitted and received as specified in the Special Provisions. Failure to submit the required DBE commitment will be grounds for finding the bid nonresponsive.

The form requires specific information regarding the construction contract: Local Agency, Location, Project Description, Total Contract Amount, Bid Date, Bidder's Name, and Contract DBE Goal.

The form has a column for the Contract Item Number and Item of Work and Description or Services to be subcontracted or Materials to be provided by DBEs. Prime contractors shall indicate all work to be performed by DBEs including, if the prime is a DBE, work performed by its own forces, if a DBE. The DBE shall provide a certification number to the Contractor and expiration date. Enter the DBE prime's and subcontractors' certification numbers. The form has a column for the Names of DBE contractors to perform the work (who must be certified on the date bids are opened and include the DBE address and phone number).

IMPORTANT: Identify **all** DBE firms participating in the project regardless of tier. Names of the First-Tier DBE Subcontractors and their respective item(s) of work listed should be consistent, where applicable, with the names and items of work in the "Subcontractors Listing" submitted with your bid.

There is a column for the DBE participation dollar amount. Enter the Total Claimed DBE Participation dollars and percentage amount of items of work submitted with your bid pursuant to the special provisions. (If 100% of item is not to be performed or furnished by the DBE, describe exact portion of item to be performed or furnished by the DBE.) See "Disadvantaged Business Enterprise (DBE)," of the special provisions (construction contracts) to determine how to count the participation of DBE firms.

Exhibit 15-G must be signed and dated by the person bidding. Also list a phone number in the space provided and print the name of the person to contact.

Local agencies should complete the Local Agency Contract Award, Federal-aid Project Number, Federal Share, Contract Award Date fields and verify that all information is complete and accurate before signing and filing.

EXHIBIT 15-H DBE INFORMATION - GOOD FAITH EFFORTS
DBE INFORMATION – GOOD FAITH EFFORTS

Federal-aid Project No. _____ Bid Opening Date _____

The County of El Dorado established an Under-utilized Disadvantaged Business Enterprise (DBE) goal of 14% 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 UDBE 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 |
|-------------------------|------------------------------|-----------------------------|
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |
| | | |

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 |
|---------------|-------------------------------------|--------------------|-------------|------------------------|
| | | | | |
| | | | | |
| | | | | |
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| | | | | |
| | | | | |

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 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 | Method/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.

END OF PROPOSAL

COUNTY OF EL DORADO

BIDDER'S BOND

this form MUST be used

KNOW ALL PEOPLE BY THESE PRESENTS, THAT WE, _____
_____ as **PRINCIPAL**, and

as Surety are held and firmly bound unto the County of El Dorado, a political subdivision of the State of California (hereinafter referred to as "Obligee"), in the penal sum of **TEN (10) PERCENT OF THE AMOUNT OF THE TOTAL BID PRICE** of the Principal above named, submitted by said Principal to the Obligee for the work described below, for the payment of which sum in lawful money of the United States, well and truly to be made to the Obligee, we the Principal and Surety bind ourselves, our heirs, executors, administrators and successors, jointly and severally, firmly by these presents. In no case shall the liability of the Surety hereunder exceed the sum of

TEN PERCENT (10%) OF THE AMOUNT OF THE TOTAL BID PRICE

THE CONDITION OF THIS OBLIGATION IS SUCH, THAT:

WHEREAS, the Principal has submitted the above-mentioned Bid to the Obligee, as aforesaid, for certain construction specifically described as follows, for which bids are to be opened at 924B Emerald Bay Road, South Lake Tahoe, California 96150, for the construction of the

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

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

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.

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

(seal) _____
Principal

(seal) _____
Surety

Address: _____

NOTE: Signature of those executing for the Surety shall be properly acknowledged, and accompanied by the attached Acknowledgment.

ACKNOWLEDGMENT

State of _____
County of _____

On _____ before me, _____,
(here insert name and title of the officer)

personally appeared _____

_____ ,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

**County of El Dorado, State of California
Community Development Agency
Transportation Division**

P&C #017-C1599 / CIP NO. 95192

SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT

THIS AGREEMENT ("Agreement") approved by the Board of Supervisors this ____ day of _____, in the year of 2014, made and concluded, in duplicate, between the COUNTY OF EL DORADO, a political subdivision of the State of California, by the Community Development Agency, Transportation Division, thereof, the party of the first part hereinafter called "County," and [CONTRACTOR], the party of the second part hereinafter called "Contractor."

RECITALS:

WHEREAS, County has caused the above-captioned project to be let to formal bidding process, and

WHEREAS, Contractor has duly submitted a bid response for the captioned project upon which County has awarded this contract;

NOW, THEREFORE, the parties hereto have mutually covenanted and agreed, and by these presents do covenant and agree, each with the other, as follows:

Article 1. THE WORK

The improvement contemplated in the performance of the Contract is an improvement over which County shall exercise general supervision. County, therefore, shall have the right, but not the duty, to assume full and direct control over the Contract whenever County, at its sole discretion, shall determine that its responsibility is so required.

Contractor shall complete the Work as specified or indicated under the Bid Schedule(s) of County's Contract Documents entitled:

SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT

The project is located in El Dorado County, in the Tahoe Basin, north of the Upper Truckee River and west of US Highway 50/State Route 89, with an alignment roughly matching Sawmill Road from Lake Tahoe Blvd to approximately 300 feet east of the Echo View Drive/Sawmill Road intersection. The Work to be done is shown on the Plans, and generally consists of, but is not limited to:

Construction of a Class 1 bike path, excavation and grading, clearing and grubbing, asphalt concrete paving, tree removal, installing culverts, drainage channels, signing and striping, pavement markings, revegetation, dewatering, traffic control, and temporary erosion control. Other items or details not mentioned above, that are required by the Plans, Standard Specifications, or these Special Provisions, shall be performed, constructed, or installed.

Article 2. CONTRACT DOCUMENTS

The Contract Documents consist of: the Notice to Bidders; the bid forms which include the accepted Proposal, Bid Price Schedule and Total Bid, Subcontractors Listing, Local Agency DBE Commitment (Construction Contracts) Form; DBE Information Good Faith Efforts form; Equal Employment Opportunity Certification, Section 10285.1 Statement, Section 10162 Questionnaire, Section 10232 Statement, Noncollusion Affidavit, Iran Contracting Act Certification, Debarment, Suspension, Ineligibility, and Voluntary Exclusion Certification, Non-lobbying Certification for Federal-Aid Contracts, Disclosure of Lobbying Activities (Standard Form LLL), Form FHWA 1273; the Contract which includes this Agreement with all Exhibits

thereto, including the Fair Employment Practices Addendum and the Nondiscrimination Assurances, the Performance Bond; and Payment Bond, the drawings listed and identified as the Project Plans; the Special Provisions which incorporate by reference the State of California Department of Transportation (Caltrans) Standard Plans, dated May 2006, and Standard Specifications, dated May 2006, Amendments to the May 2006 Standard Specifications; and standard drawings from the Design and Improvement Standards Manual of County of El Dorado, revised March 8, 1994 including Resolutions 199-91 and 58-94 to adopt changes to the Design and Improvement Standards Manual; all Addenda incorporated in those documents before their execution; and all Contract Change Orders issued in accordance with the Contract Documents which may be delivered or issued after the Effective Date of this Agreement and are not attached hereto; the prevailing Labor Surcharge And Equipment Rental Rates (when required) as determined by Caltrans to be in effect on the date the Work is accomplished; all the obligations of County and of Contractor which are fully set forth and described therein; and all Contract Documents which are hereby specifically referred to and by such reference made a part thereof. All Contract Documents are intended to cooperate so that any work called for in one and not mentioned in the other is to be executed the same as if mentioned in all Contract Documents. Contractor agrees to perform all of its promises, covenants, and conditions set forth in the Contract Documents, and to abide by and perform all terms and conditions set forth therein. In case of conflict between this Agreement and any other contract document, this Agreement shall take precedence.

Article 3. COVENANTS AND CONTRACT PRICE

County hereby promises and agrees with Contractor to employ, and does hereby employ, said Contractor to provide the material and to do the Work according to the terms and conditions of the Contract Documents herein contained and referred to, for the prices hereinafter set forth, and hereby contracts to pay the same at the time, in the manner and upon the conditions herein set forth; and the said parties for themselves, their heirs, executors, administrators, successors and assigns, do hereby agree to the full performance of the covenants herein contained. County shall pay Contractor for the completion of the Work in accordance with the Contract Documents in current funds the Contract Prices named in Contractor's Bid and Bid Price Schedule, a copy of which is attached hereto as Exhibit A.

Article 4. COMMENCEMENT AND COMPLETION

The Work to be performed under the Contract shall commence on the date specified in the Notice to Proceed issued by County and the Work shall be fully completed within the time specified in the Notice to Proceed pursuant to Section 4 of the Special Provisions.

County and Contractor recognize that time is of the essence of the Agreement and that County will suffer financial loss if the Work is not completed within the time specified in Section 4 of the Special Provisions annexed hereto, plus any extensions thereof allowed in accordance with Section 4 of the Special Provisions. They also recognize the delays, expense, and difficulties involved with proving in a legal proceeding the actual loss suffered by County if the Work is not completed on time. Accordingly, instead of requiring any such proof, County and Contractor agree that as liquidated damages for delay (but not as a penalty) Contractor shall pay County the sum of **Three Thousand dollars (\$3,000.00) per day**, as liquidated damages and not as penalty, for each and every calendar day's delay in finishing the Work in excess of the number of days prescribed herein.

Article 5. INDEMNITY

To the fullest extent allowed by law, Contractor shall defend, indemnify, and hold County, its (their) officers, directors, the State of California (State), its officers and employees, directors, agents (excluding agents who are design professionals), State Contractors doing work within the project limits, the California Tahoe Conservancy (CTC), Tahoe Regional Planning Agency (TRPA), and the California Department of Parks and Recreation (State Parks), and each of its members, officers, agents, directors, and employees, any property owners from whom the County obtained easements, and any federal government agencies associated with this Contract harmless against and from any and all claims, suits, losses, demands, and liability for damages, including attorney's fees and other costs of defense brought for or on account of injuries to or death of any person, including but not limited to, workers and the public, or on account of injuries to or death of County, State, CTC, TRPA or State Parks employees, or any property owners from whom the County obtained easements, or federal government agency employees, or damage to property, or any economic, consequential or special damages which are claimed or which shall in any way arise out of or be connected

with Contractor's services, operations or performance hereunder, regardless of the existence or degree of fault or negligence on the part of County, the State, CTC, TRPA, State Parks, or any federal government agencies, any property owners from whom the County has obtained easements, the Contractor, subcontractors or employees of any of these, except for the active or sole negligence of County, State, CTC, TRPA, State Parks, or any federal government agencies, their officers and employees, or any property owners from whom the County obtained easements, or where expressly prescribed by statute.

The duty to indemnify and hold harmless the County, the State, CTC, TRPA, State Parks, any property owners from whom the County obtained easements, and any federal government agencies associated with this Contract specifically includes the duties to defend set forth in Section 2778 of the Civil Code. The insurance obligations of Contractor are separate, independent obligations under the Contract Documents, and the provisions of this defense and indemnity are not intended to modify, nor should they be construed as modifying or in any way limiting the insurance obligations set forth in the Contract Documents.

Article 6. VENUE

Any litigation arising out of this Contract shall be brought in County of El Dorado and governed by California law.

Article 7. NOTIFICATION OF SURETY COMPANY

The surety company shall familiarize itself with all of the conditions and provisions of this Contract, and shall waive the right of special notification of any change or modifications of this Contract or extension of time, or of decreased or increased work, or of the cancellation of the Contract, or of any other act or acts by County or its authorized agents, under the terms of this Contract; and failure to so notify the afore said surety company of changes shall in no way relieve the surety company of its obligation under this Contract.

Article 8. ASSIGNMENT OF ANTITRUST ACTIONS

In entering into a public works contract or a subcontract to supply goods, services, or materials pursuant to a public works contract, the Contractor offers and agrees and will require all of its subcontractors and suppliers to agree to assign to the awarding body all rights, title, and interest in and to all causes of action it may have under Section 4 of the Clayton Act (15 U.S.C. Sec. 15) or under the Cartwright Act (Chapter 2 (commencing with Section 16700) of Part 2 of Division 7 of the Business and Professions Code), arising from purchases of goods, services, or materials pursuant to the public works contract or the subcontract. This assignment shall be made and become effective at the time the awarding body tenders final payment to Contractor, without further acknowledgment by the parties.

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Government Code Sections 4450-4554, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under Government Code Sections 4450-4554 if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

Article 9. TERMINATION BY COUNTY FOR CONVENIENCE

County reserves the right to terminate the Contract at any time upon determination by County's Representative that termination of the Contract is in the best interest of County. County shall issue Contractor a written notice specifying that the Contract is to be terminated.

Upon receipt of said written notice, Contractor shall stop all work under the Contract except: (1) work specifically directed to be completed prior to termination, (2) work the Inspector deems necessary to secure the project for termination, (3) removal of equipment and plant from the site of the Work, (4) action that is

necessary to protect materials from damage, (5) disposal of materials not yet used in the Work as directed by County, and (6) clean up of the site.

If the Contract is terminated for County's convenience as provided herein, all finished or unfinished work and materials previously paid for shall, at the option of County, become its property. Contractor shall be paid an amount which reflects costs incurred for work provided to the date of notification of termination. In addition, Contractor shall be paid the reasonable cost, as solely judged by County, and without profit, for all work performed to secure the project for termination.

Article 10. TERMINATION BY COUNTY FOR CAUSE

If Contractor is adjudged as bankrupt or insolvent, or makes a general assignment for the benefit of its creditors or if a trustee or receiver is appointed for Contractor or for any of its property, or if Contractor files a petition to take advantage of any debtor's act, or to reorganize under the bankruptcy or applicable laws, or on more than one occasion fails to supply sufficient skilled workmen or suitable material or equipment, or on more than one occasion fails to make prompt payments to subcontractors for labor, materials, or equipment, or disregards the authority of County's Representative, or the Engineer, if one is appointed, or otherwise violates any provision of the Contract Documents, then County may, without prejudice to any other right or remedy and after giving Contractor and its Surety a minimum of ten (10) days from delivery of a written termination notice, terminate the services of Contractor and take equipment and machinery thereon owned by Contractor and finish the Work by whatever method County may deem expedient. In such case, Contractor shall not be entitled to receive any further payment until the Work is finished.

Without prejudice to other rights or remedies County may have, if Contractor fails to begin delivery of materials and equipment, to commence Work within the time specified, to maintain the rate of delivery of material, to execute the Work in the manner and at such locations as specified, or fails to maintain a work program which will ensure County's interest, or, if Contractor is not carrying out the intent of the Contract, an Inspector's written notice may be served upon Contractor and the Surety on its faithful performance bond demanding satisfactory compliance with the Contract. If Contractor or its Surety does not comply with such notice within five (5) days after receiving it, or after starting to comply, fails to continue, County may exclude it from the premises and take possession of all material and equipment, and complete the Work by County's own forces, by letting the unfinished Work to another Contractor, or by a combination of such methods.

Where Contractor's services have been so terminated by County, said termination shall not affect any right of County against Contractor then existing or which may thereafter accrue. Any retention or payment of monies by County due Contractor will not release Contractor from compliance with the Contract Documents.

If the unpaid balance of the Contract price exceeds the direct and indirect costs of completing the Work, including compensation for additional professional services, such excess shall be paid to Contractor. If the sums under the Contract are insufficient for completion, Contractor or Surety shall pay to County within five (5) days after the completion, all costs in excess of the Contract price. In any event, the cost of completing the Work shall be charged against Contractor and its Surety and may be deducted from any money due or becoming due from County.

If the Surety assumes any part of the Work, it shall take Contractor's place in all respect for that part and shall be paid by County for all Work performed by it in accordance with the Contract. If the Surety assumes the entire Contract, all money due Contractor at the time of its default shall be payable to the Surety as the work progresses, subject to the terms of this Contract.

The provisions of this Article shall be in addition to all other rights and remedies available to County under law.

If after notice of termination, it is determined for any reason that Contractor was not in default, the rights and obligations of the parties shall be the same as if the notice of termination had not been issued. The Contract shall be equitably adjusted to compensate for such termination.

Article 11. SUCCESSORS AND ASSIGNS

This Agreement shall bind and inure to the heirs, devisees, assignees, and successors in interest of Contractor and to the successors in interest of County in the same manner as if such parties had been expressly named herein.

Article 12. REPORTING ACCIDENTS

Contractor shall prepare and submit (within 24 hours of such incidents) reports of accidents at the site and anywhere else the work is in progress in which bodily injury is sustained or property loss in excess of Five Hundred Dollars (\$500.00) occurs.

Article 13. EMISSION REDUCTION

Contractor shall comply with emission reduction regulations mandated by the California Air Resources Board, and sign a certificate of knowledge thereof.

CERTIFICATE OF KNOWLEDGE – EMISSIONS REDUCTION REGULATIONS

I am aware of the emissions reduction regulations being mandated by the California Air Resources Board. I will comply with such regulations before commencing the performance of the Work and maintain compliance throughout the duration of this Contract.

Signed: _____ Date _____

Article 14. WORKERS’ COMPENSATION CERTIFICATION

Contractor shall comply with Labor Code Sections 3700 et seq., requiring it to obtain Workers’ Compensation Insurance, and sign a certificate of knowledge thereof.

CERTIFICATE OF KNOWLEDGE - LABOR CODE SECTION 3700

I am 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 self-insurance in accordance with the provisions of that Code, and I will comply with such provisions before commencing the performance of work of this Contract.

Signed: _____ Date _____

Article 15. WARRANTY

Contractor warrants to County that materials and equipment furnished for the Work will be good quality and new, unless otherwise required or permitted under the Contract Documents, that the Work will be free from defects or flaws and is of the highest quality of workmanship and that the Work will conform with the requirements herein. Work not conforming to these requirements, including substitutions not properly approved and authorized, shall be considered defective.

Article 16. RETAINAGE

The retainage from payment is set forth in “PAYMENT OF WITHHELD FUNDS” of the Special Provisions. Contractor may elect to receive one hundred percent (100%) of payments due as set forth in the Contract Documents, without retention, by depositing securities of equivalent value with County, in accordance with, and as set forth in Section 22300 of the Public Contract Code. Securities eligible for deposit hereunder shall be limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

Article 17. DISADVANTAGED BUSINESS ENTERPRISE (DBE) PROGRAM

Contractor or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Contractor shall carry out applicable requirements of 7 CFR Part 3016 in the award and administration of this United States Forest Service-assisted Contract. Contractor shall carry out applicable requirements of 49 CFR 18 and 49 CFR 26 in the award and administration of this UNITED STATES DEPARTMENT OF TRANSPORTATION (USDOT)-assisted Contract. 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 County deems appropriate. Contractor shall include this assurance in every subcontract entered into as a result of this Agreement. The applicable requirements of 7 CFR Part 3016 and 49 CFR 18 is as follows:

(a) *Contracting with small and minority firms, women's business enterprise and labor surplus area firms.*

(1) Contractor will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.

(2) Affirmative steps shall include:

- (i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
- (ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
- (iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
- (iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;
- (v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
- (vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (a)(2) (i) through (v) of this Article.

Bidder will take all necessary affirmative steps to assure that minority firms, women's business enterprises and labor surplus area firms are used when possible.

Article 18. PREVAILING WAGE REQUIREMENTS

In accordance with the provisions of California Labor Code sections 1770, et seq., including but not limited to 1773, 1773.1, 1773.2, 1773.6 and 1773.7, the general prevailing rate of wages in County in which the Work is to be done has been determined by the Director of the California Department of Industrial Relations. These wage rates appear in the California Department of Transportation publication entitled General Prevailing Wage Rates. Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, PO Box 420603, San Francisco CA 94142-0603, Telephone (415) 703-4708 or by referring to the web site at <http://www.dir.ca.gov/OPRL/PWD>. The rates at the time of the bid advertisement date of a project will remain in effect for the life of the project in accordance with the California Code of Regulations, as modified and effective January 27, 1997.

Copies of the general prevailing rate of wages in County in which the Work is to be done are also on file at the Department of Transportation's principal office, and shall be made available upon request, and in the case of projects involving federal funds, federal wage requirements as predetermined by the United States Secretary of Labor have been included in the Contract Documents. Addenda to modify the federal minimum wage rates, if necessary, will be issued as described in the Project Administration section of this Notice to Bidders.

In accordance with the provisions of Labor Code 1810, eight (8) hours of labor shall constitute a legal day's work upon all work done hereunder, and Contractor and any subcontractor employed under this Contract shall conform to and be bound by the provisions of Labor Code Sections 1810 through 1815.

In the case of federally funded projects, where federal and state prevailing wage requirements apply, compliance with both is required. This project is funded in whole or in part by federal funds. Comply with Section 7-1.11 of the special provisions and the Copeland Act (18 U.S.C. 874 and 29 CFR Part 3), the Davis-Bacon Act (40 U.S.C. 276a to 276a -7 and 29 CFR Part 5), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330 and 29 CFR Part 5).

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, Contractor and subcontractors shall pay not less than the higher wage rate. The Community Development Agency, Transportation Division 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 Contractor and subcontractors, Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

Article 19. NONDISCRIMINATION

- A. In connection with its performance under this Contract, Contractor shall comply with all applicable nondiscrimination statutes and regulations during the performance of this Contract including, but not limited to the following: Contractor, its employees, subcontractors and representatives shall not unlawfully discriminate against any employee or applicant for employment because of race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Contractor will take affirmative action to ensure that employees are not treated during employment, without regard to their race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Such action shall include, but not be limited to, the following: 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. Contractor shall post in conspicuous places, available to employees for employment, notices to be provided by State setting forth the provisions of this Fair Employment section. Contractor shall, unless exempt, comply with the applicable provisions of the Fair Employment and Housing Act (Government Code, Sections 12900 et seq.) and applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Sections 7285.0 et seq.); the applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations incorporated into this Agreement by reference and made a part hereof as if set forth in full; and Title VI of the Civil Rights Act of 1964, as amended. Contractor, its employees, subcontractors and representatives shall give written notice of their obligations under this clause as required by law.
- B. Where applicable, Contractor shall include these nondiscrimination and compliance provisions in any of its subcontracts that affect or are related to the Work performed herein.
- C. The Congress of the United States, the Legislature of the State of California and the Governor of the State of California, each within their respective jurisdictions, have prescribed certain nondiscrimination requirements with respect to contract and other work financed with public funds. Contractor agrees to comply with the requirements of Exhibit B, marked "Fair Employment Practices Addendum" and the requirements of Exhibit C, marked "Nondiscrimination Assurances," including Appendices A through D to Exhibit C, both of which exhibits and all of the Appendices to Exhibit C are incorporated herein and made by reference a part hereof. Contractor further agrees that any agreement entered into by Contractor with a third party for the performance of project-related work shall incorporate Exhibits B and C and Appendices A through D to Exhibit C (with third party's name replacing Contractor) as essential parts of such agreement to be enforced by that third party as verified by Contractor.
- D. Contractor's signature executing this Contract shall provide any certifications necessary under the federal laws and the laws of the State of California, including but not limited to Government Code Section 12990 and Title 2, California Code of Regulations, Section 8103.

Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Contractor shall carry out applicable requirements of 7 CFR Part 3016 in the award and administration of USDA assisted contracts. Failure by 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 County deems appropriate. Each subcontract signed by the bidder must include this assurance.

Article 20. CONTRACTOR ASSURANCES

By executing this Contract, Contractor certifies that it:

- a. Will abide by all administrative, contractual or legal remedies in instances where Contractor violates or breaches contract terms, and will comply with sanctions and penalties as the Contract Administrator deems appropriate.
- b. Will comply with the termination for cause and termination for convenience provisions of the Contract including the manner by which such termination may be effected and the basis for settlement afforded by those provisions.
- c. Will comply with Executive Order 11246 of September 24, 1965, entitled "Equal Employment Opportunity," as amended by Executive Order 11375 of October 13, 1967, and as supplemented in Department of Labor regulations (41 CFR Chapter 60).
- d. Will comply with the Copeland "Anti-Kickback" Act (18 U.S.C. 874) as supplemented in Department of Labor regulations (29 CFR Part 3).
- e. Will comply with the Davis-Bacon Act (40 U.S.C. 276a to 276a-7) as supplemented in Department of Labor regulations (29 CFR part 3).
- f. Will comply with Sections 103 and 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330) as supplemented by Department of Labor regulations (29 CFR Part 5).
- g. Will comply with County, State of California, and federal requirements and regulations pertaining to: (a) reporting; (b) patent rights with respect to any discovery or invention which arises or is developed in the course of or under this Contract; and (c) copyrights and rights in data.
- h. Will comply with all applicable standards, orders or requirements issued under Section 306 of the Clean Air Act (42 U.S.C. 1857 [h]), Section 508 of the Clean Water Act (33 U.S.C. 1368), Executive Order 11738, and Environmental Protection Agency regulations (40 CFR Part 15).
- i. Will comply with mandatory standards and policies relating to energy efficiency, which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub.: 94-163, 89 Stat. 871).
- j. Will comply with: (i) Section 504 of the Rehabilitation Act of 1973 (Rehabilitation Act) which prohibits discrimination on the basis of disability in federally assisted programs; (ii) the Americans with Disabilities Act (ADA) of 1990 which prohibits discrimination on the basis of disability irrespective of funding; and (iii) all applicable regulations and guidelines issued pursuant to both the Rehabilitation Act and the ADA.

Any subcontract entered into as a result of this Contract shall contain all of the provisions of this Article.

Article 21. BUSINESS LICENSE

The County Business License Ordinance provides that it is unlawful for any person to furnish supplies or services, or transact any kind of business in the unincorporated territory of El Dorado County without possessing a County Business License unless exempt under County Ordinance Code Section 5.08.070.

Contractor warrants and represents that it shall comply with all of the requirements of the County Business License Ordinance, where applicable, prior to beginning work under this Contract and at all times during the term of this Contract.

Article 22. CONTRACT ADMINISTRATOR

The County Officer or employee with responsibility for administering this Agreement is John Kahling, Deputy Director, Community Development Agency, Transportation Division or successor.

Article 23. AUTHORIZED SIGNATURES

The parties hereto represent that the undersigned individuals executing this Agreement on their behalf are fully authorized to do so by law or other appropriate instrument and to bind upon said parties the obligations set forth herein.

Article 24. PARTIAL INVALIDITY

If any provision of this Agreement is held by a court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions will continue in full force and effect without being impaired or invalidated in any way.

Article 25. ENTIRE AGREEMENT

This document and the documents referred to herein or exhibits hereto are the entire Agreement between the parties and they incorporate or supersede all prior written or oral agreements or understandings.

Article 26. TRAFFICKING IN PERSONS

Contractor may not:

1. Engage in severe forms of trafficking in persons;
2. Procure a commercial sex act; or
3. Use forced labor in the performance of the Contract.

Article 27. ELIGIBLE WORKERS

Contractor shall ensure that all employees complete an I-9 form to certify that they are eligible for lawful employment under the Immigration and Nationality Act (8 USC 1324a). Contractor shall comply with regulations regarding certification and retention of completed forms. Subcontractors shall also comply with these requirements.

Article 28. DRUG-FREE WORKPLACE

Contractor agrees to maintain a drug-free workplace in accordance with Government Code Section 8355, et seq. by doing all of the following:

- a. Publishing a statement notifying employees that the unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited in the person's or organization's workplace, and specifying actions that will be taken against employees for violations of this prohibition;
- b. Establishing a drug-free awareness program to inform employees about (1) the dangers of drug abuse in the workplace; (2) the person's or organization's policy of maintaining a drug-free workplace; (3) any available drug counseling, rehabilitation, and employee assistance programs; and (4) the penalties that may be imposed upon employees for drug abuse violations;
- c. Submitting a drug-free workplace certification form Exhibit D to County with the submittal of the signed Agreement;
- d. Requiring that each employee engaged in the performance of the contract be given a copy of the certification.

IN WITNESS WHEREOF, the said Community Development Agency, Transportation Division of the County of El Dorado, State of California, has caused this Agreement to be executed by County's Board of Supervisors, on its behalf, and the said Contractor has signed this Agreement the day and year written below.

COUNTY OF EL DORADO

Dated: _____

Board Date: _____

Chair, Board of Supervisors

Attest:
James S. Mitrisin
Clerk of the Board of Supervisors

Dated: _____

Board Date: _____

Deputy Clerk

CONTRACTOR

Dated: _____

License No.

Federal Employee Identification
Number

By: _____
President

By: _____
Corporate Secretary

NOTE: If Contractor is a corporation, the legal name of the corporation shall be set forth above together with the signature of the officer or officers authorized to sign contracts on behalf of the corporation; if Contractor is a co-partnership, the true name of the firm shall be set forth above together with the signature of the partner or partners authorized to sign contracts in behalf of the co-partnership; and if Contractor is an individual, his/her signature shall be placed above. Contractor executing this document on behalf of a corporation or partnership shall be prepared to demonstrate by resolution, article, or otherwise that they are appropriately authorized to act in these regards. For such corporation or partnership, such authority shall be demonstrated to the satisfaction of County. If signature is by an agent, other than officer of a corporation or a member of a partnership, an appropriate Power of Attorney shall be on file with the County prior to signing this document.

Mailing Address _____

Business Address _____

Email Address _____

Phone (____) _____

Fax (____) _____

**EXHIBIT A
CONTRACTOR'S BID AND BID SCHEDULE
SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

| ITEM NO. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT OF MEASURE | UNIT PRICE (in Figures) | ITEM TOTAL (in Figures) |
|----------|---|--------------------|-----------------|-------------------------|-------------------------|
| 1 | Mobilization | 1 | LS | | |
| 2 | Traffic Control | 1 | LS | | |
| 3 | Sweeping | 60 | DAY | | |
| 4 | Trench and Excavation Safety | 1 | LS | | |
| 5 | Humus for Topsoil Mix | 125 | CY | | |
| 6 | Mulch and Mulch Application | 250 | CY | | |
| 7 | Tackifier and Tackifier Application | 81,000 | SF | | |
| 8 | Install and Maintain Tire Wash Area (Off Pavement) | 4 | EA | | |
| 9 | Install and Maintain Concrete Wash Area | 2 | EA | | |
| 10 | Install and Maintain Weighted Fiber Rolls or Gravel-Filled Rolls | 5 | EA | | |
| 11 | Install and Maintain Filter Fence | 60 | LF | | |
| 12 | Install and Maintain Visqueen with Gravel Bags or Gravel-Filled Rolls | 1,130 | LF | | |
| 13 | Install and Maintain Sediment Trap and Drainage Inlet Protection | 8 | EA | | |
| 14 | Install and Maintain Wooden Tree Trunk Protection | 81 | EA | | |
| 15 | Install and Maintain Tree Protection and Construction Limit Fence | 9,158 | LF | | |
| 16 | Tree Removal | 116 | EA | | |
| 17 | 15" x 21" Arch CMP (In Pavement) | 97 | LF | | |
| 18 | 15" x 21" Arch CMP (Out of Pavement) | 200 | LF | | |
| 19 | 20" x 28" Arch CMP (In Pavement) | 24 | LF | | |

| ITEM NO. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT OF MEASURE | UNIT PRICE (in Figures) | ITEM TOTAL (in Figures) |
|----------|--------------------------------------|--------------------|-----------------|-------------------------|-------------------------|
| 20 | 20" x 28" Arch CMP (Out of Pavement) | 31 | LF | | |
| 21 | 15" x 21" Arch FES | 7 | EA | | |
| 22 | 20" x 28" Arch FES | 1 | EA | | |
| 23 | 36" Sediment Trap | 5 | EA | | |
| 24 | 48" Sediment Trap | 3 | EA | | |
| 25 | Log Sediment Barrier | 200 | LF | | |
| 26 | Coir Log | 2 | EA | | |
| 27 | Modified Grass-Lined Swale | 48 | LF | | |
| 28 | Sod Salvage and Transplant | 310 | SF | | |
| 29 | Rock-Lined Channel | 1,053 | LF | | |
| 30 | Rock Bowl | 283 | SF | | |
| 31 | Rock Dissipator | 279 | SF | | |
| 32 | Rock Slope Protection | 793 | SF | | |
| 33 | Class 1 Bike Path | 5,336 | LF | | |
| 34 | Striping and Markings | 475 | SF | | |
| 35 | Bike Path Signs | 10 | EA | | |
| 36 | Chain Link Fence | 1,338 | LF | | |
| 37 | Chain Link 10' Drive Gate | 3 | EA | | |
| 38 | Chain Link 4' Walk Gate | 2 | EA | | |
| 39 | Metal Rail Fence | 665 | LF | | |
| 40 | Misc Grading | 9 | CY | | |

| ITEM NO. | ITEM DESCRIPTION | ESTIMATED QUANTITY | UNIT OF MEASURE | UNIT PRICE (in Figures) | | ITEM TOTAL (in Figures) | |
|------------------|---|--------------------|-----------------|-------------------------|--|-------------------------|--|
| 41 | Misc AC Paving | 100 | SF | | | | |
| 42 | R&R AC Driveway | 1,627 | SF | | | | |
| 43 | Existing AC Pavement Removal (F) | 28 | SF | | | | |
| 44 | Dewatering Area 1 | 1 | EA | | | | |
| 45 | Dewatering Area 2 | 1 | EA | | | | |
| 46 | Dewatering Area 3 | 1 | EA | | | | |
| 47 | Dewatering Area 4 | 1 | EA | | | | |
| 48 | Dewatering Area 5 | 1 | EA | | | | |
| 49 | Dewatering Area 6 | 1 | EA | | | | |
| 50 | Overexcavate and Remove Unsuitable Material | 100 | CY | | | | |
| 51 | Rock Fracturing and Removal | 100 | CY | | | | |
| 52 | Winterization | 1 | LS | | | | |
| TOTAL BID | | | | | | | |

(F) Final Pay Quantity
(LS) Lump Sum

EXHIBIT B

FAIR EMPLOYMENT PRACTICES ADDENDUM

1. In the performance of this Agreement, Contractor will not discriminate against any employee for employment because of race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Contractor will take affirmative action to ensure that employees are treated during employment, without regard to their race, color, sex, sexual orientation, religion, ancestry or national origin, physical disability, medical condition, marital status, political affiliation, family and medical care leave, pregnancy leave or disability leave. Such action shall include, but not be limited to, the following: 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. Contractor shall post in conspicuous places, available to employees for employment, notices to be provided by State setting forth the provisions of this Fair Employment section.
2. Contractor and all subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 1290-0 et seq.), and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code, Section 12900(a-f), set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this Agreement by reference and made a part hereof as if set forth in full. Each of Contractor's contractors and all subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreements, as appropriate.
3. Contractor shall include the nondiscrimination and compliance provisions of this clause in all contracts and subcontracts to perform work under this Agreement.
4. Contractor will permit access to the records of employment, employment advertisements, application forms and other pertinent data and records by County, State, the State Fair Employment and Housing Commission or any other agency of the State of California designated by State, for the purposes of investigation to ascertain compliance with the Fair Employment section of this Agreement.
5. Remedies for Willful Violation:
 - (a) County may determine a willful violation of the Fair Employment provision to have occurred upon receipt of a final judgment to that effect from a court in an action to which Contractor was a party, or upon receipt of a written notice from the Fair Employment and Housing Commission that it has investigated and determined that Contractor has violated the Fair Employment Practices Act and had issued an order under Labor Code Section 1426 which has become final or has obtained an injunction under Labor Code Section 1429.
 - (b) For willful violation of this Fair Employment provision, County shall have the right to terminate this Agreement either in whole or in part, and any loss or damage sustained by County in securing the goods or services thereunder shall be borne and paid for by Contractor and by the surety under the performance bond, if any, and County may deduct from any moneys due or thereafter may become due to Contractor, the difference between the price named in the Agreement and the actual cost thereof to County to cure Contractor's breach of this Agreement.

EXHIBIT C

NONDISCRIMINATION ASSURANCES

Contractor hereby agrees that, as a condition to receiving any federal financial assistance from County or the State, acting for the U.S. Department of Transportation, it will comply with Title VI of the Civil Rights Act of 1964, 78 Stat. 252, 42 U.S.C. 2000d-42 U.S.C. 2000d-4 (hereinafter referred to as the Act), and all requirements imposed by or pursuant to Title 49, Code of Federal Regulations, Department of Transportation, Subtitle A, Office of the Secretary, Part 21, "Nondiscrimination in Federally-Assisted Programs of the Department of Transportation - Effectuation of Title VI of the Civil Rights Act of 1964" (hereinafter referred to as the Regulations), the Federal-aid Highway Act of 1973, and other pertinent directives, to the end that in accordance with the Act, Regulations, and other pertinent directives, no person in the United States shall, on the grounds of race, color, sex, national origin, religion, age or disability, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity for which County receives federal financial assistance from the Federal Department of Transportation. Contractor hereby gives assurance that Contractor will promptly take any measures necessary to effectuate this agreement. This assurance is required by subsection 21.7(a) (1) of the Regulations.

More specifically, and without limiting the above general assurance, Contractor hereby gives the following specific assurances with respect to its Federal-aid Program:

1. That Contractor agrees that each "program" and each "facility" as defined in subsections 21.23 (e) and 21.23 (b) of the Regulations, will be (with regard to a "program") conducted, or will be (with regard to a "facility") operated in compliance with all requirements imposed by, or pursuant to, the Regulations.
2. That Contractor shall insert the following notification in all solicitations for bids for work or material subject to the Regulations made in connection with the Federal-aid Program and, in adapted form, in all proposals for negotiated agreements:

Contractor hereby notifies all bidders that it will affirmatively insure that in any agreement entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, national origin, religion, age, or disability in consideration for an award.

3. That Contractor shall insert the clauses of Appendix A of this assurance in every agreement subject to the Act and the Regulations.
4. That the clauses of Appendix B of this Assurance shall be included as a covenant running with the land, in any deed effecting a transfer of real property, structures, or improvements thereon, or interest therein.
5. That where Contractor receives federal financial assistance to construct a facility, or part of a facility, the Assurance shall extend to the entire facility and facilities operated in connection therewith.
6. That where Contractor receives federal financial assistance in the form, or for the acquisition, of real property or an interest in real property, the Assurance shall extend to rights to space on, over, or under such property.
7. That Contractor shall include the appropriate clauses set forth in Appendix C and D of this Assurance, as a covenant running with the land, in any future deeds, leases, permits, licenses, and similar agreements entered into by Contractor with other parties:

Appendix C;

- (a) For the subsequent transfer of real property acquired or improved under the Federal-aid Program;
and

Appendix D;

- (b) For the construction or use of or access to space on, over, or under real property acquired, or improved under the Federal-aid Program.
8. That this assurance obligates Contractor for the period during which federal financial assistance is extended to the program, except where the federal financial assistance is to provide, or is in the form of, personal property or real property of interest therein, or structures, or improvements thereon, in which case the assurance obligates Contractor or any transferee for the longer of the following periods:
- (a) The period during which the property is used for a purpose for which the federal financial assistance is extended, or for another purpose involving the provision of similar services or benefits; or
 - (b) The period during which Contractor retains ownership or possession of the property.
9. That Contractor shall provide for such methods of administration for the program as are found by the U.S. Secretary of Transportation, or the official to whom he delegates specific authority, to give reasonable guarantee that Contractor, other recipients, sub-grantees, applicants, sub-applicants, transferees, successors in interest, and other participants of federal financial assistance under such program will comply with all requirements imposed by, or pursuant to, the Act, the Regulations, this Assurance and the Agreement.
10. That Contractor agrees that County, the United States and the State of California have a right to seek judicial enforcement with regard to any matter arising under the Act, the Regulations, and this Assurance.
11. Contractor shall not discriminate on the basis of race, religion, age, disability, color, national origin or sex in the award and performance of any State assisted contract or in the administration of County's DBE Program or the requirements of 49 CFR Part 26. Contractor shall take all necessary and reasonable steps under 49 CFR Part 26 to ensure non discrimination in the award and administration of State assisted contracts. County's DBE Race-Neutral Implementation Agreement is incorporated by reference in this Agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as a violation of this Agreement. Upon notification to the recipient of its failure to carry out its approved DBE Race-Neutral Implementation Agreement, State may impose sanctions as provided for under 49 CFR Part 26 and may, in appropriate cases, refer the matter for enforcement under 18 USC 1001 and/or the Program Fraud Civil Remedies Act of 1985 (31 USC 3801 et. seq.).

These Assurances are given in consideration of and for the purpose of obtaining any and all federal grants, loans, agreements, property, discounts or other federal financial assistance extended after the date hereof to County by State, acting for the U.S. Department of Transportation, and is binding on Contractor, other recipients, subgrantees, applicants, sub-applicants, transferees, successors in interest and other participants in the Federal-aid Highway Program.

APPENDIX A to EXHIBIT C

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

(1) **Compliance with Regulations:** 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) **Nondiscrimination:** 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) **Solicitations for Sub-agreements, Including procurements of Materials and Equipment:** In all solicitations either by competitive bidding or negotiation made by Contractor for work performed under s 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) **Information and Reports:** Contractor shall provide all information and reports required by the Regulations, or directives issued pursuant thereto, and shall permit access to Contractor's books, records, accounts, other sources of information, and its facilities as may be determined by County, State 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 County, State or the FHWA as appropriate, and shall set forth what efforts Contractor has made to obtain the information.

(5) **Sanctions for Noncompliance:** In the event of Contractor's noncompliance with the nondiscrimination provisions of this Agreement, County shall impose such agreement sanctions as it, the State 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) **Incorporation of Provisions:** 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 County, State 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 County or State enter into such litigation to protect the interests of County or State, and, in addition, Contractor may request the United States to enter into such litigation to protect the interests of the United States.

**APPENDIX B
to
EXHIBIT C
(NOT USED)**

draft

**APPENDIX C
to
EXHIBIT C
(NOT USED)**

draft

**APPENDIX D
to
EXHIBIT C
(NOT USED)**

draft

**EXHIBIT D
DRUG-FREE WORKPLACE CERTIFICATION**

COMPANY/ORGANIZATION NAME

The Contractor named above hereby certifies compliance with Government Code Section 8355 in matter relating to providing a drug-free workplace. The above named contractor will:

1. Publish a statement notifying employees that unlawful manufacture, distribution, dispensation, possession, or use of a controlled substance is prohibited and specifying actions to be taken against employees for violations, as required by Government Code Section 8355(a).
2. Establish a Drug-Free Awareness Program as required by Government Code Section 8355(b), to inform employees about all of the following:
 - a. The dangers of drug abuse in the workplace,
 - b. The person's or organization's policy of maintaining a drug-free workplace,
 - c. Any available counseling, rehabilitation, and employee assistance programs, and
 - d. Penalties that may be imposed upon employees for drug abuse violations.
3. Provide as required by Government Code Section 8355(c), that every employee who works on the proposed contract:
 - a. Will receive a copy of the company's drug-free policy statement, and
 - b. Will agree to abide by the terms of the company's statement as a condition of employment on the contract.

CERTIFICATION

I, the official named below, hereby swear that I am duly authorized legally to bind the contractor to the above-described certification. I am fully aware that this certification, executed on the date and in the county below, is made under penalty of perjury under the laws of the State of California.

OFFICIALS NAME

DATE EXECUTED

EXECUTED IN THE COUNTY OF

CONTRACTOR SIGNATURE

TITLE

FEDERAL I.D. NUMBER

County of El Dorado

PAYMENT BOND

(Section 3247, Civil Code)

Bond No. _____

WHEREAS, the County of El Dorado, a political subdivision of the State of California, hereafter referred to as "Obligee", has awarded to Contractor

_____,
hereafter referred to as "Principal", a contract for the work described as follows:

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

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

NOW, THEREFORE, we the undersigned Principal and Surety are held and firmly bound unto the Obligee, in the sum of

_____ Dollars,

(\$ _____) to be paid to the Obligee, for which payment we bind ourselves, jointly and severally.

THE CONDITION OF THIS OBLIGATION IS SUCH,

That if said Principal or its sub contractors shall fail to pay any of the persons named in Civil Code Section 3181, or amounts due under the Unemployment Insurance Code with respect to work or labor performed by such claimant, or any amounts required to be deducted, withheld, and paid over to the Franchise Tax Board from the wages of employees of the Principal and his sub contractors pursuant to Section 18806 of the Revenue and Taxation Code, with respect to such work and labor, that the Surety herein will pay for the same in an amount not exceeding the sum specified in this bond, otherwise the above obligation shall be void. In case suit is brought upon this bond, the Surety will pay a reasonable attorney's fee to be fixed by the court.

This bond shall inure to the benefit of any of the persons named in Civil Code Section 3181 as to give a right of action to such persons or their assigns in any suit brought upon this bond.

Dated: _____, 20_____.

Correspondence or Claims relating to this bond should be sent to the Surety at the following address:

PRINCIPAL

SURETY

ATTORNEY-IN-FACT

NOTE: Signatures of those executing for the Principal and for the Surety must be properly acknowledged, and a Power of Attorney attached for the Surety.

NOTARY ACKNOWLEDGMENTS ATTACHED

PRINCIPAL

ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
(here insert name and title of the officer)

personally appeared _____

_____ ,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

SURETY

ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
(here insert name and title of the officer)

personally appeared _____

_____ ,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

County of El Dorado

PERFORMANCE BOND

Bond No. _____

KNOW ALL MEN BY THESE PRESENTS, that we _____
the Contractor in the Contract hereto annexed, as Principal, and _____
as Surety, are held firmly bound unto the County of El Dorado, a political subdivision of the State of
California, hereinafter called the "Obligee" in the sum of _____ Dollars,
(\$ _____) lawful money of the United States, for which payment, well and truly to be made,
we bind ourselves, jointly and severally, firmly by these presents.

Signed, sealed and dated: _____

The condition of the above obligation is such that if said Principal as Contractor in the Contract hereto annexed shall faithfully perform each and all of the conditions of said Contract to be performed by him, and shall furnish all tools, equipment, apparatus, facilities, transportation, labor and material, other than material, if any, agreed to be furnished by the Obligee, necessary to perform and complete, and to perform and complete in a good and workmanlike manner, the work of **Contract No. PW 11-30593, CIP No. 95192 for the Sawmill 2B Bike Path and Erosion Control Project** in strict conformity with the terms and conditions set forth in the Contract hereto annexed, then this obligation shall be null and void; otherwise this bond shall remain in full force and effect and the said Surety will complete the Contract work under its own supervision, by Contract or otherwise, and pay all costs thereof for the balance due under terms of the Contract, and the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or to the work to be performed thereunder shall in any wise affect its obligation on this bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the work.

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.

This guarantee shall insure the Obligee during the work required by any Contract and for a period of one (1) year from the date of acceptance of the work against faulty or improper materials or workmanship that may be discovered during that time.

No right of action shall accrue under this bond to or for the use of any person other than the Obligee named herein.

Dated: _____, 20_____.

Correspondence or Claims relating to this bond should be sent to the Surety at the following address:

PRINCIPAL

SURETY

ATTORNEY-IN-FACT

NOTE: Signatures of those executing for the Principal and for the Surety must be properly acknowledged, and a Power of Attorney attached for the Surety.

PRINCIPAL

ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
(here insert name and title of the officer)

personally appeared _____

_____ ,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

SURETY

ACKNOWLEDGMENT

State of _____

County of _____

On _____ before me, _____,
(here insert name and title of the officer)

personally appeared _____

_____ ,

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of _____ that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature _____

(Seal)

2014 Withholding Exemption Certificate

590

The payee completes this form and submits it to the withholding agent.

Withholding Agent (Type or print)

Name _____

Payee

Name _____ SSN or ITIN FEIN CA Corp no. CA SOS file no.

Address (apt./ste., room, PO Box, or PMB no.) _____

City (If you have a foreign address, see instructions.) _____ State _____ ZIP Code _____

Exemption Reason

Check only one reason box below that applies to the payee.

By checking the appropriate box below, the Payee certifies the reason for the exemption from the California income tax withholding requirements on payment(s) made to the entity or individual.

- Individuals — Certification of Residency:**
I am a resident of California and I reside at the address shown above. If I become a nonresident at any time, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.
- Corporations:**
The corporation has a permanent place of business in California at the address shown above or is qualified through the California Secretary of State (SOS) to do business in California. The corporation will file a California tax return. If this corporation ceases to have a permanent place of business in California or ceases to do any of the above, I will promptly notify the withholding agent. See instructions for General Information D, Definitions.
- Partnerships or limited liability companies (LLCs):**
The partnership or LLC has a permanent place of business in California at the address shown above or is registered with the California SOS, and is subject to the laws of California. The partnership or LLC will file a California tax return. If the partnership or LLC ceases to do any of the above, I will promptly inform the withholding agent. For withholding purposes, a limited liability partnership (LLP) is treated like any other partnership.
- Tax-Exempt Entities:**
The entity is exempt from tax under California Revenue and Taxation Code (R&TC) Section 23701 _____ (insert letter) or Internal Revenue Code Section 501(c) _____ (insert number). If this entity ceases to be exempt from tax, I will promptly notify the withholding agent. Individuals cannot be tax-exempt entities.
- Insurance Companies, Individual Retirement Arrangements (IRAs), or Qualified Pension/Profit Sharing Plans:**
The entity is an insurance company, IRA, or a federally qualified pension or profit-sharing plan.
- California Trusts:**
At least one trustee and one noncontingent beneficiary of the above-named trust is a California resident. The trust will file a California fiduciary tax return. If the trustee or noncontingent beneficiary becomes a nonresident at any time, I will promptly notify the withholding agent.
- Estates — Certification of Residency of Deceased Person:**
I am the executor of the above-named person's estate or trust. The decedent was a California resident at the time of death. The estate will file a California fiduciary tax return.
- Nonmilitary Spouse of a Military Servicemember:**
I am a nonmilitary spouse of a military servicemember and I meet the Military Spouse Residency Relief Act (MSRRA) requirements. See instructions for General Information E, MSRRA.

CERTIFICATE OF PAYEE: Payee must complete and sign below.

Under penalties of perjury, I hereby certify that the information provided in this document is, to the best of my knowledge, true and correct. If conditions change, I will promptly notify the withholding agent.

Payee's name and title (type or print) _____ Telephone (____) _____

Payee's signature ► _____ Date _____

Instructions for Form 590

Withholding Exemption Certificate

References in these instructions are to the California Revenue and Taxation Code (R&TC).

General Information

Registered Domestic Partners (RDP) – For purposes of California income tax, references to a spouse, husband, or wife also refer to a Registered Domestic Partner (RDP) unless otherwise specified. For more information on RDPs, get FTB Pub. 737, Tax Information for Registered Domestic Partners.

A Purpose

Use Form 590, Withholding Exemption Certificate, to certify an exemption from nonresident withholding.

Form 590 does not apply to payments of backup withholding. For information on California backup withholding, go to ftb.ca.gov and search for **backup withholding**.

Form 590 does not apply to payments for wages to employees. Wage withholding is administered by the California Employment Development Department (EDD). For more information, go to edd.ca.gov or call 888.745.3886.

Do not use Form 590 to certify an exemption from withholding if you are a **Seller of California real estate**. Sellers of California real estate use Form 593-C, Real Estate Withholding Certificate, to claim an exemption from real estate withholding.

The following are excluded from withholding and completing this form:

- The United States and any of its agencies or instrumentalities.
- A state, a possession of the United States, the District of Columbia, or any of its political subdivisions or instrumentalities.
- A foreign government or any of its political subdivisions, agencies, or instrumentalities.

B Income Subject to Withholding

California Revenue and Taxation Code (R&TC) Section 18662 requires withholding of income or franchise tax on payments of California source income made to nonresidents of California.

Withholding is required on the following, but is not limited to:

- Payments to nonresidents for services rendered in California.
- Distributions of California source income made to domestic nonresident S corporation shareholders, partners, and members and allocations of California source income made to foreign partners and members.
- Payments to nonresidents for rents if the payments are made in the course of the withholding agent's business.

- Payments to nonresidents for royalties from natural resources with activities in California.
- Distributions of California source income to nonresident beneficiaries from an estate or trust.
- Endorsement payments received for services performed in California.
- Prizes and winnings received by nonresidents for contests in California.

However, withholding is optional if the total payments of California source income are \$1,500 or less during the calendar year.

For more information on withholding get FTB Pub. 1017, Resident and Nonresident Withholding Guidelines. To get a withholding publication, see Additional Information.

C Who Certifies this Form

Form 590 is certified by the payee. California residents or entities exempt from the withholding requirement should complete Form 590 and submit it to the withholding agent. The withholding agent is then relieved of the withholding requirements if the agent relies in good faith on a completed and signed Form 590 unless notified by the Franchise Tax Board (FTB) that the form should not be relied upon.

An incomplete certificate is invalid and the withholding agent should not accept it. If the withholding agent receives an incomplete certificate, the withholding agent is required to withhold tax on payments made to the payee until a valid certificate is received. In lieu of a completed certificate on the preprinted form, the withholding agent may accept as a substitute certificate a letter from the payee explaining why the payee is not subject to withholding. The letter must contain all the information required on the certificate in similar language, including the under penalty of perjury statement and the payee's taxpayer identification number. The withholding agent must retain a copy of the certificate or substitute for at least four years after the last payment to which the certificate applies, and provide it upon request to the FTB.

For example, if an entertainer (or the entertainer's business entity) is paid for a performance, the entertainer's information must be provided. **Do not** submit the entertainer's agent or promoter information.

The grantor of a grantor trust shall be treated as the payee for withholding purposes. Therefore, if the payee is a grantor trust and one or more of the grantors is a nonresident, withholding is required. If all of the grantors on the trust are residents, no withholding is required. Resident grantors can check the box on Form 590 labeled "Individuals — Certification of Residency."

D Definitions

Nonresident includes all of the following:

- Individuals who are not residents of California.
- Corporations not qualified through the California Secretary of State (CA SOS) to do business in California or having no permanent place of business in California.
- Partnerships or limited liability companies (LLCs) with no permanent place of business in California.
- Any trust without a resident grantor, beneficiary, or trustee, or estates where the decedent was not a California resident.

Foreign refers to non-U.S.

For more information about determining resident status, get FTB Pub. 1031, Guidelines for Determining Resident Status. Military servicemembers have special rules for residency. For more information, get FTB Pub. 1032, Tax Information for Military Personnel.

Permanent Place of Business:

A corporation has a permanent place of business in California if it is organized and existing under the laws of California or if it is a foreign corporation qualified to transact intrastate business by the CA SOS. A corporation that has not qualified to transact intrastate business (e.g., a corporation engaged exclusively in interstate commerce) will be considered as having a permanent place of business in California only if it maintains a permanent office in California that is permanently staffed by its employees.

E Military Spouse Residency Relief Act (MSRRA)

Generally, for tax purposes you are considered to maintain your existing residence or domicile. If a military servicemember and nonmilitary spouse have the same state of domicile, the MSRRA provides:

- A spouse shall not be deemed to have lost a residence or domicile in any state solely by reason of being absent to be with the servicemember serving in compliance with military orders.
- A spouse shall not be deemed to have acquired a residence or domicile in any other state solely by reason of being there to be with the servicemember serving in compliance with military orders.

Domicile is defined as the one place:

- Where you maintain a true, fixed, and permanent home.
- To which you intend to return whenever you are absent.

A military servicemember's nonmilitary spouse is considered a nonresident for tax purposes if the servicemember and spouse have the same domicile outside of California and the spouse is in California solely to be with the servicemember who is serving in compliance with Permanent Change of Station orders.

California may require nonmilitary spouses of military servicemembers to provide proof that they meet the criteria for California personal income tax exemption as set forth in the MSRRRA.

Income of a military servicemember's nonmilitary spouse for services performed in California is not California source income subject to state tax if the spouse is in California to be with the servicemember serving in compliance with military orders, and the servicemember and spouse have the same domicile in a state other than California.

For additional information or assistance in determining whether the applicant meets the MSRRRA requirements, get FTB Pub. 1032.

Specific Instructions

Payee Instructions

Enter the withholding agent's name.

Enter the payee's information, including the taxpayer identification number (TIN) and check the appropriate TIN box.

You must provide an acceptable TIN as requested on this form. The following are acceptable TINs: social security number (SSN); individual taxpayer identification number (ITIN); federal employer identification number (FEIN); California corporation number (CA Corp no.); or CA SOS file number.

Private Mail Box (PMB) – Include the PMB in the address field. Write "PMB" first, then the box number. Example: 111 Main Street PMB 123.

Foreign Address – Enter the information in the following order: City, Country, Province/Region, and Postal Code. Follow the country's practice for entering the postal code. **Do not** abbreviate the country's name.

Check the box that reflects the reason why the payee is exempt from the California income tax withholding requirement.

Withholding Agent Instructions

Keep Form 590 for your records. **Do not** send this form to the FTB unless it has been specifically requested.

For more information, contact Withholding Services and Compliance, see Additional Information.

The payee must notify the withholding agent if any of the following situations occur:

- The individual payee becomes a nonresident.
- The corporation ceases to have a permanent place of business in California or ceases to be qualified to do business in California.
- The partnership ceases to have a permanent place of business in California.
- The LLC ceases to have a permanent place of business in California.
- The tax-exempt entity loses its tax-exempt status.

If any of these situations occur, then withholding may be required. For more information, get Form 592, Resident and Nonresident Withholding Statement, Form 592-B, Resident and Nonresident Withholding Tax Statement, and Form 592-V, Payment Voucher for Resident and Nonresident Withholding.

Additional Information

For additional information or to speak to a representative regarding this form, call the Withholding Services and Compliance telephone service at:

Telephone: **888.792.4900**

916.845.4900

Fax: 916.845.9512

OR write to:

WITHHOLDING SERVICES AND
COMPLIANCE MS F182
FRANCHISE TAX BOARD
PO BOX 942867
SACRAMENTO CA 94267-0651

You can download, view, and print California tax forms and publications at **ftb.ca.gov**.

OR to get forms by mail write to:

TAX FORMS REQUEST UNIT
FRANCHISE TAX BOARD
PO BOX 307
RANCHO CORDOVA CA 95741-0307

For all other questions unrelated to withholding or to access the TTY/TDD numbers, see the information below.

Internet and Telephone Assistance

Website: **ftb.ca.gov**

Telephone: 800.852.5711 from within the
United States

916.845.6500 from outside the
United States

TTY/TDD: 800.822.6268 for persons with
hearing or speech impairments

Asistencia Por Internet y Teléfono

Sitio web: **ftb.ca.gov**

Teléfono: 800.852.5711 dentro de los
Estados Unidos
916.845.6500 fuera de los Estados
Unidos

TTY/TDD: 800.822.6268 personas con
discapacidades auditivas
y del habla

PAYEE DATA RECORD

(REVERSE)

| | |
|---------------------------------|---|
| <p>1</p> | <p>Requirement to Complete Payee Data Record</p> <p>A completed Payee Data Record is required for payments to all non-governmental entities and will be kept on file at the County of El Dorado Auditor-Controller's Office.</p> <p>Payees who do not wish to complete the Payee Data Record may elect to not do business with the County of El Dorado. If the payee does not complete the form and the required payee data is not otherwise provided, payment may be reduced for federal backup withholding and nonresident State income tax withholding. Amounts reported on Information Returns (1099) are in accordance with the Internal Revenue Code and the California Revenue and Taxation Code.</p> |
| <p>2</p> | <p>Enter the payee's legal business name. Sole proprietorships must also include the owner's full name. An individual must list his/her full name. The mailing address should be the address at which the payee chooses to receive correspondence. Do not enter payment address or lock box information here.</p> |
| <p>3</p> <p>4</p> | <p>Check the box that corresponds to the payee business type. Check only one box. Corporations must check the box that identifies the type of corporation. The County of El Dorado requires that all parties entering into business transactions that may lead to payment(s) from the County provide their Taxpayer Identification Number (TIN). The TIN is required by the California Revenue and Taxation Code Section 18646 to facilitate tax compliance enforcement activities and the preparation of Form 1099 and other information returns as required by the Internal Revenue Code Section 6109(a).</p> <p>The TIN for individuals and sole proprietorships is the Social Security Number (SSN). Only partnerships, estates, trusts, limited liability corporations and corporations will enter their Federal Employer Identification Number (FEIN).</p> <p>Are you a California resident or nonresident?</p> <p>A corporation will be defined as a "resident" if it has a permanent place of business in California or is qualified through the Secretary of State to do business in California.</p> <p>A partnership is considered a resident partnership if it has a permanent place of business in California. An estate is a resident if the decedent was a California resident at time of death. A trust is a resident if at least one trustee is a California resident.</p> <p>For individuals and sole proprietors, the term "resident" includes every individual who is in California for other than a temporary or transitory purpose and any individual domiciled in California who is absent for a temporary or transitory purpose. Generally, an individual who comes to California for a purpose that will extend over a long or indefinite period will be considered a resident. However, an individual who comes to perform a particular contract of short duration will be considered a nonresident.</p> <p>Payments to all nonresidents may be subject to withholding. Nonresident payees performing services in California or receiving rent, lease, or royalty payments from property (real or personal) located in California will have 7% of their total payments withheld for State income taxes. However, no withholding is required if total payments to the payee are \$1,500 or less for the calendar year. Nonresidents who have been granted a waiver on payments of California source income from the California Franchise Tax Board must submit a copy of the waiver.</p> <p>For information on Nonresident Withholding, contact the Franchise Tax Board at the numbers listed below: Withholding Services and Compliance Section: 1-888-792-4900 E-mail address: wscs.gen@ftb.ca.gov For hearing impaired with TDD, call: 1-800-822-6268 Website: www.ftb.ca.gov</p> <p>California nonresidents charging California sales tax are required to provide their California sales tax number.</p> |
| <p>5</p> | <p>Provide the name, title, signature, and telephone number of the authorized individual completing this form. Provide the date the form was completed.</p> |
| <p>6</p> | <p>This section must be completed by the department/office requesting the information.</p> |
| | <p>Privacy Statement</p> <p>Section 7(b) of the Privacy Act of 1974 (Public Law 93-579) requires that any federal, State, or local governmental agency, which requests an individual to disclose their social security account number, shall inform that individual whether that disclosure is mandatory or voluntary, by which statutory or other authority such number is solicited, and what uses will be made of it.</p> <p>It is mandatory to furnish the information requested. Federal law requires that payment for which the requested information is not provided is subject to federal backup withholding and State law imposes noncompliance penalties of up to \$20,000.</p> <p>You have the right to access records containing your personal information, such as your SSN. To exercise that right, please contact the County of El Dorado Auditor-Controller's Office in writing.</p> <p>All questions should be referred to the County of El Dorado Auditor-Controller's Office.</p> |

**COUNTY OF EL DORADO, CALIFORNIA
COMMUNITY DEVELOPMENT AGENCY
TRANSPORTATION DIVISION**

SPECIAL PROVISIONS

ANNEXED TO CONTRACT NO. PW 11-30593, CIP NO. 95192

SECTION 1. SPECIFICATIONS AND PLANS

1-1.01 GENERAL

The work embraced herein shall be done in accordance with the Standard Specifications dated May 2006 and the Standard Plans dated May 2006, of the Department of Transportation (Caltrans) insofar as the same may apply, County of El Dorado Design and Improvement Standards Manual, revised March 8, 1994, including Resolutions 199-91 and 58-94 to adopt changes to the Design and Improvement Standards Manual and these special provisions.

Attention is directed to Appendix A of these special provisions containing Amendments to May 2006 Standard Specifications as issued by the State of California Department of Transportation. These Amendments are hereby incorporated into the contract documents to replace or supplement those sections of the Standard Specifications where an Amendment exists, and are to be treated the same as the Standard Specifications in relation to other Contract Documents.

Amendments to the Standard Specifications set forth in these special provisions shall be considered as part of the Standard Specifications for the purposes set forth in Section 5-1.04, "Coordination and Interpretation of Plans, Standard Specifications and Special Provisions," 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.**

In case of conflict between the Standard Specifications, the Amendments to Standard Specifications, and these special provisions, the special provisions shall take precedence over and be used in lieu of the conflicting portions.

1-1.02 DEFINITIONS AND TERMS

As used in the contract documents, unless the context otherwise requires, the following terms have the following meanings:

APPROVAL OF CONTRACT – Execution of the Contract by the County of El Dorado Director of Transportation.

CALTRANS – The State of California Department of Transportation.

CONTRACTOR – Contractor responsible for constructing the **SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT**.

COUNTY – The County of El Dorado, a political subdivision of the State of California.

CTC – California Tahoe Conservancy.

CCC – California Conservation Corps.

DOT / DEPARTMENT / DEPARTMENT OF TRANSPORTATION / RECIPIENT / TRANSPORTATION DIVISION – The Community Development Agency, Transportation Division.

COUNTY SURVEYOR – The elected official holding the title of County Surveyor for the County of El Dorado, whose office is located in Placerville, California.

DBE – Disadvantaged Business Enterprise. This definition includes disadvantaged, small, minority, and women owned business enterprises.

DIRECTOR OF TRANSPORTATION – The Director of the Community Development Agency for the County of El Dorado.

ENGINEER / STATE HIGHWAY ENGINEER – The Director of the Community Development Agency for the County of El Dorado, or his/her authorized representative (Resident Engineer).

FHWA – The Federal Highway Administration.

LABORATORY – The established laboratory of the County of El Dorado Transportation Division or laboratories authorized by the Engineer to test materials and work involved in the contract.

LAHONTAN – The California Regional Water Quality Control Board (CRWQCB) in the Lake Tahoe area known as the Lahontan Region.

MUTCD – Current California Manual on Uniform Traffic Control Devices.

OSHA – Occupational Safety and Health Administration.

PLANS – The improvement plans titled “**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT**” approved by the County of El Dorado Transportation Division and the Standard Plans.

SEZ – Stream Environment Zone - Land Capability Class 1b.

STANDARD PLANS – The May 2006 edition of the Standard Plans of the State of California, Department of Transportation (Caltrans).

STANDARD SPECIFICATIONS – The May 2006 edition of the Standard Specifications for the State of California, Department of Transportation (Caltrans).

STPUD – South Tahoe Public Utility District.

SURVEYOR – An employee of the County of El Dorado Transportation Division who is a registered Land Surveyor or who is performing surveying under the license of a registered Land Surveyor who is also employed by the Transportation Division.

STATE – County of El Dorado.

STATE PARKS – State of California Department of Parks and Recreation.

TRCD – Tahoe Resource Conservation District.

TRPA – Tahoe Regional Planning Agency.

USDA – The United States Department of Agriculture.

USDOT – The United States Department of Transportation.

USFS – The United States Forest Service; also known as the USDA Forest Service – an agency of the United States Department of Agriculture.

All other Definitions and Terms are in accordance with the Standard Specifications.

SECTION 2. PROPOSAL REQUIREMENTS AND CONDITIONS

2-1.01 GENERAL

The bidders' attention is directed to the provisions in Section 2, "Proposal Requirements and Conditions," of the Standard Specifications and these special provisions for the requirements and conditions which it must observe in the preparation of the proposal form and the submission of the bid.

The first sentence of the second paragraph in Section 2-1.05, "Proposal Forms," of the Standard Specifications is amended to read:

"The Proposal form is bound together with the Notice to Bidders, Special Provisions, Agreement and attendant documents."

A Proposal shall be deemed "Non-Responsive" if the Proposal is submitted without the entire Contract Document package attached.

In addition to whom the bidder proposes to directly subcontract portions of the Work as required in accordance with Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications, the list of subcontractors shall also set forth the percentage of each bid item that will be done by each subcontractor listed. A sheet for listing the subcontractors is included in the Proposal.

The first sentence of the last paragraph in Section 2-1.07, "Proposal Guaranty," of the Standard Specifications is amended to read:

The bidder's bond, if used, shall conform to the bond form included in this proposal for the project "SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT", and shall be properly filled out and executed.

(DO NOT DETACH THE FORM)

The proposal shall be attached and submitted with the contract documents bid package in its entirety.

The form of bidder's bond mentioned in the last paragraph in Section 2-1.07, "Proposal Guaranty," of the Standard Specifications will be found in the Proposal. **Bid security shall be in an amount equal to at least ten percent (10%) of the total amount bid.**

In accordance with Public Contract Code Section 7106, a Noncollusion Affidavit is included in the proposal. Signing the proposal shall also constitute signature of the Noncollusion Affidavit.

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 Title 49 CFR (Code of Federal Regulations) Part 26 in the award and administration of USDOT 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 County deems appropriate. Each subcontract signed by the Contractor must include this assurance.

Failure of the bidder to fulfill the requirements of the special provisions for submittals required to be furnished after bid opening, including but not limited to escrowed bid documents, where applicable, may subject the bidder to a determination of the bidder's responsibility in the event it is the apparent low bidder on a future public works contracts.

During the performance of this Contract, the Contractor and its subcontractors shall not unlawfully discriminate against any employee or applicant for employment because of race, religion, color, national origin, ancestry, physical handicap, medical condition, marital status, age, or sex. The Contractor and its subcontractors shall ensure that the evaluation and treatment of their employees and applicants for employment are free of such discrimination. The Contractor and its subcontractors shall comply with the provisions of the Fair Employment and Housing Act (Government Code Section 12900 et seq.) and the applicable regulations promulgated thereunder (California Code of Regulations, Title 2, Section 7285.0 et seq.). The applicable regulations of the Fair Employment and Housing Commission implementing Government Code Section 12990, set forth in Chapter 5 of Division 4 of Title 2 of the California Code of Regulations are incorporated into this Contract by reference and made a part hereof as if set forth in full. The Contractor and its subcontractors shall give written notice of their obligations under this clause to labor organizations with which they have a collective bargaining or other agreement. Each subcontract signed by the bidder must include this assurance.

Contractor, sub recipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Contract. Contractor shall carry out applicable requirements of 7 CFR Part 3016 in the award and administration of USDA assisted contracts. Failure by 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 County deems appropriate. Each subcontract signed by the bidder must include this assurance.

2-1.02 REQUIRED LISTING OF PROPOSED SUBCONTRACTORS

Section 2-1.054, "Required Listing of Proposed Subcontractors," of the Standard Specifications is amended to read:

2-1.054 Required Listing of Proposed Subcontractors; Each Proposal shall have listed therein the name, contractor's license number and address of each subcontractor to whom the bidder proposes to subcontract portions of the work in an amount in excess of 0.5% of the total bid or \$10,000, whichever is greater, in accordance with the Subletting and Subcontracting Fair Practices Act, commencing with Section 4100 of the Public Contract Code. The Bidder shall also describe in the Subcontractor Listing the work to be performed by each subcontractor listed. The work to be performed by the subcontractor shall be shown by listing the bid item number, bid item description, and portion of the work to be performed by the subcontractor in the form of a percentage calculated by dividing the work to be performed by the subcontractor by the respective bid item amount(s) (not by the total bid price). The percentage of each bid item subcontracted may be submitted with the Bidder's bid or sent via email or fax to Donald Palaroan, County of El Dorado Community Development Agency, Transportation Division, email-donald.palaroan@edcgov.us, Fax-(530) 541-7049 by 4:00 p.m. on the first business day after the bid opening. The email or fax shall contain the name of each subcontractor submitted with the Bidder's bid along with the bid item number, bid item description, and the percentage of each bid item subcontracted, as described above. At the time the contract is awarded, all listed subcontractors shall be properly licensed to perform their designated portion of the work. The bidder's attention is directed to other provisions of the Act related to the imposition of penalties for failure to observe its provisions by using unauthorized subcontractors or by making unauthorized substitutions.

Forms for listing the subcontractors who will work on this Project are included in the Proposal section of these Contract Documents.

2-1.03 INCLUSION OF FEDERAL FORM 1273 CONTRACT PROVISIONS

In accordance with Section 12.9 of Chapter 12 of the Local Assistance Procedures Manual (LAPM), and Section 14, "FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS," of these Contract Documents the provisions of FHWA Form 1273 are required to be physically incorporated into each contract, subcontract and subsequent lower-tier subcontracts. The provisions may not be incorporated by reference.

The prime contractor is responsible for compliance with the requirements be all subcontractors and lower-tier subcontractors. Failure of the prime contractor to comply with the requirements by is grounds for County termination of the contract with the contractor and debarment of the contractor by FHWA.

2-1.04 FEDERAL LOBBYING RESTRICTIONS

Section 1352, Title 31, United States Code prohibits Federal funds from being expended by the recipient or any lower tier subrecipient 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 purposes in connection with this Federal-aid 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. Information regarding standard Form - LLL, "Disclosure of Lobbying Activities," is 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. A cumulative increase of \$25,000 or more in the amount paid or expected to be paid for influencing or attempting to influence a covered Federal action; or
- B. A change in the person(s) or individual(s) influencing or attempting to influence a covered Federal action; or,
- C. A change in the officer(s), employee(s), or member(s) influencing or attempting to influence a covered Federal action.

2-1.05 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 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.

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

The Contractor shall also carry out applicable requirements of 49 CFR Part 18 and 7 CFR 3016 in the award and administration of this USDOT and USFS assisted Contract, respectively. The applicable requirements of 49 CFR Part 18 and 7 CFR 3016 are as follows:

(a) *Contracting with small and minority firms, women's business enterprise and labor surplus area firms.*

- (1) Contractor will take all necessary affirmative steps to assure that minority firms, women's business enterprises, and labor surplus area firms are used when possible.
- (2) Affirmative steps shall include:
 - (i) Placing qualified small and minority businesses and women's business enterprises on solicitation lists;
 - (ii) Assuring that small and minority businesses, and women's business enterprises are solicited whenever they are potential sources;
 - (iii) Dividing total requirements, when economically feasible, into smaller tasks or quantities to permit maximum participation by small and minority business, and women's business enterprises;
 - (iv) Establishing delivery schedules, where the requirement permits, which encourage participation by small and minority business, and women's business enterprises;
 - (v) Using the services and assistance of the Small Business Administration, and the Minority Business Development Agency of the Department of Commerce; and
 - (vi) Requiring the prime contractor, if subcontracts are to be let, to take the affirmative steps listed in paragraphs (a)(2) (i) through (v) of this section.

Bidder will take all necessary affirmative steps to assure that minority firms, women's business enterprises and labor surplus area firms are used when possible.

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

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

Meet the DBE goal shown in the Notice 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 toward the County's Overall DBE goal and the State's federally mandated statewide overall DBE 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 Local Agency Bidder-DBE Commitment (Construction Contracts) Exhibit 15-G form included in the Proposal. If the form is not submitted with the bid, make a copy of the form from the Proposal 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 via fax or email to Donaldo Palaroan, El Dorado County Community Development Agency, Transportation Division, email-donaldopaloroan@edcgov.us, Fax-(530) 541-7049. DBE Commitment form must be received as noted 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 County requests it. If the County requests you to submit a DBE Commitment form, submit the completed form within four (4) business days of the request via email or fax to Donaldo Palaroan, El Dorado County Community Development Agency, Transportation Division, email-donaldopaloroan@edcgov.us, Fax-(530) 541-7049.

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 UDBE is participating in the contract.

If you do not submit the DBE Commitment form with the DBE quotes within the specified time, the County 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 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 submitted by the County no later than 4:00 pm on the 4th business day after bid opening via fax or email to Donaldo Palaroan, El Dorado County Community Development Agency, Transportation Division, email-donaldopaloroan@edcgov.us, Fax-(530) 541-7049.

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 County 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 your 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. Provide copies of supporting documents, as appropriate.
8. Any additional data to support demonstration of good faith efforts.

The County may consider DBE commitments of the 2nd and 3rd bidders when determining whether the low bidder make good faith efforts to meet the DBE goal.

In accordance with 49 CFR 26.53(d) if the County determines that the apparent successful bidder failed to meet the Good Faith Effort requirements, the County will provide the apparent successful low bidder an opportunity for administrative reconsideration before awarding the contract. The County will provide the apparent successful low bidder an opportunity to submit written documentation or argument and meet in person with the reconsideration official concerning the issue of whether it met the goal or made adequate good faith efforts to do so. The reconsideration official is someone who did not participate in the original determination that the goal or good faith effort was not met.

2-1.06 COMPLIANCE WITH FEDERAL, STATE, AND LOCAL AGENCY REQUIREMENTS

County is relying on federal assistance or grants as well as on state funds for all or a portion of the funding for the Work to be provided under this Contract. As a requirement of County's use of federal and state funds, County is required to comply with certain federal and state contracting requirements and to extend those requirements to its third party contracts. Contractor shall comply and shall require its subcontractors to comply with all applicable provisions of federal and state regulations, including those required by Caltrans and Federal Highway Administration (FHWA) grant funding requirements, regulations, and related executive orders regarding the use, expenditure, control, reporting, allowable costs and management of such funds as well as these requirements detailed in 49 CFR Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments. Contractor shall further comply with all applicable provisions of the Caltrans Local Assistance Procedures Manual and the Local Assistance Program Guidelines, all Title 23 Federal requirements and all applicable state and federal laws, regulations and policy; procedural or instructional memoranda. Failure of Contractor to comply with any federal or state provision may be the basis for withholding payments to Contractor and for such other remedies as may be appropriate including termination of this Contract. Contractor shall also comply with any flow-down or third-party contracting provisions which may be required under the federal and state regulations and which may apply to Contractor's subcontracts, if any, associated with this Contract. Contractor shall ensure that all subcontractors submit certifications regarding federal lobbying activities as required by Section 1352, Title

31, United State Code and that all such certifications are made a part of any subcontracts entered into as a result of this Contract.

2-1.07 COST PRINCIPLES

The Federal Acquisition Regulations in Title 48, CFR, Part 31 et seq. as applicable, are the governing factors regarding allowable elements of cost for the Work to be performed under this Contract.

- A. Contractor and its subcontractors shall comply with Office of Management and Budget Circular A-87, Cost Principles for State, Local And Indian Tribal Governments; with Federal administrative procedures pursuant to 49 CFR, Part 18, Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments; and with Contract Cost Principles, 48 CFR, Federal Acquisition Regulations System, Chapter 1, Parts 31 et seq., insofar as those regulations may apply to Contractor and its subcontractors. This provision shall apply to every sub-recipient receiving funds as a Contractor or subcontractor under this Contract.
- B. Any expenditures for costs for which Contractor has received payment or credit that are determined by subsequent audit to be unallowable under Office of Management and Budget Circular A-87, 48 CFR, Parts 31 et seq. or 49 CFR, Part 18 are subject to repayment by Contractor to County.
- C. Travel and per diem reimbursements, if applicable, and third-party contract reimbursements to subcontractors will be allowable as project costs only after those costs are incurred and paid for by Contractor.
- D. Notwithstanding any other provision of the Contract Documents to the contrary, payments to Contractor for mileage, travel or subsistence expenses, if applicable, for Contractor's staff or subcontractors claimed for reimbursement shall not exceed the lesser of (1) the rates to be paid to County employees under the current Board of Supervisors Travel Policy in effect at the time the expenses are incurred; or (2) the rates authorized to be paid to rank and file State employees under current State Department of Personnel Administration (DPA) rules. If the rates claimed are in excess of those authorized DPA rates, then Contractor is responsible for the cost difference, and any overpayments inadvertently paid by County shall be reimbursed to County by Contractor on demand within thirty (30) days of such demand.
- E. Contractor and its subcontractors shall establish and maintain accounting systems and records that properly accumulate and segregate funds received under this Agreement by line item. The accounting systems of Contractor and all subcontractors shall conform to Generally Accepted Accounting Principles (GAAP), shall enable the determination of incurred costs at interim points of completion, and shall provide support for reimbursement of payment vouchers or invoices.

2-1.08 BID PROTEST PROCEDURE

The protest procedure is intended to handle and resolve disputes related to the bid award for this project pursuant to Title 7 Code of Federal Regulations Chapter XXX Part 3016.36 (b)(12)(i)-(ii) and Title 49 Code of Federal Regulations Part 18 Section 18.36 (b) (12)(i)-(ii) and County of El Dorado policies and procedures. A protestor must exhaust all administrative remedies with the County of El Dorado before pursuing a protest with a Federal Agency. Reviews of protests by the Federal agency will be limited to:

- (i.) Violations of Federal law or regulations and the standards of 7 CFR Chapter XXX Part 3016.36 (b)(12)(i)-(ii) and 49 CFR Part 18 Subpart C Section 18.36 (b) (12)(i)-(ii). Violations of State of California or local law will be under the jurisdiction of the State of California or the County of El Dorado; and
- (ii.) Violation of the County of El Dorado's protest procedures for failure to review a complaint or protest. Protests received by the Federal agency other than those specified above will be referred to the County of El Dorado.

The protest procedure is an extension of the formal bid process and allows those who wish to protest the recommendation of an award after bid the opportunity to be heard.

Policy: Upon completion of the bid evaluation, the Community Development Agency, Transportation Division shall notify all bidders of the recommendation of award, the basis therefore, and the date and time on which the recommendation for award will be considered and acted upon by the Board of Supervisors. All bidders may attend the Board of Supervisors meeting at that time the agenda item is considered, address the Board of Supervisors, and be heard.

Procedure: If a bidder wishes to protest the award, the procedure shall be as follows:

1. The Community Development Agency, Transportation Division will review the bids received in a timely fashion under the terms and conditions of the Notice to Bidders, and notify the bidders in writing, at the FAX number designated in the bid, of its recommendation including for award or rejection of bids (“All Bidders Letter”).
2. Within five (5) working days from the date of the “All Bidders Letter,” the bidder protesting the recommendation for award shall submit a letter of protest to the Community Development Agency, Transportation Division, Attention Donald Palaroan, 924B Emerald Bay Road, South Lake Tahoe, CA 96150, and state in detail the basis and reasons for the protest. The bidder must provide facts to support the protest, including any evidence it wishes to be considered, together with the law, rule, regulation, or criteria on which the protest is based.
3. If the Community Development Agency, Transportation Division finds that protest to be valid, it may modify its award recommendations and notify all bidders of that decision. If the Community Development Agency, Transportation Division does not agree with the protest, or otherwise fails to resolve the protest, the Community Development Agency, Transportation Division will notify the bid protestor and all interested parties of its decision and the date and time that the recommendation for award will be agendized for the Board of Supervisors’ consideration and action. The Community Development Agency, Transportation Division shall also include in its report the details of the bid protest.
4. The bidder may attend the Board of Supervisors meeting at which the recommendation and bid protest will be considered. The Board of Supervisors will take comment from the bidder, staff, and members of the public who wish to speak on the item. In the event that the bidder is not in attendance at that time, the bid protest may be dismissed by the Board of Supervisors without further consideration of the merits; and,

The decision of the Board of Supervisors on the bid protest shall be final.

SECTION 3. AWARD AND EXECUTION OF CONTRACT

3-1.01 GENERAL

The Bidder’s attention is directed to the provisions in Section 3, “Award and Execution of Contract,” of the Standard Specifications and these Special Provisions for the requirements and conditions concerning award and execution of contract.

3-1.02 AWARD OF CONTRACT

Section 3-1.01, “Award of Contract”, of the Standard Specifications is amended to read:

3-1.01 Award of Contract; Bids will be considered for award by the Board of Supervisors. The County of El Dorado reserves the right after opening bids to reject any or all bids, to waive any irregularity in a bid, or to make award to the lowest responsive, responsible Bidder and reject all other bids, as it may best serve the interests of the County. The award of Contract, if it be awarded, will be to the lowest, responsive, responsible bidder whose Proposal complies with all the requirements prescribed. Such award, if made, will be made within sixty (60) days after the opening of the Proposals. This period will be subject to extension for such further period as may be agreed upon in writing between the Department and the bidder concerned.

All bids will be compared on the basis of the Proposal Pay Items and Bid Price Schedule of the quantities of work to be done.

The lowest responsive, responsible bidder shall be the bidder submitting the lowest additive total of all the bid items and meeting all other requirements. In the event of a discrepancy between the unit price bid and the extended unit total as stated on the Proposal, the amount bid for the unit price shall control and shall be utilized in calculating the additive total of the bid items for purposes of award, including revisions by Addenda, and as specified in the Proposal instructions.

3-1.03 EXECUTION OF CONTRACT

Attention is directed to the "Notice to Bidders" and "Proposal" for this Contract. Barring some unforeseen irregularity, Notice of Award will be sent to the lowest responsive responsible bidder after approval by the El Dorado County Board of Supervisors.

The successful bidder shall return the signed Contract, the Contract bonds, the Drug-Free Certification Form, a California Form 590-Withholding Exemption Certificate, a County Payee Data Record Form, and certificates of insurance to the Office of the Community Development Agency, Transportation Division within five (5) days, not including Saturdays, Sundays, and legal holidays, of the date of the Notice of Award of Contract Letter. Priority delivery or mail of these documents should be to the attention of Donaldo Palaroan, County of El Dorado Community Development Agency, Transportation Division at 924B Emerald Bay Road, South Lake Tahoe, California 96150, donaldo.palaroan@edcgov.us.

The failure of the successful bidder to furnish any bond required of it by law or by this Agreement, or the failure to execute the Contract, or the failure to provide the required insurance documents within the time fixed for the execution of the Contract and return of the bonds and insurance constitutes a failure to execute and return the Contract as required herein. Upon such failure or refusal to return the executed Agreement, or to provide the bonds or insurance documents required herein, the bidder's security shall be forfeited to County.

The Engineer will provide the successful bidder 5 sets of half-size Plans, 5 sets of full-size Plans, and 5 copies of the Contract Documents book after approval of the Contract.

SECTION 4. BEGINNING OF WORK, TIME OF COMPLETION AND LIQUIDATED DAMAGES

4-1.01 GENERAL

Attention is directed to the provisions in Section 8-1.06, "Time of Completion," and in Section 8-1.07, "Liquidated Damages," of the Standard Specifications and these special provisions.

Section 8-1.03, "Beginning of Work," of the Standard Specifications shall not apply and shall be replaced with the following:

The contract working days shall begin on the date stated in the Notice to Proceed issued by the Community Development Agency, Transportation Division.

The Engineer will issue Notice to Proceed within ten (10) days of contract approval.

The work shall be diligently prosecuted to completion before the expiration of **SIXTY WORKING DAYS.**

The Contractor shall pay to the County of El Dorado the sum of three thousand dollars (**\$3,000.00**) per day, for each and every calendar day's delay in finishing the work in excess of **SIXTY (60) WORKING DAYS.** The County will suspend the assessment of liquidated damages for each day between October 15 and May 1 on which climatic conditions or governing agency rules and regulation prohibit the Contractor from performing the Work.

Contractor is advised that most construction operations are prohibited by local agency ordinances in the period between October 15 and May 1. Contractor is responsible for contacting the TRPA and Lahontan to determine the conditions under which this requirement may be modified for specific types of work and for unusual weather conditions.

Should the Contractor begin work in advance of receiving the Notice to Proceed, any work performed by the Contractor in advance of the date stated in the Notice to Proceed shall be considered as having been done by the Contractor at the Contractor's own risk and as a volunteer with the exception of preparing and obtaining the Engineer's acceptance of the Construction Schedule as specified in Section 4-1.03, "Contractor Submittals," of these special provisions.

TEMPORARY SUSPENSION OF WORK DUE TO INCLEMENT WEATHER

Due to the timing of the start of construction if, from the contractor's schedule and the long-range forecast, the Engineer determines that the predicted weather window will not allow the Contractor to complete an item of work before the onset of inclement weather, the Engineer may order a temporary suspension of the proposed item of work.

During the temporary suspension, winterization cost or costs associated with water pollution control within the County's project area shall be made in accordance with "Winterization" elsewhere in these Special Provisions. Any other contract work required to be performed within the County's project area during the temporary suspension (including, but not limited to items such as dust control and traffic control) shall be paid for via their respective contract items.

Since the Contractor is being made aware of this temporary suspension of work prior to bid submittal, full compensation for all direct and indirect costs (including, but not limited to time-related overhead, home office overhead, field office overhead, and mobilization or remobilization) related to this temporary suspension of work shall be considered as included in the various items of work and no additional payment will be made therefore. Except as otherwise provided herein, the Contractor shall at all times remain responsible for the obligations set forth in Section 7 of the Standard Specifications, "Legal Relations and Responsibility".

4-1.02 CONSTRUCTION SCHEDULE AND WORK HOURS

Contractor shall schedule its work day between the hours of 8:00 a.m. to 6:30 p.m. weekdays. These work hours may be extended only with the written approval of the Engineer. A working day shall be defined as Monday through Friday excluding the following County-observed holidays: New Year's Day, Martin Luther King Jr.'s Birthday, Washington's Birthday, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving, Friday after Thanksgiving, Christmas Eve, and Christmas Day. Contractor may work on Saturdays, Sundays, or County-observed holidays, from 8:00 a.m. to 5:00 p.m., only with the written approval of the Engineer. If the Engineer approves work on such days and Contractor works on the controlling operation or operations for at least 60% of the total daily time, these days will be counted as working days. Controlling operation is defined in Section 8-1.06 "Time of Completion" of the Standard Specifications.

4-1.02A COMMENCEMENT OF WORK REQUIREMENTS

The Contract working days shall begin on the date specified in the Notice to Proceed letter issued to Contractor. The Engineer will review and work with Contractor cooperatively to approve Contractor's submittals and schedule the pre-grade inspection by TRPA within ten (10) days of the date specified in the Notice to Proceed. Contractor shall install Temporary Erosion Control measures within ten (10) days of the date specified in the Notice to Proceed.

Contractor shall complete the work within: **sixty (60) working days** of the date specified in the Notice to Proceed.

The Contract days shall begin on the date specified in the Notice to Proceed, and Contractor may not begin work (other than the temporary erosion control installation) until all required submittals are approved by the Engineer and TRPA completes its required pre-grade inspection.

Contractor's attention is directed to Section 10-1.01, "Order of Work," in these Special Provisions.

4-1.03 CONTRACTOR SUBMITTALS

Contractor may provide the Submittals required in Section 4-1.03, "Contractor Submittals," to the Engineer as early as ten (10) working days after the receipt of the Notice of Award, but must comply with these submittal requirements within five (5) working days of receipt of Notice to Proceed, or as stated below. Contractor shall provide a minimum of two (2) hardcopies of each submittal listed below. Additional copies may be required at the request of the Engineer.

- Contractor must submit a Construction Schedule for the Engineer's review and approval. The first two paragraphs of Section 8-1.04, "Progress Schedule," of the Standard Specifications shall not apply. If the Engineer requires changes to the initial Construction Schedule, Contractor shall provide the Engineer with a revised schedule within five (5) working days of receipt of notification requiring changes to the initial Construction Schedule. Subsequent Schedules shall be updated and submitted to the Engineer at the weekly meetings if Contractor falls behind the initially approved schedule by more than three (3) days. Contents of all schedules shall conform to paragraphs three, four, and five of Section 8-1.04, "Progress Schedule," of the Standard Specifications.
- Contractor must submit the name and address of its authorized representative who is to receive all written notices under this Contract.
- Contractor must submit a Temporary Erosion Control Plan that shall include the locations and descriptions of erosion control measures and daily clean up measures in accordance with all federal, state, and local agency regulations, the Plans, the Storm Water Pollution Prevention Plan (SWPPP), and these Special Provisions. Contractor may use the temporary erosion control measures and details shown on the Plans in preparing a Temporary Erosion Control Plan. However, Contractor's Temporary Erosion Control Plan shall show specifically where filter fence, weighted fiber rolls or gravel-filled rolls, and gravel bags will be applied, where the tire wash and concrete wash areas will be located, and any additional temporary erosion control required due to Contractor's method of operation or required to meet TRPA and Lahontan permit requirements. Contractor's Temporary Erosion Control Plan shall also detail specifically what temporary erosion control measures will be applied and where the temporary erosion control measures will be placed in any area to be used to store Contractor's materials, equipment, and supplies. All temporary erosion control measures, their implementation, and maintenance shall conform to the Plans and the provisions of the SWPPP outlined in Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions. A complete copy of the SWPPP is available for review at the office of the Community Development Agency, Transportation Division, 924B Emerald Bay Road, South Lake Tahoe, CA 96150. Contractor shall not propose or use alternative temporary erosion control measures unless the Contract Documents specify where and which alternatives may be used. Contractor's Temporary Erosion Control Plan is subject to TRPA review and approval.
- Contractor must submit a Traffic Control Plan for the Engineer's review and approval. Contractor must use the requirements specified in the Traffic Control Plan contained in the Plans in preparing its Traffic Control Plan. Contractor's Plan must also coordinate with the traffic control plan provisions described in Section 10-1.04, "Traffic Control Plan," of these Special Provisions. All Traffic Control shall be in accordance with Section 10-1.03, "Maintaining Traffic," of these Special Provisions.
- Contractor must submit a Spill Contingency Plan in accordance with Section 5-1.56, "Spill Contingency Plan," of these Special Provisions.
- The Dewatering Plan shall be in accordance with Section 10-1.20, "Dewatering," of these Special Provisions and in accordance with the applicable Item descriptions.
- The Dust Control Plan shall be in accordance with Section 5-1.55, "Dust and Tracking Control," of these Special Provisions and in accordance with the applicable Item descriptions.

- Contractor shall submit specifications for low pressure equipment (LPG) to be used in the areas specified in accordance with Section 10-1.02, "Equipment Specifications," of these Special Provisions.
- Contractor must submit for County and Lahontan review any proposed revisions to the SWPPP. Upon approval, County will enter the revision into the SWPPP Amendment Log.
- Contractor must submit a set of "As-Constructed Plans". The "As-Constructed Plans" shall contain changes made to the Plans to reflect actual construction of the proposed improvements. The "As-Constructed Plans" shall be current and updated in a timely manner so the Plans and its information are made available to the Engineer for review during the weekly meetings. Contractor shall make "As-Constructed Plans" corrections and additions using red ink. Corrections and additions are, but not limited to: changes to pipes, channels, drainage structures, and other drainage details; corrected typical sections, base, and surfacing details; changes in vertical and horizontal alignment; establish or re-establish right-of-way markers, monuments, and bench marks; new, replaced, removed or abandoned utilities, especially underground; and, any other construction details or appurtenances not shown on the Plans. When Engineer has made the final inspection as provided in Section 5-1.37, "Final Inspection and Acceptance," of these Special Provisions, then the Contractor shall submit the complete set of "As-Constructed Plans".

With the exception of the "As-Constructed Plans," no mobilization payments will be made until **all** of the above submittals have been reviewed and approved by the Engineer. When weekly schedule update submittals are required, the provisions regarding this submittal and progress payments shall be in accordance with paragraphs three, four, and five of Section 8-1.04, "Progress Schedule," of the Standard Specifications.

Contractor must comply with the time frames listed in the applicable Special Provisions Sections for the following submittals:

- Contractor must submit a Shoring and Excavation Plan in accordance with Section 7-1.01E, "Trench Safety," of the Standard Specifications, as it applies to sediment trap and pipe installations (See Section 10-1.26, "Shoring and Excavation Plan," of these Special Provisions).
- Contractor must submit AC mix designs and testing in accordance with Section 10-1.15 "Asphalt Concrete," of these Special Provisions.
- Contractor must submit concrete mix designs in accordance with Section 90, "Portland Cement Concrete," of the Standard Specifications and Section 10-1.19, "Concrete Structures," of these Special Provisions.
- Contractor must submit Certificates of Compliance in accordance with Section 5-1.53, "Certificates of Compliance," of these Special Provisions.
- Contractor must submit a plan for driveway access in accordance with Section 10-1.03, "Maintaining Traffic," of these Special Provisions.
- Contractor must submit shop drawings for sediment traps, chain link fence and gates, and metal rail fence in accordance with the Item descriptions.
- Contractor must submit information regarding the equipment to be used for the application of mulch, and tackifier in accordance with Section 10-1.10D, "Excavating and Grading, Materials," of these Special Provisions.

Approval of all submittals by the Engineer does not relieve Contractor of its responsibility to perform the work in an acceptable manner and in accordance with the Plans, the Standard Specifications, and these Special Provisions. County review is only for general conformance with the design concept of the project and general compliance with the information given in the Contract Documents. Any action is subject to the requirements of the Plans, Standard Specifications, and these Special Provisions. Contractor is responsible

for dimensions which shall be confirmed and correlated at the project site; fabrication processes and techniques of construction; coordination of its work with that of all other trades, and the satisfactory performance of its work.

4-1.04 PRE-CONSTRUCTION CONFERENCE AND WEEKLY MEETINGS

A pre-construction conference will be scheduled by the Engineer between the Engineer and the Contractor or its representative after the project is awarded and prior to the issuance of the Notice to Proceed. The conference will be held at the County of El Dorado Community Development Agency, Transportation Division, Tahoe Engineering Office, 924B Emerald Bay Road, South Lake Tahoe to discuss the work each DBE subcontractor will perform and important aspects of the project and all essential matters pertaining to the prosecution and the satisfactory completion of the project as required, and the Contractor shall bring all required schedules and documents to the meeting.

Before work can begin on a subcontract, the Department will require the Contractor to submit a completed "Subcontracting Request," Exhibit 16-B of the Caltrans Local Assistance Procedures Manual (LAPM) or equivalent. When the Engineer receives the completed form it will be checked for agreement of the first tier subcontractors and DBE's. The Engineer will not approve the request when it identifies someone other than the DBE listed in the previously completed "LOCAL AGENCY BIDDER – DBE COMMITMENT (Construction Contracts) Exhibit 15-G" form or first tier subcontractor listed in the Subcontractor Listing form of the Proposal. The "Subcontracting Request" will not be approved until any discrepancies are resolved. If an issue cannot be resolved at that time, or there is some other concern, the Engineer will require the Contractor to eliminate the subcontractor in question before signing the subcontracting request. A change in the DBE or first tier subcontractor may be addressed during a substitution process at a later date.

Suppliers, vendors, or manufacturers listed on the "LOCAL AGENCY BIDDER – DBE COMMITMENT (Construction Contracts) Exhibit 15-G" form will be compared to those listed in the completed Exhibit 16-I "Notice of Materials to be Used", of the LAPM or equivalent. Differences must be resolved by either making corrections or requesting a substitution.

Substitutions will be subject to the Subletting and Subcontracting Fair Practices Act (FPA). The Department will require contractors to adhere to the provisions within Subletting and Subcontracting Fair Practices Act (State Law) Sections 4100-4114. FPA requires the Contractor to list all subcontractors in excess of one half of one percent (0.5%) of the Contractor's total bid or \$10,000, whichever is greater. The statute is designed to prevent bid shopping by contractors. The FPA explains that a contractor may not substitute a subcontractor listed in the original bid except with the approval of the awarding authority.

The Engineer will give the Contractor a blank Exhibit 17-F, "Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First-Tier Subcontractors," from the Caltrans LAPM. This form must be completed and returned to the County with the Acceptance Statement, which accompanies the Proposed Final Estimate.

4-1.05 PROSECUTION AND PROGRESS

Attention is directed to the provisions of Section 8, "Prosecution and Progress," of the Standard Specifications.

Contractor shall notify the Engineer within five (5) working days of any occurrence which, in Contractor's opinion, entitles it to an extension of time for completion. Such notice shall be in writing. The Engineer shall acknowledge, in writing, receipt of any such claim by Contractor within five (5) working days of its receipt.

SECTION 5. GENERAL

5-1.01 NOT USED

5-1.02 GUARANTEE

GENERAL

The Contractor shall guarantee the work is in accordance with contract requirements and remains free from substantial defects in materials and workmanship for a period of one year after contract acceptance. For certain portions of the work where the Director relieves the Contractor of responsibility in accordance with Section 7-1.15, "Relief from Maintenance and Responsibility," of the Standard Specifications, the guarantee period starts on the relief date and ends one year therefrom.

Substantial defects in materials and workmanship means defective work objectively manifested by damaged, displaced, or missing parts or components and workmanship resulting in improper function of materials, components, equipment, or systems, as installed or manufactured by the Contractor, subcontractor, supplier, or manufacturer.

During the guarantee period, the Contractor shall repair or replace contract work and associated work which is not in accordance with contract requirements or has substantial defects in materials and workmanship. The Contractor shall perform the corrective work with no expense to the Department other than State-provided field inspection services.

The guarantee of work excludes damage or displacement that is outside the control of the Contractor and caused by normal wear and tear, improper operation, insufficient maintenance, abuse, unauthorized modification, or natural disaster as described in Section 7-1.165, "Damage by Storm, Flood, Tsunami or Earthquake," of the Standard Specifications.

The Contractor shall have the same insurance coverage during corrective work operations as prior to contract acceptance, in accordance Section 7, "Contractor's Insurance," of the Standard Specifications and these Special Provisions.

The contract bonds furnished in accordance with Section 3-1.02, "Contract Bonds," of the Standard Specifications must remain in full force and effect during the guarantee period and until all corrective work is complete.

In the case of conflict between this guarantee provision and any warranty provision included in the contract, the warranty provision shall govern for the specific construction product or feature covered.

CORRECTIVE WORK

During the guarantee period, the Department will monitor performance of the highway facilities completed by the Contractor and will perform a thorough review of the contract work at least sixty (60) days before the expiration of the one-year guarantee.

If the Engineer discovers contract work not in compliance with contract requirements or that has substantial defects in materials and workmanship, at any time during the guarantee period, a list of items that require corrective work will be developed and forwarded to the Contractor. Within fifteen (15) days of receipt of a list, the Contractor shall submit to the Engineer a detailed plan for performing corrective work. The work plan shall include a start to finish schedule. It shall include a list of labor, equipment, materials, and any special services intended to be used. It shall clearly show related work including traffic control, temporary delineation, and permanent delineation.

The Contractor shall start the corrective and related work within fifteen (15) days of receiving notice from the Engineer that the Contractor's work plan is approved. The corrective work shall be diligently prosecuted and completed within the time allotted in the approved work plan.

If the Engineer determines that corrective work, covered by the guarantee, is urgently needed to prevent injury or property damage, the Engineer will give the Contractor a request to start emergency repair work and a list of items that require repair work. The Contractor shall mobilize within twenty-four (24) hours and diligently perform emergency repair work on the damaged highway facilities. The Contractor shall submit a work plan within five (5) days of starting emergency repair work.

If the Contractor fails to commence and execute, with due diligence, corrective work and related work required under the guarantee in the time allotted, the Engineer may proceed to have the work performed by

State forces or other forces at the Contractor's expense. Upon demand, the Contractor shall pay all costs incurred by the Department for work performed by State forces or other forces including labor, equipment, material, and special services.

PAYMENT

Full compensation for performing corrective work; and related work such as traffic control, temporary delineation, and permanent delineation, and to maintain insurance coverage and bonds, shall be considered as included in the contract prices paid for the various contract items of work and no separate payment will be made therefor.

5-1.03 LINES AND GRADES

Stakes or marks will be set by the Engineer in conformance with Section 5-1.57, "Construction Staking," of these Special Provisions.

5-1.04 CONTRACT BONDS

Attention is directed to Section 3-1.02, "Contract Bonds," of the Standard Specifications and these Special Provisions.

Bonds shall be a Performance Bond equal to one hundred percent (100%) of the total amount payable by the terms of the Contract and a Payment Bond equal to one hundred percent (100%) of the total amount payable under the terms of the Contract.

5-1.05 COST REDUCTION INCENTIVE

Attention is directed to Section 5-1.14, "Cost Reduction Incentive," of the Standard Specifications.

Prior to preparing a written cost reduction proposal, Contractor shall request a meeting with the Engineer to discuss the proposal in concept. Items of discussion will also include permit issues, impact on other projects, impact on the project schedule, peer reviews, overall merit of the proposal, and review times required by the Department and other agencies.

If a cost reduction proposal submitted by Contractor, and subsequently approved by the Engineer, provides for a reduction in contract time, fifty percent (50%) of that contract time reduction shall be credited to County by reducing the contract working days, not including plant establishment if applicable. Attention is directed to "Beginning of Work, Time of Completion and Liquidated Damages" of these Special Provisions regarding the working days.

5-1.06 LABOR NONDISCRIMINATION

Attention is directed to the following Notice that is required by Chapter 5 of Division 4 of Title 2, California Code of Regulations.

NOTICE OF REQUIREMENT FOR NONDISCRIMINATION PROGRAM (GOV. CODE, SECTION 12990)

Attention is directed to the "Nondiscrimination Clause" set forth in Section 7-1.01A(4), "Labor Nondiscrimination," of the Standard Specifications, which is applicable to all nonexempt State or County contracts and subcontracts, and to the "Standard California Nondiscrimination Construction Contract Specifications" set forth therein. The Specifications are applicable to all nonexempt State or County construction contracts and subcontracts of \$5,000 or more.

Attention is also directed to the Special Provisions and to the draft Agreement contained in these Contract Documents for additional nondiscrimination and fair employment practices provisions that will apply to this federal-aid contract.

The Transportation Division hereby notifies all Bidders that it will affirmatively insure that in any Contract entered into pursuant to this advertisement, minority business enterprises will be afforded full opportunity to

submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, or national origin in consideration for the award.

5-1.07 PREVAILING WAGE

Attention is directed to Section 7-1.01A(2), "Prevailing Wage," of the Standard Specifications.

In accordance with the provisions of California Labor Code sections 1770, et seq., including but not limited to 1773, 1773.1, 1773.2, 1773.6 and 1773.7 the general prevailing rate of wages in the county in which the Work is to be done has been determined by the Director of the California Department of Industrial Relations. These wage rates appear in the California Department of Transportation publication entitled General Prevailing Wage Rates. Interested parties can obtain the current wage information by submitting their requests to the Department of Industrial Relations, Division of Labor Statistics and Research, PO Box 420603, San Francisco CA 94142-0603, Phone (415) 703-4774. This information is also available at the following address on the Internet: <http://www.dir.ca.gov/dlsr/PWD>. The rates at the time of the bid advertisement date of a project will remain in effect for the life of the project in accordance with the California Code of Regulations, as modified and effective January 27, 1997.

Copies of the general prevailing rate of wages in the county in which the Work is to be done are also on file at the Transportation Division's principal office, and shall be made available upon request, and in the case of projects involving federal funds, federal prevailing wage requirements have been included in the Contract Documents.

In accordance with the provisions of Labor Code 1810, eight (8) hours of labor shall constitute a legal day's work upon all work done hereunder, and Contractor and any subcontractor employed under this Contract shall conform to and be bound by the provisions of Labor Code Sections 1810 through 1815.

In the case of federally funded projects, where federal and state prevailing wage requirements apply, compliance with both is required. This project is funded in whole or in part by federal funds. Contractors attention is directed to Section 14 of these Specifications and the requirements of, and compliance with, the Copeland Act (18 U.S.C. 874 and 29 CFR Part 3), the Davis-Bacon Act (40 U.S.C. 276a to 276a-7 and 29 CFR Part 5), and the Contract Work Hours and Safety Standards Act (40 U.S.C. 327-330 and 29 CFR Part 5).

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, Contractor and subcontractors shall pay not less than the higher wage rate. The Department 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 Contractor and subcontractors, Contractor and subcontractors shall pay not less than the Federal minimum wage rate which most closely approximates the duties of the employees in question.

5-1.08 APPRENTICES

Attention is directed to Sections 1777.5, 1777.6 and 1777.7 of the California Labor Code and Title 8, California Code of Regulations Section 200 et seq. To ensure compliance and complete understanding of the law regarding apprentices, and specifically the required ratio thereunder, each Contractor or subcontractor should, where some question exists, contact the Division of Apprenticeship Standards, 455 Golden Gate Avenue, San Francisco, CA 94102, or one of its branch offices prior to commencement of work on the public works contract. Responsibility for compliance with this section lies with Contractor.

It is County policy to encourage the employment and training of apprentices on public works contracts as may be permitted under local apprenticeship standards.

5-1.09 CERTIFIED PAYROLL

As required under the provisions of Labor Code Section 1776, Contractor and any subcontractors shall keep accurate payroll records as follows:

1. The payroll records shall show the name, address, social security number, work classification, straight time and overtime hours worked each day and week, and the actual per diem wages paid to each journeyman, apprentice, worker, or other employee employed by Contractor or subcontractors in connection with this project.
2. A certified copy of all payroll records enumerated above shall be available for inspection at all reasonable hours at the principal office of Contractor as follows:
 - a. Make available or furnish to the employee or his or her authorized representative on request.
 - b. Make available for inspection or furnished upon request to a representative of County, the State Division of Labor Standards Enforcement, and the Division of Apprenticeship Standards of the State Department of Industrial Relations.
 - c. Make available upon request by the public for inspection or copies thereof made; provided, however, that a request by the public shall be made through either County, the State Division of Labor Standards Enforcement, or the State Division of Apprenticeship Standards. The requesting party shall, prior to being provided the records, reimburse the costs of preparation by Contractor, subcontractor, and the entity through which the request was made. The public shall not be given access to the records at the principal office of Contractor.

5-1.10 DISPUTES RESOLUTION

As permitted by Public Contract Code section 20104, the County has elected to resolve any claims between the Contractor and the County pursuant to Article 7.1 (commencing with Section 10240) of Chapter 1 of Part 2 of the Public Contract Code. Attention is directed to Section 9, "Measurement and Payment" of the Standard Specifications for the contract claim procedure. The provisions of that Section constitute a non-judicial claim settlement procedure, and also step one of a two-step claim presentment procedure by agreement under Section 930.2 of the California Government Code. Specifically, step one is compliance with the contract claim procedure in accordance with the Contract Documents, including, but not limited to, Section 9, "Measurement and Payment" of the Standard Specifications. Step two is the filing of a timely Government Code Section 910 et seq. claim in accordance with the California Government Code. Any such claim shall affirmatively indicate Contractor's prior compliance with the contract claim procedure herein and previous dispositions under Section 9, "Measurement and Payment" of the Standard Specifications. Any claim that fails to conform to the contract claim procedure required in step one may not be asserted in any subsequent Government Code Section 910 et seq. claim.

As a condition precedent to arbitration or litigation, claims must first be mediated. Mediation shall be non-binding and utilize the services of a mediator mutually acceptable to the parties and, if the parties cannot agree, a mediator selected by the American Arbitration Association from its panel of approved mediators trained in construction industry mediation. All statutes of limitations shall be tolled from the date of the demand for mediation until a date two weeks following the mediation's conclusion. The cost of mediation shall be equally shared by the parties.

If Contractor fails to comply with these claim procedures as to any claim, then Contractor waives its rights to such claim. County shall not be deemed to waive or alter any provision of this section or Section 9, "Measurement and Payment" of the Standard Specifications if, at County's sole discretion, County administers a claim in a manner not in accord with those provisions.

These provisions shall survive termination, breach, or completion of the Contract Documents.

5-1.11 RECORDS

Contractor shall maintain cost accounting records for the contract pertaining to, and in such a manner as to provide a clear distinction between the following six categories of costs of work during the life of the contract:

- A. Direct costs of contract item work.
- B. Direct costs of changes in character in conformance with Section 4-1.03C, "Changes in Character of Work," of the Standard Specifications.
- C. Direct costs of extra work in conformance with Section 4-1.03D, "Extra Work," of the Standard Specifications.
- D. Direct costs of work not required by the contract and performed for others.
- E. Direct costs of work performed under a notice of potential claim in conformance with the provisions in Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications.
- F. Indirect costs of overhead.

Cost accounting records shall include the information specified for daily extra work reports in Section 9-1.03C, "Records," of the Standard Specifications. The requirements for furnishing the Engineer completed daily extra work reports shall only apply to work paid for on a force account basis.

The cost accounting records for the contract shall be maintained separately from other contracts, during the life of the contract, and for a period of not less than four (4) years after the date of acceptance of the Work. If Contractor intends to file claims against the Department, Contractor shall keep the cost accounting records specified above until complete resolution of all claims has been reached.

5-1.12 RECORDS EXAMINATION AND AUDIT REQUIREMENTS

Contractor shall maintain and make available to the FHWA, the USDOT, the USFS, the Comptroller General of the United States, the State of California, the California State Auditor, and County or to any of their duly authorized representatives all books, papers, job cost records, detailed cost estimates, claims, and accounts, including payment, property, payroll, personnel, subcontractor records, and financial records related to or which arise out of the Work or under terms of this Contract. Contractor shall maintain such books, records, data and documents in accordance with generally accepted accounting principles and in accordance with these special provisions and federal and state requirements. These books, papers, records, claims, and accounts shall be made available for examination during normal business hours and shall be readily available and accessible at Contractor's principal place of business in California, for audit during normal business hours at such place of business. Contractor shall provide office space, photocopies and other assistance to enable audit or inspection representatives to conduct such audits or inspections. This right to audit books and records directly related to this Contract shall also extend to any first-tier subcontractors employed under this Contract. Contractor shall incorporate this provision in any subcontract entered into as a result of this Contract and shall require its subcontractors to agree to cooperate with the above-listed agencies by making all appropriate and relevant Project records available to those agencies for audit and copying.

All of Contractor's books, papers, job cost records, detailed cost estimates, claims, and accounts, including payment, property, payroll, personnel, subcontractor records, and financial records related to or which arise out of the work or under terms of this Contract shall be retained for access, inspection and/or audit by the FHWA, the USDOT, the Comptroller General of the United States, the State, County or their duly authorized representatives for at least four (4) years after County's final payment to Contractor and/or the final resolution of any claims under this Contract. Contractor shall incorporate this provision in any subcontract entered into as a result of this Contract.

5-1.13 SUBCONTRACTING AND DBE RECORDS

Use each DBE subcontractor as listed on the List of Subcontractors form and the Local Agency Bidder DBE Commitment (Construction Contracts), Exhibit 15-G, forms unless you receive authorization for a substitution.

The County 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.

Maintain records including:

1. Name and business address of each 1st-tier subcontractor
2. Name and business address of each DBE subcontractor, DBE vendor, and DBE trucking company, regardless of tier
3. 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.

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 with the Acceptance Statement, which accompanies the Proposed Final Pay Estimate.

Upon work completion, complete a Final Report – Utilization of Disadvantaged Business Enterprises (DBE), First –Tier Subcontractors, Exhibit 17-F, form. Submit it with the Acceptance Statement, which accompanies the Proposed Final Estimate. The County withholds \$10,000 until the form is submitted. The County releases the withhold upon submission of the completed form.

5-1.14 DBE CERTIFICATION STATUS

If a DBE subcontractor is decertified during the life of the project, the decertified subcontractor shall notify the Contractor in writing with the date of decertification. If a subcontractor becomes a certified DBE during the life of the project, the subcontractor shall notify the Contractor in writing with the date of certification. The Contractor shall furnish the written documentation to the Engineer.

Upon completion of the contract "Disadvantage Business Enterprises (DBE) Certification Status Change Form," Form CEM-2403 (F) indicating the DBE's existing certification status shall be signed and certified correct by the Contractor. The certified form shall be furnished to the Engineer with the Acceptance Statement, which accompanies the Proposed Final Estimate.

5-1.15 PERFORMANCE OF SUBCONTRACTORS

DBEs must perform work or supply materials as listed in the "Local Agency Bidder - DBE Commitment" (Construction Contracts) Exhibit 15–G form specified under Section 2, "Proposal Requirements and Conditions," of these special provisions.

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 prior written authorization from the County.

The County authorizes a request to use other forces or sources of materials for requests that show 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. County 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 County 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. 1 or more of the reasons listed in the preceding paragraph
2. Notices from you to the DBE regarding the request
3. Notices from the DBE to you regarding the request

If a listed DBE subcontractor is terminated, you must make good faith efforts to find another DBE subcontractor 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.

The County does not pay for work or material unless it is performed or supplied by the listed DBE, unless the DBE is terminated in accordance with this section.

5-1.16 SUBCONTRACTING

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

If the Contractor violates Pub Cont Code § 4100 et seq., the County may exercise the remedies provided under Pub Cont Code § 4110. The County may refer the violation to the Contractors State License Board as provided under Pub Cont Code § 4111.

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

Each subcontract must comply with the terms and conditions of this Contract.

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

Submit copies of subcontracts upon request by the Engineer.

Before subcontracted work starts, submit a Subcontracting Request form.

Do not use a debarred contractor; a current list of debarred contractors is available at the Department of Industrial Relations' Web site.

In accordance with Title 2 CFR Section 1200.220 the Debarment and Suspension Provisions apply to all subcontracts associated with this contract. Contractor shall require all subcontractors to execute a debarment and suspension certification such as one provided in the Proposal section of these Contract Documents.

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

Each subcontract and any lower tier subcontract that may in turn be made shall include the "Required Contract Provisions Federal-Aid Construction Contracts" in Section 14 of these Special Provisions. Noncompliance shall be corrected. Payment for subcontracted work involved will be withheld from progress payments due, or to become due, until correction is made. Failure to comply may result in termination of the contract.

5-1.17 PROMPT PROGRESS PAYMENT TO SUBCONTRACTORS

Attention is also directed to Section 7108.5 of the Business and Professions Code, which requires a prime contractor or subcontractor to pay any subcontractor not later than ten (10) days of receipt of each progress payment, unless otherwise agreed to in writing. In addition, Federal Regulation (49 CFR 26.29) requires a prime contractor or subcontractor to pay a subcontractor no later than thirty (30) days after receipt of each payment, unless any delay or postponement of payment among the parties takes place only for good cause and with the prior written approval of County. Any violation of Section 7108.5 shall subject the violating contractor or subcontractor to the penalties, sanction and other remedies of that section. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract performance, or noncompliance by a subcontractor.

Prime contractors shall include in their subcontracts language providing that prime contractors and subcontractors will use appropriate alternative dispute resolution mechanisms to resolve payment disputes.

5-1.18 PROMPT PAYMENT OF WITHHELD FUNDS TO SUBCONTRACTORS

The Department shall hold retainage from the prime Contractor and shall make prompt and regular incremental acceptances of portions, as determined by the Department, of the contract work and pay retainage to the prime Contractor based on these acceptances in accordance with "Payment of Withheld Funds" of these Special Provisions. The prime Contractor or subcontractor shall return all monies withheld in retention from the subcontractor within thirty (30) days after receiving payment for work satisfactorily completed and accepted including incremental acceptances of portions of the contract work by the Department. Federal law (49 CFR 26.29) requires that any delay or postponement of payment over thirty (30) days may take place only for good cause and with the Department's prior written approval. Any violation of this provision shall subject the violating Contractor or subcontractor to the penalties, sanctions, and remedies specified in Section 7108.5 of the California Business and Professions Code. This requirement shall not be construed to limit or impair any contractual, administrative, or judicial remedies otherwise available to the prime contractor or subcontractor in the event of a dispute involving late payment or nonpayment by the prime contractor, deficient subcontract or performance, and/or noncompliance by a subcontractor.

5-1.19 PAYMENTS

Attention is directed to Sections 9-1.06, "Partial Payments," and 9-1.07, "Payment After Acceptance," of the Standard Specifications and these Special Provisions.

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

5-1.20 PAYMENT OF WITHHELD FUNDS

The Department will retain ten percent (10%) of the value of each progress payment (excluding mobilization payments) from each progress payment. In conformance with 49 CFR 26.29 the Department will release retention incrementally as follows:

1. When 25% of the total amount bid (excluding mobilization) has been completed, the Department will release all retention withheld up to this point;
2. When 50% of the total amount bid (excluding mobilization) has been completed, the Department will release all retention withheld since the previous release;

3. When 75% of the total amount bid (excluding mobilization) has been completed, the Department will release all retention withheld since the previous release.
4. The remaining retained funds shall be retained until thirty-five (35) days after recordation of the Notice of Acceptance.

Work increments deemed complete by the Engineer under this section do not affect the Contractor's other contractual obligations pertaining to that work, including, but not limited to, the commencement of the warranty period or the Contractor's obligation of maintenance and responsibility for that increment of work. Relief from maintenance and responsibility shall be at the discretion of the Engineer and shall conform to the provisions of Section 7-1.15, "Relief from Maintenance and Responsibility," of the Standard Specifications.

The Contractor may elect to receive one hundred percent (100%) of payments due under the Contract from time to time, without retention of any portion of the payment by the County, by depositing securities of equivalent value with the County in accordance with the provisions of Section 22300 of the California Public Contract Code. Securities eligible for deposit hereunder shall be limited to those listed in Section 16430 of the Government Code, or bank or savings and loan certificates of deposit.

Funds withheld from progress payments to ensure performance of the contract that are eligible for payment into escrow or to an escrow agent pursuant to Section 22300 of the Public Contract Code do not include funds withheld or deducted from payment due to failure of the Contractor to fulfill a contract requirement.

5-1.21 MEASUREMENT AND PAYMENT

Attention is directed to Section 9, "Measurement and Payment," of the Standard Specifications.

In lieu of Section 11-1.02 items A through E of "Mobilization" of the Standard Specifications, the first monthly payment estimate will be prepared when the Engineer determines that 5% of the contract amount, not including mobilization, has been completed. Subsequent monthly pay estimates shall be made on the same day of the month as the first monthly pay estimate. Work completed in place less than 2 working days prior to the preparation of the monthly pay estimate shall not be eligible for payment until the following month's estimate. The third to last paragraph of Section 11, "Mobilization," of the Standard Specifications shall be amended to read: "The adjustment provisions in Section 4-1.03, "Changes," shall not apply to the contract lump sum item of mobilization."

Measurement shall be in accordance with Section 9 "Measurement and Payment," of the Standard Specifications or these Special Provisions.

5-1.22 INTEREST ON PAYMENTS

Interest shall be payable on progress payments, payments after acceptance, final payments, extra work payments, and claim payments as follows:

- A. Unpaid progress payments, payment after acceptance, and final payments shall begin to accrue interest thirty (30) days after the receipt of an undisputed and properly submitted pay request from Contractor defined herein as the pay estimate prepared by Engineer and approved by the Contract Administrator for the County.
- B. Unpaid extra work bills shall begin to accrue interest thirty (30) days after preparation of the first pay estimate following receipt of a properly submitted and undisputed extra work bill. To be properly submitted, the bill must be submitted within seven (7) days of the performance of the extra work and in conformance with the provisions in Section 9-1.03C, "Records," and Section 9-1.06, "Partial Payments," of the Standard Specifications. An undisputed extra work bill not submitted within seven (7) days of performance of the extra work will begin to accrue interest thirty (30) days after the preparation of the second pay estimate following submittal of the bill.
- C. The rate of interest payable for unpaid progress payments, payments after acceptance, final payments, and extra work payments shall be ten percent (10%) per annum.
- D. The rate of interest payable on unpaid and undisputed claims shall be six percent (6%) per annum. Interest shall begin to accrue sixty-one (61) days after the Contractor submits to the Engineer information in sufficient detail to enable the Engineer to accept the claim statement.

The rate of interest payable on any award in arbitration shall not exceed six percent (6%) per annum in accordance with Public Contract Code Section 10240.13.

5-1.23 PUBLIC SAFETY

Contractor shall provide for the safety of traffic and the public in accordance with the provisions in Section 7-1.09, "Public Safety," of the Standard Specifications and these Special Provisions.

Attention is directed to Section 5-1.36, "Storage of Equipment, Materials, Supplies, Etc.," Section 10-1.03, "Maintaining Traffic," and Section 10-1.04, "Traffic Control Plan," of these Special Provisions.

Contractor shall install temporary railing (Type K) between any lanes carrying public traffic and any excavation, obstacle, or storage area when the following conditions exist:

1. Excavations – Whenever the near edge of which is 12 feet or less from the edge of the lane, except for:
 - a. Excavations covered with sheet steel or concrete covers of adequate thickness to prevent accidental entry by traffic or the public.
 - b. Excavations less than one foot deep.
 - c. Trenches less than one foot wide for irrigation pipe or electrical conduit, or excavations less than one foot in diameter.
 - d. Excavations parallel to the lane for the purpose of pavement widening or reconstruction.
 - e. Excavations in side slopes, where the slope is steeper than 4:1.
 - f. Excavations protected by existing barrier or railing.

Contractor's attention is directed to Section 10-1.03, "Maintaining Traffic," of these Special Provisions.

2. Temporarily Unprotected Permanent Obstacles – Whenever the Work includes the installation of a fixed obstacle together with a protective system, such as a sign structure together with protective railing, and Contractor elects to install the obstacle prior to installing the protective system; or whenever Contractor, for its 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.
3. Storage Areas – Whenever material or equipment is stored within 12 feet of the lane and such storage is not otherwise prohibited by the Standard Specifications or these Special Provisions.

The approach end of temporary railing (Type K), installed in accordance with the provisions in this section "Public Safety" and in Section 7-1.09, "Public Safety," of the Standard Specifications shall be offset a minimum of 15 feet 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 one foot transversely to 10 feet longitudinally with respect to the edge of the traffic lane. If the 15-foot minimum offset cannot be achieved, the temporary railing shall be installed on the 10 to 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 12-3.08, "Temporary Railing (Type K)," of the Standard Specifications. Temporary railing (Type K) conforming to the details shown on 2006 Standard Plan T3 may be used. Temporary railing (Type K) fabricated prior to January 1, 1993, with one longitudinal No. 5 reinforcing steel bar near the top in lieu of the 2 longitudinal No. 5 reinforcing steel bars

near the top, as shown on the plans, may be used, provided the fabrication date is printed on the required Certificate of Compliance.

Temporary crash cushion modules shall conform to the provisions in "Temporary Crash Cushion Module" elsewhere in these Special Provisions.

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

| <u>Approach Speed of Public Traffic (Posted Limit, Miles Per Hour)</u> | <u>Work Areas</u> |
|--|---|
| Over 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 traffic lane, the line of cones or delineators shall be considered to be the edge of traffic lane, however, Contractor shall not reduce the width of an existing lane to less than 10 feet without written approval from the Engineer.

When work is not in progress on a trench or other excavation that requires 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.

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

5-1.24 TESTING

Testing of materials and work shall conform to the provisions in Section 6-3, "Testing," of the Standard Specifications and these special provisions.

Whenever the provisions of Section 6-3.01, "General," of the Standard Specifications refer to tests or testing, it shall mean tests to assure the quality and to determine the acceptability of the materials and work.

The Engineer will deduct the costs for testing of materials and work found to be unacceptable, as determined by the tests performed by the Department, and the costs for testing of material sources identified by the Contractor which are not used for the work, from moneys due or to become due to the Contractor. The amount deducted will be determined by the Engineer.

5-1.25 REMOVAL OF ASBESTOS AND HAZARDOUS SUBSTANCES

When the presence of asbestos or hazardous substances is not shown on the plans or indicated in the Contract Documents and Contractor encounters materials which Contractor reasonably believes to be asbestos as defined in Section 25914.1 of the Health and Safety Code or a hazardous substance as defined in Section 25117 of the Health and Safety Code, and the asbestos or hazardous substance has not been rendered harmless, Contractor may continue work in unaffected areas reasonably believed to be safe.

Contractor shall immediately cease work in the affected area and report the condition to the Engineer in writing.

In accordance with Section 25914.1 of the Health and Safety Code, removal of asbestos or hazardous substances including any exploratory work to identify and determine the extent of such asbestos or hazardous substance will be performed by separate contract.

If delay of work in the area delays the current controlling operation, the delay will be considered a right of way delay and Contractor will be compensated for the delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

5-1.26 SOUND CONTROL REQUIREMENTS

Sound control shall conform to the provisions in Section 7-1.01I, "Sound Control Requirements," of the Standard Specifications and these Special Provisions.

The noise level requirement shall apply to all 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 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 in this section shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

5-1.27 TRAINING

For the Federal training program, the number of trainees or apprentices is zero (0).

5-1.28 NOT USED

5-1.29 PROJECT APPEARANCE

The Contractor shall maintain a neat appearance to the work.

In any areas visible to the public, the following shall apply:

- A. When practicable, broken concrete, asphalt concrete, and debris developed during clearing and grubbing shall be disposed of concurrently with its removal. If stockpiling is necessary, the material shall be removed or disposed of weekly.
- B. Trash bins shall be furnished for debris from structure's construction. Debris shall be placed in trash bins daily. Forms or false work that are to be reused shall be stacked neatly concurrently with their removal. Forms and false work that are not to be reused shall be disposed of concurrently with their removal, if applicable.

Full compensation for conforming to the provisions in this section, not otherwise provided for, shall be considered as included in prices paid for the various contract items of work involved and no additional compensation will be allowed therefor.

5-1.30 CONTRACTOR'S RESPONSIBILITY FOR MATERIALS

Contractor shall be responsible for the condition of all materials which it has furnished, and shall replace at its own expense all such material found to be defective or which has been damaged after delivery. This includes the replacement of material which is found to be defective at any time prior to expiration of the guarantee period.

5-1.31 LAKE, STREAM, AND AIR POLLUTION

Contractor's attention is directed to the Fish and Game Code, El Dorado County Air Quality Management District Ordinances and Regulations, Section 7-1.01G "Water Pollution," of the Standard Specifications and

Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions, and other applicable statutes relating to pollution prevention or abatement. Contractor shall exercise every reasonable precaution to prevent silt, sand or other detritus from entering Lake Tahoe and live streams.

Attention is directed to Rule 300 "Open Burning", Rule 223 "Fugitive Dust - General Requirements", and Rule 223.1 "Fugitive Dust - Construction, Bulk Material Handling, Blasting, and Other Earthmoving Activities and Carryout and Trackout Prevention," of the County Air Quality Management District Rules and Regulations. A valid permit from an El Dorado County Air Quality Management District Officer is required when open burning of wood waste is proposed. A copy of the permit shall be filed with the Engineer prior to any burning.

The Contractor shall comply with applicable State, TRPA, and County Air Quality Management District rules and regulations regarding reduction of construction related impacts on air quality, including the implementation of the following measures:

1. Maintain equipment in tune per manufacturer's specifications.
2. Retard diesel engine injection timing by two or four degrees unless not recommended by manufacturer (due to lower emission output in place).
3. Use reformulated, low-emission diesel fuel, when feasible.
4. Substitute electric and gasoline-powered equipment for diesel where feasible.
5. Use catalytic converters on gasoline-powered equipment.
6. Do not leave inactive equipment idling for prolonged periods (i.e. more than 2 minutes.)

Pursuant to 7 CFR 3016.36(i)(12) and 49 CFR 18.36(i)(12), Contractor shall comply with all applicable standards, orders, or requirements issued under section 306 of the Clean Air Act (42 USC 1875(h)), section 508 of the Clean Water Act (33 USC 1368), Executive Order 11738, Environmental Protection Agency regulations (40 CFR part 15).

Oil, chemical, or greasy substances, cement or cement products originating from Contractor's operations shall not be allowed to enter or be placed where they will later enter streams. Washing of vehicles or construction equipment within the project area shall be in accordance with Sections 5-1.50, "Local, State, and Federal Agencies' Conditions of Approval and Permits," and 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

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

5-1.32 UTILITIES

Attention is directed to Section 8-1.10, "Utility and Non-Highway Facilities," and Section 15, "Existing Highway Facilities," of the Standard Specifications.

Contractor shall still determine by potholing or other means the exact locations in advance of performing the contract items of work especially placement of the drainage work.

If the Contractor while performing the Contract discovers utility facilities not identified by the Engineer in the Contract Plans or Specifications, the Contractor shall immediately notify the Engineer in writing. The Contractor shall schedule the project so as to allow the Engineer forty-eight (48) hours, excluding Saturdays, Sundays, and holidays, to determine the work to be done when a conflict exists. Owner of the utility facility shall have the sole discretion to perform the repairs or relocation work itself, or to permit the Contractor to do such repairs or relocation work at a reasonable price. In the event that the utility owner permits the Contractor to perform the work, the work will be paid for by the County, via Force Account Change Order. Compensation to the Contractor for said cost shall be in accordance with Section 4215 of the Government Code and with Section 9-1.03, "Force Account Payment," of the Standard Specifications.

Nothing herein shall be construed to require the Utility Owner to locate the presence of any existing services not expressly included in Government Code Section 4215, nor limit the Owner's rights or remedies set forth therein.

The Contractor shall protect from damage existing utility and other non-highway facilities that are to remain in place. This protection may consist of shoring an existing utility. Damage due to Contractor's failure to exercise reasonable care shall be repaired at its cost and expense.

Attention is directed to the existence of certain underground facilities that may require special precautions be taken by the Contractor to protect the health, safety and welfare of workers and of the public. Facilities requiring special precautions include, but are not limited to: conductors of petroleum products, oxygen, chlorine, and toxic or flammable gases; natural gas in pipelines greater than six (6) inches (150 mm) in diameter or pipelines operating at pressures greater than 60 psi (415 kPa) (gage); underground electric supply system conductors or cables, with potential to ground of more than 300 V, either directly buried or in a duct or conduit which do not have concentric grounded or other effectively grounded metal shields or sheaths.

The Contractor shall notify the Engineer and the appropriate regional notification center for operators of subsurface installations at least two (2) business days, but not more than fourteen (14) days, prior to performing any excavation or other work close to any underground pipeline, conduit, duct, wire or other structure. Regional notification centers include, but are not limited to, the following:

| Notification Center | Telephone Number |
|---------------------------|------------------|
| Underground Service Alert | 1-800-642-2444 |

The Contractor shall determine the exact location of existing underground utilities in conflict with the excavation by excavating with hand tools within the area of the approximate location of the underground utility as determined by the field marking provided in accordance with Section 4216.3 of the Government Code before using any power-operated or power-driven excavating or boring equipment within the approximate location of the underground utilities. Power-operated or power-driven excavating or boring equipment may be used for the removal of any existing pavement if there are no existing underground utilities contained in the pavement. If mutually agreeable with the utility company and Contractor, Contractor may utilize power-operated or power-driven excavating or boring equipment within the approximate location of the underground utilities and to any depth.

Contractor shall notify the following listed utility companies forty-eight (48) hours in advance of doing any work at the site of the project:

Underground Service Alert

Phone: 1-800-642-2444

Liberty Energy

Attn: Jeff Matthews
 933 Eloise Avenue
 So. Lake Tahoe, CA 96150
 (530) 545-3780
 Fax (530) 544-4811

**South Tahoe Public Utility District
 (water & sewer)**

24 Hr # (530) 544-4964
 Attn: Randy Curtis
 1275 Meadow Crest Drive
 So. Lake Tahoe, CA 96150
 (530) 544-6474
 FAX (530) 544-6359

**AT&T
 (telephone)**

Attn: Astrid Willard, PW Mgr.
 2700 Watt Avenue, Room 3473-11
 Sacramento, CA 95821
 (916) 404-2388

**Charter Communications
 (cable)**

Attn: Jake Newnham
 9335 Prototype Drive
 Reno, NV 89521
 (775) 350-1228

**Southwest Gas Corporation
 (natural gas)**

Attn: Chris Peters
1740 D Street, Unit No. 4
South Lake Tahoe, CA 96150
(530) 543-3225

It is anticipated that there will be no utility facility relocations required during construction.

Full compensation for working around said facilities, performing any necessary potholing and coordination of facility relocation shall be considered as included in the prices paid for the various contract items and no additional compensation will be allowed therefor.

5-1.33 REPORTING

In order to monitor the progress of projects funded in whole or in part by federal funds, federal agencies rely heavily on inspection data. Inspections by the County shall be performed on a regular basis and data compiled in report form, as necessary, in conformance with 49CFR 18.40(c). Information to be supplied by Contractor shall be reported to County on an as requested basis.

Any subcontract entered into as a result of this Contract shall contain all of the provisions referenced and/or listed in this section.

5-1.34 NOT USED

5-1.35 NOT USED

5-1.36 STORAGE OF EQUIPMENT, MATERIALS, SUPPLIES, ETC.

Attention is directed to the provisions of Section 6-1.03, "Storage of Materials," of the Standard Specifications, and Sections 5-1.23, "Public Safety," 10-1.01, "Order of Work," 10-1.03, "Maintaining Traffic," and 10-1.04, "Traffic Control Plan," of these Special Provisions.

Sheets EC-1, EC-2, and T-1 of the Plans shows the following staging areas that Contractor may use for storage of equipment, materials, and supplies.

- 1) Approximately 2,070 SF on APN 033-090-15, approximate BP STA 47+10.
- 2) Approximately 3,880 SF on APN 033-090-16, approximate BP STA 55+00.
- 3) Approximately 4,860 SF on APN 033-090-16, approximate BP STA 57+80.
- 4) Approximately 4,480 SF on APN 033-090-14, approximate BP STA 73+60.
- 5) Approximately 3,160 SF on APN 033-100-15, approximate BP STA 87+40.

Contractor's attention is directed to Section 4-1.02, "Construction Schedule and Work Hours," of these Special Provisions regarding work hours. These hours apply to working on or starting up equipment in these storage areas.

Contractor has the option of storing equipment and materials on private property after first obtaining written authorization from the property owner and filing a copy of said authorization with the Engineer. Contractor shall be responsible for appropriate security of all storage areas to protect property and persons.

Attention is directed to Sections 10-1.01 "Order of Work", 10-1.10 "Excavation and Grading," 10-1.24 "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," and Items "Install and Maintain Filter Fence" and "Install and Maintain Weighted Fiber Rolls or Gravel-filled Rolls" of these Special Provisions.

5-1.37 FINAL INSPECTION AND ACCEPTANCE OF CONTRACT

Section 7-1.17, "Acceptance of Contract," of the Standard Specifications is amended to read:

When the Engineer has made the final inspection and determines that the contract work has been completed in all respects in accordance with the plans and specifications, the Engineer will recommend to the Board of Supervisors that the contract be accepted and the Notice of Acceptance be recorded to accept the contract, and immediately upon and after the acceptance by the Board of Supervisors, notwithstanding Section 7-1.15, "Relief from Maintenance and Responsibility," of the Standard Specifications, the Contractor will be relieved of the duty of maintaining and protecting the work as a whole, and the Contractor will not be required to perform any further work thereon except work required under "Guarantee," of these Special Provisions; and the Contractor will be relieved of the responsibility for injury to persons or property or damage to the work which occurs after the formal acceptance by the Board of Supervisors.

5-1.38 NOT USED

5-1.39 ACCESS FOR INSPECTION OF WORK

Representatives of County, Engineer, USFS, FHWA, Lahontan, CTC, State Parks, TRPA, Southwest Gas, STPUD, AT&T, Liberty Energy, and Charter Communications shall, at all times, have full access for inspection and testing of the work accomplished under this contract and Contractor shall provide proper and safe facilities for such access.

5-1.40 NOT USED

5-1.41 COORDINATION WITH PROPERTY OWNERS

The County has entered into agreements with adjacent property owners for access and construction shown on the project plans and as indicated in these special provisions. The County has obtained a special use permit for parcels owned by USFS for access and construction shown on the project plans and indicated in these special provisions.

Contractor shall communicate with property owners, tenants, permits and permits with adjacent property owners are made a part of these special provisions, and no additional compensation will be due to the Contractor for complying with those conditions or in any required permits.

The conditions of the agreements and permits with adjacent property owners are included below in these special provisions.

The following table lists information related to easements shown on the Plans.

| PLAN SHEET | APN | PROPERTY OWNER | EASEMENT TYPE | DESCRIPTION OF WORK |
|-----------------------|------------|-----------------------|----------------------|-----------------------------------|
| P-1 and P-7 | 033-020-03 | CA State Parks | multi-use trail | bike path improvements |
| | | | drainage | drainage improvements |
| | | | roadway | roadway and drainage improvements |
| P-1 and P-7 | 033-080-07 | CA State Parks | multi-use trail | bike path improvements |
| | | | roadway | roadway and drainage improvements |
| P-2 and P-7 | 033-090-15 | CA State Parks | multi-use trail | bike path improvements |
| | | | drainage | drainage improvements |
| | | | roadway | roadway and drainage improvements |
| P-2, P-8 and P-9 | 033-090-16 | Amacker | multi-use trail | bike path improvements |
| | | | roadway | roadway and drainage improvements |
| P-3, P-4, P-8 and P-9 | 033-090-12 | Amacker | multi-use trail | bike path improvements |
| | | | drainage | drainage improvements |

| PLAN SHEET | APN | PROPERTY OWNER | EASEMENT TYPE | DESCRIPTION OF WORK |
|--------------------|------------|----------------|------------------------|--|
| | | | roadway | roadway and drainage improvements |
| | | | temporary construction | temporary access |
| P-5 and P-10 | 033-090-13 | Silberstein | multi-use trail | bike path improvements |
| | | | drainage | drainage improvements |
| | | | roadway | roadway and drainage improvements |
| P-6, P-10 and P-11 | 033-090-14 | USFS | special use permit | bike path improvements; maintenance and access; temporary improvements |
| P-6, P-11 and P-12 | 033-100-15 | CTC | multi-use trail | bike path improvements |
| | | | drainage | drainage improvements |
| | | | roadway | roadway and drainage improvements |
| P-12 | 033-180-21 | CTC | multi-use trail | bike path improvements |
| | | | drainage | drainage improvements |
| | | | drainage | drainage improvements |

The Temporary Construction Easements (TCE) listed in the above table secured by the County allow the County or its agents, employees, and contractors the right of ingress and egress as may be reasonably necessary for construction purposes, inclusive of repairs, replacements, and removals as may be from time to time be required as well as for other purposes incidental to construction of the project, including any staging, stockpiling, and parking of construction vehicles or equipment.

The Contractor shall make every effort to communicate with adjacent property owners and tenants to inform them of the required access for construction operations, and shall give forty-eight (48) hours' notice to the property owners and tenants when work is to be performed on their property.

The Contractor shall keep work areas on private property neat and orderly and remove all trash and debris completely when the work is finished. All areas on private property disturbed during construction operations shall be restored to match their original condition at the end of the project.

The Contractor shall be responsible for protecting or replacing any facilities damaged by Contractor adjacent to County right-of-way, TCE areas, and adjacent properties affected by the work unless otherwise specified in the contract documents or by the Engineer. Where not specified for payment elsewhere, full compensation for conforming to all requirements and conditions listed in this section will be considered as included in the contract unit prices bid for the various items of work with no additional compensation therefor.

5-1.42 SAFETY AND HEALTH PROVISIONS

Attention is directed to the Standard Specifications Section 7-1.06, "Material Breach," and these Special Provisions.

In addition to other specifications, definitions and provisions, Contractor is also hereby categorized and designated as the following types of employer for this project:

- **Exposing Employer** – the employer whose employees are exposed to a hazard
- **Creating Employer** – the employer who actually is creating a hazard
- **Controlling Employer** – the employer who is responsible and who has the authority for ensuring that a hazardous condition is corrected
- **Correcting Employer** – the employer who has the responsibility for actually correcting a hazard

Contractor's Safety Officer(s) shall be certified as a competent person for controlling this project's workplace safety. A Contractor's Safety Officer shall be on the site, at a minimum, each and every day that work is in

progress or periodically when work is not active and shall have the authority to correct any safety violation. In addition, Contractor is required to develop a Safety Program specifically for this project, which will be available on site, at all times, and updated periodically during the project.

5-1.43 ARCHAEOLOGICAL DISCOVERIES

If archaeological materials, including but not limited to human skeletal material and disarticulated human bone, are discovered at the job site, protect and leave undisturbed and in place archaeological materials in accordance with the following codes and these special provisions:

1. California Public Resources Code, Division 5, Chapter 1.7 § 5097.5;
2. California Public Resources Code, Division 5, Chapter 1.75 § 5097.98 and § 5097.99;
3. California Administrative Code, Title 14 § 4308;
4. California Penal Code, Part 1, Title 14 § 622-1/2; and,
5. California Health and Safety Code, Division 7, Part 1, Chapter 2, § 7050.5.

Archaeological materials are the physical remains of past human activity and include historic-period archaeological materials and prehistoric Native American archaeological materials. Nonhuman fossils are not considered to be archaeological except when showing direct evidence of human use or alteration or when found in direct physical association with archaeological materials as described in these special provisions.

Historic-period archaeological materials include cultural remains beginning with initial European contact in California, but at least 50 years old. Historical archaeological materials include:

1. Trash deposits or clearly defined disposal pits containing tin cans, bottles, ceramic dishes, or other refuse indicating previous occupation or use of the site;
2. Structural remains of stone, brick, concrete, wood, or other building material found above or below ground; or,
3. Human skeletal remains from the historic period, with or without coffins or caskets, including any associated grave goods.

Prehistoric Native American archaeological materials include:

1. Human skeletal remains or associated burial goods such as beads or ornaments;
2. Evidence of tool making or hunting such as arrowheads and associated chipping debris of fine-grained materials such as obsidian, chert, or basalt;
3. Evidence of plant processing such as pestles, grinding slabs, or stone bowls;
4. Evidence of habitation such as cooking pits, stone hearths, packed or burnt earth floors; or,
5. Remains from food processing such as concentrations of discarded or burnt animal bone, shellfish remains, or burnt rocks used in cooking.

Immediately upon discovery of archaeological materials, stop all work within a 60-foot radius of the archaeological materials and immediately notify the Engineer. Archaeological materials found during construction are the property of the State. Do not resume work within the 60-foot radius of the find until the Engineer gives Contractor written approval. If, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of an archeological find or investigation or recovery of archeological materials, Contractor will be compensated for resulting losses and an extension of time will be granted in the same manner as provided for in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

Engineer will contact the California State Historic Preservation Office (SHPO) and the Washoe Tribe of California and Nevada Cultural Resource Office/Tribal Historic Preservation Office in the event archaeological materials are discovered.

The Department may use other forces to investigate and recover archaeological materials from the location of the find. When ordered by the Engineer furnish labor, material, tools and equipment, to secure the location of the find, and assist in the investigation or recovery of archaeological materials and the cost will be paid for as extra work as provided in Section 4-1.03D, "Extra Work," of the Standard Specifications.

Full compensation for immediately notifying the Engineer upon discovery of archaeological materials and leaving undisturbed and in place archaeological materials discovered on the job site shall be considered as included in the contract price paid for various items of work involved and no additional compensation will be allowed therefor.

5-1.44 EMPLOYEE CHEMICAL EXPOSURES

Contractor shall provide, directly to the Engineer, Material Safety Data Sheets conforming to all requirements of Title 8, California Code of Regulations, Section 5194. Only if applicable Contractor may instead provide a statement to the effect that any given substance is exempt from these regulations. This requirement shall be met a minimum of five (5) working days before any chemical substance is brought onto the premises where County Employees are present. Contractor shall cooperate with County's effort to communicate substance hazards to its employees and to provide them with a safe and healthy workplace. As appropriate, Contractor may be required to acknowledge in writing that it has received Material Safety Data Sheets and County's departmental rules and procedures for safety around chemical substances which may be present on County premises.

5-1.45 DISPOSAL OF WATER

It shall be the responsibility of Contractor to dispose of all water resulting from this work, according to all local, state, and federal agencies standards and requirements including, but not limited to, the NPDES permit attached hereto, and Section 10-1.20, "Dewatering," of these special provisions.

5-1.46 UTILITIES REQUIRED BY CONTRACTOR

Except as set out otherwise herein, all water, electric current, telephone, and/or any utility service, including portable sanitary facilities, required by Contractor during construction shall be furnished at its own expense.

5-1.47 CONSTRUCTION INSPECTION AND CONTRACT ADMINISTRATION

Resident construction inspection and contract administration will be performed by the County of El Dorado, Transportation Division, under the supervision of Donaldo Palaroan, P.E. (Resident Engineer), or successor and with approval of contract change orders, claims processing, and payment review by Donaldo Palaroan, P.E. (Project Manager) or successor, and preparation of contract change orders, claims processing, and pay estimates by John H. Kahling, P.E. (Contract Administrator), or successor. In order to monitor the progress of projects funded in whole or in part by federal funds, federal agencies rely heavily on inspection data. Inspections shall be performed on a regular basis and data compiled in report form, as necessary, in conformance with 7 CFR 3016.40(c) and 49 CFR 18.40(c). Information to be supplied by Contractor shall be reported to County on an as requested basis.

5-1.48 HIGHWAY CONSTRUCTION EQUIPMENT

Attention is directed to Section 7-1.01D, "Vehicle Code," and 7-1.02, "Load Limitations," of the Standard Specifications and these Special Provisions.

Pursuant to the authority contained in Section 591 of the Vehicle Code, the Department has determined that, within such areas as are within the limits of the Project and are open to public traffic, Contractor shall comply with all the requirements set forth in Divisions 11, 12, 13, 14, and 15 of the Vehicle Code. Attention is directed to the statement in Section 591 that this section shall not relieve Contractor or any person from the duty of exercising due care. Contractor shall take all necessary precautions for safe operation of Contractor's equipment and the protection of the public from injury and damage from Contractor's equipment.

5-1.49 SITE INVESTIGATION AND REPRESENTATION

Contractor and its Subcontractor(s) acknowledge that they have satisfied themselves as to the nature and location of the Work, the general and local conditions, particularly those bearing upon availability of transportation; disposal of materials, handling, and storage of materials; availability of labor, water, electric power, and roads; uncertainties of weather, or similar physical conditions at the site; the conformation and

conditions of the ground; the character of equipment and facilities needed preliminary to and during the prosecution of the Work; and all other matters which can in any way affect the Work or the cost thereof under this Contract.

Contractor further acknowledges that it has satisfied itself as to the character, quality, and quantity of the surface and subsurface materials to be encountered from inspecting the site, as well as from information presented by the plans and specifications made a part of the Contract. Any failure by Contractor to acquaint itself with all the available information or obtaining any additional information deemed necessary, will not relieve it from responsibility for properly estimating the difficulty or cost of successfully performing the work.

Contractor warrants that as a result of its examination and investigation of all the aforesaid data that it can perform the work in a good and workmanlike manner and to the satisfaction of County. County assumes no responsibility for any representations made by any of its officers or agents during or prior to the execution of this Contract, unless: (1) such representations are expressly stated in the Contract, and (2) the Contract expressly provides that the responsibility therefore is assumed by County.

The submission of a Proposal shall be conclusive evidence that Contractor and its Subcontractor(s) have investigated and are satisfied as to the conditions to be encountered, as to the character, quality, and quantities of work to be performed and materials to be furnished, and as to the requirements of the contract documents.

5-1.50 ASSIGNMENT OF ANTITRUST ACTIONS

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

If an awarding body or public purchasing body receives, either through judgment or settlement, a monetary recovery for a cause of action assigned under Government Code Sections 4550-4554, the assignor shall be entitled to receive reimbursement for actual legal costs incurred and may, upon demand, recover from the public body any portion of the recovery, including treble damages, attributable to overcharges that were paid by the assignor but were not paid by the public body as part of the bid price, less the expenses incurred in obtaining that portion of the recovery. Upon demand in writing by the assignor, the assignee shall, within one year from such demand, reassign the cause of action assigned under Government Code Sections 4550-4554 if the assignor has been or may have been injured by the violation of law for which the cause of action arose and (a) the assignee has not been injured thereby, or (b) the assignee declines to file a court action for the cause of action.

5-1.51 PERSONAL LIABILITY

Neither the Director, the Engineer nor any other officer or authorized employee of the State of California nor any officer or employee of any county, city or district shall be personally responsible for any liability arising under or by virtue of the contract.

5-1.52 SAFETY PROVISIONS

Reference is hereby made to Section 7-1.06, "Safety and Health Provisions," of the Standard Specifications concerning safety provisions by Contractor.

Contractor shall note the following directive from the Division of Occupational Safety & Health (DOSH):

"Construction Safety Order Section 1592 and General Industry Safety Order Section 3706 require an acceptable automatic backup alarm to sound immediately upon backing. Warning devices such as wheel-mounted bell types (ding-dongs) normally

sound on a quarter revolution of the wheel. These units do not meet the immediate sounding requirements of these orders and are not acceptable in California. Electronic warning devices which begin to sound as soon as the machine is put into reverse not only will meet this requirement, but have the added advantage of sounding even before actually backing.”

In addition, Contractor should take particular note of Section 1592, “Warning Methods,” of the Construction Safety Orders, Cal-OSHA.

5-1.53 CERTIFICATES OF COMPLIANCE

Attention is directed to Section 6-1.07, “Certificates of Compliance,” of the Standard Specifications and these Special Provisions.

Certificates of Compliance are required for the following materials:

- Evidence for steam cleaning of construction equipment
- Low Ground Pressure (LPG) Equipment
- Asphalt Concrete (Alternative 1 or 2)
- Class 1 Types A and B Permeable Material
- Portland Cement
- Portland Cement Concrete
- Concrete Curing Compound
- Galvanizing Repair Material
- Grout
- Corrugated Metal Pipe
- Class 2 Aggregate Base (3/4" max.)
- Humus
- Mulch
- Tackifier
- Paint
- All Signing and Delineation Products Used in the Work
- Slurry Cement Backfill
- Weighted Fiber Rolls or Gravel-Filled Rolls for ST Protection
- Filter Fabric
- Filter Fabric for Filter Fence
- Rice Straw Fiber Rolls
- Rolled Erosion Control Product
- Steel and Iron materials and mill test reports
- Turf Reinforcement Mat
- Geotextile Fabric

Contractor shall submit all Certificates of Compliance within ten (10) working days of the contract start date noted in the Notice to Proceed, or within three (3) working days before the materials are to be used, whichever is sooner. The provisions of Sections 4-1.03, “Contractor Submittals,” and 4-1.04, “Pre-Construction Conference and Weekly Meetings,” of these Special Provisions regarding submittals shall apply.

5-1.54 LOCAL, STATE, AND FEDERAL AGENCIES’ CONDITIONS OF APPROVAL AND PERMITS

Attention is directed to the following items:

1. California Regional Water Quality Control Board, Lahontan Region, Board Order No. R6T-2014-0022, dated March 18, 2014. (See Appendix D)

The Notice of Intent WDID No. 6A091401001 is active and the project is covered under the Construction General NPDES Permit for the Lake Tahoe Basin Order No. R6T-2011-0019 which can be found at the following website:

http://www.waterboards.ca.gov/lahontan/water_issues/programs/storm_water/docs/tahoe_cgp.pdf

2. Tahoe Regional Planning Agency Permit, No. EIPC2013-0022. (See Appendix E)
3. USDA Forest Service Special Use Permit, Authorization ID: ELD100323. (See Appendix F)
4. US Army Corps of Engineers Nationwide Permit. (See Appendix G)

As applicable the permit conditions shall be made a part of every subcontract executed pursuant to this Agreement.

County will obtain all permits above prior to bid opening and will provide copies to all Contract Document Holders.

Contractor shall comply with the conditions of the permits where applicable and shall comply with the regulations and conditions of the TRPA and Lahontan. All fines levied against County due to Contractor's action or inaction shall be paid by Contractor.

Contractor shall procure at its own expense all permits, licenses, and insurance policies not already obtained by County as may be necessary to comply with Federal and State laws associated with the performance of the Work.

These shall include but are not limited to the following:

- Timber Operator's license as specified in Section 10-1.27, "Timber Removal Practices," of these Special Provisions.
- Water Truck Permit from STPUD.

Full compensation for conforming to the provisions of this section, not otherwise provided for, shall be considered as included in the prices paid for the various Contract items of work with no additional compensation allowed therefor.

5-1.55 DUST AND TRACKING CONTROL

The following requirements shall be applicable to this Contract in addition to the requirements of Section 10, "Dust Control," of the Standard Specifications.

Dust Control

Contractor shall provide an acceptable plan for preventing the generation of dust due to its operations in the construction zones, along the haul or traveled routes, or in equipment parking zones. Contractor's Dust Control Plan and daily dust control operations shall not conflict with requirements of any agency having jurisdiction in the project area. Contractor is required to have a water truck on site at all times during construction.

At the end of each day's work and as necessary during the work day, Contractor shall wet down the construction area to control dust. On days that Contractor is not working, it shall take such action as may be required to prevent the generation of dust within the project area if it is deemed necessary by the Engineer.

In the event the control of dust is not satisfactory to the Engineer, the Engineer shall take such measures as may be necessary to insure satisfactory dust control and shall deduct the cost of those measures from any payments due Contractor.

Dust shall be controlled through a combination of sweeping and use of the water truck. **Dust control is a temporary erosion control measure or Best Management Practices (BMP). A fine of \$100/day will be**

levied against Contractor for each day Contractor delays in responding to Engineer's request to implement this temporary erosion control measure.

Tracking Control

Tracking of sediment onto public streets shall be minimized by a combination of road sweeping and use of tire wash areas designated on the Plans during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets clear of soil and debris. Tracking control applies to streets within the project area as well as to streets adjacent to the project area that have the potential to be impacted by tracking from the project construction.

Affected streets shall be swept a **minimum of three (3) times daily** (e.g. mid-morning, mid-afternoon, and at the end of the day) during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets clear of soil and debris.

Tracking control is a temporary erosion control measure or BMP. A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to implement this temporary erosion control measure.

The costs associated with installing, maintaining, and removing the Tire Wash Area on Pavement shall be included in the Item "Install and Maintain Tire Wash Area on Pavement." The costs associated with sweeping and disposing of the swept material shall be included in the Item "Sweeping."

Contractor shall post a publicly visible sign at the staging areas shown on Sheets EC-1, EC-2, and T-1 of the Plans. The visible sign shall contain the Contractor's telephone number and name of person to contact for complaints and/or inquiries on dust control and other air quality problems resulting from construction activities.

Full compensation for conforming to the requirements in this section pertaining to using the water truck for dust control, using the tire wash area, cleaning equipment/vehicles, and providing the Contractor contact information sign shall be considered as included in the prices paid for the various contract items of work and no additional compensation will be allowed therefor.

5-1.56 SPILL CONTINGENCY PLAN

Contractor shall provide the information requested in Appendix B, Spill Contingency Plan, of the Storm Water Pollution Prevention Plan within five (5) working days of receipt of Notice to Proceed. This Spill Contingency Plan is included in Appendix B of these Special Provisions.

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

5-1.57 CONSTRUCTION STAKING

The Surveyor will furnish one (1) set of construction stakes as set forth below and Contractor shall be solely responsible for the maintenance and protection of the survey stakes or marks, once set, in accordance with the provisions of this section. Any additional stakes or marks requested and any replacement of stakes or marks shall be set by the Surveyor at Contractor's expense. The Surveyor will provide Contractor with copies of the staking cut sheets, when applicable. The construction staking furnished by the Surveyor will be as outlined below, unless otherwise agreed to by the Surveyor and Contractor at the pre-construction meeting. Where site constraints do not allow for staking to be placed as specified herein, other staking configurations will be agreed upon by the Surveyor and Contractor at the pre-construction meeting or when the staking request is submitted.

1. Tree removal – All trees to be removed will be conspicuously marked by the Engineer of the Surveyor for removal with an X, or other agreed upon marking.

2. Sediment Traps (ST) – One set of double offset stakes (two stakes total) will be set for each structure. The stakes will be set sufficient for Contractor to determine location, orientation, and grade of each structure. Due to the nature of the design and to site conditions, the offset locations will be agreed upon by the Surveyor and Contractor at the pre-construction meeting. The closer of the offset stakes to sediment traps will be marked with grades to all Invert Elevations of pipes and structure (IEs), Window Invert Elevations (WIs), and to Rim or Grate (TG), as applicable. The farther offset will be marked with an elevation and is to be used for line only.
3. Storm Drain Pipe and Culvert – All grade breaks will be staked with one offset (at a distance to be agreed to by the Surveyor and Contractor) perpendicular from the line at the grade break and graded to flowline of the pipe. Except for runs containing grade breaks, storm drain pipe will not be staked on runs shorter than 50'. On short runs, the pipe is to be placed based upon the staking of the drainage structures. For runs greater than 50', one offset (at a distance to be agreed to by the Surveyor and Contractor) perpendicular from the line at the midpoint will be set and graded to flowline of the pipe. Curved pipe will be staked at 50' intervals for curves with radius greater than or equal to 500', and at 25' intervals for curves with radius less than 500'. For Angle Points (AP), one set of double offset stakes (two stakes total) will be set. The closer of the offset stakes will be graded to flowline of the pipe at the AP and the farther offset stake will be set for line only.
4. Channels and Swales – One set of single offset stakes will be set at 5' from centerline of channel or swale at 50' intervals and at grade breaks. The stakes will be graded to the finished surface at the flowline. For Angle Points (AP) and Curve Points (B.C./E.C.), one set of double offset stakes (two stakes total) will be set. The closer of the offset stakes will be graded to flowline at the B.C., E.C., and AP, and the farther offset stake will be line only.
5. Filter Fence, Wooden Tree Trunk Protection, and Construction Limit Fence – Stakes for these items will be provided only when these items are shown on the Plans. One set of stakes for horizontal control will be provided at 50' intervals and at angle points. For Wooden Tree Trunk Protection, the trees will be marked with flagging marked "TREE PROTECTION."
6. Benchmark – Elevations of the Surveyor's control points will be provided to Contractor on the Survey Control Sheet. In the event that the control points are not in usable positions for Contractor, the Surveyor will set up to four (4) temporary benchmarks throughout the project, at locations to be agreed upon by the Surveyor and Contractor.
7. Rock Dissipator and Rock Slope Protection – For Rock Dissipator one set of double offset stakes (two stakes total) will be set for horizontal and vertical control. The closer of the two stakes will be graded to top of rock and the farther of the two stakes will be line only. For rock slope protection, one set of double offset stakes (two stakes total) will be set at the beginning and end depending on the length of rock slope protection, stakes will be provided at 50' intervals on tangent sections, 25' intervals on curves, and at E.C.s, B.C.s, and APs.
8. AC Pavement Removal – Removal limits, as indicated on the plans, will be clearly marked with paint.
9. AC Paving – Where there is sawcut with existing retained pavement within the roadway, no stakes will be provided. The Contractor will pave to the existing sawcut per the appropriate plan detail. Where paving limits are not bounded by an existing sawcut, stakes will be provided to delineate pavement edge and will be graded to finish surface.
10. Tire and Concrete Wash Areas – Will be delineated by the Engineer or the Surveyor.
11. Bike Path – One (1) set of single offset stake will be set from CL of bike path for vertical and horizontal at 50' intervals, at grade breaks, EVCs, and BVCs. The stakes will be graded to

finished surface of the CL bike path. For Angle Points (AP) and Curve Points (B.C./E.C.), one set of double offset stakes (two stakes total) will be set. The closer of the offset stakes will be graded to finished grade of bike path CL at the B.C., E.C., and AP, and the farther offset stake will be line only.

12. Revegetation Limits – Paint or flagging for horizontal control. Areas will be marked in the filed by Engineer or Surveyor.

In order to match existing conditions, dimensions and elevations in the field may vary from those shown on the Plans. Any such field changes will be with the approval of the Engineer or Surveyor, and Contractor will be notified of such changes.

Surveying provided will not, nor is intended to, supplant or supplement any layout work normally provided by Contractor. Contractor is advised that it shall furnish personnel and equipment necessary to perform any additional layout for construction purposes that it may require.

All stakes and survey markers will be conspicuously marked with flagging and/or paint. It will be the obligation of Contractor to inform its employees and subcontractors of the importance of their preservation. The Surveyor has placed control monuments necessary for the work. Contractor is specifically advised that it shall be its sole responsibility to protect and maintain all stakes and monuments from destruction by any source. In the event that one or more of the stakes are damaged or destroyed, the Surveyor will replace the stakes at Contractor's expense. If a control point cannot be preserved, Contractor shall give the Surveyor sufficient notice (i.e. 48 hours excluding Saturdays, Sundays, and Holidays) to place alternate control points in the immediate vicinity before the original point(s) is (are) destroyed.

Contractor shall give the Surveyor not less than two (2) full working days (i.e. 48 hours excluding Saturdays, Sundays, and Holidays) notice for each staking order, and a minimum staking order shall be not less than a full day's work as determined by the Surveyor. Timeliness of surveying services will not be guaranteed without written notice submitted to the Surveyor not less than two (2) working days prior to the day staking is needed. County will supply Contractor with staking request forms.

Contractor and its subcontractor shall insure that existing property survey monuments and markers that are not designated to be removed will not be impacted by construction activities. Any right-of-way or property corner monuments, not designated to be removed per the Plans or as directed by Engineer, disturbed or destroyed by Contractor shall be replaced, at Contractor's expense, by a Professional Land Surveyor registered in the State of California in accordance with Business and Professions Code Sections 8700 et seq. Contractor shall also ensure that a Corner Record or Record of Survey is prepared and submitted as required by the Professional Land Surveyors Act, at Contractor's expense, to County Surveyor's office to document this replacement. A copy of the approved Corner Record or Record of Survey shall be submitted to the Engineer or Surveyor. County may retain Two Thousand Dollars (\$2,000.00) of the ten percent (10%) retention money withheld for each Corner Record and/or Record of Survey, until the documentation specified above is provided. Since the project is funded by grants with a finite term, should the grants expire before Contractor provides proof of the submittal, Contractor shall forfeit the amount retained.

5-1.58 NOT USED

5-1.59 NOT USED

5-1.60 COPYRIGHTS, TRADEMARKS, AND PATENTS

This project will be funded, in part, with federal funds. The USFS and USDOT reserve a royalty-free, non-exclusive, and irrevocable license to reproduce, publish or otherwise use, and to authorize others to use, for Federal Government proposes:

- (a) The copyright in any work developed under a grant, sub-grant, or contract under a grant or subgrant;

- (b) Any rights of copyright to which a grantee, subgrantee or a contractor purchases ownership with grant support; and
- (c) The patent rights to any discovery or invention which arises or is developed in the course of or under such contract.

5-1.61 ENERGY CONSERVATION

Pursuant to 7 CFR 3016.36(i)(13) Contractor shall comply with all mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (Pub. L. 94-163, 89 Stat. 871).

SECTION 6. (NOT USED)

SECTION 7. CONTRACTOR'S INSURANCE

7-1.01 INDEMNITY

To the fullest extent allowed by law, Contractor shall defend, indemnify, and hold County, its (their) officers, directors, the State of California (State), its offices and employees, directors, agents (excluding agents who are design professionals), State Contractors doing work within the project limits, the California Tahoe Conservancy (CTC), Tahoe Regional Planning Agency (TRPA), and the California Department of Parks and Recreation (State Parks), and each of its members, officers, agents, directors, and employees, any property owners from whom the County obtained easements, and any federal government agencies associated with this Contract harmless against and from any and all claims, suits, losses, demands, and liability for damages, including attorney's fees and other costs of defense brought for or on account of injuries to or death of any person, including but not limited to, workers and the public, or on account of injuries to or death of County, State, CTC, TRPA or State Parks employees, or any property owners from whom the County obtained easements, or federal government agency employees, or damage to property, or any economic, consequential or special damages which are claimed or which shall in any way arise out of or be connected with Contractor's services, operations or performance hereunder, regardless of the existence or degree of fault or negligence on the part of County, the State, CTC, TRPA, State Parks, or any federal government agencies, any property owners from whom the County has obtained easements, the Contractor, subcontractors or employees of any of these, except for the active or sole negligence of County, State, CTC, TRPA, State Parks, or any federal government agencies, their officers and employees, or any property owners from whom the County obtained easements, or where expressly prescribed by statute.

The duty to indemnify and hold harmless the County, the State, CTC, TRPA, State Parks, any property owners from whom the County obtained easements, and any federal government agencies associated with this Contract specifically includes the duties to defend set forth in Section 2778 of the Civil Code.

The insurance obligations of Contractor are separate, independent obligations under the Contract Documents, and the provisions of this defense and indemnity are not intended to modify, nor should they be construed as modifying or in any way limiting the insurance obligations set forth in the Contract Documents.

7-2.01 GENERAL INSURANCE REQUIREMENTS

Contractor shall provide proof of a policy of insurance satisfactory to the County of El Dorado Risk Management Division and documentation evidencing that Contractor maintains insurance that meets the following requirements:

1. Full Workers' Compensation and Employers' Liability Insurance covering all employees of Contractor as required by law in the State of California and shall include a waiver of subrogation in favor of the State of California.
2. Commercial General Liability (CGL) Insurance of not less than Two Million Dollars (\$2,000,000.00) combined single limit per occurrence and Two Million Dollars (\$2,000,000.00) general aggregate for

bodily injury and property damage, including but not limited to endorsements for the following coverage: Premises, personal/advertising injury, operations, products and completed operations, blanket contractual, independent contractors liability. This insurance can consist of a minimum One Million Dollars (\$1,000,000.00) primary layer of CGL and the balance as an excess/umbrella layer, but only if the County is provided with written confirmation that the excess/umbrella layer "follows the form" of the CGL policy.

3. Automobile Liability Insurance of not less than One Million Dollars (\$1,000,000.00) is required for all owned, hired, and non-owned motor vehicles in the event motor vehicles are used by Contractor in performance of the Contract.
4. In the event Contractor is a licensed professional and is performing professional services under this contract, Professional Liability Insurance is required with a limit of liability of not less than One Million Dollars (\$1,000,000.00).
5. Explosion, Collapse and Underground (XCU) coverage is required when the scope of work includes XCU exposures. For the purpose of this contract, XCU coverage is required.
6. Insurance companies issuing such policies shall have a rating classification of "A-" or better and financial size category ratings of "VII" or better according to the latest edition of the A.M. Best Key Ratings Guide. All insurance companies issuing such policies shall be licensed admitted insurers or eligible surplus lines insurers authorized to do business in the state of California.

7-2.02 PROOF OF INSURANCE REQUIREMENTS

1. Contractor shall furnish proof of coverage satisfactory to the County of El Dorado Risk Management Division as evidence that the insurance required herein is being maintained. The insurance will be issued by an insurance company acceptable to Risk Management Division, or be provided through partial or total self-insurance likewise acceptable to Risk Management Division.
2. The County of El Dorado, its officers, officials, employees, and volunteers; the California Tahoe Conservancy (CTC) and CTC's officers, officials, employees, and volunteers; the California Department of Parks and Recreation (State Parks) and State Parks' officers, officials, employees, and volunteers; and agencies of the federal government, its officers, officials, employees, and volunteers are included as additional insured, but only insofar as the operations under this Contract are concerned. This provision shall apply to all general liability, automobile liability and excess liability policies. Proof that County, CTC, State Parks, and agencies of the federal government are named additional insureds shall be made by providing the Risk Management Division with a certified copy, or other acceptable evidence, of an endorsement to Contractor's insurance policy naming County, CTC, State Parks, and agencies of the federal government as additional insureds.
3. In the event Contractor cannot provide an occurrence policy, Contractor shall provide insurance covering claims made as a result of performance of this Contract for not less than three (3) years following completion of performance of this Contract.
4. Any deductibles or self-insured retentions must be declared to and approved by County. At the option of County, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects to County, its officers, officials, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration and defense expenses.
5. Contractor shall require each of its subcontractors to procure and maintain commercial general liability insurance, automobile liability insurance, and workers' compensation insurance of the types and in the amounts specified above, or shall insure the activities of its subcontractors in its own policy in like amounts. Contractor shall also require each of its subcontractors to name Contractor and the County of El Dorado, its officers, officials, employees, and volunteers as additional insureds.

7-2.03 INSURANCE NOTIFICATION REQUIREMENTS

1. Contractor agrees no cancellation or material change in any policy shall become effective except upon thirty (30) days prior written notice to the County of El Dorado Community Development Agency, Contract Services Unit, 2850 Fairlane Court, Placerville, CA, 95667.
2. Contractor agrees that the insurance required herein shall be in effect at all times during the term of this Contract. In the event said insurance coverage expires at any time or times during the term of this Contract, Contractor shall immediately provide a new certificate of insurance as evidence of the required insurance coverage. In the event Contractor fails to keep in effect at all times insurance coverage as herein provided, County may, in addition to any other remedies it may have, terminate this Contract upon the occurrence of such event. New certificates of insurance are subject to the approval of the Risk Management Division.

7-2.04 ADDITIONAL STANDARDS

Certificates shall meet such additional standards as may be determined by the Department either independently or in consultation with Risk Management Division, as essential for protection of County.

7-2.05 COMMENCEMENT OF PERFORMANCE

Contractor shall not commence performance of this Contract unless and until compliance with each and every requirement of the insurance provisions is achieved.

7-2.06 MATERIAL BREACH

Failure of Contractor to maintain the insurance required herein, or to comply with any of the requirements of the insurance provisions, shall constitute a material breach of the entire Contract.

7-2.07 REPORTING PROVISIONS

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

7-2.08 PRIMARY COVERAGE

Contractor’s insurance coverage shall be primary insurance as respects the County, its officers, officials, employees and volunteers; CTC, its officers, officials, employees and volunteers; State Parks, its officers, officials, employees and volunteers; and agencies of the federal government, and its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the County, its officers, officials, employees or volunteers shall be in excess of the Contractor’s insurance and shall not contribute with it.

7-2.09 PREMIUM PAYMENTS

The insurance companies shall have no recourse against the County of El Dorado, CTC, State Parks, the State of California and their officers, agents, employees, and agencies of the federal government or any of them for payment of any premiums or assessments under any policy issued by any insurance company.

7-2.10 CONTRACTOR’S OBLIGATIONS

Contractor’s indemnity and other obligations shall not be limited by the insurance required herein and shall survive the expiration of this Contract.

7-2.11 GOVERNING PRECEDENCE

To the extent that this Section 7, “Contractor’s Insurance,” is inconsistent with Section 7-1.12, “Indemnification and Insurance,” of the Standard Specifications May 2006, this Section shall govern; otherwise each and every provision of such Section 7-1.12 shall be applicable to this Contract.

SECTION 8. MATERIALS

8-1.01 BUY AMERICA REQUIREMENTS

Steel and iron materials must be melted and manufactured in the United States 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;
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, material produced outside the United States may be used if authorized.

Furnish steel and iron materials to be incorporated into the work with certificate of compliance and certified mill test reports. Mill test reports indicate where the steel and iron were melted and manufactured.

All melting and manufacturing processes for these materials, including an application of a coating, must occur in the United States. Coating includes all processes that protect or enhance the value of the material to which the coating is applied.

8-1.02 PREQUALIFIED AND TESTED SIGNING AND DELINEATION MATERIALS

Caltrans maintains the following list of Prequalified and Tested Signing and Delineation Materials. The Engineer shall not be precluded from sampling and testing products on the list of Prequalified and Tested Signing and Delineation Materials.

The manufacturer of products on the list of Prequalified and Tested Signing and Delineation Materials shall furnish the Engineer a Certificate of Compliance in conformance with the provisions in Section 6 1.07, "Certificates of Compliance," of the Standard Specifications for each type of traffic product supplied.

For those categories of materials included on the list of Prequalified and Tested Signing and Delineation Materials, only those products shown within the listing may be used in the work. Other categories of products, not included on the list of Prequalified and Tested Signing and Delineation Materials, may be used in the work provided they conform to the requirements of the Standard Specifications.

Materials and products may be added to the list of Prequalified and Tested Signing and Delineation Materials if the manufacturer submits a New Product Information Form to the New Product Coordinator at the Transportation Laboratory. Upon a Departmental request for samples, sufficient samples shall be submitted to permit performance of required tests. Approval of materials or products will depend upon compliance with the specifications and tests the Department may elect to perform.

PAVEMENT MARKERS, PERMANENT TYPE

Retroreflective With Abrasion Resistant Surface (ARS)

("length along the direction of travel" x "marker width")

1. Apex, Model 921AR (4" x 4")
2. Ennis-Flint, Models C88 (4" x 4"), 911 (4" x 4") and C80FH (3.1" x 4.5")
3. Ray-O-Lite, Models "AA" ARC II (4" x 4") and ARC Round Shoulder (4" x 4")
4. 3M Series 290 (3.5" x 4")
5. 3M Series 290 PSA
6. Glowlite, Inc Model 988AR (4" x 4")

Retroreflective With Abrasion Resistant Surface (ARS)

(For recessed application only)

1. Ennis-Flint, Model 948 (2.3" x 4.7")
2. Ennis-Flint, Model 944SB (2" x 4")*
3. Ray-O-Lite, Model 2002 (2" x 4.6")
4. Ray-O-Lite, Model 2004 (2" x 4")*

*For use only in 4.5 inch wide (older) recessed slots

Non-Retroreflective, 4-inch round

1. Apex Universal (Ceramic)
2. Apex Universal, Models 929 (ABS) and 929PP (Polypropylene)
3. Glowlite, Inc. (Ceramic) and PP (Polypropylene)
4. Hi-Way Safety, Inc., Models P20-2000W and 2001Y (ABS)
5. Interstate Sales, "Diamond Back" (Polypropylene)

6. Novabrite Models Cdot (White) Cdot-y (Yellow), Ceramic
7. Novabrite Models Pdot-w (White) Pdot-y (Yellow), Polypropylene
8. Three D Traffic Works TD10000 (ABS), TD10500 (Polypropylene)
9. Ray-O-Lite, Ray-O-Dot (Polypropylene)

PAVEMENT MARKERS, TEMPORARY TYPE

Temporary Markers For Long Term Day/Night Use (180 days or less)

1. Vega Molded Products "Temporary Road Marker" (3" x 4")
2. Pexco LLC, Halftrack model 25, 26 and 35

Temporary Markers For Short Term Day/Night Use (14 days or less)

(For seal coat or chip seal applications, clear protective covers are required)

1. Apex Universal, Model 932
2. Pexco LLC, Models T.O.M., T.R.P.M., and "HH" (High Heat)
3. Hi-Way Safety, Inc., Model 1280/1281
4. Glowlite, Inc., Model 932

STRIPING AND PAVEMENT MARKING MATERIAL

Permanent Traffic Striping and Pavement Marking Tape

1. Advanced Traffic Marking, Series 300 and 400
2. Brite-Line, Series 1000
3. Brite-Line, "DeltaLine XRP"
4. Swarco Industries, "Director 35" (For transverse application only)
5. Swarco Industries, "Director 60"
6. 3M, "Stamark" Series 380 and 270 ES
7. 3M, "Stamark" Series 420 (For transverse application only)

Temporary (Removable) Striping and Pavement Marking Tape (180 days or less)

1. Advanced Traffic Marking, Series 200
2. Brite-Line, "Series 100", "Deltaline TWR"
3. Garlock Rubber Technologies, Series 2000
4. Tape 4, Aztec, Grade 102
5. Swarco Industries, "Director-2", "Director 2-Wet Reflective"
6. Trelleborg Industries, R140 Series
7. 3M Series 620 "CR", Series 780 and Series 710
8. 3M Series A145, Removable Black Line Mask
(Black Tape: for use only on Hot mix asphalt surfaces)
9. Advanced Traffic Marking Black "Hide-A-Line"
(Black Tape: for use only on Hot mix asphalt surfaces)
10. Brite-Line "BTR" Black Removable Tape
(Black Tape: for use only on Hot mix asphalt surfaces)
11. Trelleborg Industries, RB-140
(Black Tape: for use only on Hot mix asphalt surfaces)

Preformed Thermoplastic (Heated in place)

1. Ennis-Flint, "Hot Tape"
2. Ennis-Flint, "Premark Plus"
3. Ennis-Flint, "Flametape"

Ceramic Surfacing Laminate, 6" x 6"

1. Highway Ceramics, Inc.

CLASS 1 DELINEATORS

One Piece Driveable Flexible Type, 66-inch

1. Pexco LLC, "Flexi-Guide Models 400 and 566"
2. Carsonite, Curve-Flex CFRM-400
3. Carsonite, Roadmarker CRM-375

4. FlexStake, Model 654 TM
5. GreenLine Model CGD1-66

Special Use Type, 66-inch

1. Pexco LLC, Model FG 560 (with 18-inch U-Channel base)
2. Carsonite, "Survivor" (with 18-inch U-Channel base)
3. Carsonite, Roadmarker CRM-375 (with 18-inch U-Channel base)
4. FlexStake, Model 604
5. GreenLine Model CGD (with 18-inch U-Channel base)
6. Impact Recovery Model D36, with #105 Driveable Base
7. Safe-Hit with 8-inch pavement anchor (SH248-GP1)
8. Safe-Hit with 15-inch soil anchor (SH248-GP2) and with 18-inch soil anchor (SH248-GP3)
9. Safe-Hit RT 360 Post with Soil Mount Anchor (GPS)
10. Shur-Tite Products, Shur-Flex Drivable

Surface Mount Type, 48-inch

1. Bent Manufacturing Company, Masterflex Model MFEX 180-48
2. Carsonite, "Channelizer"
3. FlexStake, Models 704, 754 TM, and EB4
4. Impact Recovery Model D48, with #101 Fixed (Surface-Mount) Base
5. Three D Traffic Works "Channelflex" ID No. 522248W
6. Flexible Marker Support, Flexistiff Model C-9484
7. Safe-Hit, SH 248 SMR

CHANNELIZERS

Surface Mount Type, 36-inch

1. Bent Manufacturing Company, Masterflex Models MF-360-36 (Round) MF-180-36 (Flat) and MFEX 180—36
2. Pexco LLC, Flexi-Guide Models FG300PE, FG300UR, and FG300EFX
3. Carsonite, "Super Duck" (Round SDR-336)
4. Carsonite, Model SDCF03601MB "Channelizer"
5. FlexStake, Models 703, 753 TM, and EB3
6. GreenLine, Model SMD-36
7. Hi-way Safety, Inc. "Channel Guide Channelizer" Model CGC36
8. Impact Recovery Model D36, with #101 Fixed (Surface-Mount) Base
9. Safe-Hit, Guide Post, Model SH236SMA and Dura-Post, Model SHL36SMA
10. Three D Traffic Works "Boomerang" 5200 Series
11. Flexible Marker Support, Flexistiff Model C-9484-36
12. Shur-Tite Products, Shur-Flex

Lane Separation System

1. Pexco LLC, "Flexi-Guide (FG) 300 Curb System"
2. Qwick Kurb, "Klemmfix Guide System"
3. Dura-Curb System
4. Tuff Curb
5. FG 300 Turnpike Curb
6. Shur-Tite Products, SHUR-Curb , Model No. SF0200

CONICAL DELINEATORS, 42-inch

(For 28-inch Traffic Cones, see Standard Specifications)

1. Bent Manufacturing Company "T-Top", TDSC Series
2. Plastic Safety Systems "Navigator-42"
3. Traffix Devices "Grabber"
4. Three D Traffic Works "Ringtop" TD7000, ID No. 742143
5. Three D Traffic Works, TD7500
6. Work Area Protection Corp. C-42

7. Custom-Pak 4600 (Part No. 93005-0001)
8. Plasticade, Navicade, 650 RI

OBJECT MARKERS

Type "K", 18-inch

1. Pexco LLC, Model FG318PE
2. Carsonite, Model SMD 615
3. FlexStake, Model 701 KM
4. Safe-Hit, Model SH718SMA
5. Impact Recover Systems, Model 282-K

Type "Q" Object Markers, 24-inch

1. Bent Manufacturing "Masterflex" Model MF-360-24
2. Pexco LLC, Model FG324PE
3. Carsonite, "Channelizer"
4. FlexStake, Model 701KM
5. Safe-Hit, Models SH824SMA_WA and SH824GP3_WA
6. Three D Traffic Works ID No. 531702W and TD 5200
7. Three D Traffic Works ID No. 520896W
8. Safe-Hit, Dura-Post SHLQ-24"
9. Flexible Marker Support, IMC 9484-24
10. Impact Recover Systems, Model 282-Q

CONCRETE BARRIER MARKERS AND TEMPORARY RAILING (TYPE K) REFLECTORS

Impactable Type

1. ARTUK, "FB"
2. Pexco LLC, Models PCBM-12 and PCBM-T12, PCBM 912
3. Duraflex Corp., "Flexx 2020" and "Electriflexx"
4. Hi-Way Safety, Inc., Model GMKRM100
5. Plastic Safety Systems "BAM" Models OM-BARR and OM-BWAR
6. Three D Traffic Works "Roadguide" Model TD 9300

Non-Impactable Type

1. ARTUK, JD Series
2. Plastic Safety Systems "BAM" Models OM-BITARW and OM-BITARA
3. Vega Molded Products, Models GBM and JD
4. Plastic Vacuum Forming, "Cap-It C400"

METAL BEAM GUARD RAIL POST MARKERS

(For use to the left of traffic)

1. Pexco LLC, "Mini" (3" x 10"), I-Flex
2. Creative Building Products, "Dura-Bull, Model 11201"
3. Duraflex Corp., "Railrider"
4. Plastic Vacuum Forming, "Cap-It C300"

CONCRETE BARRIER DELINEATORS, 16-inch

(For use to the right of traffic)

1. Pexco LLC, Model PCBM T-16
2. Safe-Hit, Model SH216RBM
3. Three D Traffic Works "Roadguide" Model 9400

CONCRETE BARRIER-MOUNTED MINI-DRUM (10" x 14" x 22")

1. Stinson Equipment Company "SaddleMarker"

GUARD RAILING DELINEATOR

(Place top of reflective element at 48 inches above plane of roadway)

Wood Post Type, 27-inch

1. Pexco LLC, FG 427 and FG 527
2. Carsonite, Model 427
3. FlexStake, Model 102 GR
4. GreenLine GRD 27
5. Safe-Hit, Model SH227GRD
6. Three D Traffic Works "Guardflex" TD9100
7. New Directions Mfg, NDM27
8. Shur-Tite Products, Shur-Tite Flat Mount
9. Glasforms, Hiway-Flex, GR-27-00
10. Impact Recover Systems, 200-GRP

Barrier, Guardrail Visibility Enhancement

1. UltraGuard Safety System, Potters Industries, Inc.
2. Worldwide Safety and Irwin Hodson, Monarch Butterfly Reflective Device (MBGR only)

Steel Post Type

1. Carsonite, Model CFGR-327

RETROREFLECTIVE SHEETING**Channelizers, Barrier Markers, and Delineators**

1. Avery Dennison T-6500 Series (For rigid substrate devices only)
2. Avery Dennison WR-7100 Series and WR-6100
3. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
4. Reflexite, PC-1000 Metalized Polycarbonate
5. Reflexite, AC-1000 Acrylic
6. Reflexite, AP-1000 Metalized Polyester
7. Reflexite, Conformalight, AR-1000 Abrasion Resistant Coating
8. 3M, High Intensity

Traffic Cones, 4-inch and 6-inch Sleeves

1. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
2. Reflexite, Vinyl, "TR" (Semi-transparent) or "Conformalight", C85
3. 3M Series 3840, Series 3340
4. Avery Dennison S-9000C

Drums

1. Avery Dennison WR-6100 Series
2. Nippon Carbide Industries, Flexible Ultralite Grade (ULG) II
3. Reflexite, "Conformalight", "Super High Intensity" or "High Impact Drum Sheeting"
4. 3M Series 3810

BARRICADE SHEETING**Type I, Medium-Intensity (Typically Enclosed Lens, Glass-Bead Element)**

1. Nippon Carbide Industries, CN8117
2. Avery Dennison, W 1100 series
3. 3M Series CW 44

Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, W-2100 Series

Type IV, High-Intensity (Typically Unmetalized Microprismatic Retroreflective Element)

1. 3M Series 3334/3336

Vertical Clearance Signs: Structure Mounted

1. 3M Model 4061, Diamond Grade DG3, Fluorescent Yellow

Signs: Type II, Medium-High-Intensity (Typically Enclosed Lens, Glass-Bead Element)

1. Avery Dennison, T-2500 Series
2. Nippon Carbide Industries, Nikkalite 18000

Signs: Type III, High-Intensity (Typically Encapsulated Glass-Bead Element)

1. Avery Dennison, T-5500A and T-6500 Series
2. Nippon Carbide Industries, Nikkalite Brand Ultralite Grade II
3. 3M 3870 and 3930 Series
4. Changzhou Hua R Sheng, Series TM 1200
5. Oracal, Oralite Series 5800

Signs: Type IV, High-Intensity (Typically Unmetallized Microprismatic Element)

1. Avery Dennison, T-6500 Series
2. Nippon Carbide Industries, Crystal Grade, 94000 Series
3. Nippon Carbide Industries, Model No. 94847 Fluorescent Orange
4. 3M Series 3930 and Series 3924S

Signs: Type VI, Elastomeric (Roll-Up) High-Intensity, without Adhesive

1. Avery Dennison, WU-6014
2. Novabrite LLC, "Econobrite"
3. Reflexite "Vinyl"
4. Reflexite "SuperBright"
5. Reflexite "Marathon"
6. 3M Series RS20

Signs: Type VIII, Super-High-Intensity (Typically Unmetallized Microprismatic Element)

1. Avery Dennison, T-7500 Series
2. Avery Dennison, T-7511 Fluorescent Yellow
3. Avery Dennison, T-7513 Fluorescent Yellow Green
4. Avery Dennison, W-7514 Fluorescent Orange
5. Nippon Carbide Industries, Nikkalite Crystal Grade Series 92800
6. Nippon Carbide Industries, Nikkalite Crystal Grade Model 92847 Fluorescent Orange

Signs: Type IX, Very-High-Intensity (Typically Unmetallized Microprismatic Element)

1. 3M VIP Series 3981 Diamond Grade Fluorescent Yellow
2. 3M VIP Series 3983 Diamond Grade Fluorescent Yellow/Green
3. 3M VIP Series 3990 Diamond Grade
4. Avery Dennison T-9500 Series
5. Avery Dennison, T9513, Fluorescent Yellow Green
6. Avery Dennison, W9514, Fluorescent Orange
7. Avery Dennison, T-9511 Fluorescent Yellow

Signs: Type XI, Very High Intensity (Typically Unmetallized Microprismatic Element)

1. 3M Diamond Grade, DG3, Series 4000
2. 3M Diamond Grade, DG3, Series 4081, Fluorescent Yellow
3. 3M Diamond Grade, DG3, Series 4083, Fluorescent Yellow/Green
4. 3M Diamond Grade, DG3, Series 4084, Fluorescent Orange
5. Avery Dennison, OmniCube, T-11500 Series
6. Avery Dennison, OmniCube, T-11511, Fluorescent Yellow
7. Avery Dennison, OmniCube, T-11513, Fluorescent Yellow Green
8. Avery Dennison, OmniCube, W-11514 Fluorescent Orange

SPECIALTY SIGNS

1. Reflexite "Endurance" Work Zone Sign (with Semi-Rigid Plastic Substrate)

ALTERNATIVE SIGN SUBSTRATES

Fiberglass Reinforced Plastic (FRP) and Expanded Foam PVC

1. Fiber-Brite (FRP)
2. Sequentia, "Polyplate" (FRP)
3. Inteplast Group "InteCel" (0.5 inch for Post-Mounted CZ Signs, 48-inch or less)(PVC)

Aluminum Composite, Temporary Construction Signs and Permanent Signs up to 4 foot, 7 Inches

1. Alcan Composites "Dibond Material, 80 mils"
2. Mitsubishi Chemical America, Alpolic 350
3. Bone Safety Signs, Bone Light ACM (temporary construction signs only)
4. Kommerling, USA, KomAlu 3 mm

8-1.03 TEST METHODS

Whenever a reference is made in the specifications to any of the California Test numbers specified below, the corresponding ASTM Designation or AASHTO Designation test may be used to determine the quality of the work or materials. The latest edition of each standard test method shall be used.

| California <u>Test</u> | ASTM <u>Designation</u> | AASHTO <u>Designation</u> |
|---------------------------|----------------------------|------------------------------|
| 231 | D 2922 | T 238(a) |
| 203 | D 422 | T 88 |
| 204 | D 4318 | T 89 and T 90 |
| 504 | C 231 | T 152 |
| 518 | C 138 | T 121 |
| 521 | C 39 | T 22 |
| 523 | C 293 and C 78 | T 177 and T 97 |
| 533 | C 360 | ----- |
| 211 | C131 and C 535 | T 96 |

Note: When ASTM Designation: D 2922 or AASHTO Designation: T 238 is used, the frequency and real distribution of such tests shall comply with the requirements specified in California Test 231. For each determination of relative compaction by ASTM test methods, laboratory compaction tests per ASTM Designation: D 1557 shall be performed, except when the use of previous laboratory maximum dry unit weights are allowed. Previous laboratory maximum dry unit weights may be used to determine relative compaction if the material, as determined by the Engineer, is from the same general excavation or plant source and has the same visual characteristics of color, gradation, and soil classification as the previous laboratory maximum dry unit weights.

8-2.00 FREEZE-THAW REQUIREMENTS

Aggregates proposed for use in Portland cement concrete and precast Portland cement concrete products shall pass the freezing and thawing test, as specified in Section 90-2.02, "Aggregates," of the Standard Specifications and these Special Provisions.

A list of sources of aggregates which have previously passed the freeze-thaw test is available at the Caltrans District Office at 703 "B" Street, Marysville, California 95901.

Contractor's attention is directed to the fact that California Test 528, "Test for Freeze-Thaw Resistance of Aggregates in Air-Entrained Concrete," does not include procedures that determine compliance of the aggregates with the other requirements of the Plans and Specifications.

The mortar strength of fine aggregate relative to the mortar strength of Ottawa sand shall be 100%, minimum, as determined by California Test 515.

Unless a higher cement content is otherwise required, the minimum cement content for all Portland cement concrete and for all precast Portland cement concrete products shall be 590 pounds per cubic yard.

An air-entraining admixture conforming to the requirements in Section 90-4, "Admixture," of the Standard Specifications shall be added to the concrete at the rate required to result in an air content of 5 ½% ± 1 ½%

in the freshly mixed concrete, unless a different air content is specified elsewhere in these Special Provisions.

SECTION 9. DESCRIPTION OF WORK

The Work consists of but is not limited to the following: Construction of a Class 1 bike path, excavation and grading, clearing and grubbing, asphalt concrete paving, tree removal, installing culverts, drainage channels, signing and striping, pavement markings, revegetation, dewatering, traffic control, and temporary erosion control. These improvements are proposed for construction along Sawmill Road from approximately 300 feet east of the Echo View Drive/Sawmill Road intersection to US Highway 50/State Route 89.

SECTION 10. CONSTRUCTION DETAILS

10-1.00 DESCRIPTION OF CONTRACT ITEMS

ITEM 1 – MOBILIZATION

Mobilization shall conform to the provisions of Sections 4-1.03, "Contractor Submittals," and 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

Mobilization shall include the obtaining of all bonds, insurance, and permits; moving onto the site of all equipment; and the furnishing and erecting of temporary buildings and other facilities required for the performance and completion of the Work. Mobilization shall also include the following items:

- 1) Providing on-site sanitary facilities.
- 2) Arranging for and setting up Contractor's storage area(s) in accordance with Section 5-1.36, "Storage of Equipment, Materials, Supplies, Etc.," and applicable permit conditions.
- 3) Removal and disposal of the existing metal gate near BP Station 47+10 LT and removal, storage, and restoration of 8 boulders near BP Station 73+60.
- 4) Posting all OSHA required notices and establishment of safety programs.
- 5) Posting of all Prevailing Wage Requirements.
- 6) Preparing and transmitting the Submittals outlined in Section 4-1.03, "Contractor Submittals."
- 7) Obtaining and Submitting Certificates of Compliance.
- 8) Steam cleaning excavating and loading equipment prior to mobilization on site and presenting receipts to Engineer.
- 9) Preparation of "As-Constructed Plans" as outlined in Section 4-1.03, "Contractor Submittals."

Contractor shall be entitled to progress payments in accordance with Public Contract Code Section 20104.50. In lieu of Section 11-1.02 items A through E of "Mobilization" of the Standard Specifications, the first monthly payment estimate will be prepared when Engineer determines that five percent (5%) of the contract amount, not including mobilization, has been completed. Subsequent monthly pay estimates shall be made on the same day of the month as the first monthly pay estimate. Work completed in place less than two (2) working days prior to the preparation of the monthly pay estimate shall not be eligible for payment until the following month's estimate. The third to last paragraph of Section 11, "Mobilization," of the Standard Specifications shall be amended to read: "The adjustment provisions in Section 4-1.03, "Changes" shall not apply to the contract lump sum item of mobilization."

Payment for Mobilization Item as specified above will be made at the lump sum price bid, with no additional compensation therefor. In lieu of Section 11-1.02, "Payment," of the Standard Specifications, one partial payment of 50% of the bid price will be made upon completion of 50% of the mobilization of equipment on site and completion of items 1-8 above. The final payment of the remainder of the mobilization bid will be after satisfactory completion of the final project punch list and submittal of item 9 above. Satisfactory work completion for the partial or final payment will be determined by Engineer.

ITEM 2 – TRAFFIC CONTROL

Work under this Item shall include all flaggers, temporary signs, lights, barricades, communication devices, and other devices required for the direction of local traffic through or around the work during construction. Contractor shall furnish all sign panels, posts, hardware, and all barricades and shall erect, maintain and remove all construction area signs, necessary for construction of project improvements, as specified in the Plans and these Special Provisions.

Traffic Control Requirements will be strictly enforced. Violation of these requirements is justification for Engineer to stop work until these requirements are met.

Contractor is notified that work along U.S. Highway 50 may be in progress concurrently with construction for this project. Coordination regarding traffic controls may be required with Caltrans and its Contractor.

Attention is directed to Section 10-1.03, "Maintaining Traffic," and Section 10-1.04, "Traffic Control Plan," of these Special Provisions.

In lieu of Section 12-2.02, "Flagging Costs," of the Standard Specifications, the full cost of any flagging necessary shall be borne by Contractor.

Payment for Traffic Control Item as specified above shall be made at the lump sum price bid, with no additional compensation therefor. Partial payments for traffic control will be made based on the percentage of work requiring traffic control completed as determined by Engineer.

ITEM 3 – SWEEPING

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to sweep the project site and dispose of the swept materials. Tracking of sediment onto public streets shall be minimized by a combination of road sweeping and use of tire wash areas designated on the Plans during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets clear of soil and debris. Tracking control applies to streets within the project area as well as streets adjacent to the project area that have the potential to be impacted by tracking from the project construction.

Contractor shall provide sweeping equipment that conforms to the following minimum requirements:

- The sweeper shall be a chassis-mounted vehicle capable of vacuuming the roadways such that the swept material is placed into a hopper, from which the swept material can be removed and disposed of. **Broom sweepers that are attachments to other equipment are not acceptable sweepers.**

Affected streets shall be swept a minimum of **three (3) times daily** (e.g. mid-morning, mid-afternoon, and at the end of the day) during soil hauling operations, during equipment transporting from one work area to another, and as necessary to keep the streets clear of soil and debris. The swept material shall be disposed of in accordance with Section 10-1.10C.6, "Excavation and Grading," of these Special Provisions.

Attention is directed to Section 5-1.55, "Dust and Tracking Control," of these Special Provisions.

Sweeping is a temporary erosion control measure or BMP. A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to implement this temporary erosion control measure.

Payment for Sweeping Item shall be based on the per day price bid and on performing the sweeping operations as specified above.

ITEM 4 – TRENCH AND EXCAVATION SAFETY

Work under this Item shall consist of furnishing all labor, tools, equipment, and materials necessary to install sheeting, shoring and bracing, sloping the sides of trenches/excavations, or equivalent method for trenches/excavations five feet and greater in accordance with the Plans, the Standard Specifications, and these Special Provisions.

Attention is directed to Section 10-1.10, "Excavation and Grading," and Section 10-1.26, "Shoring and Excavation Plan," of these Special Provisions. If Section 10-1.26, "Shoring and Excavation Plan," requires shoring and bracing the excavation in lieu of sloping the sides of the excavation and Contractor doesn't comply, no payment will be made under this Item.

Payment for Trench and Excavation Safety Item shall be based on the lump sum price bid as specified above. Engineer has the discretion to reduce payments for this Item where the need for trench and excavation protection is indicated on the Plans but not required in the field.

ITEM 5 – HUMUS FOR TOPSOIL MIX

Work under this Item shall consist of furnishing all labor, tools, material, and equipment necessary to furnish and deliver humus to the project to be mixed with the soil salvaged from the excavation for the various items of work to create “topsoil mix.”

Attention is directed to Section 10-1.10, "Excavation and Grading," of these Special Provisions regarding humus specifications, mixing humus with salvaged soil, and placing and compacting topsoil mix. The costs associated with mixing the humus with salvaged soil and placing and compacting topsoil mix shall be included in the unit prices bid for the various items of work for which topsoil mix is required.

Payment for Humus for Topsoil Mix Item shall be based on the unit price bid and on the number of cubic yards of humus delivered as specified above. An invoice certifying the number of cubic yards delivered to the site for mixing with salvaged soil will be the basis for determining the quantity for payment.

ITEM 6 – MULCH AND MULCH APPLICATION

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to supply mulch and apply one-inch thick layer of mulch over topsoil mix after seeding by CCC is completed and over disturbed areas beyond new facilities but within the filter fence and construction limit fence in accordance with the Plans, the Standard Specifications, and these Special Provisions.

The CCC under the direction of Engineer will provide flagging on the slopes or other means to identify the location of mulch to be supplied and applied by Contractor. Attention is directed to Section 10-1.10, “Excavation and Grading,” of these Special Provisions regarding mulch specifications and blower equipment specifications.

Payment for Mulch and Mulch Application Item shall be based on the unit price bid and on the number of cubic yards of mulch supplied and applied as specified above. An invoice certifying the number of cubic yards supplied and applied will be the basis for determining the quantity for payment.

ITEM 7 – TACKIFIER AND TACKIFIER APPLICATION

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to supply and apply tackifier over the mulched areas in accordance with the Plans, the Standard Specifications, and these Special Provisions.

Attention is directed to Section 10-1.10, “Excavation and Grading,” of these Special Provisions regarding tackifier specifications and application equipment specifications.

Payment for Tackifier and Tackifier Application Item shall be based on the unit price bid and on the number of square feet of tackifier supplied and applied as specified above or the number of gallons applied for the equivalent square feet. An invoice certifying the number of square feet supplied and applied by the application equipment will be the basis for determining the quantity for payment.

ITEM 8 – INSTALL AND MAINTAIN TIRE WASH AREA (OFF PAVEMENT)

Work under this Item shall consist of furnishing all labor, tools, equipment and material necessary to install, maintain, remove, and dispose of the tire wash area off pavement in accordance with the Plans, Standard Plan T58, the Standard Specifications, and these Special Provisions. Work under this Item includes furnishing, installing, maintaining, removing and disposing of rock filter, temporary entrance fabric, and sediment trapping sump, and following removal, backfilling and compaction of native material adjacent to the edge of pavement.

The tire wash shall be constructed in accordance with Standard Plan T58, Type 1, in Appendix C of these Contract Documents. Rock filter and temporary entrance fabric shall be made up of materials suitable for the

intended use. In order to minimize disturbance and fit the tire wash area within the proposed construction limit fencing, minor modifications to the horizontal configuration shall be allowed. However, the overall dimensions of the rock filter (minimum length of 50 feet and minimum width of 16 feet) shall be maintained. Examples of acceptable modifications are creating a bend in the tire wash from Sawmill Road onto the bike path at SM Stations 56+30 and 82+00 and installing the tire wash parallel to Sawmill Road near SM Station 71+00.

Attention is directed to Section 10-1.10, "Excavation and Grading," Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," and Appendix C. Attention is directed to Section 5-1.55, "Dust and Tracking Control," of these Special Provisions regarding payment for the actual washing of tires.

The Tire Wash Area is a temporary erosion control device or BMP. A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices.

Payment for Install and Maintain Tire Wash Area (Off Pavement) Item shall be based on the unit price bid and on the number of tire wash areas installed and maintained as specified above. Progress payments for this Item will be a maximum of 50% of the unit cost bid multiplied by the number of tire wash areas installed off pavement during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payment for the maintenance, removal, and disposal of all tire wash areas off pavement will be made in the Final Pay Estimate providing that satisfactory maintenance was performed throughout the duration of the project and removal was completed as specified.

ITEM 9 – INSTALL AND MAINTAIN CONCRETE WASH AREA

Work under this Item shall consist of furnishing all labor, tools, equipment and material necessary to install, maintain, remove, and dispose of the concrete wash area in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavation and disposal of excess material, grading, furnishing, installing, maintaining, removing and disposing of the rice straw fiber roll, woven filter fabric, and Class 1 Type A Permeable rock filter.

Attention is directed to Section 10-1.10, "Excavation and Grading," Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

The Concrete Wash Area is a temporary erosion control device or BMP. A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to maintain this temporary erosion control device. A separate \$100 fine will be levied for each time that Contractor, subcontractor, or suppliers do not use the concrete wash out and wash out in a location that has not been approved.

Payment for Install and Maintain Concrete Wash Area Item shall be based on the unit price bid and on the number of concrete wash areas installed and maintained as specified above. Progress payments for this Item will be a maximum of 50% of the unit cost bid multiplied by the number of concrete wash areas installed during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payment for the maintenance, removal, and disposal of all concrete wash areas will be made in the Final Pay Estimate providing that satisfactory maintenance was performed throughout the duration of the project and removal was completed as specified.

ITEMS 10, 11, AND 12 – INSTALL AND MAINTAIN WEIGHTED FIBER ROLLS OR GRAVEL-FILLED ROLLS, INSTALL AND MAINTAIN FILTER FENCE, AND INSTALL AND MAINTAIN VISQUEEN WITH GRAVEL BAGS OR GRAVEL-FILLED ROLLS

Work under these Items shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of, where applicable, these temporary erosion control measures as required by the Plans, the Standard Specifications, these Special Provisions, and the TRPA Best Management Practices.

Attention is direction to Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices.

INSTALL AND MAINTAIN WEIGHTED FIBER ROLLS OR GRAVEL-FILLED ROLLS: Weighted fiber rolls or alternatively, gravel-filled rolls shall be used only in areas of compacted soil, concrete, or paved surfaces. The spacing intervals shall be maintained and new sections of weighted fiber rolls or gravel-filled rolls added as the installations of these improvements progress. In addition to the placement of the weighted fiber rolls or gravel-filled rolls at the specified spacing intervals, Contractor shall place weighted fiber rolls or gravel-filled rolls at the location where each installation is temporarily discontinued. This section of weighted fiber rolls or gravel-filled rolls shall be reused to satisfy the specified intervals once the installation that had been temporarily discontinued is completed. However, payment for the installation and maintenance of this section of weighted fiber rolls or gravel-filled rolls will be made only once. The configuration for the use of weighted fiber rolls or gravel-filled rolls at the sawcut areas is intended to filter sediment from runoff before the runoff enters any inlets.

Areas where Contractor stores equipment or material on pavement may require the use of weighted fiber rolls or gravel-filled rolls for temporary erosion control. If a section of weighted fiber rolls or gravel-filled rolls is used in storage/staging more than once, or removed and replaced at a single location more than once, payment for installation and maintenance will be made only once. Attention is directed to Section 5-1.36, "Storage of Equipment, Materials, Supplies, Etc.," of these Special Provisions, Sheets EC-1, EC-2, and T-1 of the Plans for staging/storage areas. Weighted fiber rolls or gravel-filled rolls shall be a minimum length of 5 feet.

Contractor shall remove and dispose of all weighted fiber rolls or gravel-filled rolls measures after construction in the area is completed and TRPA approval is obtained.

Contractor shall note that **straw bales** shall not be used for any temporary erosion control measures.

Payment for Install and Maintain Weighted Fiber Rolls or Gravel-Filled Rolls Item shall be based on the unit price bid and on the number of weighted fiber rolls or gravel-filled rolls installed and maintained as described above with no additional compensation therefor. Progress payments for this Item will be a maximum of 50% of the unit cost bid multiplied by the number of weighted fiber rolls or gravel-filled rolls installed during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payment for maintenance, removal, and disposal of all weighted fiber rolls or gravel-filled rolls will be made in the Final Pay Estimate providing that satisfactory maintenance was performed throughout the duration of the project.

INSTALL AND MAINTAIN FILTER FENCE (FF): FF shall be placed at the downstream edge of fill and elsewhere noted on the Plans.

TRPA or Lahontan may require that FF be used at additional locations.

Areas where Contractor temporarily stockpiles excavated materials may require FF for temporary erosion control. Attention is directed to Section 5-1.36, "Storage of Equipment, Materials, Supplies, Etc.," of these Special Provisions and Sheets EC-1, EC-2, and T-1 of the Plans for the designated temporary staging/storage areas.

FF shall be removed and disposed of by Contractor after construction is completed.

Payment for Install and Maintain Filter Fence Item shall be based on the unit price bid and on the number of linear feet of FF installed and maintained as described above with no additional compensation therefor. Progress payments for these Items will be a maximum of 50% of the unit cost bid multiplied by the number of

linear feet of FF installed during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payments for maintenance, removal, and disposal, as applicable, of filter fence will be made in the Final Pay Estimate providing that satisfactory maintenance was performed through the duration of the project and removal was completed as specified.

INSTALL AND MAINTAIN VISQUEEN WITH GRAVEL BAGS OR GRAVEL-FILLED ROLLS: Visqueen sheeting weighted with gravel bags or gravel-filled rolls shall be placed in all swales and channels along the entire length of the swale and/or channel after grading is completed, when the turf reinforcement mat, cannot be placed in the swale or channel immediately after that section of swale or channel is graded, unless from weather reports, Engineer determines that the interim use of visqueen sheeting weighted with gravel bags or gravel-filled rolls is unnecessary. Contractor shall be paid per linear foot of channel or swale along which visqueen with gravel bags or gravel-filled bags are installed. Gravel bags or gravel-filled rolls shall be placed along the visqueen at the spacing shown on Sheet EC-3 of the Plans. Visqueen shall be overlapped as shown on Sheet EC-3 of the Plans. The visqueen sheeting shall cover the swale or channel cross section and extend one foot either side of the top of the swale or channel bank. Once installed in a graded swale or channel, visqueen sheeting with gravel bags or gravel-filled rolls shall remain in place until turf reinforcement mat is placed.

The quantity shown on the Item is approximate and may be reduced or may be increased. The increase or reduction of this quantity compared with that set forth in the bid schedule shall not constitute a basis for a claim by Contractor for extra payment or damages and Section 4-1.03B, "Increased or Decreased Quantities," of the Standard Specifications shall not apply.

Payment for Install and Maintain Visqueen with Gravel Bags or Gravel-Filled Rolls Item shall be based on the unit price bid and on the number of linear feet of channel or swale over which the visqueen with gravel bags or gravel-filled rolls are installed and maintained as described above with no additional compensation therefor. Progress payments for this Item will be a maximum of 50% of the unit cost bid multiplied by the number of linear feet of swale or channel over which visqueen with gravel bags or gravel-filled rolls are installed and maintained during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. As described above once the swale or channel is covered, the visqueen and gravel bags or gravel-filled rolls will remain in place until the swale or channel permanent protection is installed. Therefore, the maximum payment for each swale and/or channel location will be the length of the swale and/or channel. Payments for maintenance, removal, and disposal of visqueen with gravel bags or gravel-filled rolls will be made in the Final Pay Estimate providing that satisfactory maintenance was performed through the duration of the project and removal was completed as specified.

ITEM 13 – INSTALL AND MAINTAIN SEDIMENT TRAP INLET PROTECTION

Work under this Item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Plans, the Standard Specifications, these Special Provisions, and the TRPA Best Management Practices. Work under this Item includes furnishing, installing, maintaining, removing, and disposing of the sediment trap inlet protection as shown on Sheet EC-3 of the Plans.

Attention is directed to Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices.

Sediment trap inlet protection shall be placed as denoted on the Plans in areas where grading has been completed and final stabilization and seeding are pending.

Payment for Install and Maintain Sediment Trap Inlet Protection Item shall be based on the unit cost bid and on the number of sediment trap inlet protections (one per sediment trap as designated by the Engineer and/or shown on the Plans to receive inlet protection) installed and maintained with no additional compensation therefor. Progress payments for this Item will be a maximum of 50% of the unit cost bid

multiplied by the number of sediment trap inlet protections installed during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payment for the maintenance, removal, and disposal of all sediment trap inlet protection will be made in the Final Pay Estimate providing that satisfactory maintenance was performed throughout the duration of the project and removal was completed as specified.

ITEM 14 – INSTALL AND MAINTAIN WOODEN TREE TRUNK PROTECTION

Work under this Item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Plans, the Standard Specifications, these Special Provisions, and the TRPA Best Management Practices. Work under this Item includes furnishing, installing, maintaining, removing and disposing of wooden tree trunk protection and construction limit fencing interior wrap.

Attention is directed to Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan," of these Special Provisions.

A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices.

At areas inside the drip line of existing tree branches within the construction area, tree trunks shall be wrapped with construction limit fence then wrapped with wooden tree trunk protection in accordance with the detail shown on the Plans. The wooden tree trunk protection shall be attached to the tree in accordance with the details shown on the Plans and as described in Section 10-1.24 "Temporary Erosion Control and Storm Water Pollution Prevention Plan," of these Special Provisions.

Wooden tree trunk protection shall remain in place until equipment access is no longer necessary in the area and TRPA approval is obtained.

Payment for Install and Maintain Wooden Tree Trunk Protection Item shall be based on the unit cost bid and on the number of wooden tree trunk protections (one per tree as designated by the Engineer and/or shown on the Plans to receive tree trunk protection) installed and maintained with no additional compensation therefor. Progress payments for this Item will be a maximum of 50% of the unit cost bid multiplied by the number of wooden tree trunk protections installed during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payment for the maintenance, removal, and disposal of all wooden tree trunk protection will be made in the Final Pay Estimate providing that satisfactory maintenance was performed throughout the duration of the project and removal was completed as specified.

ITEM 15 – INSTALL AND MAINTAIN TREE PROTECTION AND CONSTRUCTION LIMIT FENCE

Work under this Item shall consist of furnishing all labor, tools, equipment, and materials necessary to install, maintain, remove, and dispose of this temporary erosion control measure as required by the Plans, the Standard Specifications, these Special Provisions, and TRPA Best Management Practices.

Attention is directed to Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices.

Contractor shall perform all construction activities that are outside the road right-of-way within the construction limits staked by Engineer and delineated with construction limit fence installed by Contractor. Where directed by Engineer and/or shown on the Plans, construction limit fence shall be placed around individual trees that are to remain, in accordance with the Construction Limit Fence detail shown on the Plans. Attention is directed to Section 10-1.22, "Disturbance and Revegetation," of these Special Provisions.

The area within which Contractor will be allowed to work will be the area within the limits of the construction limit fence. At trees near the work area, the width of the work area will be reduced in order to protect the

trees. Contractor shall review each such location to determine what equipment can be used to install the improvements at these locations or if hand work will be necessary. The costs associated with working within these reduced widths shall be included in the unit price bid for the applicable item of work with no additional compensation therefor.

All construction limit fence shall remain in place until equipment access is no longer necessary in the area and TRPA approval is obtained.

Where tree protection fencing cannot be placed at the dripline of the tree, the detail showing wooden tree trunk protection shall apply. The unit price bid for Install and Maintain Wooden Tree Trunk Protection Item shall apply to this condition.

Payment for Install and Maintain Tree Protection and Construction Limit Fence Item shall be based on the unit cost bid and on the number of linear feet of construction limit fence and/or tree protection fencing installed and maintained with no additional compensation therefor. Progress payments for this Item will be a maximum of 50% of the unit cost bid multiplied by the number of linear feet of construction limit fence and/or tree protection fencing installed during the pay period as determined by Engineer and/or required by TRPA's Compliance Division. Payment for the maintenance, removal, and disposal of all construction limit fence and/or tree protection fence will be made in the Final Pay Estimate providing that satisfactory maintenance was performed throughout the duration of the project and removal was completed as specified.

ITEM 16 – TREE REMOVAL

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary for the removal and disposal of trees equal to or larger than 8" in diameter, measured at an elevation of five feet above the existing ground surface adjacent to the tree, and the preparation, storage, and delivery of logs for fence material and log sediment barriers. Trees equal to or larger than 8" in diameter to be removed are shown on the Plans and will be marked in the field by Engineer.

Work under this Item includes the following: On APN 33-090-12 and APN 33-90-16, all trees 6" in diameter or greater, designated on the Plans to be removed or cut as clear and grub, shall be limbed, the logs cut into 10 lengths, and neatly stacked on one or both of the parcels noted at location(s) mutually agreed upon between Contractor and Engineer. These trees shall remain the property of the land owner.

Except for trees to be removed on APN 33-090-12 and APN 33-90-16, all trees 4" to 8" in diameter designated on the Plans to be removed or cut as clear and grub shall be limbed, the logs cut into 10' lengths and stored on site for the construction of the wood rail fence (by others) as shown on Sheet D-3 of the Plans. Suitable storage location(s) providing protection from damage and theft shall be proposed by the Contractor for approval by Engineer. Logs shall be neatly stacked in a manner that prevents rolling and covered with tarps. Should the quantity of material exceed the amount required for the fencing, Contractor shall dispose of the excess trees in accordance with Section 10-1.27, "Timber Removal Practices," of these Special Provisions. At the time of fence construction, Contractor shall coordinate with Engineer the delivery of the logs to locations mutually agreed upon between Contractor and Engineer.

Except for trees removed on APN 33-090-12 and APN 33-90-16, trees 10" to 16" in diameter designated on the Plans to be removed shall be limbed, the logs cut into 20' lengths and used for log sediment barriers as shown on Sheet D-3 of the Plans. If the logs are not installed as sediment barriers at the time of felling, Contractor shall be responsible to provide for suitable storage location(s) providing protection from damage and theft. Logs shall be neatly stacked in a manner that prevents rolling and covered with tarps. Should the quantity of material exceed the amount required for the sediment barriers, Contractor shall dispose of the excess trees as described above.

Snags removed under this Item that exhibit infestation or rot shall not be salvaged for the wood rail fence or log sediment barriers.

For the tree noted to be removed near BP Sta 59+00 on APN 33-090-12 and the trees noted to be removed on APN 33-180-21, stumps shall be left in place and cut flush with bike path subgrade, minimizing subsurface disturbance at these locations.

The costs associated with felling and limbing trees smaller than 8" in diameter, cutting those trees into 10' logs, and storing and delivering those logs to designated locations shall be included as part of clearing and grubbing and no additional compensation shall be made therefor.

Removal of tree stumps shall not be paid for under this Item. Compensation for the removal of trees less than 8" in diameter and the removal of stumps of any size as necessary for construction of the various items of work as staked by Engineer, shall be included in the unit prices paid for the various items of work as part of clearing and grubbing and no additional compensation shall be made therefor.

Attention is directed to Section 10-1.07, "Clearing and Grubbing," and Section 10-1.27, "Timber Removal Practices," of these Special Provisions.

Payment for Tree Removal Item shall be based on the unit price bid and the number of trees equal to or larger than 8" in diameter removed as specified herein and on the Plans.

ITEMS 17 AND 19 – 15"x21" ARCH CMP (IN PAVEMENT) AND 20"x28" ARCH CMP (IN PAVEMENT)

Work under these Items shall consist of furnishing all labor, tools, equipment and materials necessary to construct CMP culverts in accordance with the Plans, Standard Specifications, and these Special Provisions. Work under these Items includes sawcutting, excavation, disposal of excess material, scarifying and compacting subgrade, shoring, bracing, or sloping of the sides of the excavation for trenches less than five feet deep, furnishing and laying pipe, elbows, couplings, and bends, furnishing, placing, and compacting bedding, if applicable; backfilling and compaction, if applicable; furnishing, placing, and compacting aggregate base or furnishing and placing slurry cement, asphalt concrete removal, disposal, and replacement, and removal and disposal of existing culverts where noted on the Plans. The costs associated with the removal and disposal of sediment accumulated in the culverts during construction shall also be included in the unit price bid for these Items. Disposal of sediment shall be in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions. Sediment shall be removed just prior to demobilization.

Cover is the distance from the finished surface of the proposed AC paving to the top of the pipe. Slurry cement backfill shall be used in conformance with Section 10-1.19, "Concrete Structures," of these Special Provisions where the cover over the pipe is less than 18 inches. Attention is directed to Section 10-1.10, "Excavation and Grading", of these Special Provisions for backfill and compaction requirements where cover is greater than or equal to 18 inches.

The new AC section shall be 3 inches of compacted AC over 8 inches compacted aggregate base at all locations under this Item. Cold AC mix shall be placed, compacted, and maintained over the pipe trench and shall be placed and compacted immediately after the backfill compaction is complete or the slurry cement has set. The costs associated with furnishing, placing, compacting, and maintaining cold AC mix shall be included in the unit price bid for CMP in pavement.

Compensation for slurry cement backfill, where applicable, shall be included in the unit price bid for CMP in pavement.

Contractor is responsible for the protection of the existing utilities in the performance of the work described herein. The costs associated with providing such protection shall be included in the unit price bid for CMP in pavement.

Attention is directed to Section 10-1.03, "Maintaining Traffic," Section 10-1.04, "Traffic Control Plan," Section 10-1.10, "Excavation and Grading," Section 10-1.17, "Culvert and CMP Structures," Section 10-1.19, "Concrete Structures," Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," and Section 10-1.26, "Shoring and Excavation Plan," of these Special Provisions. Attention is also directed to Items "Dewatering Area 1," "Dewatering Area 3," "Dewatering Area 4," "Dewatering Area 5," "Dewatering Area 6," Section 10-1.20, "Dewatering," and Section 10-1.24,

“Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP),” for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for 15"x21" Arch CMP (in pavement) and 20"x28" Arch CMP (in pavement) Items shall be based on the unit price bid and on the number of linear feet of CMP constructed as specified above.

ITEMS 18 AND 20 – 15"x21" ARCH CMP (OUT OF PAVEMENT) AND 20"x28" ARCH CMP (OUT OF PAVEMENT)

Work under these Items shall consist of furnishing all labor, tools, equipment and materials necessary to construct CMP culverts beyond the edge of pavement or under the bike path in accordance with the Plans, Standard Specifications, and these Special Provisions. Work under these Items includes clearing and grubbing, excavation, disposal of excess material, scarifying and compacting subgrade, shoring, bracing, or sloping of the sides of the excavation for trenches less than five feet deep, furnishing and laying pipe, elbows, couplings, and bends, furnishing, placing, and compacting bedding, backfilling and compaction, mixing soil and humus, placing and compacting topsoil mix, and removal and disposal of existing culverts where noted on the Plans. Where applicable, topsoil mix shall be mounded over the top of the pipe as shown on the pipe trench detail on Plan Sheet D-3. The costs associated with the removal and disposal of sediment accumulated in the culverts during construction shall also be included in the unit price bid for these Items. Disposal of sediment shall be in accordance with Section 10-1.10, “Excavation and Grading,” of these Special Provisions. Sediment shall be removed just prior to demobilization.

Cover over the pipes shall be a minimum of 12 inches where cover is defined as the distance from finished grade elevation of the backfilled pipe trench to the top of the pipe. Where pipe is installed under AC paving (e.g., the bike path), but designated as being out of pavement, cover is the distance from the finished surface of the proposed AC paving to the top of the pipe. In these locations, slurry cement backfill shall be used in conformance with Section 10-1.19, “Concrete Structures,” of these Special Provisions where the cover over the pipe is less than 18 inches. The costs associated with slurry cement backfill shall be included in the unit price bid for CMP out of pavement.

Contractor is responsible for the protection of the existing utilities in the performance of the work described herein. The costs associated with providing such protection shall be included in the unit price bid for CMP out of pavement.

Attention is directed to Section 10-1.03, “Maintaining Traffic,” Section 10-1.04, “Traffic Control Plan,” Section 10-1.10, “Excavation and Grading,” Section 10-1.17, “Culvert and CMP Structures,” Section 10-1.23, “Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric,” Section 10-1.26, “Shoring and Excavation Plan,” and Items “Install and Maintain Filter Fence,” “Install and Maintain Tree Protection and Construction Limit Fence,” “Humus for Topsoil Mix,” “Mulch and Mulch Application,” and “Tackifier and Tackifier Application,” of these Special Provisions. Attention is also directed to Items “Dewatering Area 1,” “Dewatering Area 3,” “Dewatering Area 4,” “Dewatering Area 5,” “Dewatering Area 6,” Section 10-1.20, “Dewatering,” and Section 10-1.24, “Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP),” for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for 15"x21" Arch CMP (out of pavement) and 20"x28" Arch CMP (out of pavement) Items shall be based on the unit price bid and on the number of linear feet of CMP constructed as specified above.

ITEMS 21 AND 22 – 15"x21" ARCH FES AND 20"x28" ARCH FES

Work under these Items shall consist of furnishing all labor, tools, equipment and materials necessary to install galvanized metal flared end sections with toe plates in accordance with the Plans, Standard Specifications, and these Special Provisions. Work under these Items includes excavation, disposal of excess material, backfill, compaction, installation, attachment to culvert, furnishing and installing No. 1 backing each side and over the FES, mixing soil and humus, and placing and compacting topsoil mix in the disturbed area around the FES but within the construction area limits.

The Contractor shall backfill and compact in and around the excavation as necessary to match the configuration of the No.1 backing shown on the Flared End Section and Rock Dissipator detail.

Attention is directed to Section 10-1.10, "Excavation and Grading," Section 10-1.17, "Culvert and CMP Structures," Section 10-1.18, "Flared End Sections," Section 10-1.21, "Rock Specifications," and Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," of these Special Provisions. Attention is also directed to Items "Dewatering Area 1," "Dewatering Area 3," "Dewatering Area 4," "Dewatering Area 5," "Dewatering Area 6," Section 10-1.20, "Dewatering," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for 15"x21" Arch FES and 20"x28" Arch FES Items shall be based on the unit price bid for each type of flared end section and on the number of each type of flared end section installed as specified above.

ITEMS 23 AND 24 – 36" SEDIMENT TRAP AND 48" SEDIMENT TRAP

Work under these Items shall consist of furnishing all labor, tools, equipment and materials necessary to construct the sediment traps (STs) in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under these Items includes clearing and grubbing, excavation, mixing soil and humus, disposal of excess material, furnishing, placing, and compacting Class 1 Type A and B permeable materials, furnishing and placing woven geotextile fabric, placement and compaction of backfill, regrading, furnishing and installing galvanized vertical CMP (including welding culverts, installing concrete collars, furnishing and installing Caltrans Type 36R grates per Caltrans Revised Standard Plan RSP D77B or fabrication and installation of checkered plate hinged lids, windows, and vertical bars on windows), No. 1 backing with precast concrete base, and placing and compacting topsoil mix around the ST where applicable. Also included are the ring assemblies attached to the hinged lids. The costs associated with the removal and disposal of sediment and stormwater accumulated in the traps during construction shall also be included in the unit price bid for these Items. Disposal of sediment shall be in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions. Sediment shall be removed just prior to demobilization.

Contractor is responsible for the protection of the existing utilities in the performance of work described herein. The costs associated with providing such protection shall be included in the unit price bid for each type of sediment trap.

The locations where welding culverts to the sediment traps is required are listed below:

- P-1 – SM Station 47+10.30 RT – Two 15"x21" arch CMPs
- P-4 – SM Station 69+29.98 LT – 15"x21" arch CMP
- P-5 – SM Station 73+12.64 LT – 15"x21" arch CMP
- P-6 – SM Station 93+57.81 LT – 15"x21" arch CMP

Contractor shall cut the sediment trap windows and holes to receive culverts in the field and, where applicable, weld the culverts to the vertical CMP in the field to allow for adjustments if necessary. The lids, lid assemblies, and grates may be prefabricated. Should Contractor elect to prefabricate all elements (other than CMP lengths, grates, lids, and lid assemblies) of the sediment traps, any modifications required in the field that are the result of providing prefabricated elements (other than CMP lengths, grates, lids, and lid assemblies) shall be performed by Contractor at his expense. Contractor shall submit shop drawings for all prefabricated elements of the sediment traps to Engineer within five (5) working days of the Notice to Proceed for review. The concrete bases shall be precast.

Galvanized areas damaged during cutting, welding, or handling shall be repaired with suitable corrosion resistant coating approved by Engineer (see Section 5-1.53, "Certificates of Compliance").

Attention is directed to Section 10-1.26, "Shoring and Excavation Plan," for submittal requirements for safety and a description of the conditions under which sloping the sides of the excavation will be allowed in lieu of shoring and/or bracing.

Attention is directed to Section 4-1.03 "Contractor Submittals," Section 10-1.03, "Maintaining Traffic," Section 10-1.10, "Excavation and Grading," Section 10-1.17, "Culvert and CMP Structures," Section 10-1.19,

“Concrete Structures,” and Section 10-1.21, “Rock Specifications.” Attention is also directed to Items “Dewatering Area 1,” “Dewatering Area 2,” “Dewatering Area 3,” “Dewatering Area 4,” “Dewatering Area 5,” “Dewatering Area 6,” “Dewatering Area 7,” Section 10-1.20, “Dewatering,” and Section 10-1.24, “Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP),” for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for 36" Sediment Trap and 48" Sediment Trap Items shall be based on the unit price bid for each type of sediment trap and on the number of each type of sediment trap installed as specified above.

ITEM 25 – LOG SEDIMENT BARRIER

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to install log sediment barriers in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes excavating, disposal of excess material, furnishing and installing logs and stakes, mixing soil and humus, and placing and compacting topsoil mix in the disturbed area around the logs but within the construction area limits.

One twenty-foot long log shall be considered one log sediment barrier. Logs shall be free of infestation or rot. Stakes shall be made of hardwood.

Attention is directed to Item “Tree Removal,” and Section 10-1.27, “Timber Removal Practices,” of these Special Provisions.

Payment for Log Sediment Barrier Item shall be based on the unit price bid and on the number of linear feet of log sediment barrier installed as specified above.

ITEM 26 – COIR LOG

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to install coir logs in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes excavating, disposal of excess material, furnishing and installing coir logs, stakes, and twine.

Coir logs shall be 12-inch diameter coconut fiber wrapped in bio-degradable netting. Twine shall be sisal and stakes shall be made of hardwood. One 10-foot long section of coir log shall be considered one coir log.

Attention is directed to Section 4-1.03 "Contractor Submittals," of these Special Provisions. Attention is also directed to Item “Dewatering Area 1,” and Section 10-1.24, “Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP),” for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for Coir Log Item shall be based on the unit price bid and on the number of coir logs installed as specified above.

ITEM 27 – MODIFIED GRASS-LINED SWALE

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to construct the modified grass-lined swales in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavation, placement and compaction of fill, disposal of excess material, furnishing and placing turf reinforcement mat, furnishing and placing No. 1 backing, mixing soil and humus, and placement and compaction of topsoil mix adjacent to the swale in disturbed areas within the construction area limits.

The costs associated with the placement of salvaged sod in the swale shall be included in the unit price bid for Item “Sod Salvage and Transplant.” For those swale locations where salvaged sod quantities for transplanting to the swale become deficient, the costs associated with furnishing and installing turf reinforcement mat, mixing soil and humus, and placing and compacting topsoil mix shall be included in the unit price bid for this Item. Under these conditions, sod will be supplied and placed by others.

The costs associated with salvaging soil at modified grass-lined swales shall be included in the unit price bid for this Item.

For swales to be constructed outside of the road right-of-way, the swale shall be constructed with the trucks for off-hauling excess material placed on the roadway, unless Contractor can provide an alternate method that reduces tracking of dirt and minimizes disturbance. Equipment for constructing modified grass-lined swales outside the road right-of-way shall be track-mounted. Contractor's attention is directed to Section 5-1.55, "Dust and Tracking Control," of these Special Provisions.

Attention is directed to Items "Install and Maintain Filter Fence" and "Install and Maintain Visqueen with Gravel Bags or Gravel-Filled Rolls," Section 10-1.07, "Clearing and Grubbing," Section 10-1.08, "Sod Salvage and Transplant," Section 10-1.10, "Excavation and Grading," and Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric" of these Special Provisions. Attention is also directed to Items "Dewatering Area 1," "Dewatering Area 3," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for Modified Grass-Lined Swale Item shall be based on the unit price bid and on the number of linear feet of modified grass-lined swale installed as specified above.

ITEM 28 – SOD SALVAGE AND TRANSPLANT

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to salvage and transplant the following quantities of sod as shown on the Plans in accordance with the Plans, the Standard Specifications, and these Special Provisions:

Salvage Sod Areas

- P-1 – SM Station 47+20 RT- 310 SF at pipe, FES, rock dissipator, and modified grass-lined swale

Transplant Sod Area:

- Modified grass-lined swales

All sod salvaging and transplant procedures shall be in accordance with Section 10-1.08, "Sod Salvage and Transplant," of these Special Provisions. Attention is directed to "Modified Grass-Lined Swale" Item for the provisions for sod by others should salvaged sod quantities be deficient.

Attention is directed to Section 10-1.07, "Clearing and Grubbing," and Section 10-1.10, "Excavation and Grading," of these Special Provisions. Attention is also directed to Items "Dewatering Area 1," "Dewatering Area 3," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for Sod Salvage and Transplant shall be based on the unit price bid and on the number of square feet of sod salvaged and transplanted in accordance with the procedures specified in these Special Provisions.

ITEM 29 – ROCK-LINED CHANNEL

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to construct the rock-lined channels in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavation, placement and compaction of fill, disposal of excess material, scarifying and compaction of subgrade, furnishing and placing turf reinforcement mat and No. 1 backing, mixing soil and humus, placing and compacting topsoil mix in the area disturbed beyond the rock-lined channel but within the construction area limits, and warping the rock-lined channel to match adjacent improvements or existing ground where noted.

The costs associated with the removal and disposal of existing AC and debris near SM Station 62+40 LT as shown on Sheet P-3 of the Plans shall be included in the unit price bid for this Item. The costs associated with fill placement and compaction along the RLC, grading to drain to the RLC, and sediment removal within the excavation limits of the RLC and its disposal, as shown on Sheets P-1, P-2, P-3, P-4, and P-6 of the Plans shall be included in the unit price bid for this Item.

For channels to be constructed outside of the road right-of-way, the channel shall be constructed with the trucks for off-hauling excess material placed on the roadway, unless Contractor can provide an alternate method that reduces tracking of dirt and minimizes disturbance. Equipment for constructing rock-lined channels outside the road right-of-way shall be track-mounted. Contractor's attention is directed to Section 5-1.55, "Dust and Tracking Control," of these Special Provisions.

Attention is directed to Items "Install and Maintain Filter Fence" and "Install and Maintain Visqueen with Gravel Bags or Gravel-Filled Rolls," Section 10-1.07, "Clearing and Grubbing," Section 10-1.10, "Excavation and Grading," Section 10-1.21, "Rock Specifications," and Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," of these Special Provisions. Attention is also directed to Item "Dewatering Area 1," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for Rock-Lined Channel Item shall be based on the unit price bid and on the number of linear feet of rock-lined channel installed as specified above.

ITEM 30 – ROCK BOWL

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to construct the rock bowls in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavation, placement and compaction of fill, disposal of excess material, scarifying and compaction of subgrade, furnishing and placing of turf reinforcement mat and No. 1 backing, mixing soil and humus, and placing and compacting topsoil mix in the area disturbed beyond the rock bowl but within the construction area limits.

The costs associated with fill placement and compaction adjacent to rock bowl and gravel bag removal and disposal, as shown on Plan Sheets P-1, P-3, and P-5, shall be included in the unit price bid for this Item.

Attention is directed to Section 10-1.10, "Excavation and Grading," Section 10-1.21, "Rock Specifications," and Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric" of these Special Provisions. Attention is also directed to Items "Dewatering Area 1," "Dewatering Area 2," "Dewatering Area 3," "Dewatering Area 4," "Dewatering Area 5," "Dewatering Area 6," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for Rock Bowl Item shall be based on the unit price bid and on the number of square feet of rock bowl installed as specified above.

ITEM 31 – ROCK DISSIPATOR

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to construct the rock dissipators in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavation, placement and compaction of fill, where applicable, disposal of excess material, scarifying and compaction of subgrade, furnishing and placing of turf reinforcement mat, mixing soil and humus, placing and compacting topsoil mix in the disturbed area adjacent to the rock dissipator but within the construction area limits, and furnishing and placing No. 1 backing, including the 18"x24" rock key.

The costs associated with salvaging soil at rock dissipators shall be included in the unit price bid for this Item.

Attention is directed to Section 10-1.10, "Excavation and Grading," Section 10-1.21, "Rock Specifications," and Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric" of these Special Provisions. Attention is also directed to Items "Dewatering Area 1," "Dewatering Area 3," "Dewatering Area 4," "Dewatering Area 5," "Dewatering Area 6," "Dewatering Area 8," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements and to the FES with Rock Dissipator detail regarding the pay limits for the rock dissipator.

Payment for Rock Dissipator Item shall be based on the unit price bid and on the number of square feet of rock dissipator installed as specified above.

ITEM 32 – ROCK SLOPE PROTECTION

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to construct the rock slope protection in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavation, disposal of excess material, scarifying and compaction of subgrade, furnishing and placing of rolled erosion control product, No. 2 backing where applicable, backfill and compaction, and No. 1 backing.

Omit No. 2 backing at the following locations:

- P-1 – At toe of 4:1 slope near SM Station 47+10 LT
- P-3 – Above the rock-lined channel from SM Station 62+72 LT to SM Station 64+43 LT and SM Station 54+54 LT to SM Station 64+85 LT
- P-3 – Above the rock bowl near SM Station 64+89 LT
- P-4 – Above the rock-lined channel from SM Station 68+62 LT to SM Station 68+92 LT
- P-5 – Above the rock bowl near SM Station 73+12 LT

Attention is directed to Section 10-1.10, "Excavation and Grading," Section 10-1.21, "Rock Specifications," and Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," of these Special Provisions.

Payment for Rock Slope Protection Item shall be based on the unit price bid and on the number of square feet of rock slope protection installed as specified above.

ITEM 33 – CLASS 1 BIKE PATH

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to construct the asphalt concrete Class 1 bike path in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes sawcutting, AC pavement removal and disposal, clearing and grubbing, excavation, placement and compaction of fill, soil salvage and mixing soil and humus, disposal of excess material, placing and compacting topsoil mix in the disturbed area around the perimeter of the bike path but within the construction area limits, scarifying and compacting subgrade, furnishing, placing, and compacting 6 inches of aggregate base, and furnishing, placing, and compacting 3 inches of asphalt concrete.

Work under this Item shall also include grubbing performed by hand on APN 33-090-12 between BP Station 58+14 and BP Station 59+36 and on APN 33-180-21 between BP Station 88+68 and BP Station 90+66, thereby minimizing subsurface disturbance in these locations. Clearing and grubbing in these locations shall be followed by the temporary placement of 3 inches of compacted aggregate base over the area of the bike path subject to construction traffic within the stationing shown. During clearing and grubbing operations within these stationed limits, only low ground pressure (LGP) equipment shall be allowed. The costs associated with the placement and compaction of the 3 inches of temporary aggregate base and its removal and disposal shall be included in the unit price bid for this Item.

The costs associated with AC removal and AC paving where the bike path crosses the driveway at BP Station 61+70± shall be included in the Item "R&R AC Driveway." The costs associated with AC removal and AC paving where the bike path crosses the driveway at BP Station 65+60± shall be included in the unit price bid for this Item.

Attention is directed to Section 4-1.03, "Contractor Submittals," Section 10-1.02, "Equipment Specifications," Section 10-1.10, "Excavation and Grading," Section 10-1.12, "Aggregate Base, Class 2," Section 10-1.14 "Asphaltic Emulsion (Paint Binder)," Section 10-1.15, "Asphalt Concrete," and Section 10-1.22, "Disturbance and Revegetation," of these Special Provisions.

Payment for the Class 1 Bike Path Item shall be based on the unit price bid and on the number of linear feet of bike path installed as specified above.

ITEM 34 – STRIPING AND MARKINGS

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to install bike path striping and markings in accordance with the Plans, the Standard Specifications, and these Special Provisions.

Payment for Striping and Markings Item shall be based on the unit bid price and the actual square foot area of striping and markings placed in the field, with no additional compensation therefor.

ITEM 35 – BIKE PATH SIGNS

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to install bike path and related signs in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes furnishing and installing signs and posts and furnishing and installing bolts, bands, brackets, and other hardware required to securely attach signs to the chain link fence. Hardware shall be stainless steel and be of a commercial or industrial grade. Bolts shall be theft proof.

Metal posts shall be the following TRPA approved color: Federal Standard 595 Color FS 30059, or approved equal. The backs of all signs shall be cleaned, sanded and primed, then painted with the following TRPA approved color: Federal Standard 595 Color FS 30059, or approved equal.

Attention is directed to Section 4-1.03 "Contractor Submittals," of these Special Provisions.

Payment for Bike Path Signs Item shall be based on the unit price bid for each type of sign and on the number of signs installed as specified above.

ITEM 36 – CHAIN LINK FENCE

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to construct the chain link fence in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavating, and furnishing all materials and labor necessary for installing the chain link fence and concrete post foundations.

Trimming of existing tree limbs along the fence alignment may be necessary. The limbs shall be saw cut leaving a clean end, a minimum of one foot beyond the fence alignment. All slash and debris shall be properly disposed of. The costs associated with this work shall also be included in the unit price bid for this Item.

Chain link fence shall be Type CL-6, slatted, and shall conform to the provisions in Section 80, "Fences," of the Standard Specifications; except that chain link fabric shall be 9 gauge and Portland cement concrete for the foundations shall be minor concrete in accordance with these Special Provisions. Chain link fabric top and bottom selva shall be knuckled finish.

Galvanized steel end, latch, and corner posts shall have a minimum nominal outside diameter of 2.875 inches, weighing not less than 5.79 lbs/lf. Galvanized steel line posts shall have a nominal outside diameter of 2.375 inches, weighing not less than 3.65 lbs/lf. Galvanized steel rails and braces shall have a nominal outside diameter of 1.660 inches, weighing not less than 2.27 lbs/lf. Posts shall include galvanized bolted fittings to properly secure rails and braces. Tension wire for top and bottom edge support of fence fabric shall be No. 7 gauge zinc coated steel wire. Post cap and fittings shall be manufacturer's standard, pressed steel or malleable iron post caps, fittings, and accessories, all galvanized. Post caps shall be designed to fit

securely over the posts to exclude water. All other fittings and hardware shall be provided to fasten to the pipe posts or concrete in the manner indicated on the Plans, Special Provisions, or Standard Specifications.

Bottom tension wire shall be installed on a straight grade between posts by leveling high points of the existing ground surface. Fasten fabric to tension wires with wire ties or hog rings not over 18 inches on center. Wire ties shall have at least one complete turn. Close each hog ring with ends overlapping. Wrap tension wires around terminal posts. The distance from top of the fabric to top of the tension wire shall not exceed 2 inches.

Truss rods shall be alloy steel a minimum diameter of 3/8 inch. Rods shall have threaded ends and self-tightening galvanized turnbuckles and anchor plates. Secure anchor plates to posts by welding. Tension bars shall be galvanized steel, one piece the height of the fabric less 2 inches, with a minimum cross section of 1/4 inch x 3/4 inch. Provide one tension bar for each end post and two for each corner and pull post. Tension bar bands shall be galvanized heavy pressed steel or malleable iron bands with a minimum cross section of 1/8 inch x 3/4 inch, spaced not over 15 inches on center. Miscellaneous materials and accessories, clips, tie wire, anchors, and fasteners shall be provided as required for a complete installation. All items shall be galvanized.

Slats shall be flat, tubular extruded plastic with UV inhibitors, top locking, one piece the full height of the fence fabric, inserted vertically, have no staples, and be dark brown in color. Slats may be preinstalled in the chain link fabric or installed in the field.

The Contractor shall submit shop drawings of the chain link fence including details of the fencing, installation, slats, posts, hardware, and accessories at least five (5) working days before the start of fence installation for Engineer's approval.

Attention is directed to Section 80, "Fences," of the Standard Specifications," Section 4-1.03 "Contractor Submittals," Section 10-1.10, "Excavation and Grading," and Section 10-1.19, "Concrete Structures," of these Special Provisions.

Payment for Chain Link Fence Item shall be based on the unit price bid and on the linear feet of chain link fence installed as specified above.

ITEMS 37 AND 38 – CHAIN LINK 10' DRIVE GATE AND CHAIN LINK 4' WALK GATE

Work under these Items shall consist of furnishing all labor, tools, materials, and equipment necessary to construct chain link gates in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under these Items includes clearing and grubbing, excavating, and furnishing all materials and labor necessary for installing the gates and concrete for drop rod sleeve.

Chain link gates shall be Type CL-6, slatted, and shall conform to the provisions in Section 80, "Fences," of the Standard Specifications; except that chain link fabric shall be 9 gauge. Chain link fabric top and bottom selvage shall be knuckled finish.

The 10-foot drive gates and 4-foot walk gates (called double swing and swing gates, respectively, on the plans) shall be installed at the locations shown on the Plans. The 10-foot drive gates shall be double gates consisting of two 5-foot swing gates with a latch and drop rod with sleeve set in concrete. Gate latches for drive gates and walk gates shall accommodate a standard padlock. Gate frames shall be fabricated from zinc-coated steel pipe matching the chain link fence posts and shall have a minimum nominal outside diameter of 1.900 inches and weighing not less than 2.72 lbs/lf. Gates shall be assembled by welding or with fittings and rivets for rigid connections. Install fabric with tension bars at vertical edges and tie wires at top and bottom edges. Attach hardware with rivets or by other means that provide security against removal or breakage.

Truss rods shall be installed on each gate frame and shall be alloy steel a minimum diameter of 3/8 inch. Rods shall have threaded ends and self-tightening galvanized turnbuckles and anchor plates. Secure anchor plates to gate frame by welding. Tension bars shall be galvanized steel, one piece the height of the fabric less 2 inches, with a minimum cross section of 1/4 inch x 3/4 inch. Tension bar bands shall be

galvanized heavy pressed steel or malleable iron bands with a minimum cross section of 1/8 inch x 3/4 inch, spaced not over 15 inches on center. Miscellaneous materials and accessories, clips, tie wire, anchors, and fasteners shall be provided as required for a complete installation. All items shall be galvanized.

Slats shall be flat, tubular extruded plastic with UV inhibitors, top locking, one piece the full height of the fence fabric, inserted vertically, have no staples, and be dark brown in color. Slats may be preinstalled in the chain link fabric or installed in the field.

The Contractor shall submit shop drawings of the chain link gates including details of the frame, installation, slats, posts, hardware, and accessories at least five (5) working days before the start of fence installation for Engineer's approval.

Attention is directed to Section 80, "Fences," of the Standard Specifications," Section 4-1.03 "Contractor Submittals," and Section 10-1.19, "Concrete Structures," of these Special Provisions.

Payment for Chain Link 10' Drive Gate and Chain Link 4' Walk Gate Items shall be based on the unit price bid for each type of gate and on the number gates installed as specified above.

ITEM 39 – METAL RAIL FENCE

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to construct the metal rail fence in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes clearing and grubbing, excavating, and furnishing all materials and labor necessary for installing the metal rail fence and concrete post foundations.

Posts and rails shall be seamless mild steel. End, corner, line posts, and rails shall have a nominal outside diameter of 2.875 inches, weighing not less than 5.80 lbs/lf. Posts shall include bolted fittings to properly secure rails. Post caps shall be designed to fit securely over the posts to exclude water. Post caps and all fittings, hardware, and accessories shall be steel match the finish of the posts and rails and be of a commercial or industrial grade.

The Contractor shall submit shop drawings of the metal rail fence including details of the fencing, installation, slats, posts, hardware, and accessories at least five (5) working days before the start of fence installation for Engineer's approval.

Attention is directed to Section 4-1.03 "Contractor Submittals," Section 10-1.10, "Excavation and Grading," and Section 10-1.19, "Concrete Structures," of these Special Provisions.

Payment for Metal Rail Fence Item shall be based on the unit price bid and on the linear feet of metal rail fence installed as specified above.

ITEM 40 – MISC GRADING

Work under this Item shall consist of providing all labor, tools, materials, and equipment necessary to perform miscellaneous grading as shown on the Plans and as directed by Engineer. Miscellaneous grading includes excavation, placement and compaction of fill and backfill, mixing soil and humus, disposal of excess material in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions, scarifying and compaction of subgrade, and placement and compaction of topsoil mix over graded areas where applicable.

Work under this Item is separate from excavation, fill, compaction, disposal of excess material, and scarifying and compacting of subgrade required within other items of work in these Special Provisions.

The grading quantities shown on the plans and listed below include the topsoil mix, where applicable.

- Sheet P-2 – 0.5 CY – SM STA 57+90± RT, fill existing channel;
- Sheet P-3 – 2 CY – SM STA 64+70± RT, fill existing channel;
- Sheet P-5 – 5 CY – SM STA 74+00± LT and 78+50 LT, grade to drain, add fill;
- Sheet P-6 – 1 CY – SM STA 82+95± LT and 93+64 RT, remove sediment, grade to daylight; and,

- Sheet P-8 – 0.5 CY – Bike Path STA 51+50± LT, grade to drain.

Measurement for payment under this Item shall be based on the number of cubic yards of soil excavated or the number of cubic yards of soil placed and compacted as shown on the Plans. If miscellaneous grading is required but not shown and quantified on the Plans or these Special Provisions, the payment quantity shall be mutually agreed upon by Engineer and Contractor. The quantity shown in the bid schedule is approximate and may be reduced or may be increased.

Attention is directed to Section 10-1.10, "Excavation and Grading," of these Special Provisions. Attention is also directed to Items "Dewatering Area 3," "Dewatering Area 6," Section 10-1.20, "Dewatering," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," for information regarding which excavations may require dewatering and for dewatering operation requirements.

Payment for Misc Grading Item shall be based on the unit price bid and on the number of cubic yards of soil excavated or placed and compacted as quantified on the Plans and these Special Provisions and/or as determined by mutual agreement between Engineer and Contractor.

ITEM 41 – MISC AC PAVING

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to install miscellaneous AC paving as directed by Engineer in accordance with the Plans, the Standard Specifications, and these Special Provisions. When directed by Engineer, work under this Item shall include sawcutting, AC removal and disposal, excavation, disposal of excess material, grading, scarifying and compacting subgrade, furnishing, placing, and compacting aggregate base (8" compacted thickness), furnishing and placing paint binder (tack coat), placing and compacting AC (3" compacted thickness).

The quantity of this Item listed in the bid schedule represents no actual estimate, is nominal only, and may be greatly increased, decreased, or reduced to zero. Payment under this Item will be limited to the number of square feet of miscellaneous AC paving installed, as directed by Engineer.

All asphalt concrete and any other unsuitable material removed under this Item shall be removed from the Tahoe Basin in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions.

The following work will be paid for under this Item:

- Areas marked in the field by Engineer.

Regardless of the condition of the existing pavement, Contractor shall take such care of the sawcut edge of the pavement as is necessary to ensure that miscellaneous AC paving greater than that shown on the Plans is not necessary. All pavement disturbed beyond the limits shown on the Plans and/or marked in the field shall be replaced at Contractor's expense and shall include an additional sawcut.

Attention is directed to Section 10-1.26, "Shoring and Excavation Plan," which notes areas where the Contractor shall shore excavations rather than laying back the slopes in order to avoid the need for AC removal and additional miscellaneous AC paving. Should the Contractor's excavation operation cause the need for additional miscellaneous AC paving, the Contractor shall perform this paving work at its own expense.

Contractor's attention is directed to Section 10-1.01, "Order of Work," Section 10-1.03, "Maintaining Traffic," Section 10-1.10, "Excavation and Grading," Section 10-1.14, "Asphaltic Emulsion (Paint Binder)," and Section 10-1.15, "Asphalt Concrete," of these Special Provisions.

Payment for Misc AC Paving Item shall be based on the unit price bid and on the number of square feet of miscellaneous AC paving installed as specified above.

ITEM 42 – R&R AC DRIVEWAY

Work under this Item shall consist of furnishing all labor, tools, equipment and materials necessary to remove and replace AC paving at driveways in accordance with the Plans, the Standard Specifications, and these

Special Provisions. Work under this Item includes sawcutting, AC removal and disposal, clearing and grubbing, excavation, placement and compaction of fill, disposal of excess material, scarifying and compaction of subgrade, furnishing, placing and compacting 6" thickness of aggregate base, furnishing, placing, and compaction of AC (3" compacted thickness), furnishing and placing paint binder (tack coat), and furnishing, placing, and compacting 6" thickness of aggregate base shoulder. Width of aggregate base shoulder shall be a minimum of 1 foot and a maximum of 2 feet. AC paving shall be sloped to prevent ponding or trapping water and to maintain a smooth transition at the bike path.

The costs associated with AC removal and AC paving where the bike path crosses the driveway at BP Station 61+70± shall be included in the unit price bid for this Item. The costs associated with AC removal and AC paving where the bike path crosses the driveway at BP Station 65+60± shall be included in the Item "Class 1 Bike Path."

Attention is directed to Section 10-1.01, "Order of Work," Section 10-1.10, "Excavation and Grading," Section 10-1.12, "Aggregate Base, Class 2," Section 10-1.14, "Asphaltic Emulsion (Paint Binder)," and Section 10-1.15, "Asphalt Concrete," of these Special Provisions.

Payment for R&R AC Driveway Item shall be based on the unit price bid and on the number of square feet of AC paving installed as specified above.

ITEM 43 – EXISTING AC PAVEMENT REMOVAL (F)

Work under this Item shall consist of furnishing all labor, tools, materials, and equipment necessary to remove the existing AC paving as shown on Sheets P-4 of the Plans in accordance with the Plans, the Standard Specifications, and these Special Provisions. Work under this Item includes sawcutting, removal of existing AC paving, disposal of AC paving that is removed, scarifying and compacting subgrade, placing and compacting a minimum 6 inches of aggregate base in the resulting void.

The costs associated with AC removal at existing or proposed culvert crossings and bike path shall be included in the unit prices bid for the applicable items.

Attention is directed to Section 10-1.10, "Excavation and Grading," and Section 10-1.12, "Aggregate Base, Class 2," of these Special Provisions. As noted by (F) in the bid schedule the quantity shown in the bid schedule shall be the final pay quantity regardless of the variations in pavement thickness encountered.

Payment for Existing AC Pavement Removal (F) Item shall be based on the unit price bid and on the number of square feet shown in the bid schedule, regardless of the thickness of AC, and removed as specified above.

ITEMS 44, 45, 46, 47, 48, AND 49 – DEWATERING AREA 1, DEWATERING AREA 2, DEWATERING AREA 3, DEWATERING AREA 4, DEWATERING AREA 5, AND DEWATERING AREA 6

Work under these Items shall consist of furnishing all labor, tools, equipment, and materials necessary to dewater the following excavation and backfill locations:

- **Dewatering Area 1** - Plan Sheet P-1, located near SM Station 47+00± – Rock-lined channels, rock bowl, sediment traps, culvert removal, culvert installation (with FES and rock dissipator), modified grass-lined swale, sod salvage and transplant, coir logs.
- **Dewatering Area 2** - Plan Sheet P-1, located near SM Station 49+30± – Rock bowl, sediment trap.
- **Dewatering Area 3** - Plan Sheet P-3, located near SM Station 64+80± – Rock bowl, sediment trap, culvert removal, culvert installation (with FES and rock dissipator), modified grass-lined swale, fill.
- **Dewatering Area 4** - Plan Sheet P-4, located near SM Station 69+30± – Rock bowl, sediment trap, culvert removal, culvert installation (with FES and rock dissipator).
- **Dewatering Area 5** - Plan Sheet P-5, located near SM Station 73+10± – Rock bowl, sediment trap, culvert removal, culvert installation (with FES and rock dissipator).

- **Dewatering Area 6** - Plan Sheet P-6, located near SM Station 93+60± – Rock bowl, sediment traps, culvert removal, culvert installation (with FES and rock dissipator), grade to daylight.

Dewatering shall result in conditions that allow the required compaction to be achieved and shall prevent sediment-laden water that exceeds the effluent discharge limits from entering the drainage ways within the project area.

It is anticipated that these areas may exhibit wet conditions. Discussions between Contractor and Engineer will determine if dewatering is necessary. If it is decided that dewatering at a particular location is unnecessary, no payment for this Item will be made. If it is decided that dewatering is unnecessary at each of these locations, no payment for these Items will be made.

Contractor's attention is directed to Section 4-1.03, "Contractor Submittals," Section 5-1.27 "Lake, Stream, and Air Pollution," Section 10-1.01, "Order of Work," Section 10-1.20, "Dewatering," and Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions.

Payment for Dewatering Area 1, Dewatering Area 2, Dewatering Area 3, Dewatering Area 4, Dewatering Area 5, and Dewatering Area 6 Items shall be based on the unit price bid and on the number of locations dewatered as specified above.

ITEM 50 – OVEREXCAVATE AND REMOVE UNSUITABLE MATERIAL

Work under this Item shall be directed by Engineer. When directed by Engineer, Contractor shall excavate below the lower limit of the excavation line shown on the Plans.

All work done under this Item shall conform to the requirements of applicable portions of the Standard Specifications except as modified herein.

The quantity of this Item listed in the bid schedule represents no actual estimate, is nominal only, and may be greatly increased, decreased, or reduced to zero.

Payment under this Item will be limited to the volume of material removed, as directed by Engineer, below the lower limit of the excavation line and outside the dimensional limits designated on the Plans.

If excavation below the lower limit of excavation as shown on the Plans is required, the ensuing void shall be backfilled with Class 1 Type A permeable material compacted in accordance with Section 10-1.10. The permeable material shall conform to Section 10-1.10, "Excavation and Grading," of these Special Provisions.

If the improvements at which overexcavation and removal of unsuitable material is performed are in the roadway section and are to receive aggregate base and/or native backfill over the permeable material, Contractor shall place woven geotextile (filter) fabric in accordance with Section 10-1.23, "Rolled Erosion Control Product, Turf Reinforcement Mat, Filter Fabric, and Geotextile Fabric," of these Special Provisions over the permeable material prior to completing the backfilling operation.

All unsuitable material removed under this Item shall be removed from the Tahoe Basin in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions.

Payment for Overexcavate and Remove Unsuitable Material Item shall be based on the unit price bid and on the number of cubic yards of unsuitable material excavated as specified above. Measurement of the number of cubic yards shall be based on the dimensions of the void resulting from the excavation as measured by the Engineer.

ITEM 51 – ROCK FRACTURING AND REMOVAL

Work under this Item shall consist of furnishing all labor, tools, equipment, and material necessary to fracture and remove any existing rock that prohibits installation of the proposed improvements to the grades shown on the Plans and that can't be removed after a reasonable effort with the equipment being used on the site

has been made. Work under this Item includes the use of a cracking agent, or non-detonating rock breaking equipment, rather than blasting; blasting will not be allowed. The work includes fracturing the rock in accordance with the manufacturer's recommendations and removing the rock. If the rock cannot be used in the construction of other improvements, Contractor shall dispose of the rock in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions. Contractor shall be responsible for any damage to persons, private property, the work, or existing structures or utilities associated with this Item.

This specification is intended to illustrate the minimum effort that can reasonably be expected from Contractor if rock is encountered and must be removed. Should Contractor have larger equipment on site for use on the project, Contractor shall make a reasonable effort with the larger equipment to remove the rock and compensation shall not be made under this Item, but shall be included in the unit price bid for the item of work for which the rock was encountered.

The quantity of this Item listed in the bid schedule represents no actual estimate, is nominal only, and may be increased, decreased, or reduced to zero.

Contractor shall notify Engineer immediately when rock is encountered that meets the definition described in the first paragraph of this Item. Engineer will consider whether the lines and grades can be adjusted to avoid fracturing and removing the rock. If Engineer determines adjustments in the lines and grades are not feasible, that the rock meets the definition described herein, and that Contractor has made a reasonable effort to remove, fracture and remove, or scrape and remove the rock with the minimum equipment specified above, then the removal and disposal of the obstructing rock shall be accomplished and paid for in accordance with the methods described in this Item. Contractor and Engineer will agree to the number of cubic yards of rock fractured and removed immediately after the removal of the rock from the excavation.

The void created by the rock removal shall be backfilled with native material or whichever is applicable per the Plans and details. The backfill shall conform to and shall be compacted in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions.

The cracking agent shall be soundless chemical demolition agent such as Bentonamit or Fract.Ag, or approved equal. The non-detonating rock breaking equipment shall be Boulder Buster, NoneX, or approved equal.

Payment for Rock Fracturing and Removal Item shall be based on the unit price bid and on the number of cubic yards of rock fractured and removed as specified above and mutually agreed upon by Contractor and the Engineer.

ITEM 52 – WINTERIZATION

Work under this Item shall consist of developing a winterization plan for Engineer's review and approval; and furnishing all labor, tools, equipment, and materials necessary to install and maintain the winterization measures within the approved plan and as required by the Sheets EC-1, EC-2, and EC-3 of the Plans, these Special Provisions, and the approved SWPPP during the winterization timeframe from October 15, 2014 to May 1, 2015. Maintenance shall be in accordance with Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions. Work under this Item also includes demobilization of the equipment needed to complete the remaining work in the 2014 construction season and remobilization of the equipment and materials necessary to complete the remaining work in the 2015 construction season. Payment for this Item of work constitutes full and final compensation for all direct and indirect costs of performing the work required herein, inclusive of all profit, extended or unabsorbed home or field office overhead, bond and insurance premiums, escalation costs, and any other costs associated with carrying the project through the winter for completion during the 2015 construction season.

Any grading work started (i.e., soil disturbance) must be winterized by October 15 unless County is able to obtain an extension to the grading deadline from TRPA. If grading extensions are not granted, County will notify Contractor five (5) working days prior to October 15, 2014 with a written Temporary Suspension of Work notice related to the grading activities only and a request to develop the winterization plan for submittal to Engineer within two (2) days of receipt of the written Temporary Suspension of Work notice for review and approval. Engineer shall review Contractor's winterization plan and respond to Contractor with any revisions

to the plan within two (2) working days. Upon receipt of the required revisions, Contractor shall have two (2) working days to re-submit for final Engineer's approval and written notice to proceed with the work described within the approved plan.

A fine of \$100/ day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to maintain the temporary erosion control devices within the approved winterization plan.

If the Engineer requires work beyond that described herein, the Engineer will negotiate a Contract Change Order with the Contractor for this extra work.

The lump sum amount bid shall include maintaining the following temporary BMPs which are within the approved SWPPP and which shall be the minimum required BMPs within the Contractor's winterization plan:

- 5 Each of Weighted Fiber Rolls or Gravel-Filled Rolls;
- 60 Linear Feet of Filter Fence; and,
- 1,130 Linear Feet of Visqueen with Gravel Bags or Gravel-Filled Rolls.

Attention is direction to Section 4, "Beginning of Work, Time of Completion and Liquidated Damages," Section 4-1.03, "Contractor Submittals," Section 10-1.01, "Order of Work," Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," and Item "Install and Maintain Weighted Fiber Rolls or Gravel-Filled Rolls," Item "Install and Maintain Filter Fence," and Item "Install and Maintain Visqueen with Gravel Bags or Gravel-Filled Rolls," of these Special Provisions.

Attention is also directed to Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications with respect to temporary suspension of work.

Payment for Winterization Item shall be based on a lump sum price bid for the work as specified above. Should Contractor complete the Project in accordance with Section 5-1.36, "Final Inspection," of these Special Provisions prior to October 15, 2014, or such other extended deadline as may be allowed by TRPA, this item of work shall not be required and no compensation will be provided therefor.

10-1.01 ORDER OF WORK

Order of work shall conform to the provisions in Section 5-1.05, "Order of Work," of the Standard Specifications and these Special Provisions. Compensation for conforming to these requirements shall be considered as included in the various contract items of work and no additional compensation will be made therefor.

Contractor shall schedule work to reduce the need for dewatering by working on the drier areas of the project first.

As described in Section 4-1.02A, "Commencement of Work Requirements," Contractor shall install temporary erosion control.

Any work started (i.e., soil disturbance) must be winterized by October 15 unless County is able to obtain an extension to the grading deadline from both TRPA and Lahontan. Attention is directed to Item "Winterization" regarding extensions not being granted.

Contractor shall implement the following sequence of work for the project:

- Unless winterization is implemented, all bike path, roadway, and driveway AC paving must be complete by October 31, 2014.

The California Conservation Corps (CCC), under County's direction, will perform revegetation work for the project. Contractor shall coordinate the humus application work on the slopes, and the mulch and tackifier applications with Engineer to minimize the need for additional mobilization and demobilization of the mulch and tackifier operations. The CCC will perform this work while Contractor is still fulfilling his construction

contract. In areas where the CCC is to follow the work of Contractor (e.g. after Contractor places and compacts topsoil mix), Contractor shall notify Engineer when he has completed such work so revegetation can begin. Any disturbance of this revegetation work by Contractor's operations shall be repaired at Contractor's expense by the CCC.

Attention is directed to Section 5-1.23, "Public Safety," of these Special Provisions.

10-1.02 EQUIPMENT SPECIFICATIONS

Low ground pressure (LGP) machinery shall be used during the initial work along the bike path on APN 33-090-12 between BP Station 58+14 and BP Station 59+36 and on APN 33-180-21 between BP Station 88+68 and BP Station 90+66. Initial work includes clearing and grubbing operations followed by temporary placement of 3 inches of compacted aggregate base over the area of the bike path subject to construction traffic within the stationing shown. The equipment shall be approved by the Engineer in accordance with Section 4-1.03, "Contractor Submittals," of these Special Provisions.

All construction equipment working in or near SEZ areas shall be steam cleaned in accordance with Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan," of these Special Provisions.

10-1.03 MAINTAINING TRAFFIC

Attention is directed to Section 7, "Legal Relations and Responsibility," and Section 12, "Construction Area Traffic Control Devices," of the Standard Specifications, Section 5-1.23, "Public Safety," and Section 10-1.01, "Order of Work," and these Special Provisions.

Traffic Control Requirements will be strictly enforced. Any violation of such requirements is justification for Engineer to stop work until requirements are met.

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

Project-related vehicles will observe the posted speed limit on hard-surfaced road and 15 miles per hour speed limit on unpaved road during travel in the project area.

Local and emergency traffic shall be permitted to pass through construction operations at all times with as little inconvenience as possible. At the end of the day's work and when construction operations are suspended, roadways shall be opened for public traffic in both directions. Contractor's attention is directed to Section 10-1.01, "Order of Work."

When work is in progress, at least one 10-foot minimum lane shall be opened to public traffic. Otherwise, two 10-foot lanes of traffic shall be maintained.

Contractor shall provide access to all driveways at all times. No driveways shall be out of service unless other arrangements are made with the property owner(s). Contractor shall notify County 48 hours in advance of any work that will affect any owner's driveway. Contractor shall submit a plan that describes his method of operation that will provide for operable driveways. This plan shall be in accordance with Section 4-1.03, "Contractor Submittals," of these Special Provisions and shall be submitted for Engineer's acknowledgment at least two weeks prior to the performance of any work that affects driveways.

Equipment actively engaged in construction shall be confined to the work corridor marked by delineators spaced at 30-foot intervals, and will not be allowed to travel or encroach upon the travel lane(s) used to convey local traffic through the project, unless traffic is controlled by an adequate number of flaggers.

At the end of each working day if a difference in excess of 0.15 foot exists between the elevation of the existing pavement and the elevation of any excavation within twenty (20) feet of the traveled way, material shall be placed and compacted against the vertical cuts adjacent to the traveled way. During excavation operations, native material may be used for this purpose, however, once the placing of the new AC section

commences, aggregate base shall be used. The material shall be placed to the level of the elevation of the top of existing pavement and tapered at a slope of 4:1 or flatter to the bottom of the excavation. Treated Class 2 Aggregate Base shall not be used for the taper. Full compensation for placing the material on a 4:1 slope, regardless of the number of times it is required to be removed and replaced shall be considered as included in the contract price paid for the applicable item and no additional compensation will be allowed therefor. No payment will be made for material placed in excess of that required for the new AC section.

Alternatively, at the end of each working day, the edge of the excavations adjacent to the travel lane for aggregate base shoulder shall be delineated with traffic cones or flexible delineators. Any excavations for sediment traps not backfilled at the end of the work day shall be covered with trench plates and delineated with traffic cones or flexible delineators and flashing barricades. Contractor shall not excavate more than can be installed and backfilled in one working day. If the backfill for the culvert installation is placed but not compacted by the end of the work day, the trench shall be plated, or otherwise prepared to safely provide a minimum of two ten-foot travel lanes.

When traffic cones or delineators are used to delineate a temporary edge of travel lane, the line of cones or delineators shall be considered to be the edge of travel lane, however, Contractor shall not reduce the width of the travel lane to less than 10 feet within County right-of-way without written approval from Engineer.

When work is not in progress on a trench or other excavation that requires reduction or closure of the travel lane, the traffic cones or portable delineators used for the travel lane reduction or 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.

Personal vehicles of Contractor's employees shall not be parked within the construction limits at any time. Contractor shall make his own arrangements relative to keeping the work area clear of parked vehicles, whether belonging to his employees or to private individuals.

Construction area signs shall not be used until they are needed and when no longer needed they shall become the property of Contractor and shall be removed from the site of the work.

The seventh paragraph of Section 12-3.06, "Construction Area Signs," of the Standard Specifications shall be amended to read as follows:

Contractor shall clean all construction area sign panels at the time of installation and as often thereafter as Engineer determines to be necessary, but at least once every month.

Signs damaged by any cause shall be repaired or, if determined by Engineer to be irreparable, replaced by Contractor at his expense.

All construction area signs shall conform to the dimensions, color, legends, and reflectorization or lighting requirements of the Plans, the current California Manual on Uniform Traffic Control Devices, also called the California MUTCD and hereinafter referred to as California MUTCD, and these Special Provisions. All sign panels shall be the product of a commercial sign manufacturer, but need not be new. Used sign panels in good repair may be furnished with Engineer's approval.

Except as otherwise shown on the Plans, construction area signs shall be stationary signs or portable signs. Construction area signs shall be erected at the locations shown on the Plans or in Contractor's Traffic Plan approved by Engineer.

Stationary signs shall conform to Section 12-3.06A, "Stationary Mounted Signs," of the Standard Specifications with the following additions:

Stationary signs that are shown on the Plans or described in these Special Provisions, or as directed for placement by Engineer, shall be attached to 4" x 4" wood posts with 5/16" galvanized carriage bolts and washers. The posts shall be

securely set a minimum of 30" in the ground and such that the bottom of the signs will be five (5) feet above the pavement.

Sign panels for stationary mounted signs shall consist of high quality reflective sheeting applied to a base of aluminum or plywood in conformance with the following:

Base material shall be exterior grade plywood not less than 3/8" thick, or sheet aluminum not less than 0.063" thick for widths up to 42" and not less than 0.080" thick for widths of 48" or greater.

Portable signs shall conform to the provisions of Section 12-3.06B, "Portable Signs," of the Standard Specifications except the third paragraph shall be amended to read: "The sign standard or framework shall be capable of supporting the size of the sign specified."

The fact that rain or other causes, either within or beyond the control of Contractor, forces delay of the work, shall in no way relieve Contractor of his responsibility for maintaining traffic through the project as specified herein. Contractor shall at all times keep on the job such material, force, equipment as may be necessary to keep the roads within the project open to traffic and in good repair, and shall expedite the passage of traffic using such labor and equipment as may be necessary.

The term "Construction Area Signs" shall include all temporary signs required for the direction of local traffic through or around the work during construction. Such signs are shown in or referred to in the current California MUTCD.

Construction Area Signs shall conform to Section 12-3.06, "Construction Area Signs," of the Standard Specifications with the following additions and amendments:

Contractor shall furnish all sign panels, posts and hardware, and shall erect, maintain, and remove all construction area signs shown on the Plans as provided in these Special Provisions.

Traffic cones shall conform to the provisions of Section 12-3.10, "Traffic Cones," of the Standard Specifications.

In lieu of the provisions in Section 7-1.08, "Public Convenience," Section 7-1.09, "Public Safety," and Section 12-2.02, "Flagging Costs," of the Standard Specifications, Contractor shall bear the entire cost of furnishing flaggers and furnishing, installing, maintaining, and removing signs, lights, flares, barricades, delineators, and other warning and safety devices.

Full compensation for providing signs, covering and uncovering signs, lights, flares, traffic cones, flaggers, delineators, barricades, warning and safety devices shall be made under the lump sum Item "Traffic Control."

10-1.04 TRAFFIC CONTROL PLAN

Traffic Control Procedures on County roads shall conform generally to Caltrans Standard Plans, the California MUTCD, and these Special Provisions.

The Traffic Control Plan shown on Sheet T-1 of the Plans has been prepared as a guide to Contractor in preparation of a complete Traffic Control Plan and to aid in Contractor's planning for staging/storage of materials and equipment. Contractor's Traffic Control Plan shall include detailed controls, including flaggers, lane closures and signs for all items of road work which will require alteration of existing traffic patterns. Contractor's Traffic Control Plan shall include all signing required on intersecting streets within the area that will require traffic control and signage on U.S. Highway 50, as required. Contractor's plan shall address traffic control related to truck traffic associated with the project construction.

Contractor's Traffic Control Plan shall conform to the provisions of Section 5-1.23, "Public Safety," Section 10-1.01, "Order of Work," and Section 10-1.03, "Maintaining Traffic," of these Special Provisions and the California MUTCD.

Contractor is notified that work along U.S. Highway 50 may be in progress concurrently with construction for this project. Coordination regarding traffic controls may be required with Caltrans and its Contractor.

Submittal of Contractor's Traffic Control Plan shall conform to Section 4-1.03, "Contractor Submittals," of these Special Provisions. No work shall be commenced on County roads until the Traffic Control Plan is approved by Engineer. Any violation of the Traffic Control requirements is justification for Engineer to stop work until the requirements are met.

The costs associated with the requirements outlined in this section shall be included in the Item "Traffic Control" and no additional compensation will be made therefor.

10-1.05 NOT USED

10-1.06 NOT USED

10-1.07 CLEARING AND GRUBBING

Construction areas to receive improvements shall be cleared of all logs, stumps, roots of felled trees, brush, willows and willow clumps not designated for salvage and transplant, grass, weeds, fencing, boulders, debris, and all other deleterious material. Grubbing in these areas consists of removal of all buried roots, stumps, logs, and any foreign objects encountered within a radius of one foot beyond the proposed structure. Areas shall only be cleared and grubbed to the minimum required for installation of improvements as specified. Grubbing on APN 33-090-12 between BP Station 58+14 and BP Station 59+36 (SM Station 66+86 and SM Station 68+05) and APN 33-180-21 between BP Station 88+68 and BP Station 90+60 (SM Station 97+00 to SM Station 98+89) shall be performed by hand, minimizing subsurface disturbance in these locations. During clearing and grubbing operations within these stationed limits, only low ground pressure (LGP) equipment shall be allowed.

Contractor's attention is directed to Section 10-1.10, "Excavation and Grading," of these Special Provisions regarding reusing soil from excavated areas. Removal and disposal of trash, branches, shrubs, and pine cones from the excavated material is included in the clearing and grubbing within the specific improvement item.

Trees shall be removed in such a manner as to cause no damage to the road, existing drainage facilities, adjacent property or utilities, or the public. Except for logs to be stored on APN 33-090-12 and APN 33-90-16 for landowner use or logs stored elsewhere on-site for fencing, Contractor shall remove felled logs from site within 48 hours of felling. Logs infested with insects shall be covered with clear plastic sheeting and sealed at the ground until the wood is disposed of.

Trees on APN 33-090-12 and APN 33-90-16, 6" in diameter or greater designated on the Plans to be removed or cut as clear and grub, shall be limbed, the logs cut into 10 lengths, and neatly stacked on one or both of the parcels noted at location(s) mutually agreed upon between Contractor and Engineer. These trees shall remain the property of the landowner.

Except for trees on APN 33-090-12 and APN 33-90-16, all trees, 4" to 8" in diameter designated on the Plans to be removed or cut as clear and grub shall be limbed, the logs cut into 10' lengths and stored on-site for the construction of the wood rail fence (by others) as shown on Sheet D-3 of the Plans. Snags removed that exhibit infestation or rot shall not be salvaged for the wood rail fence. Suitable storage location(s) providing protection from damage and theft shall be proposed by the Contractor for approval by Engineer. Logs shall be neatly stacked in a manner that prevents rolling and covered with tarps. Should the quantity of material exceed the amount required for the fencing, Contractor shall dispose of the excess trees in accordance with Section 10-1.27, "Timber Removal Practices," of these Special Provisions. At the time of fence construction, Contractor shall coordinate with Engineer the delivery of the logs to locations mutually agreed upon between Contractor and Engineer.

Costs associated with felling and limbing trees 8" in diameter and larger, cutting those trees into 10' logs, and storing and delivering those logs to designated locations shall be included in the unit price bid for Item "Tree Removal."

All areas where tree stumps are removed shall be backfilled with native material or other material as applicable to the location of the void relative to the improvements, compacted in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions, and regraded to match adjacent existing ground elevations. Stumps that interfere with the installation of improvements shall be removed to a depth of 2' below the bottom of the improvement. Stumps shall not be removed in areas that will be graded (e.g. rock-lined channels) until just prior to the beginning of grading to minimize the areas of exposed bare soil.

All activities controlled by Contractor, except cleanup or other required work, shall be confined within County road rights-of-way, the permanent and temporary easements, and construction limits.

Nothing herein shall be construed as relieving Contractor of his responsibility for final cleanup of the construction areas provided in Section 4-1.02, "Final Cleaning Up," of the Standard Specifications.

Except as noted herein, all cleared and grubbed and waste material shall become the property of Contractor and shall be disposed of outside the Tahoe Basin or at a site approved by all local, state, and federal agencies.

Contractor shall take all necessary precautions to preserve all on-site trees and vegetation not designated for removal. Such precautions shall include placing construction limit fence along the length of the construction limits noted on the Plans. If ordered by Engineer and where noted on the Plans, Contractor shall provide and install suitable safeguards, approved by Engineer, to protect trees and/or vegetation from injury or damage. If trees and/or vegetation are injured or damaged by reason of Contractor's operations, they shall be replaced in kind by Contractor to a condition acceptable to Engineer and at Contractor's expense.

Where roots of live trees are encountered and can't be protected as described in Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Prevention Plan (SWPPP)," of these Special Provisions, and must be removed, all roots larger than 1 1/2" in diameter shall be saw cut, leaving a clean cut. The ends of the remaining root shall be treated with emulsified asphalt.

Contractor's attention is directed to Section 10-1.27, "Timber Removal Practices," of these Special Provisions.

Full compensation for all work involved in clearing and grubbing, which includes trees with a diameter less than 8" and all stumps, regardless of size, including stumps of trees felled by Contractor larger than or equal to 8", shall be considered as included in the compensation for the various contract items of work and no additional compensation will be allowed therefor. Tree removal for trees equal to or greater than 8" diameter measured at a height five feet above the adjacent ground shall be paid under Item "Tree Removal."

10-1.08 SOD SALVAGE AND TRANSPLANT

SOD SALVAGING AND TRANSPLANT PROCEDURES:

- 1) The Engineer will delineate with paint in the field the exact areas of sod to be salvaged from the locations specified in the item description and on the Plans. After discussions with the Contractor a quantity of salvageable sod from each location will be agreed upon. The Contractor shall notify the Engineer prior to beginning each and every salvage operation in order for the Engineer to schedule a County representative to observe the salvaging operations. A minimum of two hours' notice shall be given. After salvaging operations in an area are complete, the County representative will determine the exact quantity of sod that was finally salvaged.
- 2) All sod shall be salvaged immediately before any excavation work is begun at the area where sod is to be salvaged and improvements are to be constructed. Sod to be salvaged shall be irrigated

prior to removal such that conditions are moist from the surface to a depth of 4" below the surface. Sod removal shall result in the salvaged sod having a uniform thickness with a smooth bottom. The sod shall be removed in clumps with a minimum thickness of 2" and a maximum of 6" and in as large a length and width as practicable. Sod shall be salvaged in such a manner as to minimize the disturbance of the soil bound by the root mass and the contiguous integrity of the sod section.

- 3) Salvaged sod shall be stored on the ground near the improvement where it is to be transplanted in an area that is already disturbed or that will be disturbed by the proposed construction. Salvaged sod shall be stored no longer than 72 hours.
- 4) Sod clumps shall be placed on the ground side by side, roots facing down, in the shade, one layer deep, with the edges snugly adjoining adjacent sections. Sod on the perimeter of the storage area shall have the outermost edges covered with wetted burlap within 30 minutes of storage to protect the roots and conserve soil moisture. The Contractor shall be responsible for providing adequate moisture to the sod during the interim storage period.
- 5) As soon as the work in the area where the sod is to be transplanted is completed such that the sod can be transplanted, the Contractor shall saturate the subgrade to a minimum depth of 4" before transplanting the sod. Sod shall be placed with sides snugly adjoining adjacent sod sections. Voids between sod sections shall be filled with topsoil mix. Sod shall be firmly tamped or rolled after placement to eliminate air pockets between the prepared surface and the roots. Sod shall be placed so that the top surface forms a continuous shape.
- 6) Sod shall be thoroughly irrigated immediately following placement. The Contractor shall be responsible for providing adequate irrigation to all sod salvaged and transplanted during the period of this contract. Sod shall be irrigated thoroughly a minimum of every 3 days.

If an excavator bucket is used for sod salvage, the bucket shall have a plate lip or cutting bar. The bucket shall also be equipped with a hydraulic tilt or swivel to allow angling of the bucket 45 degrees to the right or left. Section 5-1.11 of the Standard Specifications applies with the condition that the written request for "Alternative Equipment" shall be submitted to the Engineer within three (3) working days of receiving the Notice to Proceed.

10-1.09 WATERING

Watering shall conform to the provisions in Section 17, "Watering," of the Standard Specifications, except that full compensation for developing a water supply shall be considered as included in the prices paid for the various contract items of work involving the use of water and no separate payment will be made therefor.

No guarantees of an available source of water supply, implied or otherwise, are made by County. It shall be the sole responsibility of Contractor to make all necessary arrangements in order to develop a source of water supply.

10-1.10 EXCAVATION AND GRADING

A. GENERAL

Earthwork shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these Special Provisions. In lieu of the applicable provisions in Section 19-3.08, "Payment," full compensation for excavation, backfill, and pervious material shall be considered included in the contract item prices paid for the applicable items of work. Excavation and grading for erosion control improvements as shown on the Plans shall be considered as a part of the respective erosion control item and no additional compensation will be allowed therefor.

If rock is encountered in the bottom of the trenches where culvert or sediment traps are to be placed, Contractor shall immediately notify Engineer so that an assessment of the impact on the design can be made. If the design cannot be modified and the removal of the rock is necessary, the cost associated with

the rock removal and disposal shall be paid for in accordance with the unit price bid for "Rock Fracturing and Removal" Item of these Special Provisions.

B. COMPACTION

County will, at their expense except as noted in Section 5-1.24, "Testing," of these Special Provisions, provide compaction testing of subgrade to verify that Contractor has achieved the required compaction. Relative compaction will be based on the maximum dry unit weight as determined by ASTM D-1557. Corrections to the Unit Weight for Soil Containing Oversize Particles will be made in accordance with ASTM 4718.

Compaction testing will be performed on subgrade (where applicable), aggregate base, fill, backfill, topsoil, and where applicable, permeable material. Contractor shall provide a 24-hour notice to Engineer stating when Contractor will be completed with an operation that requires compaction testing to allow Engineer time to schedule testing before Contractor begins with the next operation. County will make every effort to collect native samples and to provide moisture-density curves in a timely manner. However, should Contractor choose to proceed with the work before compaction criteria for native soil or fill material can be verified, he assumes the risk of having to remove this work at his expense if subgrade compaction is later found to be inadequate. Subgrade that exhibits pumping will not be accepted.

All compaction shall be accomplished with mechanical compaction. Fill or backfill that exhibits pumping will not be accepted.

With the exception of the bike path on APN 33-090-12 between BP Station 58+14 and BP Station 59+36 and APN 33-180-21 between BP Station 88+68 and BP Station 90+60, all areas where asphalt concrete, Portland cement concrete, aggregate base, Class 1 Types A and B permeable material, fill, backfill, or No. 1 backing is to be placed over native material, the native material shall be scarified a minimum of six (6) inches, thoroughly mixed with water to the optimum moisture for compaction, and compacted to a minimum of 90% relative compaction prior to placement of fill or other material unless noted otherwise on the Plans. No scarification of the native material will be performed in the area of the bike path on APN 33-090-12 between BP Station 58+14 and BP Station 59+36 and APN 33-180-21 between BP Station 88+68 and BP Station 90+60.

In any case where undisturbed native material becomes disturbed during excavation, the native material shall be scarified a minimum of six (6) inches, thoroughly mixed with water to the optimum moisture for compaction, and compacted to a minimum of 90% relative compaction prior to placement of fill or other material as shown on the Plans.

All fill and backfill using native material or excess excavated material shall be thoroughly mixed with water to the optimum moisture for compaction. Lift thickness shall be a maximum of 8 inches thick, loose, prior to compaction. Unless otherwise specified, all fill and backfill placed shall be compacted to a minimum relative compaction of 90%. These provisions also apply to imported fill or backfill if it is necessary.

Native backfill at sediment traps and culverts shall be compacted to a minimum of 90% relative compaction.

The temporary aggregate base placed on APN 33-090-12 between BP Station 58+14 and BP Station 59+36 and on APN 33-180-21 between BP Station 88+68 and BP Station 90+60, shall be compacted to a minimum of 85% relative compaction at the time of placement. This work shall be performed with low ground pressure (LGP) equipment.

All Class 2 aggregate base to be placed over native material or for pipe backfill, as applicable, culvert removal backfill, and at edge of pavement, shall be compacted to a minimum of 95% relative compaction.

Class 1 Types A and B permeable material to be placed over native material shall be compacted to a minimum of 90% relative compaction. Compaction of permeable material shall be verified by an established method agreed upon by Engineer and Contractor.

The void created by stump removal, culvert removal, or rock removal shall be filled with native material and compacted to a minimum of 90% relative compaction if such backfill material is consistent with the required backfill for the location of the void. The void resulting from the removal of unsuitable material shall be backfilled with Class 1 Type A permeable material and compacted to a minimum relative compaction of 95%, except if unsuitable material is overexcavated from the bottom of a sediment basin. In this case 85% minimum and 90% maximum relative compaction will be required.

The mixture of salvaged soil and humus (i.e. topsoil mix) shall be compacted to a minimum of 85% relative compaction and a maximum of 90% relative compaction. Compaction of topsoil mix shall be verified by an established method agreed upon by the Engineer and the Contractor.

All costs associated with compaction shall be included in the various items of work and no additional compensation will be made therefor.

Requirements at Storm Drain Pipe and Sediment Traps

General

Where rock is encountered at the bottom of the trench where the pipe is to be laid such that a point load on the pipe is created by the rock, the rock shall be removed to a depth of 6 inches below the trench bottom. The 6 inches shall be backfilled with Class 1 Type A permeable material and compacted to 90% relative compaction. Compaction of permeable material shall be verified by an established method agreed upon by Engineer and Contractor. The costs associated with the rock removal and disposal shall be included in the applicable pipe item, unless the rock removal meets the criteria for payment under "Rock Fracturing and Removal" Item of these Special Provisions.

Where rock is encountered at the bottom of the excavation for an open bottom sediment trap such that infiltration could be achieved if the rock were removed, the rock shall be removed. The void shall be backfilled with Class 1 Type A permeable material and compacted to 90% relative compaction. Compaction of permeable material shall be verified by an established method agreed upon by Engineer and Contractor. The costs associated with the rock removal and disposal shall be included in the applicable sediment trap item, unless the rock removal meets the criteria for payment under "Rock Fracturing and Removal" Item of these Special Provisions. Alternatively, the Engineer may direct Contractor to install a sealed base over the rock for the sediment trap.

For pipe in pavement, cover is defined as the distance between the top of the pipe and the finished surface of the proposed AC paving. For pipe out of pavement, cover is defined as the distance between the top of the pipe and the top of the pipe trench finish grade.

All costs associated with bedding and backfill shall be included in the various items of work and no additional compensation shall be made therefor.

C. EXCESS MATERIAL, TOPSOIL MIX, MULCH, HUMUS, AND TACKIFIER

1. CUT, FILL, SOIL SALVAGE, TOPSOIL MIX, MULCH, & HUMUS VOLUMES

The following quantities have been calculated using topographic information shown on the Plans. The volumes shown are "raw" meaning that neither shrinkage, subsidence, nor bulking have been taken into account. It is assumed for the quantities shown that no rock was encountered. It is Contractor's responsibility to review these quantities and apply the necessary factors to determine the volume of import material necessary (or if it is necessary).

EARTHWORK SUMMARY BY IMPROVEMENT

| ALL VOLUMES ARE IN CY | CUT | FILL | SALVAGED SOIL | HUMUS FOR TOPSOIL MIX | TOPSOIL MIX | MULCH |
|---|------------|------------|---------------|-----------------------|-------------|------------|
| Pipes (pipe displacement, pipe removal backfill), FES | 25 | 5 | | 2.5 | 10 | 5 |
| Rock Dissipators, RSP, Rock Bowls | 45 | 8 | | 1.5 | 5 | 2.5 |
| Bike Path | *332 | 259 | **272 | 100.5 | 402 | 201 |
| R&R AC Driveway | 18 | | | | | |
| Rock-Lined Channels, Modified GLS | 292 | 18 | **103 | 8 | 32 | 16 |
| Sediment Traps | 29 | | | | | |
| Stump Removal | | 70 | | | | |
| Log Sediment Barrier, Coir Logs | 4 | | | 0.5 | 3 | 1.5 |
| Chain Link Fence, Metal Rail Fence | 39 | | | | | |
| Revegetation Areas (not associated with improvements), Misc Grading | 5 | 4 | | 12 | 48 | 24 |
| TOTALS | 789 | 364 | **375 | 125 | 500 | 250 |

*Quantity of cut reflects amount available following removal of an assumed 2" average (approximately 395 CY) from the bike path for clear and grub and deducting for salvaged soil.

**Quantity of salvaged soil shown reflects that amount required for the 3:1 ratio for topsoil mix in raw numbers (e.g., prior to compaction). Quantity of salvaged soil shown on the Plans reflects the following:

Bike Path – amount available per sheet following removal of an assumed 2" average (approximately 395 CY) from the bike path for clear and grub and deducting for the fill required for bike path construction.

Rock-Lined Channel – Quantity from the excavation of the rock-lined channel shown on sheets P-2 and P-3 of the Plans (additional soil can be salvaged from this location).

Importing of material (other than humus, mulch, and tackifier) or disposal of excess material shall be included in Contractor's bid for the various items of work and no additional compensation will be made therefor.

Any material excavated on site shall be used for fill or backfill and shall contain less than 2% by volume nondecomposed organic material and material no larger than 1 1/2" in the largest dimension.

2. TOPSOIL MIX

Salvage

After removal and disposal of pine cones, branches, trash, and other large debris (i.e. clearing and grubbing), Contractor shall excavate and stockpile the native soil and undecomposed plant material from the bike path between BP Stations 36+75.00 and 88+75.00.

The stockpiled, excavated material will be mixed in a ratio of 3:1 (salvaged material to humus) with humus at the project site to create the topsoil mix. The humus shall conform to the provisions of 10-1.10D of this section. Compaction of the topsoil mix shall be in accordance with 10-1.10B of this section.

Mixture, Placement, and Compaction

Attention is directed to Sheets R-1 and R-2 of the Plans. Contractor shall place and compact the topsoil mix (2" compacted thickness unless noted otherwise below) at the following improvements:

- On modified grass-lined swale side slopes when salvaged sod quantities are limited;
- Grade to drain, revegetation not associated with improvements, and miscellaneous grading locations;
- 0.30' compacted thickness over the top of pipe backfill for pipe out of pavement;
- Over all disturbed areas just outside of but within the construction area limits of rock slope protection, rock-lined channels, rock bowls, modified grass-lined swales, log sediment barriers, coir logs, and existing channels that are backfilled;
- Around perimeter of rock dissipators and No. 1 backing surrounding FES; and,
- Slopes along the bike path.

Humus shall be mixed with salvaged soil in a ratio of 3:1 (soil to humus) to create topsoil mix. Humus and salvaged soil must be mixed together in a separate stockpile. Mixing of these materials in place at the locations the topsoil mix will be placed will not be acceptable. The costs associated with salvaging and stockpiling soil, furnishing humus, mixing the soil with humus, and placing and compacting the topsoil mix shall be included in the various items of work requiring topsoil mix and no additional compensation will be made therefor.

3. MULCH

Mulch and its application shall conform to 10-1.10D of this section. After topsoil mix is placed and compacted and after the CCC places seed and soil amendment, Contractor shall apply 1" mulch to those locations where the topsoil mix was placed, with the following exception:

- In cases where topsoil mix has been substituted for salvaged sod, mulch will not be placed within the modified grass-lined swales.

The cost associated with furnishing and applying mulch shall be included in the unit price bid for the Item "Mulch and Mulch Application."

4. HUMUS

Humus and its application shall conform to 10-1.10D of this section. The cost associated with furnishing and applying humus shall be included in the unit price bid for the Item "Humus For Topsoil Mix."

5. TACKIFIER

Contractor shall apply tackifier to all areas that have been mulched. Tackifier and its application shall conform to 10-1.10D of this section. The cost associated with furnishing and applying mulch shall be included in the unit price bid for the Item "Tackifier and Tackifier Application."

6. DISPOSAL OF EXCESS MATERIAL

Asphalt & Concrete

Asphalt concrete (e.g. AC pavement) and Portland cement concrete (e.g. concrete wash area) removed from any portion of the project shall be disposed of by Contractor at his expense and shall be disposed of outside of the Lake Tahoe Basin. AC and concrete may be disposed of in the Lake Tahoe Basin provided Contractor obtains and submits written approval from all applicable state, local, and federal agencies.

Soil & Rock

Section 19-2.06, "Surplus Material," of the Standard Specifications is amended to read as follows:

Surplus excavated materials from any portion of the project, if suitable according to the provisions of these Specifications and the Plans, shall be used to balance material deficiencies in any other portion of the work. **As the excavation for an item of work progresses, the excess excavated material shall not be stockpiled adjacent to where it was excavated unless the area is an approved storage area.** The excess excavated material shall be removed as it is excavated from the site of the excavation for stockpiling in an approved staging area or for use as fill or backfill in an applicable item of work. Excess material that cannot be reused on site shall be defined as unsuitable material; or material that is removed from temporary erosion control devices and the sweeper in satisfying the maintenance of these devices; or material that is larger than 1 1/2" in the largest dimension, but doesn't meet the rock specifications outlined in these Special Provisions; or material that has less than 2% by volume nondecomposed organic matter and contains material no larger than 1 1/2" in the largest dimension, but is in excess of what is needed for fill or backfill for the proposed improvements. Any excess or unsuitable material shall be disposed of by Contractor at his own expense and shall be disposed **outside of the Lake Tahoe Basin.** Materials may be disposed of in the Lake Tahoe Basin providing Contractor obtains and submits to County written approval from all applicable state, local, and federal agencies. At no time shall excess material be disposed of or stockpiled in such a way as to allow erosion of the material or to pose a threat of adverse water quality impact. The costs associated with stockpiling, disposing of, or reusing excess material are included in the applicable items with no additional compensation therefor.

D. MATERIALS

1. Permeable Material

Class 1 Type A 3/4" and Class 1 Type B 1 1/2" permeable material shall conform to the following requirements:

| Class 1 Type A 3/4" | |
|---------------------|-----------------|
| Sieve Sizes | Percent Passing |
| 1" | 100 |
| 3/4" | 90 |
| 1/2" | 59 |
| 3/8" | 39 |
| No. 4 | 2 |
| No. 10 | 2 |

| Class 1 Type B 1 1/2" | |
|-----------------------|-----------------|
| Sieve Sizes | Percent Passing |
| 1 1/2" | 100 |
| 1 1/4" | 88 |
| 1" | 24 |
| 3/4" | 9 |
| 1/2" | 7 |
| 3/8" | 4 |

2. Imported Fill or Backfill

If required, imported fill or backfill shall be a silty sand material designated by SM in the Unified Soil Classification System (USCS).

Should such imported material be required, Contractor shall notify Engineer of the borrow site location 72 hours before Contractor plans to pick-up the material so Engineer can verify the suitability of the material.

3. Humus

Humus shall consist of an amendment that shall be the result of an aerobic composting process maintaining temperatures greater than 135°F and less than 165°F, for a minimum of 10 days. Nitrogen introduction shall be derived from dairy manure. The compost feedstock must consist of a minimum of 50% by volume indigenous forest vegetation from the Lake Tahoe Basin. The humus shall be 50% Humus Fines (3/8" minus) and 50% wood "overs" (3/8" to 3"). Full Circle Compost (Humus is called "Integrated 50%") and Tahoe Sand and Gravel, in South Lake Tahoe, CA, produce a humus that satisfies these requirements.

Contractor shall notify Engineer of the proposed location of the source of imported humus 72 hours before Contractor plans to pick-up the material so Engineer can verify the suitability of the material. Contractor shall submit written certification that the humus is weed free.

4. Mulch

Material shall be the result of an aerobic composting process maintaining temperatures greater than 130 degrees Fahrenheit and less than 165 degrees Fahrenheit for a minimum of 10 days. Nitrogen introduction shall be derived from dairy manure. The compost feedstock must consist of a minimum of 50% by volume indigenous forest vegetation from the Lake Tahoe Basin. The resulting finished compost shall consist of 75% wood "overs" (from 3/8" to 3" in size) and 25% humus (fines) (3/8" minus). Full Circle Compost (Mulch is called "Integrated 25%") and Tahoe Sand and Gravel, in South Lake Tahoe, CA, produce a mulch that satisfies these requirements. Contractor shall submit written verification that the mulch is certified weed free.

Mulch can be applied by non-motorized means or by means of a pneumatic conveying system capable of blowing the mulch at rates between 10 and 15 cubic yards per hour and shall be capable of blowing the mulch a distance of 300 feet as necessary to access slopes. If selected, the conveying equipment shall have a self-contained dust suppression system.

Contractor shall submit written certification that the mulch is weed free.

5. Tackifier

Tackifier shall include wood-cellulose fiber mulch. The term "tackifier" used in these Special Provisions shall mean tackifier with wood-cellulose fiber mulch. The Tackifier material shall be of an organic, plant-derived substance containing psyllium, guar gum, cornstarch such as PT-TAC, Reclamare 2400, M-Binder, Eco-tak, Fisch-Stick, or approved equal. Material shall form a transparent 3-dimensional film-like crust permeable to water and air and containing no agents toxic to seed germination. Mulch shall consist of degradable green-dyed wood-cellulose fiber or 100%-recycled long-fiber pulp (recycled newspaper), free from weeds or other foreign matter toxic to seed germination.

Mulch shall be anchored with tackifier within 48 hours of application. A hydroseeder with a paddle wheel agitator shall be used to evenly apply the tackifier mixture at the following rates under suspension unless otherwise approved. Contractor shall apply tackifier to all areas where mulch has been applied. The Tackifier shall be mixed and applied in accordance with the following:

| | |
|-----------------------------|--------------|
| Wood-cellulose fiber mulch: | 500 lbs/acre |
| Tackifier: | 130 lbs/acre |
| Water: | As needed |

Tackifiers shall be applied using a commercial hydraulic mulcher with a built-in agitation system that has sufficient capacity to agitate, suspend, homogenize, and apply materials (at indicated rates) specified for hydraulic application in this section of the Special Provisions.

Information regarding mulch application method and tackifier application equipment that Contractor proposes to use for this project shall be presented for review and approval by Engineer no later than ten (10) days prior to the proposed use. Hydraulic/Pneumatic applications of mulch and tackifier shall not be conducted during windy conditions (greater than 8 mph) to insure uniform application and proper placement of these materials at specified rates. To facilitate proper placement of these materials, applications shall consist of a continuous operation where each treatment follows the preceding as specified above. Specified materials shall be applied to individual identified areas within a single seeding work shift. Under no circumstances shall any one application be completed independent of completion of the others.

10-1.11 NOT USED

10-1.12 AGGREGATE BASE, CLASS 2

Aggregate base shall be Class 2 in conformance with the provisions in Section 26, "Aggregate Bases," of the Standard Specifications.

In lieu of the second sentence in the second paragraph in Section 26-1.02A, "Class 2 Aggregate Base," of the Standard Specifications, the grading for 3/4" maximum shall be used where aggregate base other than recycled AC base is specified.

County will, at their expense, provide compaction testing of Class 2 Aggregate Base to verify that Contractor has achieved the specified compaction. Relative compaction will be based on the maximum dry unit weight as determined by ASTM D-1557. Corrections to the Unit Weight for containing oversize particles will be made in accordance with ASTM 4718. Any areas of Class 2 Aggregate Base that are pumping will not be acceptable.

10-1.13 NOT USED

10-1.14 ASPHALTIC EMULSION (PAINT BINDER)

Asphaltic emulsion (paint binder) shall conform to the provisions of Section 94, "Asphaltic Emulsions," and Section 39-4.02, "Prime Coat and Paint Binder," of the Standard Specifications and these Special Provisions.

Paint binder shall be asphaltic emulsion SS-1, applied in one application at the approximate rate of 0.05 gallons per square yard of surface covered. The exact rate of application will be determined by Engineer.

Full compensation for furnishing all labor, equipment, and materials involved in applying asphaltic emulsion as a paint binder shall be considered as included in the various contract items of work and no additional compensation will be allowed therefor.

10-1.15 ASPHALT CONCRETE

All Asphalt Concrete shown on the Plans shall conform to these Special Provisions and to the provisions in Section 39, "Asphalt Concrete," of the Standard Specifications except that the material shall be as specified herein.

Alternative 1 – Asphalt Concrete

Unless otherwise directed by Engineer, asphalt binder to be mixed with the mineral aggregate shall be steam-refined paving asphalt, performance grade, PG 64-28.

Aggregate grading shall conform to the following gradation requirements:

| Sieve Sizes | Percentage Passing |
|-------------|--------------------|
| 2" | 95-100 |
| 3/8" | 90-100 |
| No. 4 | 60-77 |
| No. 8 | 42-60 |
| No. 30 | 25-38 |
| No. 200 | 5-10 |

S.E. = 32 minimum for all material passing No. 4 sieve. The gradation above shall be considered the "contract compliance range" as described in the Standard Specifications.

Alternative 2 – Asphalt Concrete

Asphalt concrete shall conform to 1/2" Maximum, Medium of the Standard Specifications. Asphalt binder to be mixed with the mineral aggregate shall be steam-refined paving asphalt conforming to the provisions in Section 92 "Asphalts," of the Standard Specifications and shall be PG 64-28PM.

General

Contractor shall submit an asphalt concrete mix design for each type of asphalt proposed for use on the project including Sand Equivalent test results, optimum bitumen content, unit weight, source of aggregate, gradation tests of aggregate, percent (%) air voids and stabilometer values for the proposed design mix to be used. The mix design shall be no older than six (6) months to insure that the mix supplied is consistent with the mix design. The design and test results shall be submitted to Engineer within fifteen (15) working days of the Notice to Award of Contract letter and at least ten (10) working days prior to the start of paving operations. No work shall be done until the design is approved by Engineer. The mix design shall be in effect until modified by Engineer. Should a change in sources of material be made, a new mix design, and Sand Equivalent test must be established before the new material is used.

Unless otherwise directed in writing by Engineer, Contractor shall furnish and use canvas tarpaulins to cover all loads of asphalt concrete from the time that the mixture is loaded until it is discharged from the delivery vehicle.

County shall, at their expense except as noted in Section 5-1.24, "Testing," of these Special Provisions, provide compaction testing of asphalt concrete to verify that Contractor has achieved the required compaction. Asphalt concrete shall be compacted to 95% of the maximum density determined from the asphalt plant sample, from samples taken behind the paver, and from the lab test results.

Measurement and Payment

Measurement of asphalt concrete quantities shall be in accordance with the item descriptions containing asphalt concrete work.

Full compensation for the asphalt concrete, including supply, spreading, and compaction shall be included in the various contract items that require asphalt concrete.

10-1.16 NOT USED

10-1.17 CULVERT AND CMP STRUCTURES

Culvert pipe shall be corrugated metal pipe (CMP) as specified on the Plans. All culverts shall have soil tight gasketed joints.

CMP

Corrugated metal pipe shall be steel and conform to the requirements of Section 66, "Corrugated Metal Pipe," of the Standard Specifications, and these Special Provisions. CMP structures shall be corrugated galvanized steel pipe. Galvanizing shall conform to Section 75-1.05, "Galvanizing," of the Standard Specifications. For CMP culvert the maximum allowable deflection at a joint shall be 5 degrees.

All exposed surfaces of the CMP structures and exposed surfaces of the flared end sections shall be painted with the following TRPA approved color: Federal Standard 595 Color FS 30059, or approved equal. Painting and its preparation shall conform to Section 59-3, "Painting Galvanized Surfaces," of the Standard Specifications. The CMP structures shall be painted in the field, however, the covers and flared end sections may be painted during the prefabrication process. Any painted surface that is damaged shall be sanded and repainted.

Corrugated Metal Pipe (CMP) shall have the following minimum thickness:

| STEEL THICKNESS FOR CORRUGATED METAL PIPE | |
|---|--------------------------------|
| Diameter of pipe, inches | Steel Gauge thickness, minimum |
| 6 | 16 gauge (0.064") |
| 12 | 14 gauge (0.079") |
| 18 | 14 gauge (0.079") |
| 24 | 14 gauge (0.079") |
| 30 | 14 gauge (0.079") |
| 36 | 12 gauge (0.108") |
| 48 | 12 gauge (0.108") |

General

Pipes shall be laid to the lines and grades shown on the Plans and established by Engineer. The subgrade on which the culverts will be placed shall be finish graded with the use of a string line or other similar method to assure the culverts are set on smooth, straight grades consistent with the slopes and elevations shown on the Plans with no deviations along the length of pipe. Compaction of bedding and backfill shall conform to Section 10-1.10, "Excavation and Grading," of these Special Provisions.

Attachment of culverts to sediment traps shall conform to the details shown on the Plans. Field fabrication and prefabrication requirements for sediment traps and their attachments shall be as specified in the respective contract items. Welded joints that damage galvanizing shall be repaired with a corrosion resistant coating.

Contractor's method of operation for culvert installation conform to the requirements of the Traffic Control Plan and as outlined in Section 10-1.03, "Maintaining Traffic," and Section 10-1.04, "Traffic Control Plan," of these Special Provisions.

The interior of the pipeline shall be cleaned as the work progresses.

10-1.18 FLARED END SECTIONS

Flared end sections shall be galvanized prefabricated steel flared end sections and shall conform to the requirements in AASHTO M36 and M218. The flared end sections shall be equipped with galvanized toe plates.

Exposed surfaces of the flared end sections shall be painted as specified in Section 10-1.17 of these Special Provisions.

Full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all work involved in installing flared end sections, including excavation and backfill, complete and in place shall be considered as included in the contract unit price for flared end sections, and no additional compensation will be allowed therefor.

10-1.19 CONCRETE STRUCTURES

Portland cement concrete structures shall conform to the provisions in Section 51, "Concrete Structures," and/or Section 73, "Concrete Curbs and Sidewalks," of the Standard Specifications and these Special Provisions. Portland cement concrete shall conform to Section 90, "Portland Cement Concrete," of the Standard Specifications, except as noted herein.

Reinforcement shall conform to the details shown on the Plans, the Standard Plans, these Special Provisions, Section 52, "Reinforcement," of the Standard Specifications and shall conform to the requirements of ASTM Designation A615 Grade 60.

Portland cement shall be Type II with no mineral admixtures.

Contractor shall supply concrete mix designs for all items of work requiring concrete within fifteen (15) working days of the receipt of the Notice to Proceed and at least five (5) working days prior to the start of the concrete work associated with these items.

An air-entraining agent conforming to the requirements in Section 90-4, "Admixtures," of the Standard Specifications shall be added to the concrete at the rate required to result in an air content of 4-7% in the freshly mixed concrete. Air Content will be tested by and at the discretion of Engineer at County's expense.

Slump tests shall be performed by Engineer at Engineer's discretion and at County's expense. Slump for Portland cement concrete shall be no more than 2 inches nor less than 1 inch. Slump for grout shall be 3 inches.

A mechanical power driven internal vibrator shall be used for concrete consolidation.

Concrete for sediment trap bases, fence post foundations and drop rod sleeve, concrete collars, and roadside sign posts, shall be minor concrete as defined in Section 51, "Concrete Structures," of the Standard Specifications and shall have not less than 548 pounds of cement per cubic yard. Sediment trap bases shall be precast. Grout shall be a six-sack mix with not less than 590 pounds of Portland cement per cubic yard.

Slurry cement backfill shall conform to the provisions of Section 19-3.062, "Slurry Cement Backfill," of the Standard Specifications, except that the mix shall contain 282 pounds of cement (i.e. 3-sack mix). Backfilling over or placing any material over slurry cement backfill shall not commence until four (4) hours after the slurry cement backfill has been placed.

10-1.20 DEWATERING

This section outlines acceptable dewatering methods and locations for the disposal of dewatering effluent for the installation of the various items of work identified in the dewatering item descriptions.

Contractor shall furnish, install, and operate pumps, pipe, appliances, and equipment of sufficient capacity to keep all excavations that require casting concrete in place or all construction that requires compaction under optimum moisture conditions free from water until the areas are backfilled and compacted in accordance with these Special Provisions. All water removed from such excavations shall be placed in a water truck(s). Contractor shall provide water truck(s) of sufficient capacity so as not to delay the dewatering operations by frequent emptying of the water truck(s). Contractor shall provide all means or facilities to conduct water to the pumps and to the water truck(s) for disposal as specified herein.

The dewatering effluent shall be discharged from the water truck(s) and applied to high land capability areas (Class 3, 4, 5, 6, 7, not SEZ = Class 1b. See Sheets EC-1 and EC-2 of the Plans) for dust control, irrigation, or for use in the tire wash areas.

Alternatively, Contractor may discharge the dewatering effluent onto non-sensitive lands by pumping the effluent through a piping system.

The dewatering effluent shall be discharged in such a manner as to prevent erosion. Contractor shall install temporary erosion control measures where dewatering effluent is discharged as necessary to control sediment transport.

Contractor shall submit a Dewatering Plan that addresses all locations at which dewatering is anticipated to be required. The dewatering plan shall include the Contractor’s methodology for dewatering including but not limited to: Anticipated number and size of pumping units, power source for pumping units, size and material for pipes, materials for damming, well point design if required, stilling/detention basin location(s), piping point of discharge, fuel storage locations (if applicable), location of dirt bag and/or baker tanks, maximum flow rate capabilities, method and location for disposal of treated effluent, and contingency plan for alternate disposal location(s) should the proposed locations become saturated or exhibit surface runoff. The Contractor shall include in the submittal descriptions of all energy dissipating devices and the manufacture’s specifications for impermeable and filter barriers proposed for use.

Full compensation for furnishing all labor, tools, material, and equipment necessary to dewater the above referenced excavations and areas to be compacted shall be included in the price bid for each dewatering item and no additional compensation will be made therefor.

10-1.21 ROCK SPECIFICATIONS

This section applies to all rock in bottom of sediment traps, modified grass-lined swales, rock-lined channels, rock dissipators, rock slope protection, and rock bowls included in the Contract work. Attention is directed to Section 10-1.10, “Excavation and Grading,” of these Special Provisions for the specifications for permeable material.

This Section 10-1.21, “Rock Specifications,” shall **replace** Section 72, “Slope Protection,” of the Standard Specifications.

All rock shall conform to the following quality requirements:

| <i>Test</i> | <i>California Test</i> | <i>Requirement</i> |
|---------------------------|------------------------|--------------------|
| Apparent Specific Gravity | 206 | 2.5 min. |
| Absorption | 206 | 4.2% max* |
| Durability Index | 229 | 52 min.* |

Coarse Durability Index
 $\% \text{ Absorption} + 1 = \text{Durability Absorption Ratio (DAR)}$

*Based on the formula contained herein, absorption may exceed 4.2% if DAR is greater than 10. Durability Index may be less than 52 if DAR is greater than 24.

Rock Materials. The following grading restrictions shall apply to each type of rock specified:

No. 1 Backing

| <u>Rock Size</u> | <u>Percent Smaller Than</u> |
|------------------|-----------------------------|
| 16" | 100 |
| 12" | 75-100 |
| 8" | 0-20 |
| 6" | 0 |

No. 2 Backing

| <u>Rock Size</u> | <u>Percent Smaller Than</u> |
|------------------|-----------------------------|
| 25" | 100 |
| 16" | 0 |

Percentage is based on the number of rocks per size range versus the total number of rocks in any 100 SF area. Rock size shall be measured along the smallest dimension of each rock.

Where 18" thickness of rock layering is designated on the Plans, it shall be interpreted as a nominal thickness. This means that some areas may be 16" thick, some may be 18" and some may be greater than 18" thick. In any case, in any 100 SF area of rock, the average thickness of the rock layering shall not be less than 18".

Rock shall be angular with not fewer than three fractured surfaces and of such shape as to form a stable protective structure after placement. The use of rounded cobbles will not be permitted.

All rock color shall blend with the surroundings and shall not consist of bright, light colors such as light gray, white, or off-white. At least 50% of the rock shall have at least one surface that is weathered (i.e. exhibiting signs of oxidation). Samples of acceptable rock coloring are available for viewing at County of El Dorado Transportation Division, 924B Emerald Bay Road, in South Lake Tahoe, CA.

Application of rolled erosion control product and turf reinforcement mat prior to rock placement shall be performed in accordance with other portions of these Special Provisions and in accordance with applicable Plan details.

Rock Placement for Rock Bowl, Rock Dissipator, Modified Grass-Lined Swale, and Rock-Lined Channel. On each rock, three perpendicular axes can be identified in three dimensions: a short axis, an intermediate axis, and a long axis. In order to produce the most stable and aesthetic appearing revetment, with a relatively uniform rock surface, rock shall be placed with the short axis in a vertical plane parallel to the face of the slope, the intermediate axis perpendicular to the face of the slope, and the long axis horizontal and parallel to the face of the slope. Each rock shall have a minimum of three points bearing on the rocks below and adjacent. Every effort shall be made to place the rock with the weathered surface exposed.

Rocks shall be placed so as to provide a minimum of voids. The larger rocks shall be placed in the toe course. The rock shall be placed in accordance with the lines and grades as shown on the Plans to form the specified cross section in a roughly regular surface without large cavities or excess projections above the general lines of the rock layer.

Contractor shall key in the full diameter of the rocks such that the top of all rock is at the same elevation at the edge of the rock structure (e.g. top of bank for rock-lined channel) as the adjacent finished grade. Rock placement for channels shall proceed both from the lowest end towards the upper end and from the center of the channel towards the sides.

Rock Placement for Rock Slope Protection (RSP). A footing trench shall be excavated along the toe of slope as shown on the Plans. The No. 2 backing shall be placed in the footing trench. Rocks shall be placed with their long axis normal to the embankment face and arranged so that each rock above the foundation course has a 3-point bearing on the underlying rocks. Foundation course is the No. 2 backing placed in the footing trench or, in the case of RSP above rock-lined channels or rock bowls, the foundation course is the first course laid on top of the No. 1 backing for the rock-lined channel or rock bowls. Bearing on small rocks which may be used for chinking voids will not be acceptable. Placing of rocks by dumping will not be permitted. Every effort shall be made to place the rock with the weathered surface exposed.

Rock Placement for No. 1 Backing in STs. No. 1 backing shall be hand placed within the concrete base.

Compensation for furnishing and installing all rock, including all necessary disposal of excavated material, will be at the contract price per various associated items of work and no additional compensation will be allowed therefor.

10-1.22 DISTURBANCE AND REVEGETATION

Other than topsoil mix, mulch, and tackifier furnishing and application performed by Contractor, the CCC under the direction of County will perform all revegetation work including, but not limited to, slopes and pipe out of pavement, all disturbance within the filter fencing or construction limit fencing and staging areas that

are disturbed. Attention is directed to Section 10-1.01, "Order of Work," of these Special Provisions for requirements regarding Contractor's cooperation with the CCC.

Contractor shall not disturb any area beyond the construction area limits shown on the Plans, and staked and fenced in the field, or disturb any areas outside of the areas to be disturbed by construction of the improvements as indicated on the Plans. Should such disturbance occur, Contractor will be liable for the following costs:

1. \$3.65/sq ft revegetation cost to be performed by the CCC's.
2. Provide mitigation of disturbance as required by TRPA.

10-1.23 ROLLED EROSION CONTROL PRODUCT, TURF REINFORCEMENT MAT, FILTER FABRIC, AND GEOTEXTILE FABRIC

This section applies to the rolled erosion control product, turf reinforcement mat, filter fabric, and geotextile fabric, specified for the various rock-lined structures, modified grass-lined swales, filter fencing, concrete wash, and soil in pipe installations shown on the Plans. The table below outlines the acceptable products for each of the aforementioned applications.

| | APPLICATION | PRODUCT |
|---------------------------------------|---|---|
| ROLLED EROSION CONTROL PRODUCT | Under rock slope protection. | C125 as manufactured by North American Green or Landlok C2 as manufactured by Propex, or approved equal. |
| TURF REINFORCEMENT MAT | Under rock-lined channels, rock bowls, rock dissipators, and modified grass-lined swales. | P300 as manufactured by North American Green or Landlok TRM 450 as manufactured by Propex, or approved equal. |
| FILTER FABRIC (woven) | Filter fence material and concrete wash liner. | Geotex 2130 as manufactured by Propex or 100X as manufactured by Mirafi, or approved equal. |
| GEOTEXTILE FABRIC (woven) | Between the Class 1 Type A permeable material and soil backfill in pipe and ST installations. | Geotex 200ST as manufactured by Propex, Mirafi 500x as manufactured by Mirafi, or approved equal. |

The fabric shall be furnished in protective covers capable of protecting the fabric from ultraviolet rays and water.

Contractor's attention is directed to Section 10-1.24, "Temporary Erosion Control and Storm Water Pollution Plan (SWPPP)," of these Special Provisions for the filter fabric requirements associated with temporary erosion control measures.

Full compensation for furnishing and installing rolled erosion control product, turf reinforcement mat, filter fabric, and geotextile fabric as shown on the Plans and as specified in these Special Provisions shall be considered as included in the various items of work, and no additional compensation shall be made therefor.

10-1.24 TEMPORARY EROSION CONTROL AND STORM WATER POLLUTION PREVENTION PLAN (SWPPP)

Contractor is advised that, due to the steepness and erodability of the work area, temporary erosion control provisions of these Specifications will be strictly enforced. It is Contractor's responsibility to determine the effect that temporary erosion control measures will have on construction operations, and to fully account for this effect in the bid price for the work.

Contractor shall attend a pre-grade inspection meeting with TRPA prior to the start of any work, other than temporary erosion control installation. All temporary erosion control facilities shown on the Plans shall be in place prior to any soil disturbance or excavation.

In addition to temporary erosion control facilities shown on the Plans, Contractor shall provide additional temporary erosion control facilities as necessary to prevent adverse water quality impacts.

A fine of \$100/day will be levied against Contractor for each day Contractor delays in responding to Engineer's request to install new temporary erosion control devices and/or maintain existing temporary erosion control devices.

Requirements: Temporary erosion control requirements shall be in accordance with Tahoe Regional Planning Agency's "Best Management Practices and Ordinances" and permits for this project, the Lahontan Regional Board Order pertaining to the project, and the California Tahoe Conservancy requirements. Water quality effluent limits must be in accordance with the following values:

TRPA and Lahontan Water Quality Limits

| Constituent | Surface Waters | | Infiltration Systems | |
|--------------------------|----------------|----------|----------------------|---------|
| | Lahontan | TRPA | Lahontan | TRPA |
| Total Nitrogen as N | 0.5 mg/l | | 5 mg/l | |
| Dissolved Nitrogen as N | | 0.5 mg/l | | 5 mg/l |
| Total Phosphate as P | 0.1 mg/l | | 1 mg/l | |
| Dissolved Phosphate as P | | 0.1 mg/l | | 1 mg/l |
| Total Iron | 0.5 mg/l | | 4 mg/l | |
| Dissolved Iron | | 0.5 mg/l | | 4 mg/l |
| Turbidity | 20 NTU | | 200 NTU | |
| Suspended Sediment | | 250 mg/l | | |
| Grease & Oil | 2 mg/l | 2 mg/l | 40 mg/l | 40 mg/l |

Source: Storm Water Quality Improvement Committee document

Note: Surface Water values also apply to discharges to SEZs.

Temporary erosion control shall consist of taking necessary measures to minimize erosion and resulting transport of sediment from graded or disturbed areas into natural or man-made facilities within and outside the project limits. Temporary erosion control shall continue to be effective through the completion of Work and shall be maintained as required during the course of Work.

Contractor shall install and maintain all erosion control measures shown on the plans as well as all measures required by TRPA's permit conditions, including but not limited to Best Management Practices and the following construction/grading conditions:

Construction/Grading Conditions:

The following conditions shall be complied with during the grading and construction phase of the project:

1. All construction shall be accomplished in strict compliance with the Plans approved by TRPA.
2. The TRPA permit and final construction drawings bearing the TRPA stamp of approval shall be present on the construction site from the time construction commences to final TRPA site inspection. The permit and Plans shall be available for inspection upon request by any TRPA employee. Failure to present the TRPA permit and approved Plans may result in the issuance of a Cease and Desist Order by TRPA.
3. There shall be no grading or land disturbance performed with respect to the project between October 15 and May 1, unless proper approvals are obtained from TRPA, as provided in the limited exemption described in Subsection 4.2.A of the TRPA Code of Ordinances. Approvals from Lahontan are also required.

4. Except as provided in Subsection 64.2.B of the Code of Ordinances, there shall be no grading at any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow or is in a saturated, muddy, or unstable condition.
5. Replanting of all exposed surfaces by others, in accordance with the Plans, shall be accomplished within the first growing season following disturbance, unless an approved construction/inspection schedule establishes otherwise.
6. All trees and natural vegetation to remain on the site shall be fenced for protection. Scarring of trees shall be avoided and, if scarred, damaged areas shall be repaired with tree seal.
7. Soil and construction material shall not be tracked off the construction site. Grading operations shall cease in the event that a danger of violating this condition exists. The site shall be cleaned up and road right-of-way swept clean when necessary.
8. During grading and construction, environmental protection devices such as erosion control devices, dust control, and vegetation protection barriers shall be maintained.
9. Loose soil mounds or surfaces shall be protected from wind or water erosion by being appropriately covered when construction is not in active progress or when required by TRPA.
10. Excavated material shall be stored up grade from the excavated areas to the extent possible. No material shall be stored in any stream environment zone (SEZ land capability 1b) or wet areas as shown on Sheet L-1 of the Plans.
11. Only equipment of a size and type that, under prevailing site conditions, and considering the nature of the work to be performed, will do the least amount of damage to the environment shall be used. Construction equipment and vehicles shall be stored on pavement in the area designated on the Plans and in Section 5-1.36, "Storage of Equipment, Materials, Supplies, Etc.," of these Special Provisions when not in use.
12. Washing of tires of earth moving equipment/vehicles and washing of concrete equipment shall be allowed only in the areas designated on the Plans for these specific purposes. Cleaning of vehicles or construction equipment for other purposes shall not be permitted within the project area.
13. No vehicles or heavy equipment shall be allowed in any stream environment zone, or wet area, except as authorized by TRPA. All construction equipment authorized by TRPA to work in or near SEZ areas must be steam cleaned prior to mobilization to the SEZ area and maintained in clean and good working order with maintenance logs made available to TRPA at their request.
14. All construction sites shall be winterized by October 15 to reduce water quality impacts associated with winter weather as follows:
 - A. For sites that will be inactive between October 15 and May 1:
 - (1) Temporary erosion controls shall be installed;
 - (2) Temporary vegetation protection fencing shall be installed;
 - (3) Disturbed areas shall be stabilized;
 - (4) Onsite construction slash and debris shall be cleaned up and removed;
 - (5) Where feasible, mechanical stabilization and drainage improvements shall be installed;
and
 - (6) Spoil piles shall be removed from the site.
 - B. For sites that will be active between October 15 and May 1, in addition to the above requirements;

- (1) Permanent mechanical erosion control devices shall be installed, including paving of driveway and parking areas; and
- (2) Parking of vehicles and storage of building materials shall be restricted to paved areas.

15. No Toxic materials shall be treated, stored, disposed of, spilled, or leaked in significant quantities within the project area. Contractor shall submit a Spill Contingency Plan in accordance with Section 5-1.36, "Storage of Equipment, Materials, Supplies, Etc.," of these Special Provisions.

The following are requirements for Best Management Practices that are to be installed and maintained to provide temporary erosion control prior to and throughout construction:

Sediment Barriers and Erosion Control Devices: Throughout the entire construction period Contractor shall be responsible for insuring that no material eroded from the site leaves the construction area via the conveyance system. Contractor shall provide adequate sediment barriers at all storm drain pipe outlets, drainage inlets and other collection points and provide adequate erosion control at channels and swales that have been graded but turf reinforcement mat, salvaged sod, or mulch, as applicable has not been installed. Sediment barriers shall be constructed in accordance with the details shown on the Plans and include weighted fiber rolls or gravel-filled rolls, filter fence, and rice straw fiber rolls. Erosion control at channels and swales shall be constructed in accordance with the details shown on the Plans and shall consist of visqueen sheeting held in place with gravel bags or gravel-filled rolls.

Contractor shall install and maintain filter fences to intercept and filter sediment-laden runoff water leaving the construction site via overland flow. Care must be taken to insure that all runoff water must pass through, not over, under or around, the filter fence. The filter fence should be constructed from material specified in this section and in a manner to filter the runoff water without overtopping, collapsing, becoming overfilled with sediment, or having runoff flows skirt around the filter fence.

Visqueen sheeting shall be overlapped with the upstream edge over the top of the downstream edge to prevent runoff from flowing underneath the visqueen.

Protection of Existing Trees and Vegetation: Protect existing trees and other vegetation indicated to remain in place, against the following: Unnecessary cutting, breaking or skinning of roots, skinning and bruising of bark, smothering of trees by stockpiling construction materials or excavated materials within drip line, excess foot or vehicular traffic, or parking of vehicles within drip line.

At areas inside the drip line of existing tree branches within the construction area tree trunks shall be wrapped with construction limit fence then wrapped with the wooden tree trunk protection in accordance with detail shown on the Plans. Boards for wooden tree trunk protection shall not be nailed to trees and Construction Limit Fence shall be placed along the work area limits and around tree drip line perimeters as shown on the Plans and staked by Engineer.

Contractor shall water trees and other vegetation to remain within limits of contract work, as required to maintain their health during course of construction operations.

Contractor shall provide protection for roots over 1 1/2" diameter cut during construction operations. Contractor shall coat cut faces with emulsified asphalt, or other acceptable coating, formulated for use on damaged plant tissues. Contractor shall temporarily cover exposed roots with wet burlap to prevent roots from drying out; cover with earth as soon as possible. Contractor shall repair or replace, except where noted otherwise in these Special Provisions, trees and vegetation indicated to remain, which are damaged by construction operations, in a manner acceptable to Engineer at Contractor's expense.

Tire Wash Areas: Throughout the entire construction period, Contractor shall ensure that tracking of sediment to public streets outside the project area is minimized by cleaning all earth moving equipment/vehicles at a tire wash area before leaving the project site.

Concrete Wash Areas: Contractor shall ensure that concrete equipment is washed out only at the designated concrete wash areas. The concrete wash area shall be sized for washing all concrete equipment without overtopping the wash area.

Materials:

Gravel Bags shall be non-woven polypropylene geotextile or comparable polymer and shall conform to the following requirements:

| Specification | Requirements |
|---|--------------|
| Mass per unit area, ounces per square yard, min. ASTM Designation: D 5261 | 8.0 |
| Grab tensile strength (1 inch grip), pounds, min. ASTM Designation: D4632* | 200 |
| Ultraviolet stability, percent tensile strength retained after 500 hours, ASTM Designation: D4355, xenon arc lamp method | 70 |

* or appropriate test method for specific polymer

Gravel bags shall be between 24 inches and 32 inches in length, and between 16 inches and 20 inches in width. Yarn used for binding gravel bags shall be as recommended by the manufacturer or bag supplier and shall be of a contrasting color.

Gravel shall be 1/2" to 1" and shall be clean and free from clay balls, organic matter, and other deleterious materials. The opening of gravel-filled bags shall be secured to prevent gravel from escaping. Gravel-filled bags shall be between 26 pounds and 45 pounds in mass.

Gravel-filled rolls shall be wrapped in woven high-density polyethylene with heat welded seams and shall contain 1/4" gravel.

Filter fence shall be constructed with metal fence posts, #14 gauge wire, and covered with filter fence material, Geotex 2130 as manufactured by Propex, or 100X as manufactured by Mirafi, or approved equal.

Visqueen shall be 6 mil polyethylene sheeting wide enough to cover the swale or channel cross section plus one-foot either side of the top of the swale or channel bank. To contain sediment and control erosion in an emergency (such as a heavy rainstorm), Contractor shall have on site 6 mil polyethylene film in a sufficient amount to cover all spoils. Contractor shall maintain the polyethylene film cover over the stockpile of materials in the staging/storage areas when not accessing the stockpile. The film shall be secured to remain in place during storm events. The costs associated with covering stockpiles of materials and securing the film in place shall be included in the unit prices bid for the various temporary erosion control items with no additional compensation therefor.

Weighted fiber rolls shall be eight inches in diameter and shall consist of a machined mat or blanket of shaved aspen wood curled excelsior with a weighted inner core contained in a photodegradable, extruded, high visibility netting tube with a handle on each end. Eighty percent of the excelsior material shall consist of fibers at least 6 inches in length. The fiber roll shall be contained in a tubular orange-colored netting knotted at each end made from 85% high-density polyethylene and 14% ethyl vinyl acetate with titanium oxide for UV inhibition.

Rice Fiber Rolls (also known as straw wattles) shall be at least eight inches in diameter and shall be an Earth Savers wattle as manufactured by R.H. Dyck, Inc. or Rice Straw Fiber Roll as manufactured by Kristar or approved equal. Wood stakes for securing rice straw fiber rolls shall be untreated fir, redwood, cedar, or pine, shall be cut from sound timber, and shall be straight and free of loose or unsound knots and other defects which would render them unfit for the purpose intended.

Woven Filter Fabric for concrete wash shall be Geotex 2130 as manufactured by Propex or 100X as manufactured by Mirafi, or approved equal.

Class 1 Types A and B Permeable rock filter shall conform to Section 10-1.10D, "Excavation and Grading," of these Special Provisions.

Tree Protection and Construction Limit Fence shall be constructed with high-density polyethylene open pattern safety barrier fence or metal mesh fence and shall be at least 48 inches high. Additional tree protection where fence cannot be placed at tree dripline shall be 2" x 4" x 8' wooden boards tied together by wire or rope laced through staples attached to boards. Wooden fence shall be bound to tree with wire or rope at three locations minimum. Construction Limit Fence shall be wrapped around the tree trunk prior to wrapping the wooden tree trunk protection around the trunk.

Maintenance of Sediment Barriers:

General

Engineer will take periodic turbidity readings of the effluent discharging from all filtering devices. If the effluent levels fall below the allowable limits listed above, Contractor shall take appropriate measures to bring the effluent levels within the allowable limits. These measures include removing deposited sediment from filter fencing, and other filter materials (e.g. weighted fiber rolls, gravel-filled rolls, rice fiber rolls, or sediment trapping sump) after each storm and cleaning or replacing filter materials. The sediment removed shall be disposed of in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions.

Specific

Temporary gravel bags shall be repaired or replaced on the same day when the damage occurs. Damage to the temporary gravel bag resulting from Contractor's vehicles, equipment, or operations shall be repaired at Contractor's expense. Gravel bags or gravel-filled rolls shall be replaced when the bag material or roll material is ruptured or when the yarn has failed, allowing the bag contents to spill out.

Filter fence shall be repaired or replaced on the same day when the damage occurs. Damage to the filter fence resulting from Contractor's vehicles, equipment, or operations shall be repaired at Contractor's expense.

Rice straw fiber roll and weighted fiber rolls shall be maintained to disperse concentrated water runoff and to reduce runoff velocities. Split, torn, or unraveling rolls shall be repaired or replaced. Where applicable, broken or split stakes shall be replaced. Sagging or slumping fiber rolls shall be repaired with additional stakes or replaced. Locations where rills and other evidence of concentrated runoff have occurred beneath the rolls shall be corrected. Rice straw fiber roll and weighted fiber rolls shall be repaired or replaced on the same day when the damage occurs. Damage to the temporary fiber rolls resulting from Contractor's vehicles, equipment, or operations shall be repaired at Contractor's expense.

Filter Fabric shall be repaired or replaced the same day damage occurs. Damage to the filter fabric resulting from Contractor's vehicles, equipment, or operations shall be repaired at Contractor's expense.

Maintenance of Tire Wash Areas: Engineer will take periodic turbidity readings of the effluent discharging from the tire wash areas. If effluent limits for turbidity are exceeded, Contractor shall take the appropriate measures to bring the effluent limits into compliance. These measures include flushing the area to remove clogging of rock and cleaning the sediment trapping sump. Contractor shall ensure that the width and depth of the rock filter as shown on the Standard Plan T58 in Appendix C is adequately maintained. Any rock tracked onto the existing pavement of Sawmill Road shall be immediately swept back onto the rock filter.

Maintenance of the sediment trapping sump used in Tire Wash Areas shall conform to the requirements outlined above under Maintenance of Sediment Barriers.

Maintenance of Concrete Wash Areas: Contractor shall vector or otherwise clean the concrete wash areas as necessary to prevent overtopping of these facilities and before removing the woven filter fabric when the concrete wash area is no longer needed. Contractor shall remove hardened concrete and dispose of it in accordance with Section 10-1.10, "Excavation and Grading," of these Special Provisions and replace Class 1 Type A Permeable rock filter as necessary to keep the facility functional. After the facility is vectored and hardened concrete is removed, Contractor shall return the facility to a functional condition.

Maintenance and replacement of rice fiber rolls and woven filter fabric used in concrete wash areas shall conform to the requirements outlined above under Maintenance of Sediment Barriers.

Removal: Except where noted otherwise in the item descriptions, remove temporary erosion control measures only when all permanent structural and permanent erosion control measures have been implemented, and where designated elsewhere in these Special Provisions, upon approval by TRPA. Ground disturbance, including holes and depressions, caused by the installation and removal of the temporary erosion control measures shall be backfilled and compacted.

Payment for compliance with this section shall be considered as included in the applicable items and no additional compensation will be made therefor.

10-1.25 CLEANUP

This section describes the cleanup of construction areas associated with the erosion control construction:

Cleanup and Dressing: After all of the work indicated on the Plans and Specifications is complete and before final acceptance of the project, the entire construction site including areas used for storage of supplies and equipment shall be neatly finished to the lines and grades shown on the Plans. Slopes shall be graded so as to produce a slightly roughened (natural) appearance without damaging the existing or new improvements, trees, and shrubs.

Machine dressing shall be supplemented by hand work as necessary. At the completion of dressing, the project shall appear uniform in all respects. Trash of any kind shall be removed from the construction site and disposed of at Contractor's expense and all culverts shall be cleaned, unless otherwise directed by Engineer. All temporary erosion control devices shall be cleaned first and then removed unless noted otherwise. All pavement surfaces whether new or old shall be thoroughly cleaned by watering and sweeping.

No direct compensation shall be paid for cleanup work and Contractor shall include cleanup work as a part of the items of work.

10-1.26 SHORING AND EXCAVATION PLAN

Attention is directed to Sections 5-1.02A, "Excavation Safety Plans," and 7-1.01E, "Trench Safety," of the Standard Specifications and OSHA 29 CFR Part 1926 Construction Industry Regulations and these Special Provisions.

Contractor shall provide a safe means of egress in trenches/excavations five (5) feet deep and greater by the use of sheeting, shoring and bracing, sloping the sides of the trenches/excavations, or equivalent method.

Contractor shall submit a detailed plan showing the design of the sheeting, shoring and bracing, or equivalent method which Contractor proposes to use during construction to Engineer in accordance with Section 5-1.02A, "Excavation Safety Plans," of the Standard Specifications, except that this plan shall be submitted to Engineer within five (5) working days prior to any proposed work requiring protection. No excavation or trenching requiring protection shall commence until the "Shoring and Excavation Plan" is acknowledged by Engineer.

Nothing in this provision shall be construed to impose tort liability on County or any of its employees.

If the Engineer determines that resources sufficient to bring the Contractor in compliance with this section "Shoring and Excavation Plan" have not been allocated, Engineer may redirect any and all of the Contractor's resources available at the project site toward this effort. In the event that Engineer redirects resources due to Contractor's non-compliance with the provisions of this section, "Shoring and Excavation Plan", the County will not be responsible for any delays to the Contractor's schedule resulting from the reallocation, and no compensation shall be made therefor.

The following excavations require the use of sheeting, shoring and bracing, or equivalent method rather than sloping the sides of the excavation:

| SHEET | STRUCTURE DESCRIPTION | APPROX. STATION |
|--------------|------------------------------|------------------------|
| P-3 | 36" Sediment Trap | SM Station 64+89 LT |
| P-4 | 36" Sediment Trap | SM Station 69+30 LT |
| P-5 | 48" Sediment Trap | SM Station 73+12 LT |
| P-6 | 48" Sediment Trap | SM Station 93+58 LT |

For all other trenches/excavations, unless sloping the sides of the trench/excavation causes no disturbance to the existing adjacent slopes and vegetation and does not extend beyond County right-of-way and/or the construction limit fence, Contractor shall shore or brace the trenches/excavations.

The costs associated with installing sheeting, shoring and bracing, sloping the sides of the trenches/excavations or equivalent method for trenches/excavations five feet deep and greater shall be paid for in accordance with the lump sum price bid for Item "Trench and Excavation Safety" and no additional compensation will be made. Contractor's attention is directed to Section 5-1.50, "Local, State, and Federal Agencies' Conditions of Approval and Permits," of these Special Provisions regarding permitting and Section 10-1.22, "Disturbance and Revegetation," of these Special Provisions regarding violation of the above requirements such that disturbance results.

10-1.27 TIMBER REMOVAL PRACTICES

1. Prior to timber harvest, all project temporary erosion control devices must be in place.
2. All care must be taken to minimize damage to trees and other vegetation not marked for removal. If such occurs, damaged vegetation will be removed at Contractor expense. Revegetation of the area will be in accordance with Section 10-1.22, "Disturbance and Revegetation," of these Special Provisions.
3. Contractor shall be liable for damage to utility service lines, fences or other structures.
4. Trees shall be felled to minimize disturbance to surrounding vegetation and traffic flow.
5. Contractor shall be responsible for all traffic control during timber harvest where applicable in accordance with the California MUTCD. This shall include, but is not limited to, two flaggers in constant eye or radio contact. Contractor shall also coordinate traffic control with the emergency service providers.
6. Trees noted to be removed must be cut to stump height sufficient for subsequent easy stump removal to a depth of 2 feet below the bottom of the proposed improvements if the stump and roots will interfere with the installation of the improvements. For the tree noted to be removed near BP Sta 59+00 on APN 33-090-12 and the trees noted to be removed on APN 33-180-21, stumps shall be cut flush with bike path subgrade, minimizing subsurface disturbance at these locations.
7. Except for logs to be stored on parcels APN 33-090-12 and APN 33-90-16 or logs stored on-site for fencing or log sediment barriers, trees to be removed within a SEZ must be felled, bucked to firewood length, and the green wood covered tightly with plastic and left in place, if not removed within 48 hours. Tree removal from the area shall occur when soil is dry and stable. Lengths shall be winched out, lifted with a cherry picker, or carried by hand. No mechanical equipment for tree removal shall be operated within an SEZ (Sheets EC-1 and EC-2 of the Plans denotes the SEZ areas as 1b).
8. All wood products for resale must be removed from the site prior to resale.

9. Except for logs to be stored on parcels APN 33-090-12 and APN 33-90-16 or logs stored on-site for fencing or log sediment barriers, all trees marked for removal must be removed from the site within 48 hours to reduce the spread of insects.
10. Contractor is responsible for complete site cleanup, including slash disposal. No slash may be stored or burned on site.

Other Requirements:

1. Contractor shall obtain a Timber Operator's License from the California Department of Forestry and Fire Protection (CAL FIRE) prior to starting work if the fuel wood or timber is to be sold.
2. Contractor must meet all County requirements for comprehensive and liability insurance prior to starting work.

SECTION 11. (NOT USED)

SECTION 12. (NOT USED)

SECTION 13. (NOT USED)

SECTION 14. FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS AND FEDERAL PREVAILING WAGES

14-1.01 GENERAL

The work will be funded, in part, with Federal funds. The documents entitled Federal Requirements for Federal-Aid Construction Projects and Form 1273 including Required Contract Provisions Federal-Aid Construction Contracts, as well as Federal Minimum Wages North are included hereinafter and incorporated by reference, and are intended to comply with the federal requirements for partially federally funded projects, where applicable.

These provisions supplement the Contract Documents with additional federal requirements that may be applicable, and are intended to be compatible with the Contract Documents and these Special Provisions, not to conflict therewith.

Contractor shall review and comply with all applicable federal requirements, as called for in the bidding process, Contract award, Work progress and completion, and thereafter where applicable. To the extent that provisions in Sections 1 through 13 of the Special Provisions hereinabove, specify stricter and/or higher compliance with both federal and state or local regulations are required, Contractor shall comply with both said requirements. In the event that these general federal requirements conflict with other Contract Document provisions, or are otherwise ambiguous, the provisions shall be interpreted to require maximum compliance with all applicable laws.

SECTION 14. FEDERAL REQUIREMENTS FOR FEDERAL-AID CONSTRUCTION PROJECTS

GENERAL.—The work herein proposed will be financed in whole or in part with Federal funds, and therefore all of the statutes, rules and regulations promulgated by the Federal Government and applicable to work financed in whole or in part with Federal funds will apply to such work. The "Required Contract Provisions, Federal-Aid Construction Contracts, "Form FHWA 1273, are included in this Section 14. Whenever in said required contract provisions references are made to "SHA contracting officer", "SHA resident engineer", or "authorized representative of the SHA", such references shall be construed to mean "Engineer" as defined in Section 1-1.18 of the Standard Specifications.

PERFORMANCE OF PREVIOUS CONTRACT.—In addition to the provisions in Section II, "Nondiscrimination," and Section VI, "Subletting or Assigning the Contract," of the required contract provisions, the Contractor shall comply with the following:

The bidder shall execute the CERTIFICATION WITH REGARD TO THE PERFORMANCE OF PREVIOUS CONTRACTS OR SUBCONTRACTS SUBJECT TO THE EQUAL OPPORTUNITY CLAUSE AND THE FILING OF REQUIRED REPORTS located in the proposal. No request for subletting or assigning any portion of the contract in excess of \$10,000 will be considered under the provisions of Section VI of the required contract provisions unless such request is accompanied by the CERTIFICATION referred to above, executed by the proposed subcontractor.

NON-COLLUSION PROVISION.—The provisions in this section are applicable to all contracts except contracts for Federal Aid Secondary projects.

Title 23, United States Code, Section 112, requires as a condition precedent to approval by the Federal Highway Administrator of the contract for this work that each bidder file a sworn statement executed by, or on behalf of, the person, firm, association, or corporation to whom such contract is to be awarded, certifying that such person, firm, association, or corporation has not, either directly or indirectly, entered into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive bidding in connection with the submitted bid. A form to make the non-collusion affidavit statement required by Section 112 as a certification under penalty of perjury rather than as a sworn statement as permitted by 28, USC, Sec. 1746, is included in the proposal.

PARTICIPATION BY MINORITY BUSINESS ENTERPRISES IN SUBCONTRACTING.—Part 26, Title 49, Code of Federal Regulations applies to this Federal-aid project. Pertinent sections of said Code are incorporated in part or in its entirety within other sections of these special provisions.

Schedule B—Information for Determining Joint Venture Eligibility

(This form need not be filled in if all joint venture firms are minority owned.)

1. Name of joint venture _____

2. Address of joint venture _____

3. Phone number of joint venture _____

4. Identify the firms, which comprise the joint venture. (The MBE partner must complete Schedule A.) _____

a. Describe the role of the MBE firm in the joint venture.

b. Describe very briefly the experience and business qualifications of each non-MBE joint venturer: _____

5. Nature of the joint venture's business _____

6. Provide a copy of the joint venture agreement.

7. What is the claimed percentage of MBE ownership? ____

8. Ownership of joint venture: (This need not be filled in if described in the joint venture agreement, provided by question

6.).

- a. Profit and loss sharing.
- b. Capital contributions, including equipment.
- c. Other applicable ownership interests.

9. Control of and participation in this contract. Identify by name, race, sex, and "firm" those individuals (and their titles) who are responsible for day-to-day management and policy decision-making, including, but not limited to, those with prime responsibility for:

a. Financial decisions _____

b. Management decisions, such as:

1. Estimating _____

2. Marketing and sales _____

3. Hiring and firing of management personnel _____

4. Purchasing of major items or supplies _____

c. Supervision of field operations _____

Note.—If, after filing this Schedule B and before the completion of the joint venture's work on the contract covered by this regulation, there is any significant change in the information submitted, the joint venture must inform the grantee, either directly or through the prime contractor if the joint venture is a subcontractor.

Affidavit

"The undersigned swear that the foregoing statements are correct and include all material information necessary to identify and explain the terms and operation of our joint venture and the intended participation by each joint venturer in the undertaking. Further, the undersigned covenant and agree to provide to grantee current, complete and accurate information regarding actual joint venture work and the payment therefore and any proposed changes in any of the joint venture arrangements and to permit the audit and examination of the books, records and files of the joint venture, or those of each joint venturer relevant to the joint venture, by authorized representatives of the grantee or the Federal funding agency. Any material misrepresentation will be grounds for terminating any contract which may be awarded and for initiating action under Federal or State laws concerning false statements."

| | |
|--------------|--------------|
| | |
| Name of Firm | Name of Firm |
| | |
| Signature | Signature |
| | |
| Name | Name |
| | |
| Title | Title |
| | |
| Date | Date |

Date _____
State of _____
County of _____

On this ___ day of _____, 19 __, before me appeared (Name) _____, to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) _____ to execute the affidavit and did so as his or her free act and deed.

Notary Public _____
Commission expires _____
[Seal]
Date _____
State of _____
County of _____

On this ___ day of _____, 19 __, before me appeared (Name) _____ to me personally known, who, being duly sworn, did execute the foregoing affidavit, and did state that he or she was properly authorized by (Name of firm) _____ to execute the affidavit and did so as his or her free act and deed.

Notary Public _____
Commission expires _____
[Seal]

**REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS**

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

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 design-build 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.

3. 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-the-job 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. Employers 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.

a. 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:

(1) The number and work hours of minority and non-minority 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 [Form FHWA-1391](#). 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 or 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 contractor under this contract, or any other Federal contract with the same prime contractor, or any other federally-assisted 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. Payrolls 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 Division 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 earned, 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 or the State DOT, take such action as may be necessary 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 District or to such territory), for liquidated damages. 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 clause set forth in paragraph (1.) of this section.

3. Withholding for unpaid wages and liquidated damages. The FHWA or 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 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, such sums as may be determined to be necessary to satisfy any liabilities of such contractor or subcontractor for 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 subcontracts. 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:

- (1) 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 contracting agency has assured that each subcontract is

evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract.

5. 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.

1. 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 Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly 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.
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 transactions and in 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 (<https://www.epls.gov/>), 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:

(1) 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 and suppliers).

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 (<https://www.epls.gov/>), 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.

2. 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 \$100,000 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.

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.

1. 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.

5. 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.

Female and Minority Goals

To comply with Section II, "Nondiscrimination," of "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:

The nationwide goal for female utilization is 6.9 percent.

The goals for minority utilization [45 Fed Reg 65984 (10/3/1980)] are as follows:

Minority Utilization Goals

| Economic Area | | Goal (Percent) |
|---------------|--|---|
| 174 | Redding CA: Non-SMSA Counties: CA Lassen; CA Modoc; CA Plumas; CA Shasta; CA Siskiyou; CA Tehema | 6.8 |
| 175 | Eureka, CA Non-SMSA Counties: CA Del Norte; CA Humboldt; CA Trinity | 6.6 |
| 176 | San Francisco-Oakland-San Jose, CA: SMSA Counties: 7120 Salinas-Seaside-Monterey, CA CA Monterey 7360 San Francisco-Oakland CA Alameda; CA Contra Costa; CA Marin; CA San Francisco; CA San Mateo 7400 San Jose, CA CA Santa Clara, CA 7485 Santa Cruz, CA CA Santa Cruz 7500 Santa Rosa CA Sonoma 8720 Vallejo-Fairfield-Napa, CA CA Napa; CA Solano Non-SMSA Counties: CA Lake; CA Mendocino; CA San Benito | 28.9 25.6 19.6 14.9 9.1 17.1 23.2 |
| 177 | Sacramento, CA: SMSA Counties: 6920 Sacramento, CA CA Placer; CA Sacramento; CA Yolo Non-SMSA Counties CA Butte; CA Colusa; CA El Dorado; CA Glenn; CA Nevada; CA Sierra; CA Sutter; CA Yuba | 16.1 14.3 |
| 178 | Stockton-Modesto, CA: SMSA Counties: 5170 Modesto, CA CA Stanislaus 8120 Stockton, CA CA San Joaquin Non-SMSA Counties CA Alpine; CA Amador; CA Calaveras; CA Mariposa; CA Merced; CA Toulumne | 12.3 24.3 19.8 |
| 179 | Fresno-Bakersfield, CA SMSA Counties: 0680 Bakersfield, CA CA Kern 2840 Fresno, CA CA Fresno Non-SMSA Counties: CA Kings; CA Madera; CA Tulare | 19.1 26.1 23.6 |

apprentices or trainees, to the extent they are available within a reasonable recruitment area. Show that you have made the efforts. In making these efforts, do not discriminate against any applicant for training.

Do not employ as an apprentice or trainee an employee:

1. In any classification in which the employee has successfully completed a training course leading to journeyman status or in which the employee has been employed as a journeyman
2. Who is not registered in a program approved by the US Department of Labor, Bureau of Apprenticeship and Training

Ask the employee if the employee has successfully completed a training course leading to journeyman status or has been employed as a journeyman. Your records must show the employee's answers to the questions.

In your training program, establish the minimum length and training type for each classification. The County of El Dorado and FHWA approves a program if one of the following is met:

1. It is calculated to:
 - 1.1. Meet the your equal employment opportunity responsibilities
 - 1.2. Qualify the average apprentice or trainee for journeyman status in the classification involved by the end of the training period
2. It is registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training and it is administered in a way consistent with the equal employment responsibilities of federal-aid highway construction contracts

Obtain the State's approval for your training program before you start work involving the classification covered by the program.

Provide training in the construction crafts, not in clerk-typist or secretarial-type positions. Training is allowed in lower level management positions such as office engineers, estimators, and timekeepers if the training is oriented toward construction applications. Training is allowed in the laborer classification if significant and meaningful training is provided and approved by the division office. Off-site training is allowed if the training is an integral part of an approved training program and does not make up a significant part of the overall training.

The County of El Dorado reimburses you 80 cents per hour of training given an employee on this contract under an approved training program:

1. For on-site training
2. For off-site training if the apprentice or trainee is currently employed on a federal-aid project and you do at least one of the following:
 - 2.1. Contribute to the cost of the training
 - 2.2. Provide the instruction to the apprentice or trainee
 - 2.3. Pay the apprentice's or trainee's wages during the off-site training period
3. If you comply this section.

Each apprentice or trainee must:

1. Begin training on the project as soon as feasible after the start of work involving the apprentice's or trainee's skill

2. Remain on the project as long as training opportunities exist in the apprentice's or trainee's work classification until the apprentice or trainee has completed the training program

Furnish the apprentice or trainee:

1. Copy of the program you will comply with in providing the training
2. Certification showing the type and length of training satisfactorily completed

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

FEDERAL PREVAILING WAGES

General Decision Number: CA140009 05/30/2014 CA9

Superseded General Decision Number: CA20130009

State: California

Construction Types: Building, Heavy (Heavy and Dredging) and Highway

Counties: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Marin, Modoc, Napa, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sonoma, Sutter, Tehama, Trinity, Yolo and Yuba Counties in California.

BUILDING CONSTRUCTION PROJECTS (excluding Amador County only);
 DREDGING CONSTRUCTION PROJECTS (does not include hopper dredge work);
 HEAVY CONSTRUCTION PROJECTS (does not include water well drilling);
 AND HIGHWAY CONSTRUCTION PROJECTS

| Modification Number | Publication Date |
|---------------------|------------------|
| 0 | 01/03/2014 |
| 1 | 01/10/2014 |
| 2 | 01/24/2014 |
| 3 | 03/07/2014 |
| 4 | 04/11/2014 |
| 5 | 05/23/2014 |
| 6 | 05/30/2014 |

ASBE0016-001 01/01/2014

AREA 1: ALAMEDA, CONTRA COSTA, LAKE, MARIN, MENDOCINO, MONTEREY, NAPA, SAN BENITO, SAN FRANCISCO, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, & SONOMA COUNTIES

AREA 2: ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LASSEN, MADERA, MARIPOSA, MERCED, MODOC, MONO, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN JOAQUIN, SHASTA, SIERRA, SISKIYOU, STANISLAU, SUTTER, TEHEMA, TRINITY, TULARE, TUOLUMNE, YOLO, & YUBA COUNTIES

| | Rates | Fringes |
|---|----------|---------|
| Asbestos Workers/Insulator (Includes the application of all insulating materials, Protective Coverings, Coatings, and Finishes to all types of mechanical systems) | | |
| Area 1..... | \$ 57.15 | 18.72 |
| Area 2..... | \$ 44.05 | 18.62 |

 ASBE0016-007 01/01/2013

| | Rates | Fringes |
|--|-------|---------|
| Asbestos Removal worker/hazardous material handler (Includes preparation, wetting, stripping, removal, scrapping, vacuuming, bagging and disposing of all insulation materials from mechanical systems, whether they contain asbestos or not)....\$ | 31.13 | 6.95 |

BOIL0549-002 01/01/2013

| | Rates | Fringes |
|--------------------------------|-------|---------|
| BOILERMAKER | | |
| (1) Marin & Solano Counties.\$ | 42.06 | 33.43 |
| (2) Remaining Counties.....\$ | 38.37 | 31.32 |

BRCA0003-001 06/01/2011

| | Rates | Fringes |
|------------------------|-------|---------|
| MARBLE FINISHER.....\$ | 28.02 | 12.22 |

BRCA0003-004 05/01/2011

AREA 1: ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN,
LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA,
SIERRA, SUTTER, TEHAMA, YOLO AND YUBA COUNTIES

AREA 2: MARIN, NAPA, SISKIYOU, SOLANO, SONOMA AND TRINITY
COUNTIES

| | Rates | Fringes |
|---------------|-------|---------|
| BRICKLAYER | | |
| AREA 1.....\$ | 35.11 | 18.99 |
| AREA 2.....\$ | 39.85 | 22.00 |

SPECIALTY PAY:

- (A) Underground work such as tunnel work, sewer work, manholes, catch basins, sewer pipes and telephone conduit shall be paid \$1.25 per hour above the regular rate. Work in direct contact with raw sewage shall receive \$1.25 per hour in addition to the above.
- (B) Operating a saw or grinder shall receive \$1.25 per hour above the regular rate.
- (C) Guniting nozzle person shall receive \$1.25 per hour above the regular rate.

BRCA0003-008 07/01/2013

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

TERRAZZO FINISHER.....\$ 33.15 13.93
 TERRAZZO WORKER/SETTER.....\$ 39.95 24.39

 BRCA0003-010 04/01/2013

| | Rates | Fringes |
|---------------|----------|---------|
| TILE FINISHER | | |
| Area 1..... | \$ 21.21 | 10.01 |
| Area 2..... | \$ 21.26 | 12.44 |
| Area 3..... | \$ 22.01 | 12.35 |
| Area 4..... | \$ 20.93 | 11.79 |
| Tile Layer | | |
| Area 1..... | \$ 36.08 | 11.95 |
| Area 2..... | \$ 34.41 | 13.68 |
| Area 3..... | \$ 39.42 | 13.77 |
| Area 4..... | \$ 35.45 | 13.68 |

AREA 1: Butte, Colusa, El Dorado, Glenn, Lassen, Modoc,
 Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Sutter,
 Tehema, Yolo, Yuba
 AREA 2: Alpine, Amador
 AREA 3: Marin, Napa, Solano, Siskiyou
 AREA 4: Sonoma

 BRCA0003-014 06/01/2011

| | Rates | Fringes |
|-------------------|----------|---------|
| MARBLE MASON..... | \$ 39.22 | 18.68 |

 CARP0034-001 07/01/2013

| | Rates | Fringes |
|---------------------------------------|----------|---------|
| Diver | | |
| Assistant Tender, ROV | | |
| Tender/Technician..... | \$ 38.60 | 29.78 |
| Diver standby..... | \$ 43.38 | 29.78 |
| Diver Tender..... | \$ 42.38 | 29.78 |
| Diver wet..... | \$ 85.91 | 29.78 |
| Manifold Operator (mixed gas)..... | \$ 47.38 | 29.78 |
| Manifold Operator (Standby).\$ | 42.38 | 29.78 |

DEPTH PAY (Surface Diving):
 050 to 100 ft \$2.00 per foot
 101 to 150 ft \$3.00 per foot
 151 to 220 ft \$4.00 per foot

SATURATION DIVING:
 The standby rate shall apply until saturation starts. The
 saturation diving rate applies when divers are under
 pressure continuously until work task and decompression are
 complete. The diver rate shall be paid for all saturation
 hours.

DIVING IN ENCLOSURES:

Where it is necessary for Divers to enter pipes or tunnels, or other enclosures where there is no vertical ascent, the following premium shall be paid: Distance traveled from entrance 26 feet to 300 feet: \$1.00 per foot. When it is necessary for a diver to enter any pipe, tunnel or other enclosure less than 48" in height, the premium will be \$1.00 per foot.

WORK IN COMBINATION OF CLASSIFICATIONS:

Employees working in any combination of classifications within the diving crew (except dive supervisor) in a shift are paid in the classification with the highest rate for that shift.

 CARP0034-003 07/01/2013

| | Rates | Fringes |
|-----------------|----------|---------|
| Piledriver..... | \$ 38.60 | 29.78 |

CARP0035-001 08/01/2013

AREA 1: MARIN, NAPA, SOLANO & SONOMA

AREA 3: SACRAMENTO, WESTERN EL DORADO (Territory west of an including highway 49 and the territory inside the city limits of Placerville), WESTERN PLACER (Territory west of and including highway 49), & YOLO

AREA 4: ALPINE, BUTTE, COLUSA, EASTERN EL DORADO, GLENN, LASSEN, MODOC, NEVADA, EASTERN PLACER, PLUMAS, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, & YUBA

| | Rates | Fringes |
|-----------------------------|----------|---------|
| Drywall Installers/Lathers: | | |
| Area 1..... | \$ 39.35 | 27.02 |
| Area 3..... | \$ 33.97 | 27.02 |
| Area 4..... | \$ 32.62 | 27.02 |
| Drywall Stocker/Scrapper | | |
| Area 1..... | \$ 19.68 | 15.65 |
| Area 3..... | \$ 16.99 | 15.65 |
| Area 4..... | \$ 16.31 | 15.65 |

CARP0035-009 07/01/2013

Marin County

| | Rates | Fringes |
|---|----------|---------|
| CARPENTER | | |
| Bridge Builder/Highway | | |
| Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & | | |

| | | |
|--|----------|-------|
| Steel Shoring Erector, Saw Filer..... | \$ 39.50 | 26.58 |
| Journeyman Carpenter..... | \$ 39.35 | 26.58 |
| Millwright..... | \$ 39.45 | 28.17 |

 CARP0035-010 07/01/2013

AREA 1: Marin, Napa, Solano & Sonoma Counties

AREA 2: Alpine, San Benito and Santa Cruz

AREA 3: Alpine, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc,
 Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou,
 Sutter, Tehama, Trinity, Yolo & Yuba counties

| | Rates | Fringes |
|-----------------------------|----------|---------|
| Modular Furniture Installer | | |
| Area 1 | | |
| Installer I..... | \$ 22.96 | 17.52 |
| Installer II..... | \$ 19.53 | 17.52 |
| Lead Installer..... | \$ 26.41 | 18.02 |
| Master Installer..... | \$ 30.63 | 18.02 |
| Area 2 | | |
| Installer I..... | \$ 20.31 | 17.52 |
| Installer II..... | \$ 17.36 | 17.52 |
| Lead Installer..... | \$ 23.28 | 18.02 |
| Master Installer..... | \$ 26.91 | 18.02 |
| Area 3 | | |
| Installer I..... | \$ 19.36 | 17.52 |
| Installer II..... | \$ 16.59 | 17.52 |
| Lead Installer..... | \$ 22.16 | 18.02 |
| Master Installer..... | \$ 25.58 | 18.02 |

 CARP0046-001 07/01/2013

El Dorado (West), Placer (West), Sacramento and Yolo Counties

| | Rates | Fringes |
|---|----------|---------|
| Carpenters | | |
| Bridge Builder/Highway | | |
| Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw | | |
| Filer..... | \$ 33.62 | 26.58 |
| Journeyman Carpenter..... | \$ 33.47 | 26.58 |
| Millwright..... | \$ 35.97 | 28.17 |

Footnote: Placer County (West) includes territory West of and including Highway 49 and El Dorado County (West) includes territory West of and including Highway 49 and territory inside the city limits of Placerville.

 CARP0046-002 07/01/2013

Alpine, Colusa, El Dorado (East), Nevada, Placer (East),
Sierra, Sutter and Yuba Counties

| | Rates | Fringes |
|---|----------|---------|
| Carpenters | | |
| Bridge Builder/Highway Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer..... | \$ 32.27 | 26.58 |
| Journeyman Carpenter..... | \$ 32.12 | 26.58 |
| Millwright..... | \$ 34.62 | 28.17 |

CARP0152-003 07/01/2013

Amador County

| | Rates | Fringes |
|---|----------|---------|
| Carpenters | | |
| Bridge Builder/Highway Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer..... | \$ 32.27 | 26.58 |
| Journeyman Carpenter..... | \$ 32.12 | 26.58 |
| Millwright..... | \$ 34.62 | 28.17 |

CARP0180-001 07/01/2013

Solano County

| | Rates | Fringes |
|---|----------|---------|
| Carpenters | | |
| Bridge Builder/Highway Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer..... | \$ 39.50 | 26.58 |
| Journeyman Carpenter..... | \$ 39.35 | 26.58 |
| Millwright..... | \$ 39.45 | 28.17 |

CARP0751-001 07/01/2013

Napa and Sonoma Counties

| | Rates | Fringes |
|------------|-------|---------|
| Carpenters | | |

| | | |
|---|----------|-------|
| Bridge Builder/Highway Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer..... | \$ 39.50 | 26.58 |
| Journeyman Carpenter..... | \$ 39.35 | 26.58 |
| Millwright..... | \$ 39.45 | 28.17 |

 CARP1599-001 07/01/2013

Butte, Glenn, Lassen, Modoc, Plumas, Shasta, Siskiyou, Tehama
 and Trinity Counties

| | Rates | Fringes |
|---|----------|---------|
| Carpenters | | |
| Bridge Builder/Highway Carpenter..... | \$ 39.35 | 26.58 |
| Hardwood Floorlayer, Shingler, Power Saw Operator, Steel Scaffold & Steel Shoring Erector, Saw Filer..... | \$ 32.27 | 26.58 |
| Journeyman Carpenter..... | \$ 32.12 | 26.58 |
| Millwright..... | \$ 34.62 | 28.17 |

 ELEC0180-001 06/01/2013

NAPA AND SOLANO COUNTIES

| | Rates | Fringes |
|--------------------|----------|---------|
| CABLE SPLICER..... | \$ 49.29 | 21.609 |
| ELECTRICIAN..... | \$ 43.81 | 21.444 |

 ELEC0180-003 12/01/2013

NAPA AND SOLANO COUNTIES

| | Rates | Fringes |
|------------------------|----------|----------|
| Sound & Communications | | |
| Installer..... | \$ 31.32 | 3%+15.30 |
| Technician..... | \$ 35.66 | 3%+15.30 |

SCOPE OF WORK INCLUDES-

SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call,
 Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work
 when installed in raceways (including wire and cable
 pulling) and when performed on new or major remodel
 building projects or jobs],
 TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS
 SYSTEMS that transmit or receive information and/or control
 systems that are intrinsic to the above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

 ELEC0340-002 12/01/2013

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, NEVADA, PLACER, PLUMAS, SACRAMENTO, TRINITY, YOLO, YUBA COUNTIES

| | Rates | Fringes |
|------------------------|----------|----------|
| Communications System | | |
| Sound & Communications | | |
| Installer..... | \$ 24.68 | 3%+12.85 |
| Sound & Communications | | |
| Technician..... | \$ 28.38 | 3%+12.85 |

SCOPE OF WORK

Includes the installation testing, service and maintenance, of the following systems which utilize the transmission and/or transference of voice, sound, vision and digital for commercial, education, security and entertainment purposes for the following TV monitoring and surveillance, background-foreground music, intercom and telephone interconnect, inventory control systems, microwave transmission, multi-media, multiplex, nurse call system, radio page, school intercom and sound, burglar alarms, and low voltage master clock systems.

A. SOUND AND VOICE TRANSMISSION/TRANSFERENCE SYSTEMS
 Background foreground music Intercom and telephone interconnect systems, Telephone systems, Nurse call systems, Radio page systems, School intercom and sound systems, Burglar alarm systems, Low voltage master clock systems, Multi-media/multiplex systems, Sound and musical entertainment systems, RF systems, Antennas and Wave Guide.

B. FIRE ALARM SYSTEMS
 Installation, wire pulling and testing

C. TELEVISION AND VIDEO SYSTEMS Television monitoring and surveillance systems, Video security systems, Video entertainment systems, Video educational systems, Microwave transmission systems, CATV and CCTV

D. SECURITY SYSTEMS Perimeter security systems
 Vibration sensor systems Card access systems Access control systems Sonar/infrared monitoring equipment

E. COMMUNICATIONS SYSTEMS THAT TRANSMIT OR RECEIVE INFORMATION AND/OR CONTROL SYSTEMS THAT ARE INTRINSIC TO THE ABOVE LISTED SYSTEMS SCADA (Supervisory Control and

Data Acquisition) PCM (Pulse Code Modulation)
 Inventory Control Systems Digital Data Systems
 Broadband and Baseband and Carriers Point of Sale
 Systems VSAT Data Systems Data Communication
 Systems RF and Remote Control Systems Fiber Optic
 Data Systems WORK EXCLUDED Raceway systems are not covered
 (excluding Ladder-Rack for the purpose of the above listed
 systems). Chases and/or nipples (not to exceed 10 feet)
 may be installed on open wiring systems. Energy management
 systems. SCADA (Supervisory Control and Data Acquisition)
 when not intrinsic to the above listed systems (in the
 scope). Fire alarm systems when installed in raceways
 (including wire and cable pulling) shall be performed at
 the electrician wage rate, when either of the following two
 (2) conditions apply:

1. The project involves new or major remodel building trades construction.
2. The conductors for the fire alarm system are installed in conduit.

 ELEC0340-003 12/01/2013

ALPINE (West of Sierra Mt. Watershed), AMADOR, BUTTE, COLUSA,
 EL DORADO (West of Sierra Mt. Watershed), GLENN, LASSEN, NEVADA
 (West of Sierra Mt. Watershed), PLACER, PLUMAS, SACRAMENTO,
 SHASTA, SIERRA (West of Sierra Mt. Watershed), SUTTER, TEHAMA,
 TRINITY, YOLO & YUBA COUNTIES

| | Rates | Fringes |
|------------------------------|----------|---------|
| ELECTRICIAN | | |
| Remaining area..... | \$ 39.06 | 18.54 |
| Sierra Army Depot, Herlong.. | \$ 48.83 | 18.54 |
| Tunnel work..... | \$ 41.01 | 18.54 |

CABLE SPLICER: Receives 110% of the Electrician basic hourly
 rate.

 ELEC0401-005 07/01/2013

ALPINE (east of the main watershed divide), EL DORADO (east of
 the main watershed divide), NEVADA (east of the main
 watershed), PLACER (east of the main watershed divide) and
 SIERRA (east of the main watershed divide) COUNTIES:

| | Rates | Fringes |
|------------------|----------|---------|
| ELECTRICIAN..... | \$ 37.00 | 14.62 |

 ELEC0551-004 06/01/2013

MARIN AND SONOMA COUNTIES

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

ELECTRICIAN.....\$ 46.70 15.21

ELEC0551-005 12/01/2013

MARIN & SONOMA COUNTIES

| | Rates | Fringes |
|-------------------------|-------|---------|
| Sound & Communications | | |
| Installer.....\$ 31.32 | | 16.23 |
| Technician.....\$ 35.66 | | 16.36 |

SCOPE OF WORK INCLUDES-

SOUND & VOICE TRANSMISSION (Music, Intercom, Nurse Call, Telephone); FIRE ALARM SYSTEMS [excluding fire alarm work when installed in raceways (including wire and cable pulling) and when performed on new or major remodel building projects or jobs], TELEVISION & VIDEO SYSTEMS, SECURITY SYSTEMS, COMMUNICATIONS SYSTEMS that transmit or receive information and/or control systems that are intrinsic to the above.

EXCLUDES-

Excludes all other data systems or multiple systems which include control function or power supply; excludes installation of raceway systems, line voltage work, industrial work, life-safety systems (all buildings having floors located more than 75' above the lowest floor level having building access); excludes energy management systems.

ELEC0659-006 01/01/2013

DEL NORTE, MODOC and SISKIYOU COUNTIES

| | Rates | Fringes |
|--------------------------|-------|---------|
| ELECTRICIAN.....\$ 30.27 | | 14.81 |

ELEC0659-008 02/01/2013

DEL NORTE, MODOC & SISKIYOU COUNTIES

| | Rates | Fringes |
|--------------------------------------|-------|----------|
| Line Construction | | |
| (1) Cable Splicer.....\$ 51.09 | | 4%+13.30 |
| (2) Lineman, Pole Sprayer, | | |
| Heavy Line Equipment Man....\$ 45.62 | | 4%+13.30 |
| (3) Tree Trimmer.....\$ 32.07 | | 4%+9.80 |
| (4) Line Equipment Man.....\$ 45.62 | | 4%+9.80 |
| (5) Powdermen, | | |
| Jackhammermen.....\$ 34.22 | | 4%+9.80 |
| (6) Groundman.....\$ 31.31 | | 4%+9.80 |

ELEC1245-004 06/01/2013

ALL COUNTIES EXCEPT DEL NORTE, MODOC & SISKIYOU

| | Rates | Fringes |
|--|----------|---------|
| LINE CONSTRUCTION | | |
| (1) Lineman; Cable splicer.. | \$ 50.30 | 15 |
| (2) Equipment specialist (operates crawler tractors, commercial motor vehicles, backhoes, trenchers, cranes (50 tons and below), overhead & underground distribution line equipment)..... | \$ 40.17 | 14.56 |
| (3) Groundman..... | \$ 30.73 | 13.48 |
| (4) Powderman..... | \$ 44.91 | 13.48 |

HOLIDAYS: New Year's Day, M.L. King Day, Memorial Day,
Independence Day, Labor Day, Veterans Day, Thanksgiving Day
and day after Thanksgiving, Christmas Day

ELEV0008-001 01/01/2014

| | Rates | Fringes |
|------------------------|----------|---------|
| ELEVATOR MECHANIC..... | \$ 59.19 | 26.785 |

FOOTNOTE:

PAID VACATION: Employer contributes 8% of regular hourly
rate as vacation pay credit for employees with more than 5
years of service, and 6% for 6 months to 5 years of service.
PAID HOLIDAYS: New Years Day, Memorial Day, Independence Day,
Labor Day, Veterans Day, Thanksgiving Day, Friday after
Thanksgiving, and Christmas Day.

ENGI0003-008 07/01/2013

| | Rates | Fringes |
|---|----------|---------|
| Dredging: (DREDGING: CLAMSHELL & DIPPER DREDGING; HYDRAULIC SUCTION DREDGING:) | | |
| AREA 1: | | |
| (1) Leverman..... | \$ 40.53 | 27.81 |
| (2) Dredge Dozer; Heavy duty repairman..... | \$ 35.57 | 27.81 |
| (3) Booster Pump Operator; Deck Engineer; Deck mate; Dredge Tender; Winch Operator..... | \$ 34.45 | 27.81 |
| (4) Bargeman; Deckhand; Fireman; Leveehand; Oiler.. | \$ 31.15 | 27.81 |
| AREA 2: | | |
| (1) Leverman..... | \$ 42.53 | 27.81 |
| (2) Dredge Dozer; Heavy duty repairman..... | \$ 37.57 | 27.81 |
| (3) Booster Pump | | |

| | | |
|-----------------------------|----------|-------|
| Operator; Deck | | |
| Engineer; Deck mate; | | |
| Dredge Tender; Winch | | |
| Operator..... | \$ 36.45 | 27.81 |
| (4) Bargeman; Deckhand; | | |
| Fireman; Leveehand; Oiler.. | \$ 33.15 | 27.81 |

AREA DESCRIPTIONS

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2: MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Remainder
Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part
Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY:

Area 1: Remainder
Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part
Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border with Shasta County
Area 2: Remainder

MADERA COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Except Eastern part
Area 2: Eastern part

MONTERREY COUNTY

Area 1: Except Southwestern part
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of Sierra County
Area 2: Remainder

PLACER COUNTY:

Area 1: Al but the Central portion
Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner
Area 2: Remainder

TEHAMA COUNTY:

Area 1: All but the Western border with Mendocino & Trinity Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeastern border with Shasta County
Area 2: Remainder

TUOLUMNE COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

ENGI0003-018 07/01/2013

"AREA 1" WAGE RATES ARE LISTED BELOW

"AREA 2" RECEIVES AN ADDITIONAL \$2.00 PER HOUR ABOVE AREA 1 RATES.

SEE AREA DEFINITIONS BELOW

Rates Fringes

OPERATOR: Power Equipment
(AREA 1:)

| | | |
|----------------------------|----------|-------|
| GROUP 1..... | \$ 39.02 | 26.27 |
| GROUP 2..... | \$ 37.49 | 26.27 |
| GROUP 3..... | \$ 36.01 | 26.27 |
| GROUP 4..... | \$ 34.63 | 26.27 |
| GROUP 5..... | \$ 33.36 | 26.27 |
| GROUP 6..... | \$ 32.04 | 26.27 |
| GROUP 7..... | \$ 30.90 | 26.27 |
| GROUP 8..... | \$ 29.76 | 26.27 |
| GROUP 8-A..... | \$ 27.55 | 26.27 |
| OPERATOR: Power Equipment | | |
| (Cranes and Attachments - | | |
| AREA 1:) | | |
| GROUP 1 | | |
| Cranes..... | \$ 39.90 | 26.27 |
| Oiler..... | \$ 32.93 | 26.27 |
| Truck crane oiler..... | \$ 36.50 | 26.27 |
| GROUP 2 | | |
| Cranes..... | \$ 32.67 | 26.27 |
| Oiler..... | \$ 32.67 | 26.27 |
| Truck crane oiler..... | \$ 36.21 | 26.27 |
| GROUP 3 | | |
| Cranes..... | \$ 36.40 | 26.27 |
| Hydraulic..... | \$ 32.04 | 26.27 |
| Oiler..... | \$ 32.43 | 26.27 |
| Truck Crane Oiler..... | \$ 35.94 | 26.27 |
| OPERATOR: Power Equipment | | |
| (Piledriving - AREA 1:) | | |
| GROUP 1 | | |
| Lifting devices..... | \$ 40.24 | 26.27 |
| Oiler..... | \$ 30.98 | 26.27 |
| Truck crane oiler..... | \$ 33.26 | 26.27 |
| GROUP 2 | | |
| Lifting devices..... | \$ 38.42 | 26.27 |
| Oiler..... | \$ 30.71 | 26.27 |
| Truck Crane Oiler..... | \$ 33.01 | 26.27 |
| GROUP 3 | | |
| Lifting devices..... | \$ 36.74 | 26.27 |
| Oiler..... | \$ 30.49 | 26.27 |
| Truck Crane Oiler..... | \$ 32.72 | 26.27 |
| GROUP 4 | | |
| Lifting devices..... | \$ 34.97 | 26.27 |
| GROUP 5 | | |
| Lifting devices..... | \$ 33.67 | 26.27 |
| GROUP 6 | | |
| Lifting devices..... | \$ 32.33 | 26.27 |
| OPERATOR: Power Equipment | | |
| (Steel Erection - AREA 1:) | | |
| GROUP 1 | | |
| Cranes..... | \$ 40.87 | 26.27 |
| Oiler..... | \$ 31.32 | 26.27 |
| Truck Crane Oiler..... | \$ 33.55 | 26.27 |
| GROUP 2 | | |
| Cranes..... | \$ 39.10 | 26.27 |
| Oiler..... | \$ 31.05 | 26.27 |
| Truck Crane Oiler..... | \$ 33.33 | 26.27 |
| GROUP 3 | | |
| Cranes..... | \$ 37.62 | 26.27 |
| Hydraulic..... | \$ 32.67 | 26.27 |
| Oiler..... | \$ 30.83 | 26.27 |

| | | |
|------------------------------|----------|-------|
| Truck Crane Oiler..... | \$ 33.06 | 26.27 |
| GROUP 4 | | |
| Cranes..... | \$ 35.60 | 26.27 |
| GROUP 5 | | |
| Cranes..... | \$ 34.30 | 26.27 |
| OPERATOR: Power Equipment | | |
| (Tunnel and Underground Work | | |
| - AREA 1:) | | |
| SHAFTS, STOPES, RAISES: | | |
| GROUP 1..... | \$ 35.12 | 26.27 |
| GROUP 1-A..... | \$ 37.59 | 26.27 |
| GROUP 2..... | \$ 33.86 | 26.27 |
| GROUP 3..... | \$ 32.53 | 26.27 |
| GROUP 4..... | \$ 31.39 | 26.27 |
| GROUP 5..... | \$ 30.25 | 26.27 |
| UNDERGROUND: | | |
| GROUP 1..... | \$ 35.02 | 26.27 |
| GROUP 1-A..... | \$ 37.49 | 26.27 |
| GROUP 2..... | \$ 33.76 | 26.27 |
| GROUP 3..... | \$ 32.43 | 26.27 |
| GROUP 4..... | \$ 31.29 | 26.27 |
| GROUP 5..... | \$ 30.15 | 26.27 |

FOOTNOTE: Work suspended by ropes or cables, or work on a Yo-Yo Cat: \$.60 per hour additional.

POWER EQUIPMENT OPERATOR CLASSIFICATIONS

GROUP 1: Operator of helicopter (when used in erection work); Hydraulic excavator, 7 cu. yds. and over; Power shovels, over 7 cu. yds.

GROUP 2: Highline cableway; Hydraulic excavator, 3-1/2 cu. yds. up to 7 cu. yds.; Licensed construction work boat operator, on site; Power blade operator (finish); Power shovels, over 1 cu. yd. up to and including 7 cu. yds. m.r.c.

GROUP 3: Asphalt milling machine; Cable backhoe; Combination backhoe and loader over 3/4 cu. yds.; Continuous flight tie back machine assistant to engineer or mechanic; Crane mounted continuous flight tie back machine, tonnage to apply; Crane mounted drill attachment, tonnage to apply; Dozer, slope brd; Gradall; Hydraulic excavator, up to 3 1/2 cu. yds.; Loader 4 cu. yds. and over; Long reach excavator; Multiple engine scraper (when used as push pull); Power shovels, up to and including 1 cu. yd.; Pre-stress wire wrapping machine; Side boom cat, 572 or larger; Track loader 4 cu. yds. and over; Wheel excavator (up to and including 750 cu. yds. per hour)

GROUP 4: Asphalt plant engineer/box person; Chicago boom; Combination backhoe and loader up to and including 3/4 cu. yd.; Concrete batch plant (wet or dry); Dozer and/or push cat; Pull- type elevating loader; Gradesetter, grade checker (GPS, mechanical or otherwise); Grooving and grinding machine; Heading shield operator; Heavy-duty drilling equipment, Hughes, LDH, Watson 3000 or similar;

Heavy-duty repairperson and/or welder; Lime spreader; Loader under 4 cu. yds.; Lubrication and service engineer (mobile and grease rack); Mechanical finishers or spreader machine (asphalt, Barber-Greene and similar); Miller Formless M-9000 slope paver or similar; Portable crushing and screening plants; Power blade support; Roller operator, asphalt; Rubber-tired scraper, self-loading (paddle-wheels, etc.); Rubber-tired earthmoving equipment (scrapers); Slip form paver (concrete); Small tractor with drag; Soil stabilizer (P & H or equal); Spider plow and spider puller; Tubex pile rig; Unlicensed construction work boat operator, on site; Timber skidder; Track loader up to 4 yds.; Tractor-drawn scraper; Tractor, compressor drill combination; Welder; Woods-Mixer (and other similar Pugmill equipment)

GROUP 5: Cast-in-place pipe laying machine; Combination slusher and motor operator; Concrete conveyor or concrete pump, truck or equipment mounted; Concrete conveyor, building site; Concrete pump or pumpcrete gun; Drilling equipment, Watson 2000, Texoma 700 or similar; Drilling and boring machinery, horizontal (not to apply to waterliners, wagon drills or jackhammers); Concrete mixer/all; Person and/or material hoist; Mechanical finishers (concrete) (Clary, Johnson, Bidwell Bridge Deck or similar types); Mechanical burm, curb and/or curb and gutter machine, concrete or asphalt; Mine or shaft hoist; Portable crusher; Power jumbo operator (setting slip-forms, etc., in tunnels); Screed (automatic or manual); Self-propelled compactor with dozer; Tractor with boom D6 or smaller; Trenching machine, maximum digging capacity over 5 ft. depth; Vermeer T-600B rock cutter or similar

GROUP 6: Armor-Coater (or similar); Ballast jack tamper; Boom-type backfilling machine; Assistant plant engineer; Bridge and/or gantry crane; Chemical grouting machine, truck-mounted; Chip spreading machine operator; Concrete saw (self-propelled unit on streets, highways, airports and canals); Deck engineer; Drilling equipment Texoma 600, Hughes 200 Series or similar up to and including 30 ft. m.r.c.; Drill doctor; Helicopter radio operator; Hydro-hammer or similar; Line master; Skidsteer loader, Bobcat larger than 743 series or similar (with attachments); Locomotive; Lull hi-lift or similar; Oiler, truck mounted equipment; Pavement breaker, truck-mounted, with compressor combination; Paving fabric installation and/or laying machine; Pipe bending machine (pipelines only); Pipe wrapping machine (tractor propelled and supported); Screed (except asphaltic concrete paving); Self-propelled pipeline wrapping machine; Tractor; Self-loading chipper; Concrete barrier moving machine

GROUP 7: Ballast regulator; Boom truck or dual-purpose A-frame truck, non-rotating - under 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) - under 15 tons; Cary lift or similar; Combination slurry mixer and/or cleaner; Drilling equipment, 20 ft. and under m.r.c.; Firetender (hot plant); Grouting machine operator; Highline cableway signalperson;

Stationary belt loader (Kolman or similar); Lift slab machine (Vagtborg and similar types); Maginnes internal full slab vibrator; Material hoist (1 drum); Mechanical trench shield; Pavement breaker with or without compressor combination); Pipe cleaning machine (tractor propelled and supported); Post driver; Roller (except asphalt); Chip Seal; Self-propelled automatically applied concrete curing machine (on streets, highways, airports and canals); Self-propelled compactor (without dozer); Signalperson; Slip-form pumps (lifting device for concrete forms); Tie spacer; Tower mobile; Trenching machine, maximum digging capacity up to and including 5 ft. depth; Truck- type loader

GROUP 8: Bit sharpener; Boiler tender; Box operator; Brakeperson; Combination mixer and compressor (shotcrete/gunite); Compressor operator; Deckhand; Fire tender; Forklift (under 20 ft.); Generator; Gunite/shotcrete equipment operator; Hydraulic monitor; Ken seal machine (or similar); Mixermobile; Oiler; Pump operator; Refrigeration plant; Reservoir-debris tug (self-propelled floating); Ross Carrier (construction site); Rotomist operator; Self-propelled tape machine; Shuttlecar; Self-propelled power sweeper operator (includes vacuum sweeper); Slusher operator; Surface heater; Switchperson; Tar pot firetender; Tugger hoist, single drum; Vacuum cooling plant; Welding machine (powered other than by electricity)

GROUP 8-A: Elevator operator; Skidsteer loader-Bobcat 743 series or smaller, and similar (without attachments); Mini excavator under 25 H.P. (backhoe-trencher); Tub grinder wood chipper

ALL CRANES AND ATTACHMENTS

GROUP 1: Clamshell and dragline over 7 cu. yds.; Crane, over 100 tons; Derrick, over 100 tons; Derrick barge pedestal-mounted, over 100 tons; Self-propelled boom-type lifting device, over 100 tons

GROUP 2: Clamshell and dragline over 1 cu. yd. up to and including 7 cu. yds.; Crane, over 45 tons up to and including 100 tons; Derrick barge, 100 tons and under; Self-propelled boom-type lifting device, over 45 tons; Tower crane

GROUP 3: Clamshell and dragline up to and including 1 cu. yd.; Cranes 45 tons and under; Self-propelled boom-type lifting device 45 tons and under; Boom Truck or dual purpose A-frame truck, non-rotating over 15 tons; Truck-mounted rotating telescopic boom type lifting device, Manitex or similar (boom truck) over 15 tons;

PILEDRIVERS

GROUP 1: Derrick barge pedestal mounted over 100 tons; Clamshell over 7 cu. yds.; Self-propelled boom-type lifting device over 100 tons; Truck crane or crawler, land or barge mounted over 100 tons

GROUP 2: Derrick barge pedestal mounted 45 tons to and including 100 tons; Clamshell up to and including 7 cu. yds.; Self-propelled boom-type lifting device over 45 tons; Truck crane or crawler, land or barge mounted, over 45 tons up to and including 100 tons; Fundex F-12 hydraulic pile rig

GROUP 3: Derrick barge pedestal mounted under 45 tons; Self-propelled boom-type lifting device 45 tons and under; Skid/scow piledriver, any tonnage; Truck crane or crawler, land or barge mounted 45 tons and under

GROUP 4: Assistant operator in lieu of assistant to engineer; Forklift, 10 tons and over; Heavy-duty repairperson/welder

GROUP 5: Deck engineer

GROUP 6: Deckhand; Fire tender

STEEL ERECTORS

GROUP 1: Crane over 100 tons; Derrick over 100 tons; Self-propelled boom-type lifting device over 100 tons

GROUP 2: Crane over 45 tons to 100 tons; Derrick under 100 tons; Self-propelled boom-type lifting device over 45 tons to 100 tons; Tower crane

GROUP 3: Crane, 45 tons and under; Self-propelled boom-type lifting device, 45 tons and under

GROUP 4: Chicago boom; Forklift, 10 tons and over; Heavy-duty repair person/welder

GROUP 5: Boom cat

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TUNNEL AND UNDERGROUND WORK

GROUP 1-A: Tunnel bore machine operator, 20' diameter or more

GROUP 1: Heading shield operator; Heavy-duty repairperson; Mucking machine (rubber tired, rail or track type); Raised bore operator (tunnels); Tunnel mole bore operator

GROUP 2: Combination slusher and motor operator; Concrete pump or pumpcrete gun; Power jumbo operator

GROUP 3: Drill doctor; Mine or shaft hoist

GROUP 4: Combination slurry mixer cleaner; Grouting Machine operator; Motorman

GROUP 5: Bit Sharpener; Brakeman; Combination mixer and compressor (gunite); Compressor operator; Oiler; Pump operator; Slusher operator

AREA DESCRIPTIONS:

POWER EQUIPMENT OPERATORS, CRANES AND ATTACHMENTS, TUNNEL AND UNDERGROUND [These areas do not apply to Piledrivers and Steel Erectors]

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part

Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part

Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part

Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner

Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part

Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part

Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part

Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts

Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part

Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border
with Shasta County
Area 2: Remainder

MADERA COUNTY

Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:

Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:

Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:

Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:

Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:

Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:

Area 1: All but the Northwestern corner
Area 2: Reaminder

TEHAMA COUNTY:

Area 1: All but the Western border with mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:

Area 1: East Central part and the Northeaster border with
Shasta County

Area 2: Remainder

TULARE COUNTY;

Area 1: Remainder

Area 2: Eastern part

TUOLUMNE COUNTY:

Area 1: Remainder

Area 2: Eastern Part

ENGI0003-019 07/01/2013

SEE AREA DESCRIPTIONS BELOW

| | Rates | Fringes |
|---------------------------|----------|---------|
| OPERATOR: Power Equipment | | |
| (LANDSCAPE WORK ONLY) | | |
| GROUP 1 | | |
| AREA 1..... | \$ 29.64 | 25.71 |
| AREA 2..... | \$ 31.64 | 25.71 |
| GROUP 2 | | |
| AREA 1..... | \$ 26.04 | 25.71 |
| AREA 2..... | \$ 28.04 | 25.71 |
| GROUP 3 | | |
| AREA 1..... | \$ 21.43 | 25.71 |
| AREA 2..... | \$ 23.43 | 25.71 |

GROUP DESCRIPTIONS:

GROUP 1: Landscape Finish Grade Operator: All finish grade work regardless of equipment used, and all equipment with a rating more than 65 HP.

GROUP 2: Landscape Operator up to 65 HP: All equipment with a manufacturer's rating of 65 HP or less except equipment covered by Group 1 or Group 3. The following equipment shall be included except when used for finish work as long as manufacturer's rating is 65 HP or less: A-Frame and Winch Truck, Backhoe, Forklift, Hydragraphic Seeder Machine, Roller, Rubber-Tired and Track Earthmoving Equipment, Skiploader, Straw Blowers, and Trencher 31 HP up to 65 HP.

GROUP 3: Landscae Utility Operator: Small Rubber-Tired Tractor, Trencher Under 31 HP.

AREA DESCRIPTIONS:

AREA 1: ALAMEDA, BUTTE, CONTRA COSTA, KINGS, MARIN, MERCED, NAPA, SACRAMENTO, SAN BENITO, SAN FRANCISCO, SAN JOAQUIN, SAN MATEO, SANTA CLARA, SANTA CRUZ, SOLANO, STANISLAUS, SUTTER, YOLO, AND YUBA COUNTIES

AREA 2 - MODOC COUNTY

THE REMAINING COUNTIES ARE SPLIT BETWEEN AREA 1 AND AREA 2 AS NOTED BELOW:

ALPINE COUNTY:

Area 1: Northernmost part
Area 2: Remainder

CALAVERAS COUNTY:

Area 1: Except Eastern part
Area 2: Eastern part

COLUSA COUNTY:

Area 1: Eastern part
Area 2: Remainder

DEL NORTE COUNTY:

Area 1: Extreme Southwestern corner
Area 2: Remainder

ELDORADO COUNTY:

Area 1: North Central part
Area 2: Remainder

FRESNO COUNTY

Area 1: Except Eastern part
Area 2: Eastern part

GLENN COUNTY:

Area 1: Eastern part
Area 2: Remainder

HUMBOLDT COUNTY:

Area 1: Except Eastern and Southwestern parts
Area 2: Remainder

LAKE COUNTY:

Area 1: Southern part
Area 2: Remainder

LASSEN COUNTY:

Area 1: Western part along the Southern portion of border
with Shasta County
Area 2: Remainder

MADERA COUNTY

Area 1: Remainder
Area 2: Eastern part

MARIPOSA COUNTY

Area 1: Remainder
Area 2: Eastern part

MENDOCINO COUNTY:

Area 1: Central and Southeastern parts
Area 2: Remainder

MONTEREY COUNTY

Area 1: Remainder
Area 2: Southwestern part

NEVADA COUNTY:

Area 1: All but the Northern portion along the border of
Sierra County
Area 2: Remainder

PLACER COUNTY:
Area 1: All but the Central portion
Area 2: Remainder

PLUMAS COUNTY:
Area 1: Western portion
Area 2: Remainder

SHASTA COUNTY:
Area 1: All but the Northeastern corner
Area 2: Remainder

SIERRA COUNTY:
Area 1: Western part
Area 2: Remainder

SISKIYOU COUNTY:
Area 1: Central part
Area 2: Remainder

SONOMA COUNTY:
Area 1: All but the Northwestern corner
Area 2: Reaminder

TEHAMA COUNTY:
Area 1: All but the Western border with mendocino & Trinity
Counties
Area 2: Remainder

TRINITY COUNTY:
Area 1: East Central part and the Northeaster border with
Shasta County
Area 2: Remainder

TULARE COUNTY;
Area 1: Remainder
Area 2: Eastern part

TUOLUMNE COUNTY:
Area 1: Remainder
Area 2: Eastern Part

IRON0377-002 07/01/2013

| | Rates | Fringes |
|--|----------|---------|
| Ironworkers: | | |
| Fence Erector..... | \$ 26.58 | 17.74 |
| Ornamental, Reinforcing and Structural..... | \$ 33.00 | 26.30 |

PREMIUM PAY:

\$6.00 additional per hour at the following locations:

Sawmill 2B Bike Path and Erosion Control Project
Contract No. PW 11-30593, CIP No. 95192
May 2014

County of El Dorado
Special Provisions
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China Lake Naval Test Station, Chocolate Mountains Naval Reserve-Niland, Edwards AFB, Fort Irwin Military Station, Fort Irwin Training Center-Goldstone, San Clemente Island, San Nicholas Island, Susanville Federal Prison, 29 Palms - Marine Corps, U.S. Marine Base - Barstow, U.S. Naval Air Facility - Sealey, Vandenberg AFB

\$4.00 additional per hour at the following locations:

Army Defense Language Institute - Monterey, Fallon Air Base, Naval Post Graduate School - Monterey, Yermo Marine Corps Logistics Center

\$2.00 additional per hour at the following locations:

Port Hueneme, Port Mugu, U.S. Coast Guard Station - Two Rock

LABO0067-002 12/01/2013

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, DEL NORTE, EL DORADO, FRESNO, GLENN, HUMBOLDT, KINGS, LAKE, LASSEN, MADERA, MARIPOSA, MENDOCINO, MERCED, MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|--------------------------|----------|---------|
| Asbestos Removal Laborer | | |
| Areas A & B..... | \$ 19.66 | 9.02 |
| LABORER (Lead Removal) | | |
| Area A..... | \$ 27.89 | 19.20 |
| Area B..... | \$ 26.89 | 19.20 |

ASBESTOS REMOVAL-SCOPE OF WORK: Site mobilization; initial site clean-up; site preparation; removal of asbestos-containing materials from walls and ceilings; or from pipes, boilers and mechanical systems only if they are being scrapped; encapsulation, enclosure and disposal of asbestos-containing materials by hand or with equipment or machinery; scaffolding; fabrication of temporary wooden barriers; and assembly of decontamination stations.

LABO0067-006 06/28/2010

AREA "A" - ALAMEDA, CONTRA COSTA, MARIN, SAN FRANCISCO, SAN MATEO AND SANTA CLARA COUNTIES

AREA "B" - ALPINE, AMADOR, BUTTE, CALAVERAS, COLUSA, EL DORADO, FRESNO, GLENN, KINGS, LASSEN, MADERA, MARIPOSA, MERCED,

MODOC, MONTEREY, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SAN BENITO, SAN JOAQUIN, SANTA CRUZ, SHASTA, SIERRA, SISKIYOU, SOLANO, SONOMA, STANISLAUS, SUTTER, TEHAMA, TRINITY, TULARE, TUOLUMNE, YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|---|----------|---------|
| Laborers: (CONSTRUCTION CRAFT | | |
| LABORERS - AREA A:) | | |
| Construction Specialist | | |
| Group..... | \$ 27.84 | 15.82 |
| GROUP 1..... | \$ 27.14 | 15.82 |
| GROUP 1-a..... | \$ 27.36 | 15.82 |
| GROUP 1-c..... | \$ 27.19 | 15.82 |
| GROUP 1-e..... | \$ 27.69 | 15.82 |
| GROUP 1-f..... | \$ 27.72 | 15.82 |
| GROUP 1-g (Contra Costa | | |
| County)..... | \$ 27.34 | 15.82 |
| GROUP 2..... | \$ 26.99 | 15.82 |
| GROUP 3..... | \$ 26.89 | 15.82 |
| GROUP 4..... | \$ 20.58 | 15.82 |
| See groups 1-b and 1-d under laborer classifications. | | |
| Laborers: (CONSTRUCTION CRAFT | | |
| LABORERS - AREA B:) | | |
| Construction Specialist | | |
| Group..... | \$ 26.84 | 15.82 |
| GROUP 1..... | \$ 26.14 | 15.82 |
| GROUP 1-a..... | \$ 26.36 | 15.82 |
| GROUP 1-c..... | \$ 26.19 | 15.82 |
| GROUP 1-e..... | \$ 26.69 | 15.82 |
| GROUP 1-f..... | \$ 26.72 | 15.82 |
| GROUP 2..... | \$ 25.99 | 15.82 |
| GROUP 3..... | \$ 25.89 | 15.82 |
| GROUP 4..... | \$ 19.58 | 15.82 |
| See groups 1-b and 1-d under laborer classifications. | | |
| Laborers: (GUNITE - AREA A:) | | |
| GROUP 1..... | \$ 28.10 | 15.82 |
| GROUP 2..... | \$ 27.60 | 15.82 |
| GROUP 3..... | \$ 27.60 | 15.82 |
| GROUP 4..... | \$ 27.60 | 15.82 |
| Laborers: (GUNITE - AREA B:) | | |
| GROUP 1..... | \$ 27.10 | 15.82 |
| GROUP 2..... | \$ 26.60 | 15.82 |
| GROUP 3..... | \$ 26.01 | 15.82 |
| GROUP 4..... | \$ 25.89 | 15.82 |
| Laborers: (WRECKING - AREA A:) | | |
| GROUP 1..... | \$ 27.14 | 15.82 |
| GROUP 2..... | \$ 26.99 | 15.82 |
| Laborers: (WRECKING - AREA B:) | | |
| GROUP 1..... | \$ 26.14 | 15.82 |
| GROUP 2..... | \$ 25.99 | 15.82 |
| Landscape Laborer (GARDENERS, | | |
| HORTICULTURAL & LANDSCAPE | | |
| LABORERS - AREA A:) | | |
| (1) New Construction..... | \$ 26.89 | 15.82 |
| (2) Establishment Warranty | | |
| Period..... | \$ 20.58 | 15.82 |
| Landscape Laborer (GARDENERS, | | |

HORTICULURAL & LANDSCAPE

LABORERS - AREA B:)

| | |
|-----------------------------------|-------|
| (1) New Construction.....\$ 25.89 | 15.82 |
| (2) Establishment Warranty | |
| Period.....\$ 19.58 | 15.82 |

FOOTNOTES:

Laborers working off or with or from bos'n chairs, swinging scaffolds, belts shall receive \$0.25 per hour above the applicable wage rate. This shall not apply to workers entitled to receive the wage rate set forth in Group 1-a below.

LABORER CLASSIFICATIONS

CONSTRUCTION SPECIALIST GROUP: Asphalt ironer and raker; Chainsaw; Laser beam in connection with laborers' work; Cast-in- place manhole form setter; Pressure pipelayer; Davis trencher - 300 or similar type (and all small trenchers); Blaster; Diamond driller; Multiple unit drill; Hydraulic drill

GROUP 1: Asphalt spreader boxes (all types); Barko, Wacker and similar type tampers; Buggymobile; Caulker, bander, pipewrapper, conduit layer, plastic pipelayer; Certified hazardous waste worker including Leade Abatement; Compactors of all types; Concrete and magnesite mixer, 1/2 yd. and under; Concrete pan work; Concrete sander; Concrete saw; Cribber and/or shoring; Cut granite curb setter; Dri-pak-it machine; Faller, logloader and buckler; Form raiser, slip forms; Green cutter; Headerboard, Hubsetter, aligner, by any method; High pressure blow pipe (1-1/2" or over, 100 lbs. pressure/over); Hydro seeder and similar type; Jackhammer operator; Jacking of pipe over 12 inches; Jackson and similar type compactor; Kettle tender, pot and worker applying asphalt, lay-kold, creosote, lime, caustic and similar type materials (applying means applying, dipping or handling of such materials); Lagging, sheeting, whaling, bracing, trenchjacking, lagging hammer; Magnesite, epoxyresin, fiberglass, mastic worker (wet or dry); No joint pipe and stripping of same, including repair of voids; Pavement breaker and spader, including tool grinder; Perma curb; Pipelayer (including grade checking in connection with pipelaying); Precast-manhole setter; Pressure pipe tester; Post hole digger, air, gas and electric; Power broom sweeper; Power tampers of all types (except as shown in Group 2); Ram set gun and stud gun; Riprap stonepaver and rock-slinger, including placing of sacked concrete and/or sand (wet or dry) and gabions and similar type; Rotary scarifier or multiple head concrete chipping scarifier; Roto and Ditch Witch; Rototiller; Sandblaster, pot, gun, nozzle operators; Signalling and rigging; Tank cleaner; Tree climber; Turbo blaster; Vibrascreed, bull float in connection with laborers' work; Vibrator; Hazardous waste worker (lead removal); Asbestos and mold removal worker

GROUP 1-a: Joy drill model TWM-2A; Gardner-Denver model DH143 and similar type drills; Track driller; Jack leg driller; Wagon driller; Mechanical drillers, all types regardless of type or method of power; Mechanical pipe layers, all types regardless of type or method of power; Blaster and powder; All work of loading, placing and blasting of all powder and explosives of whatever type regardless of method used for such loading and placing; High scalers (including drilling of same); Tree topper; Bit grinder

GROUP 1-b: Sewer cleaners shall receive \$4.00 per day above Group 1 wage rates. "Sewer cleaner" means any worker who handles or comes in contact with raw sewage in small diameter sewers. Those who work inside recently active, large diameter sewers, and all recently active sewer manholes shall receive \$5.00 per day above Group 1 wage rates.

GROUP 1-c: Burning and welding in connection with laborers' work; Synthetic thermoplastics and similar type welding

GROUP 1-d: Maintenance and repair track and road beds. All employees performing work covered herein shall receive \$.25 per hour above their regular rate for all work performed on underground structures not specifically covered herein. This paragraph shall not be construed to apply to work below ground level in open cut. It shall apply to cut and cover work of subway construction after the temporary cover has been placed.

GROUP 1-e: Work on and/or in bell hole footings and shafts thereof, and work on and in deep footings. (A deep footing is a hole 15 feet or more in depth.) In the event the depth of the footing is unknown at the commencement of excavation, and the final depth exceeds 15 feet, the deep footing wage rate would apply to all employees for each and every day worked on or in the excavation of the footing from the date of inception.

GROUP 1-f: Wire winding machine in connection with guniting or shot crete

GROUP 1-g, CONTRA COSTA COUNTY: Pipelayer (including grade checking in connection with pipelaying); Caulker; Bander; Pipewrapper; Conduit layer; Plastic pipe layer; Pressure pipe tester; No joint pipe and stripping of same, including repair of voids; Precast manhole setters, cast in place manhole form setters

GROUP 2: Asphalt shoveler; Cement dumper and handling dry cement or gypsum; Choke-setter and rigger (clearing work); Concrete bucket dumper and chute; Concrete chipping and grinding; Concrete laborer (wet or dry); Driller tender, chuck tender, nipper; Guinea chaser (stake), grout crew; High pressure nozzle, adductor; Hydraulic monitor (over 100 lbs. pressure); Loading and unloading, carrying and hauling of all rods and materials for use in reinforcing concrete construction; Pittsburgh chipper and similar type brush

shredders; Sloper; Single foot, hand-held, pneumatic tamper; All pneumatic, air, gas and electric tools not listed in Groups 1 through 1-f; Jacking of pipe - under 12 inches

GROUP 3: Construction laborers, including bridge and general laborer; Dump, load spotter; Flag person; Fire watcher; Fence erector; Guardrail erector; Gardener, horticultural and landscape laborer; Jetting; Limber, brush loader and piler; Pavement marker (button setter); Maintenance, repair track and road beds; Streetcar and railroad construction track laborer; Temporary air and water lines, Victaulic or similar; Tool room attendant (jobsite only)

GROUP 4: Final clean-up work of debris, grounds and building including but not limited to: street cleaner; cleaning and washing windows; brick cleaner (jobsite only); material cleaner (jobsite only). The classification "material cleaner" is to be utilized under the following conditions:
A: at demolition site for the salvage of the material.
B: at the conclusion of a job where the material is to be salvaged and stocked to be reused on another job.
C: for the cleaning of salvage material at the jobsite or temporary jobsite yard.

The material cleaner classification should not be used in the performance of "form stripping, cleaning and oiling and moving to the next point of erection".

GUNITE LABORER CLASSIFICATIONS

GROUP 1: Structural Nozzleman

GROUP 2: Nozzleman, Gunman, Potman, Groundman

GROUP 3: Reboundman

GROUP 4: Guniting laborer

WRECKING WORK LABORER CLASSIFICATIONS

GROUP 1: Skilled wrecker (removing and salvaging of sash, windows and materials)

GROUP 2: Semi-skilled wrecker (salvaging of other building materials)

LABO0185-002 07/01/2013

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| LABORER | | |
| Mason Tender-Brick..... | \$ 31.52 | 16.53 |

LABO0185-005 07/01/2013

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC,
NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU,
SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|----------------------------|----------|---------|
| Tunnel and Shaft Laborers: | | |
| GROUP 1..... | \$ 34.10 | 16.53 |
| GROUP 2..... | \$ 33.87 | 16.53 |
| GROUP 3..... | \$ 33.62 | 16.53 |
| GROUP 4..... | \$ 33.17 | 16.53 |
| GROUP 5..... | \$ 32.63 | 16.53 |
| Shotcrete Specialist..... | \$ 36.12 | 16.53 |

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Guniting and shotcrete
nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or
excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading;
Cherry pickermen - where car is lifted; Concrete finisher
in tunnel; Concrete screedman; Grout pumpman and potman;
Guniting & shotcrete gunman & potman; Headermen; High
pressure nozzleman; Miner - tunnel, including top and
bottom man on shaft and raise work; Nipper; Nozzleman on
slick line; Sandblaster - potman, Robotic Shotcrete Placer,
Segment Erector, Tunnel Muck Hauler, Steel Form raiser and
setter; Timberman, retimberman (wood or steel or substitute
materials therefore); Tugger (for tunnel laborer work);
Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang -
muckers, trackmen; Concrete crew - includes rodding and
spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0261-002 07/01/2013

MARIN COUNTY

| | Rates | Fringes |
|---|----------|---------|
| LABORER (TRAFFIC CONTROL/LANE CLOSURE) | | |
| Escort Driver, Flag Person.. | \$ 27.64 | 18.74 |
| Traffic Control Person I.... | \$ 27.94 | 18.74 |

Traffic Control Person II...\$ 25.44 18.74

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0261-004 07/01/2013

MARIN COUNTY

| | Rates | Fringes |
|----------------------------|----------|---------|
| Tunnel and Shaft Laborers: | | |
| GROUP 1..... | \$ 34.10 | 16.53 |
| GROUP 2..... | \$ 33.87 | 16.53 |
| GROUP 3..... | \$ 33.62 | 16.53 |
| GROUP 4..... | \$ 33.17 | 16.53 |
| GROUP 5..... | \$ 32.63 | 16.53 |
| Shotcrete Specialist..... | \$ 36.12 | 16.53 |

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Guniting and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Guniting & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

LABO0261-007 07/01/2013

MARIN COUNTY

| | Rates | Fringes |
|-------------------------|----------|---------|
| LABORER | | |
| Mason Tender-Brick..... | \$ 32.77 | 16.53 |

LABO0324-004 07/01/2013

NAPA, SOLANO, AND SONOMA, COUNTIES

| | Rates | Fringes |
|--|----------|---------|
| LABORER (TRAFFIC CONTROL/LANE CLOSURE) | | |
| Escort Driver, Flag Person.. | \$ 26.64 | 18.74 |
| Traffic Control Person I.... | \$ 26.94 | 18.74 |
| Traffic Control Person II... | \$ 24.44 | 18.74 |

TRAFFIC CONTROL PERSON I: Layout of traffic control, crash cushions, construction area and roadside signage.

TRAFFIC CONTROL PERSON II: Installation and removal of temporary/permanent signs, markers, delineators and crash cushions.

LABO0324-008 07/01/2013

NAPA, SOLANO, AND SONOMA COUNTIES

| | Rates | Fringes |
|----------------------------|----------|---------|
| Tunnel and Shaft Laborers: | | |
| GROUP 1..... | \$ 34.10 | 16.53 |
| GROUP 2..... | \$ 33.87 | 16.53 |
| GROUP 3..... | \$ 33.62 | 16.53 |
| GROUP 4..... | \$ 33.17 | 16.53 |
| GROUP 5..... | \$ 32.63 | 16.53 |
| Shotcrete Specialist..... | \$ 36.12 | 16.53 |

TUNNEL AND SHAFT CLASSIFICATIONS

GROUP 1: Diamond driller; Groundmen; Gunite and shotcrete nozzlemen

GROUP 2: Rodmen; Shaft work & raise (below actual or excavated ground level)

GROUP 3: Bit grinder; Blaster, driller, powdermen, heading; Cherry pickermen - where car is lifted; Concrete finisher in tunnel; Concrete screedman; Grout pumpman and potman; Gunite & shotcrete gunman & potman; Headermen; High pressure nozzleman; Miner - tunnel, including top and bottom man on shaft and raise work; Nipper; Nozzleman on slick line; Sandblaster - potman, Robotic Shotcrete Placer, Segment Erector, Tunnel Muck Hauler, Steel Form raiser and setter; Timberman, retimberman (wood or steel or substitute materials therefore); Tugger (for tunnel laborer work); Cable tender; Chuck tender; Powderman - primer house

GROUP 4: Vibrator operator, pavement breaker; Bull gang - muckers, trackmen; Concrete crew - includes rodding and spreading, Dumpmen (any method)

GROUP 5: Grout crew; Reboundman; Swamper/ Brakeman

 LABO0324-010 07/01/2013

NAPA, SOLANO AND SONOMA COUNTIES

| | Rates | Fringes |
|-------------------------|----------|---------|
| LABORER (Brick) | | |
| Mason Tender-Brick..... | \$ 31.95 | 16.53 |

 LABO1414-005 08/07/2013

| | Rates | Fringes |
|---------------------------------|-----------------------------|---------|
| Plasterer tender..... | \$ 30.00 | 16.36 |
| Work on a swing stage scaffold: | \$1.00 per hour additional. | |

 PAIN0016-004 01/01/2013

MARIN, NAPA, SOLANO & SONOMA COUNTIES

| | Rates | Fringes |
|----------------|----------|---------|
| Painters:..... | \$ 33.86 | 20.26 |

PREMIUMS:
 EXOTIC MATERIALS - \$0.75 additional per hour.
 SPRAY WORK: - \$0.50 additional per hour.
 INDUSTRIAL PAINTING - \$0.25 additional per hour
 [Work on industrial buildings used for the manufacture and
 processing of goods for sale or service; steel construction
 (bridges), stacks, towers, tanks, and similar structures]

HIGH WORK:
 over 50 feet - \$2.00 per hour additional
 100 to 180 feet - \$4.00 per hour additional
 Over 180 feet - \$6.00 per hour additional

 PAIN0016-005 01/01/2013

ALPINE, BUTTE, COLUSA, EL DORADO (west of the Sierra Nevada
 Mountains), GLENN, LASSEN (west of Hwy. 395, excluding Honey
 Lake); MARIN, MODOC, NAPA, NEVADA (west of the Sierra Nevada
 Mountains), PLACER (west of the Sierra Nevada Mountains),
 PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada
 Mountains), SISKIYOU, SOLANO, SONOMA, SUTTER, TEHAMA, TRINITY,
 YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|-----------------------------|----------|---------|
| DRYWALL FINISHER/TAPER..... | \$ 36.24 | 18.67 |

 PAIN0016-007 01/01/2013

ALPINE, AMADOR, BUTTE, COLUSA. EL DORADO (west of the Sierra Nevada Mountains), GLENN, LASSEN (west of Highway 395, excluding Honey Lake), MODOC, NEVADA (west of the Sierra Nevada Mountains), PLACER (west of the Sierra Nevada Mountains), PLUMAS, SACRAMENTO, SHASTA, SIERRA (west of the Sierra Nevada Mountains), SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO & YUBA COUNTIES

| | Rates | Fringes |
|----------------|----------|---------|
| Painters:..... | \$ 29.06 | 15.98 |

SPRAY/SANDBLAST: \$0.50 additional per hour.

EXOTIC MATERIALS: \$1.00 additional per hour.

HIGH TIME: Over 50 ft above ground or water level \$2.00 additional per hour. 100 to 180 ft above ground or water level \$4.00 additional per hour. Over 180 ft above ground or water level \$6.00 additional per hour.

 PAIN0016-008 01/01/2013

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

| | Rates | Fringes |
|-----------------------|----------|---------|
| SOFT FLOOR LAYER..... | \$ 44.87 | 17.98 |

 PAIN0169-004 01/01/2013

MARIN , NAPA & SONOMA COUNTIES; SOLANO COUNTY (west of a line defined as follows: Hwy. 80 corridor beginning at the City of Fairfield, including Travis Air Force Base and Suisun City; going north of Manakas Corner Rd., continue north on Suisun Valley Rd. to the Napa County line; Hwy. 80 corridor south on Grizzly Island Rd. to the Grizzly Island Management area)

| | Rates | Fringes |
|--------------|----------|---------|
| GLAZIER..... | \$ 41.88 | 21.59 |

 * PAIN0567-001 07/01/2013

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

| | Rates | Fringes |
|------------------------------|----------|---------|
| Painters: | | |
| Brush and Roller..... | \$ 23.30 | 10.19 |
| Spray Painter & Paperhanger. | \$ 24.15 | 10.19 |

PREMIUMS:

Special Coatings (Brush), and Sandblasting = \$0.50/hr
Special Coatings (Spray), and Steeplejack = \$1.00/hr
Special Coating Spray Steel = \$1.25/hr
Swing Stage = \$2.00/hr

*A special coating is a coating that requires the mixing of 2 or more products.

PAIN0567-007 07/01/2013

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains) AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

| | Rates | Fringes |
|-----------------------|----------|---------|
| SOFT FLOOR LAYER..... | \$ 25.40 | 11.49 |

PAIN0567-010 07/01/2013

EL DORADO COUNTY (east of the Sierra Nevada Mountains); LASSEN COUNTY (east of Highway 395, beginning at Stacey and including Honey Lake); NEVADA COUNTY (east of the Sierra Nevada Mountains); PLACER COUNTY (east of the Sierra Nevada Mountains); AND SIERRA COUNTY (east of the Sierra Nevada Mountains)

| | Rates | Fringes |
|--|----------|---------|
| Drywall | | |
| (1) Taper..... | \$ 27.07 | 11.14 |
| (2) Steeplejack - Taper, over 40 ft with open space below..... | \$ 28.57 | 11.14 |

PAIN0767-004 01/01/2013

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO (Remainder), SUTTER, TEHAMA, TRINITY, YOLO, YUBA

| | Rates | Fringes |
|--------------|----------|---------|
| GLAZIER..... | \$ 32.24 | 19.88 |

PAID HOLIDAYS: New Year's Day, Martin Luther King, Jr. Day, President's Day, Memorial Day, Independence Day, Labor Day, Veteran's Day, Thanksgiving Day, and Christmas Day.

Employee required to wear a body harness shall receive \$1.50 per hour above the basic hourly rate at any elevation.

PAIN1176-001 07/01/2013

HIGHWAY IMPROVEMENT

| | Rates | Fringes |
|---------------------------------------|----------|---------|
| Parking Lot Striping/Highway Marking: | | |
| GROUP 1..... | \$ 28.27 | 11.65 |
| GROUP 2..... | \$ 28.60 | 11.65 |
| GROUP 3..... | \$ 26.96 | 11.65 |

CLASSIFICATIONS

GROUP 1: Striper: Layout and application of painted traffic stripes and marking; hot thermo plastic; tape, traffic stripes and markings

GROUP 2: Gamecourt & Playground Installer

GROUP 3: Protective Coating, Pavement Sealing

PAIN1237-001 01/01/2013

ALPINE; COLUSA; EL DORADO (west of the Sierra Nevada Mountains); GLENN; LASSEN (west of Highway 395, beginning at Stacey and including Honey Lake); MODOC; NEVADA (west of the Sierra Nevada Mountains); PLACER (west of the Sierra Nevada Mountains); PLUMAS; SACRAMENTO; SHASTA; SIERRA (west of the Sierra Nevada Mountains); SISKIYOU; SUTTER; TEHAMA; TRINITY; YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|-----------------------|----------|---------|
| SOFT FLOOR LAYER..... | \$ 28.25 | 16.73 |

PLAS0300-003 07/01/2009

| | Rates | Fringes |
|--|----------|---------|
| PLASTERER | | |
| AREA 295: Alpine, Amador, Butte, Colusa, El Dorado, Glenn, Lassen, Modoc, Nevada, Placer, Plumas, Sacramento, Shasta, Sierra, Siskiyou, Solano, Sutter, Tehema, Trinity, Yolo & Yuba Counties..... | \$ 32.82 | 15.10 |
| AREA 355: Marin, Napa & Sonoma Counties..... | \$ 32.82 | 15.30 |

PLAS0300-005 06/28/2010

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

CEMENT MASON/CONCRETE FINISHER...\$ 28.65 18.56

PLUM0038-002 07/01/2013

MARIN AND SONOMA COUNTIES

| | Rates | Fringes |
|--|----------|---------|
| PLUMBER (Plumber, Steamfitter, Refrigeration Fitter) | | |
| (1) Work on wooden frame structures 5 stories or less excluding high-rise buildings and commercial work such as hospitals, prisons, hotels, schools, casinos, wastewater treatment plants, and research facilities as well as refrigeration pipefitting, service and repair work - MARKET | | |
| RECOVERY RATE..... | \$ 62.00 | 42.39 |
| (2) All other work - NEW | | |
| CONSTRUCTION RATE..... | \$ 62.00 | 42.39 |

PLUM0038-006 07/01/2013

MARIN & SONOMA COUNTIES

| | Rates | Fringes |
|--|----------|---------|
| Landscape/Irrigation Fitter (Underground/Utility Fitter)..... | \$ 52.70 | 31.45 |

* PLUM0228-001 01/01/2014

BUTTE, COLUSA, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA,
SISKIYOU, SUTTER, TEHAMA, TRINITY & YUBA COUNTIES

| | Rates | Fringes |
|--------------|----------|---------|
| PLUMBER..... | \$ 34.50 | 25.24 |

PLUM0343-001 07/01/2013

NAPA AND SOLANO COUNTIES

| | Rates | Fringes |
|-----------------------|----------|---------|
| PLUMBER/PIPEFITTER | | |
| Light Commercial..... | \$ 30.60 | 19.40 |
| All Other Work..... | \$ 47.50 | 28.20 |

DEFINITION OF LIGHT COMMERCIAL:
Work shall include strip shopping centers, office buildings,
schools and other commercial structures which the total

plumbing bid does not exceed Two Hundred and Fifty Thousand (\$250,000) and the total heating and cooling does not exceed Two Hundred Fifty Thousand (\$250,000); or Any projects bid in phases shall not qualify unless the total project is less than Two Hundred Fifty Thousand (\$250,000) for the plumbing bid; and Two Hundred Fifty Thousand (\$250,000) for the heating and cooling bid. Excluded are hospitals, jails, institutions and industrial projects, regardless size of the project

FOOTNOTES: While fitting galvanized material: \$.75 per hour additional. Work from trusses, temporary staging, unguarded structures 35' from the ground or water: \$.75 per hour additional. Work from swinging scaffolds, boatswains chairs or similar devices: \$.75 per hour additional.

 PLUM0350-001 01/01/2011

EL DORADO COUNTY (Lake Tahoe area only); NEVADA COUNTY (Lake Tahoe area only); AND PLACER COUNTY (Lake Tahoe area only)

| | Rates | Fringes |
|-------------------------|----------|---------|
| PLUMBER/PIPEFITTER..... | \$ 34.60 | 10.50 |

 PLUM0355-001 07/01/2013

ALPINE, AMADOR, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NAPA, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SOLANO, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

| | Rates | Fringes |
|--|----------|---------|
| Underground Utility Worker /Landscape Fitter..... | \$ 28.55 | 8.30 |

 * PLUM0442-003 01/01/2014

AMADOR (South of San Joaquin River) and ALPINE COUNTIES

| | Rates | Fringes |
|--------------|----------|---------|
| PLUMBER..... | \$ 35.00 | 24.99 |

 PLUM0447-001 07/01/2013

AMADOR (north of San Joaquin River), EL DORADO (excluding Lake Tahoe area), NEVADA (excluding Lake Tahoe area); PLACER (excluding Lake Tahoe area), SACRAMENTO AND YOLO COUNTIES

| | Rates | Fringes |
|---------------------------------------|----------|---------|
| PLUMBER/PIPEFITTER Journeyman..... | \$ 41.77 | 22.35 |

Light Commercial Work.....\$ 32.23 17.22

ROOF0081-006 08/01/2011

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

| | Rates | Fringes |
|-------------|----------|---------|
| Roofer..... | \$ 33.16 | 10.90 |

ROOF0081-007 08/01/2012

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO, AND YUBA COUNTIES

| | Rates | Fringes |
|-------------|----------|---------|
| Roofer..... | \$ 32.33 | 11.97 |

SFCA0483-003 01/01/2014

MARIN, NAPA, SOLANO AND SONOMA COUNTIES

| | Rates | Fringes |
|---|----------|---------|
| SPRINKLER FITTER (Fire Sprinklers)..... | \$ 52.42 | 25.62 |

SFCA0669-003 07/01/2013

ALPINE, BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER, PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA, TRINITY, YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|-----------------------|----------|---------|
| SPRINKLER FITTER..... | \$ 34.19 | 19.37 |

SHEE0104-006 07/01/2013

MARIN, NAPA, SOLANO SONOMA & TRINITY COUNTIES

| | Rates | Fringes |
|--|----------|---------|
| Sheet Metal Worker Mechanical Contracts \$200,000 or less..... | \$ 51.30 | 35.96 |
| All other work..... | \$ 52.80 | 34.46 |

SHEE0104-009 07/01/2013

AMADOR, COLUSA, EL DORADO, NEVADA, PLACER, SACRAMENTO, SUTTER, YOLO AND YUBA COUNTIES

| | Rates | Fringes |
|--|-------|---------|
|--|-------|---------|

SHEET METAL WORKER.....\$ 38.43 29.31

SHEE0104-010 07/01/2013

ALPINE COUNTY

Rates Fringes

SHEET METAL WORKER.....\$ 35.87 26.88

SHEE0104-011 07/01/2013

BUTTE, COLUSA, EL DORADO, GLENN, LASSEN, MODOC, NEVADA, PLACER,
PLUMAS, SACRAMENTO, SHASTA, SIERRA, SISKIYOU, SUTTER, TEHAMA,
YOLO AND YUBA COUNTIES

Rates Fringes

Sheet Metal Worker (Metal
decking and siding only).....\$ 38.43 29.31

SHEE0104-014 07/01/2013

MARIN, NAPA, SOLANO, SONOMA AND TRINITY COUNTIES

Rates Fringes

SHEET METAL WORKER (Metal
Decking and Siding only).....\$ 52.80 34.46

SHEE0104-019 07/01/2013

BUTTE, GLENN, LASSEN, MODOC, PLUMAS, SHASTA, SIERRA, SISKIYOU
AND TEHAMA COUNTIES

Rates Fringes

SHEET METAL WORKER
Mechanical Jobs \$200,000 &
under.....\$ 29.54 27.16
Mechanical Jobs over
\$200,000.....\$ 38.43 29.31

TEAM0094-001 07/01/2013

Rates Fringes

Truck drivers:
GROUP 1.....\$ 27.44 23.69
GROUP 2.....\$ 27.74 23.69
GROUP 3.....\$ 28.04 23.69
GROUP 4.....\$ 28.39 23.69
GROUP 5.....\$ 28.74 23.69

FOOTNOTES:

Articulated dump truck; Bulk cement spreader (with or without

auger); Dumpcrete truck; Skid truck (debris box); Dry pre-batch concrete mix trucks; Dumpster or similar type; Slurry truck: Use dump truck yardage rate. Heater planer; Asphalt burner; Scarifier burner; Industrial lift truck (mechanical tailgate); Utility and clean-up truck: Use appropriate rate for the power unit or the equipment utilized.

TRUCK DRIVER CLASSIFICATIONS

GROUP 1: Dump trucks, under 6 yds.; Single unit flat rack (2-axle unit); Nipper truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump truck (when flat rack truck is used appropriate flat rack shall apply); Concrete pump machine; Fork lift and lift jitneys; Fuel and/or grease truck driver or fuel person; Snow buggy; Steam cleaning; Bus or personhaul driver; Escort or pilot car driver; Pickup truck; Teamster oiler/greaser and/or serviceperson; Hook tender (including loading and unloading); Team driver; Tool room attendant (refineries)

GROUP 2: Dump trucks, 6 yds. and under 8 yds.; Transit mixers, through 10 yds.; Water trucks, under 7,000 gals.; Jetting trucks, under 7,000 gals.; Single-unit flat rack (3-axle unit); Highbed heavy duty transport; Scissor truck; Rubber-tired muck car (not self-loaded); Rubber-tired truck jumbo; Winch truck and "A" frame drivers; Combination winch truck with hoist; Road oil truck or bootperson; Buggymobile; Ross, Hyster and similar straddle carriers; Small rubber-tired tractor

GROUP 3: Dump trucks, 8 yds. and including 24 yds.; Transit mixers, over 10 yds.; Water trucks, 7,000 gals. and over; Jetting trucks, 7,000 gals. and over; Vacuum trucks under 7500 gals. Trucks towing tilt bed or flat bed pull trailers; Lowbed heavy duty transport; Heavy duty transport tiller person; Self-propelled street sweeper with self-contained refuse bin; Boom truck - hydro-lift or Swedish type extension or retracting crane; P.B. or similar type self-loading truck; Tire repairperson; Combination bootperson and road oiler; Dry distribution truck (A bootperson when employed on such equipment, shall receive the rate specified for the classification of road oil trucks or bootperson); Ammonia nitrate distributor, driver and mixer; Snow Go and/or plow

GROUP 4: Dump trucks, over 25 yds. and under 65 yds.; Water pulls - DW 10's, 20's, 21's and other similar equipment when pulling Aqua/pak or water tank trailers; Helicopter pilots (when transporting men and materials); Lowbedk Heavy Duty Transport up to including 7 axles; DW10's, 20's, 21's and other similar Cat type, Terra Cobra, LeTourneau Pulls, Tournorocker, Euclid and similar type equipment when pulling fuel and/or grease tank trailers or other miscellaneous trailers; Vacuum Trucks 7500 gals and over and truck repairman

GROUP 5: Dump trucks, 65 yds. and over; Holland hauler; Low

bed Heavy Duty Transport over 7 axles

WELDERS - Receive rate prescribed for craft performing operation to which welding is incidental.

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Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (ii)).

The body of each wage determination lists the classification and wage rates that have been found to be prevailing for the cited type(s) of construction in the area covered by the wage determination. The classifications are listed in alphabetical order of "identifiers" that indicate whether the particular rate is union or non-union.

Union Identifiers

An identifier enclosed in dotted lines beginning with characters other than "SU" denotes that the union classification and rate have found to be prevailing for that classification. Example: PLUM0198-005 07/01/2011. The first four letters , PLUM, indicate the international union and the four-digit number, 0198, that follows indicates the local union number or district council number where applicable , i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2011, following these characters is the effective date of the most current negotiated rate/collective bargaining agreement which would be July 1, 2011 in the above example.

Union prevailing wage rates will be updated to reflect any changes in the collective bargaining agreements governing the rates.

0000/9999: weighted union wage rates will be published annually each January.

Non-Union Identifiers

Classifications listed under an "SU" identifier were derived from survey data by computing average rates and are not union rates; however, the data used in computing these rates may include both union and non-union data. Example: SULA2004-007 5/13/2010. SU indicates the rates are not union majority rates,

LA indicates the State of Louisiana; 2004 is the year of the survey; and 007 is an internal number used in producing the wage determination. A 1993 or later date, 5/13/2010, indicates the classifications and rates under that identifier were issued as a General Wage Determination on that date.

Survey wage rates will remain in effect and will not change until a new survey is conducted.

WAGE DETERMINATION APPEALS PROCESS

1.) Has there been an initial decision in the matter? This can be:

- * an existing published wage determination
- * a survey underlying a wage determination
- * a Wage and Hour Division letter setting forth a position on a wage determination matter
- * a conformance (additional classification and rate) ruling

On survey related matters, initial contact, including requests for summaries of surveys, should be with the Wage and Hour Regional Office for the area in which the survey was conducted because those Regional Offices have responsibility for the Davis-Bacon survey program. If the response from this initial contact is not satisfactory, then the process described in 2.) and 3.) should be followed.

With regard to any other matter not yet ripe for the formal process described here, initial contact should be with the Branch of Construction Wage Determinations. Write to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2.) If the answer to the question in 1.) is yes, then an interested party (those affected by the action) can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Write to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and by any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3.) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

4.) All decisions by the Administrative Review Board are final.

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END OF GENERAL DECISION

APPENDIX A

AMENDMENTS TO MAY 2006 STANDARD SPECIFICATIONS

**AMENDMENTS TO MAY 2006 STANDARD SPECIFICATIONS
UPDATED JUNE 6, 2008**

SECTION 0: GLOBAL REVISIONS

Issue Date: July 31, 2007

Global revisions are changes to contract documents not specific to a section of the Standard Specifications.

- In each contract document at each occurrence:
 1. Except where existing asphalt concrete is described, replace "asphalt concrete" with "hot mix asphalt"
 2. Except where existing AC is described, replace "AC" with "HMA" where AC means asphalt concrete

SECTION 1: DEFINITIONS AND TERMS

Issue Date: January 18, 2008

Section 1-1.01, "General," of the Standard Specifications is amended by adding the following:

- The Department is gradually changing the style and language of the specifications. The new style and language includes:
 1. Use of:
 - 1.1. Imperative mood
 - 1.2. Introductory modifiers
 - 1.3. Conditional clauses
 2. Elimination of:
 - 2.1. Language variations
 - 2.2. Definitions for industry-standard terms
 - 2.3. Redundant specifications
 - 2.4. Needless cross-references
- The use of this new style does not change the meaning of a specification not yet using this style.
- The specifications are written to the Bidder before award and the Contractor after. Before award, interpret sentences written in the imperative mood as starting with "The Bidder must" and interpret "you" as "the Bidder" and "your" as "the Bidder's." After award, interpret sentences written in the imperative mood as starting with "The Contractor must" and interpret "you" as "the Contractor" and "your" as "the Contractor's."

- Unless an object or activity is specified to be less than the total, the quantity or amount is all of the object or activity.
- All items in a list apply unless the items are specified as choices.
- Interpret terms as defined in the Contract documents. A term not defined in the Contract documents has the meaning defined in Means Illustrated Construction Dictionary, Condensed Version, Second Edition.

The 1st table in Section 1-1.02, "Abbreviations," of the Standard Specifications is amended by adding:

| | |
|------|-------------------------------------|
| SSPC | The Society for Protective Coatings |
|------|-------------------------------------|

Section 1, "Definitions and Terms," of the Standard Specifications is amended by adding the following sections:

1-1.082 BUSINESS DAY

- Day on the calendar except Saturday or holiday.

1-1.084 CALIFORNIA MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES

• The California Manual on Uniform Traffic Control Devices for Streets and Highways (California MUTCD) is issued by the Department of Transportation and is the Federal Highway Administration's MUTCD 2003 Edition, as amended for use in California.

1-1.125 DEDUCTION

• Amount of money permanently taken from progress payment and final payment. Deductions are cumulative and are not retentions under Pub Cont Code § 7107.

1-1.205 FEDERAL-AID CONTRACT

• Contract that has a Federal-aid project number on the cover of the Notice to Contractors and Special Provisions.

1-1.245 HOLIDAY

1. Every Sunday
2. January 1st, New Year's Day
3. 3rd Monday in January, Birthday of Martin Luther King, Jr.
4. February 12th, Lincoln's Birthday
5. 3rd Monday in February, Washington's Birthday
6. March 31st, Cesar Chavez Day
7. Last Monday in May, Memorial Day
8. July 4th, Independence Day
9. 1st Monday in September, Labor Day
10. 2nd Monday in October, Columbus Day
11. November 11th, Veterans Day
12. 4th Thursday in November, Thanksgiving Day
13. Day after Thanksgiving Day
14. December 25th, Christmas Day

- If January 1st, February 12th, March 31st, July 4th, November 11th, or December 25th falls on a Sunday, the Monday following is a holiday. If November 11th falls on a Saturday, the preceding Friday is a holiday. Interpret "legal holiday" as "holiday."

1-1.475 WITHHOLD

- Money temporarily or permanently taken from progress payment. Withholds are cumulative and are not retentions under Pub Cont Code § 7107.

Section 1-1.255, "Legal Holidays," of the Standard Specifications is deleted.

Section 1-1.265, "Manual on Uniform Traffic Control Devices," of the Standard Specifications is deleted.

Section 1-1.266, "Manual on Uniform Traffic Control Devices California Supplement," of the Standard Specifications is deleted.

Section 1-1.39 "State," of the Standard Specifications is amended to read:

1-1.39 STATE

- The State of California, including its agencies, departments, or divisions, whose conduct or action is related to the work.

SECTION 3: AWARD AND EXECUTION OF CONTRACT

Issue Date: August 17, 2007

Section 3-1.025, "Insurance Policies," of the Standard Specifications is amended to read:

3-1.025 INSURANCE POLICIES

- The successful bidder shall submit:
 1. Copy of its commercial general liability policy and its excess policy or binder until such time as a policy is available, including the declarations page, applicable endorsements, riders, and other modifications in effect at the time of contract execution. Standard ISO form No. CG 0001 or similar exclusions are allowed if not inconsistent with Section 7-1.12, "Indemnification and Insurance." Allowance of additional exclusions is at the discretion of the Department.
 2. Certificate of insurance showing all other required coverages. Certificates of insurance, as evidence of required insurance for the auto liability and any other required policy, shall set forth deductible amounts applicable to each policy and all exclusions that are added by endorsement to each policy. The evidence of insurance shall provide that no cancellation, lapse, or reduction of coverage will occur without 10 days prior written notice to the Department.
 3. A declaration under the penalty of perjury by a certified public accountant certifying the accountant has applied Generally Accepted Accounting Principles (GAAP) guidelines confirming the successful bidder has sufficient funds and resources to cover any self-insured retentions if the self-insured retention is \$50,000 or higher.

- If the successful bidder uses any form of self-insurance for workers compensation in lieu of an insurance policy, it shall submit a certificate of consent to self-insure in accordance with the provisions of Section 3700 of the Labor Code.

Section 3-1.03, "Execution of Contract," of the Standard Specifications is amended to read:

3-1.03 EXECUTION OF CONTRACT

- The contract shall be signed by the successful bidder and returned, together with the contract bonds and the documents identified in Section 3-1.025, "Insurance Policies," within 10 business days of receiving the contract for execution.

Section 3-1.04, "Failure to Execute Contract," of the Standard Specifications is amended to read:

3-1.04 FAILURE TO EXECUTE CONTRACT

- Failure of the lowest responsible bidder, the second lowest responsible bidder, or the third lowest responsible bidder to execute the contract as required in Section 3-1.03, "Execution of Contract," within 10 business days of receiving the contract for execution shall be just cause for the forfeiture of the proposal guaranty. The successful bidder may file with the Department a written notice, signed by the bidder or the bidder's authorized representative, specifying that the bidder will refuse to execute the contract if it is presented. The filing of this notice shall have the same force and effect as the failure of the bidder to execute the contract and furnish acceptable bonds within the time specified.

Section 3-1.05, "Return of Proposal Guaranties," of the Standard Specifications is amended to read:

3-1.05 RETURN OF PROPOSAL GUARANTIES

- The Department keeps the proposal guaranties of the 1st, 2nd and 3rd lowest responsible bidders until the contract has been executed. The other bidders' guaranties, other than bidders' bonds, are returned upon determination of the 1st, 2nd, and 3rd apparent lowest bidders, and their bidders' bonds are of no further effect.

SECTION 4: SCOPE OF WORK

Issue Date: August 17, 2007

Section 4-1.01, "Intent of Plans and Specifications," of the Standard Specifications is amended by adding the following:

- Nothing in the specifications voids the Contractor's public safety responsibilities.

SECTION 5: CONTROL OF WORK

Issue Date: February 1, 2008

Section 5, "Control of Work," of the Standard Specifications is amended by adding the following sections:

5-1.005 GENERAL

- Failure to comply with any specification part is a breach of the contract and a waiver of your right to time or payment adjustment.
 - After contract approval, submit documents and direct questions to the Engineer. Orders, approvals, and requests to the Contractor are by the Engineer.
 - The Engineer furnishes the following in writing:
 1. Approvals
 2. Notifications
 3. Orders
 - The Contractor must furnish the following in writing:
 1. Assignments
 2. Notifications
 3. Proposals
 4. Requests, sequentially numbered
 5. Subcontracts
 6. Test results
- The Department rejects a form if it has any error or any omission.
- Convert foreign language documents to English.
- Use contract administration forms available at the Department's Web site.
- If the last day for submitting a document falls on a Saturday or holiday, it may be submitted on the next business day with the same effect as if it had been submitted on the day specified.

5-1.015 RECORD RETENTION, INSPECTION, COPYING, AND AUDITING

- Retain project records and make them available for inspection, copying, and auditing by State representatives from bid preparation through:
 1. Final payment
 2. Resolution of claims, if any
- For at least 3 years after the later of these, retain and make available for inspection, copying, and auditing cost records by State representatives including:
 1. Records pertaining to bid preparation
 2. Overhead
 3. Payroll records and certified payroll
 4. Payments to suppliers and subcontractors
 5. Cost accounting records
 6. Records of subcontractors and suppliers
- Maintain the records in an organized way in the original format, electronic and hard copy, conducive to professional review and audit.
 - Before contract acceptance, the State representative notifies the Contractor, subcontractor, or supplier 5 days before inspection, copying, or auditing.

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

Section 5-1.01, "Authority of Engineer," of the Standard Specifications is amended by adding:

- Failure to enforce a contract provision does not waive enforcement of any contract provision.

Section 5-1.04, "Coordination and Interpretation of Plans, Standard Specifications, and Special Provisions," of the Standard Specifications is amended to read:

5-1.04 CONTRACT COMPONENTS

- A component in one contract part applies as if appearing in each. The parts are complementary and describe and provide for a complete work.

- If a discrepancy exists:

1. The governing ranking of contract parts in descending order is:

- 1.1. Special provisions
- 1.2. Project plans
- 1.3. Revised Standard Plans
- 1.4. Standard Plans
- 1.5. Amendments to the Standard Specifications
- 1.6. Standard Specifications
- 1.7. Project information

2. Written numbers and notes on a drawing govern over graphics

3. A detail drawing governs over a general drawing

4. A detail specification governs over a general specification

5. A specification in a section governs over a specification referenced by that section

- If a discrepancy is found or confusion arises, request correction or clarification.

Section 5-1.07, "Lines and Grades," of the Standard Specifications is replaced with the following:

5-1.07 LINES AND GRADES

- The Engineer places stakes and marks under Chapter 12, "Construction Surveys," of the Department's Surveys Manual.

- Submit your request for Department-furnished stakes:

1. On a Request for Construction Stakes form. Ensure:

- 1.1. Requested staking area is ready for stakes
- 1.2. You use the stakes in a reasonable time

2. A reasonable time before starting an activity using the stakes

- Establish priorities for stakes and note priorities on the request.
- Preserve stakes and marks placed by the Engineer. If the stakes or marks are destroyed, the Engineer replaces them at the Engineer's earliest convenience and deducts the cost.

Section 5-1.116, "Differing Site Conditions," is amended to read:

5-1.116 DIFFERING SITE CONDITIONS (23 CFR 635.109)

5-1.116A Contractor's Notification

- Promptly notify the Engineer if you find either of the following:
 1. Physical conditions differing materially from either of the following:
 - 1.1. Contract documents
 - 1.2. Job site examination
 2. Physical conditions of an unusual nature, differing materially from those ordinarily encountered and generally recognized as inherent in the work provided for in the contract
- Include details explaining the information you relied on and the material differences you discovered.
 - If you fail to notify the Engineer promptly, you waive the differing site condition claim for the period between your discovery of the differing site condition and your notification to the Engineer.
 - If you disturb the site after discovery and before the Engineer's investigation, you waive the differing site condition claim.

5-1.116B Engineer's Investigation and Decision

- Upon your notification, the Engineer investigates job site conditions and:
 1. Notifies you whether to resume affected work
 2. Decides whether the condition differs materially and is cause for an adjustment of time, payment, or both

5-1.116C Protests

- You may protest the Engineer's decision by:
 1. Submitting an Initial Notice of Potential Claim within 5 business days after receipt of the Engineer's notification
 2. Complying with claim procedures
- The Initial Notice of Potential Claim must detail the differences in your position from the Engineer's determination and support your position with additional information, including additional geotechnical data. Attach to the Initial Notice of Potential Claim a certification stating that you complied with Section 2-1.03, "Examination of Plans, Specifications, Contract, and Site of Work."
 - Promptly submit supplementary information when obtained.

SECTION 6: CONTROL OF MATERIALS

Issue Date: August 17, 2007

Section 6-1.05, "Trade Names and Alternatives," of the Standard Specifications is amended to read:

6-1.05 Specific Brand or Trade Name and Substitution

- A reference to a specific brand or trade name establishes a quality standard and is not intended to limit competition. You may use a product that is equal to or better than the specified brand or trade name if approved.
 - Submit a substitution request within a time period that:
 1. Follows Contract award
 2. Allows 30 days for review
 3. Causes no delay
 - Include substantiating data with the substitution request that proves the substitution:
 1. Is of equal or better quality and suitability
 2. Causes no delay in product delivery and installation

Section 6, "Control of Materials," of the Standard Specifications is amended by adding the following sections:

6-1.085 BUY AMERICA (23 CFR 635.410)

- For a Federal-aid contract, furnish steel and iron materials to be incorporated into the work that are produced in the United States 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, material produced outside the United States 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
- For steel and iron materials to be incorporated into the work, submit a Certificate of Compliance under Section 6-1.07, "Certificates of Compliance," of the Standard Specifications that certifies all production processes occurred in the United States except for the above exceptions.

6-1.087 BUY AMERICA (PUB RES CODE § 42703(d))

- Furnish crumb rubber to be incorporated into the work that is produced in the United States and is derived from waste tires taken from vehicles owned and operated in the United States.
- For crumb rubber to be incorporated into the work, submit a Certificate of Compliance under Section 6-1.07, "Certificates of Compliance," of the Standard Specifications that certifies only crumb rubber manufactured in the United States and derived from waste tires taken from vehicles owned and operated in the United States is used.

The 7th and 8th paragraph of Section 6-2.01, "General," of the Standard Specifications are amended to read:

- Upon the Contractor's written request, the Department tests materials from an untested local source. If satisfactory material from that source is used in the work, the Department does not charge the Contractor for the tests; otherwise, the Department deducts the test cost.

The 2nd sentence of the 7th paragraph of Section 6-2.02, "Possible Local Material Sources," of the Standard Specifications is amended to read:

- The Department deducts the charges for the removed material.

SECTION 7: LEGAL RELATIONS AND RESPONSIBILITIES

Issue Date: May 2, 2008

Section 7-1.01, "Laws To Be Observed," of the Standard Specifications is amended to read:

7-1.01 LAWS TO BE OBSERVED

- Comply with laws, regulations, orders, decrees, and permits applicable to the project. Indemnify and defend the State against any claim or liability arising from the violation of a law, regulation, order, decree, or permit by you or your employees. Immediately report to the Engineer in writing a discrepancy or inconsistency between the contract and a law, regulation, order, decree, or permit.

The 3rd listed requirement of the 1st paragraph of Section 7-1.01A(2), "Prevailing Wage," of the Standard Specifications is amended to read:

3. Upon becoming aware of the subcontractor's failure to pay the specified prevailing rate of wages to the subcontractor's workers, the Contractor must diligently take corrective action to stop or rectify the failure, including withholding sufficient funds due the subcontractor for work performed on the public works project.

The 2nd paragraph of Section 7-1.01A(2), "Prevailing Wage," of the Standard Specifications is amended to read:

- Pursuant to Section 1775 of the Labor Code, the Division of Labor Standards Enforcement must notify the Contractor on a public works project within 15 days of the receipt by the Division of Labor Standards Enforcement of a complaint of the failure of a subcontractor

on that public works project to pay workers the general prevailing rate of per diem wages. If the Division of Labor Standards Enforcement determines that employees of a subcontractor were not paid the general prevailing rate of per diem wages and if the Department did not withhold sufficient money under the contract to pay those employees the balance of wages owed under the general prevailing rate of per diem wages, the Contractor must withhold an amount of moneys due the subcontractor sufficient to pay those employees the general prevailing rate of per diem wages if requested by the Division of Labor Standards Enforcement. The Contractor must pay any money withheld from and owed to a subcontractor upon receipt of notification by the Division of Labor Standards Enforcement that the wage complaint has been resolved. If notice of the resolution of the wage complaint has not been received by the Contractor within 180 days of the filing of a valid notice of completion or acceptance of the public works project, whichever occurs later, the Contractor must pay all moneys withheld from the subcontractor to the Department. The Department withholds these moneys pending the final decision of an enforcement action.

The 2nd paragraph of Section 7-1.01A(3), "Payroll Records," of the Standard Specifications is amended to read:

- The Department withholds the penalties specified in subdivision (g) of Labor Code § 1776 for noncompliance with the requirements in Section 1776.

The 4th paragraph of Section 7-1.01A(3), "Payroll Records," of the Standard Specifications is amended to read:

- The Department withholds for delinquent or inadequate payroll records (Labor Code § 1771.5). If the Contractor has not submitted an adequate payroll record by the month's 15th day for the period ending on or before the 1st of that month, the Department withholds 10 percent of the monthly progress estimate, exclusive of mobilization. The Department does not withhold more than \$10,000 or less than \$1,000.

The 5th paragraph of Section 7-1.01A(3), "Payroll Records," of the Standard Specifications is deleted.

Section 7-1.01A(6), "Workers' Compensation," of the Standard Specifications is amended to read:

7-1.01A(6) (Blank)

The fourth sentence of the second paragraph of Section 7-1.02, "Load Limitations," of the Standard Specifications is amended to read:

- Trucks used to haul treated base, portland cement concrete, or hot mix asphalt shall enter onto the base to dump at the nearest practical entry point ahead of spreading equipment.

Section 7-1.02, "Load Limitations," of the Standard Specifications is amended by adding the following paragraph after the 4th paragraph:

- Loads imposed on existing, new, or partially completed structures shall not exceed the load carrying capacity of the structure or any portion of the structure as determined by AASHTO

LRFD with interims and California Amendments, Design Strength Limit State II. The compressive strength of concrete (f'_c) to be used in computing the load carrying capacity shall be the smaller of the following:

1. Actual compressive strength at the time of loading
2. Value of f'_c shown on the plans for that portion of the structure or 2.5 times the value of f'_c (extreme fiber compressive stress in concrete at service loads) shown on the plans for portions of the structure where no f'_c is shown

The first sentence of the eighth paragraph of Section 7-1.09, "Public Safety," of the Standard Specifications is amended to read:

- Signs, lights, flags, and other warning and safety devices and their use shall conform to the requirements set forth in Part 6 of the California MUTCD.

The sixteenth paragraph of Section 7-1.09, "Public Safety," of the Standard Specifications is amended to read:

- When vertical clearance is temporarily reduced to 15.5 feet or less, low clearance warning signs shall be placed in accordance with Part 2 of the California MUTCD and as directed by the Engineer. Signs shall conform to the dimensions, color, and legend requirements of the California MUTCD and these specifications except that the signs shall have black letters and numbers on an orange retroreflective background. W12-2P signs shall be illuminated so that the signs are clearly visible.

The last sentence of the 2nd paragraph of Section 7-1.11, "Preservation of Property," of the Standard Specifications is amended to read:

- The cost of the repairs must be borne by the Contractor and will be deducted.

Section 7-1.12, "Indemnification and Insurance," of the Standard Specifications is amended to read:

7-1.12 INDEMNIFICATION AND INSURANCE

- The Contractor's obligations regarding indemnification of the State of California and the requirements for insurance shall conform to the provisions in Section 3-1.025, "Insurance Policies," and Sections 7-1.12A, "Indemnification," and 7-1.12B, "Insurance," of this Section 7-1.12.

7-1.12A Indemnification

- The Contractor shall defend, indemnify, and save harmless the State, including its officers, employees, and agents (excluding agents who are design professionals) from any and all claims, demands, causes of action, damages, costs, expenses, actual attorneys' fees, losses or liabilities, in law or in equity (Section 7-1.12A Claims) arising out of or in connection with the Contractor's performance of this contract for:

1. Bodily injury including, but not limited to, bodily injury, sickness or disease, emotional injury or death to persons, including, but not limited to, the public, any employees or agents of the Contractor, the State, or any other contractor; and

2. Damage to property of anyone including loss of use thereof; caused or alleged to be caused in whole or in part by any negligent or otherwise legally actionable act or omission of the Contractor or anyone directly or indirectly employed by the Contractor or anyone for whose acts the Contractor may be liable.

- Except as otherwise provided by law, these requirements apply regardless of the existence or degree of fault of the State. The Contractor is not obligated to indemnify the State for Claims arising from conduct delineated in Civil Code Section 2782 and to Claims arising from any defective or substandard condition of the highway that existed at or before the start of work, unless this condition has been changed by the work or the scope of the work requires the Contractor to maintain existing highway facilities and the Claim arises from the Contractor's failure to maintain. The Contractor's defense and indemnity obligation shall extend to Claims arising after the work is completed and accepted if the Claims are directly related to alleged acts or omissions by the Contractor that occurred during the course of the work. State inspection is not a waiver of full compliance with these requirements.

- The Contractor's obligation to defend and indemnify shall not be excused because of the Contractor's inability to evaluate liability or because the Contractor evaluates liability and determine that the Contractor is not liable. The Contractor shall respond within 30 days to the tender of any Claim for defense and indemnity by the State, unless this time has been extended by the State. If the Contractor fails to accept or reject a tender of defense and indemnity within 30 days, in addition to any other remedy authorized by law, the Department may withhold such funds the State reasonably considers necessary for its defense and indemnity until disposition has been made of the Claim or until the Contractor accepts or rejects the tender of defense, whichever occurs first.

- With respect to third-party claims against the Contractor, the Contractor waives all rights of any type to express or implied indemnity against the State, its officers, employees, or agents (excluding agents who are design professionals).

- Nothing in the Contract is intended to establish a standard of care owed to any member of the public or to extend to the public the status of a third-party beneficiary for any of these indemnification specifications.

7-1.12B Insurance

7-1.12B(1) General

- Nothing in the contract is intended to establish a standard of care owed to any member of the public or to extend to the public the status of a third-party beneficiary for any of these insurance specifications.

7-1.12B(2) Casualty Insurance

- The Contractor shall procure and maintain insurance on all of its operations with companies acceptable to the State as follows:

1. The Contractor shall keep all insurance in full force and effect from the beginning of the work through contract acceptance.
2. All insurance shall be with an insurance company with a rating from A.M. Best Financial Strength Rating of A- or better and a Financial Size Category of VII or better.
3. The Contractor shall maintain completed operations coverage with a carrier acceptable to the State through the expiration of the patent deficiency in construction statute of repose set forth in Code of Civil Procedure Section 337.1.

7-1.12B(3) Workers' Compensation and Employer's Liability Insurance

- In accordance with Labor Code Section 1860, the Contractor shall secure the payment of worker's compensation in accordance with Labor Code Section 3700.
- In accordance with Labor Code Section 1861, the Contractor shall submit to the Department the following certification before performing the work:

I am 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 self-insurance in accordance with the provisions of that code, and I will comply with such provisions before commencing the performance of the work of this contract.

- Contract execution constitutes certification submittal.
- The Contractor shall provide Employer's Liability Insurance in amounts not less than:
 1. \$1,000,000 for each accident for bodily injury by accident
 2. \$1,000,000 policy limit for bodily injury by disease
 3. \$1,000,000 for each employee for bodily injury by disease
- If there is an exposure of injury to the Contractor's employees under the U.S. Longshoremen's and Harbor Workers' Compensation Act, the Jones Act, or under laws, regulations, or statutes applicable to maritime employees, coverage shall be included for such injuries or claims.

7-1.12B(4) Liability Insurance

7-1.12B(4)(a) General

- The Contractor shall carry General Liability and Umbrella or Excess Liability Insurance covering all operations by or on behalf of the Contractor providing insurance for bodily injury liability and property damage liability for the following limits and including coverage for:

1. Premises, operations, and mobile equipment
2. Products and completed operations
3. Broad form property damage (including completed operations)
4. Explosion, collapse, and underground hazards
5. Personal injury
6. Contractual liability

7-1.12B(4)(b) Liability Limits/Additional Insureds

- The limits of liability shall be at least the amounts shown in the following table:

| Total Bid | For Each Occurrence ¹ | Aggregate for Products/Completed Operation | General Aggregate ² | Umbrella or Excess Liability ³ |
|---------------|----------------------------------|--|--------------------------------|---|
| ≤\$1,000,000 | \$1,000,000 | \$2,000,000 | \$2,000,000 | \$5,000,000 |
| >\$1,000,000 | \$1,000,000 | \$2,000,000 | \$2,000,000 | \$10,000,000 |
| ≤\$5,000,000 | | | | |
| >\$5,000,000 | \$2,000,000 | \$2,000,000 | \$4,000,000 | \$15,000,000 |
| ≤\$25,000,000 | | | | |
| >\$25,000,000 | \$2,000,000 | \$2,000,000 | \$4,000,000 | \$25,000,000 |

1. Combined single limit for bodily injury and property damage.
2. This limit shall apply separately to the Contractor's work under this contract.
3. The umbrella or excess policy shall contain a clause stating that it takes effect (drops down) in the event the primary limits are impaired or exhausted.

- The Contractor shall not require certified Small Business subcontractors to carry Liability Insurance that exceeds the limits in the table above. Notwithstanding the limits specified herein, at the option of the Contractor, the liability insurance limits for certified Small Business subcontractors of any tier may be less than those limits specified in the table. For Small Business subcontracts, "Total Bid" shall be interpreted as the amount of subcontracted work to a certified Small Business.

- The State, including its officers, directors, agents (excluding agents who are design professionals), and employees, shall be named as additional insureds under the General Liability and Umbrella Liability Policies with respect to liability arising out of or connected with work or operations performed by or on behalf of the Contractor under this contract. Coverage for such additional insureds does not extend to liability:

- Arising from any defective or substandard condition of the roadway which existed at or before the time the Contractor started work, unless such condition has been changed by the work or the scope of the work requires the Contractor to maintain existing roadway facilities and the claim arises from the Contractor's failure to maintain;
- For claims occurring after the work is completed and accepted unless these claims are directly related to alleged acts or omissions of the Contractor that occurred during the course of the work; or
- To the extent prohibited by Insurance Code Section 11580.04

- Additional insured coverage shall be provided by a policy provision or by an endorsement providing coverage at least as broad as Additional Insured (Form B) endorsement form CG 2010, as published by the Insurance Services Office (ISO), or other form designated by the Department.

7-1.12B(4)(c) Contractor's Insurance Policy is Primary

- The policy shall stipulate that the insurance afforded the additional insureds applies as primary insurance. Any other insurance or self-insurance maintained by the State is excess only and shall not be called upon to contribute with this insurance.

7-1.12B(5) Automobile Liability Insurance

- The Contractor shall carry automobile liability insurance, including coverage for all owned, hired, and nonowned automobiles. The primary limits of liability shall be not less than \$1,000,000 combined single limit each accident for bodily injury and property damage. The

umbrella or excess liability coverage required under Section 7-1.12B(4)(b) also applies to automobile liability.

7-1.12B(6) Policy Forms, Endorsements, and Certificates

- The Contractor shall provide its General Liability Insurance under Commercial General Liability policy form No. CG0001 as published by the Insurance Services Office (ISO) or under a policy form at least as broad as policy form No. CG0001.

7-1.12B(7) Deductibles

- The State may expressly allow deductible clauses, which it does not consider excessive, overly broad, or harmful to the interests of the State. Regardless of the allowance of exclusions or deductions by the State, the Contractor is responsible for any deductible amount and shall warrant that the coverage provided to the State is in accordance with Section 7-1.12B, "Insurance."

7-1.12B(8) Enforcement

- The Department may assure the Contractor's compliance with its insurance obligations. Ten days before an insurance policy lapses or is canceled during the contract period, the Contractor shall submit to the Department evidence of renewal or replacement of the policy.

- If the Contractor fails to maintain any required insurance coverage, the Department may maintain this coverage and withhold or charge the expense to the Contractor or terminate the Contractor's control of the work in accordance with Section 8-1.08, "Termination of Control."

- The Contractor is not relieved of its duties and responsibilities to indemnify, defend, and hold harmless the State, its officers, agents, and employees by the Department's acceptance of insurance policies and certificates.

- Minimum insurance coverage amounts do not relieve the Contractor for liability in excess of such coverage, nor do they preclude the State from taking other actions available to it, including the withholding of funds under this contract.

7-1.12B(9) Self-Insurance

- Self-insurance programs and self-insured retentions in insurance policies are subject to separate annual review and approval by the State.

- If the Contractor uses a self-insurance program or self-insured retention, the Contractor shall provide the State with the same protection from liability and defense of suits as would be afforded by first-dollar insurance. Execution of the contract is the Contractor's acknowledgement that the Contractor will be bound by all laws as if the Contractor were an insurer as defined under Insurance Code Section 23 and that the self-insurance program or self-insured retention shall operate as insurance as defined under Insurance Code Section 22.

SECTION 8: PROSECUTION AND PROGRESS

Issue Date: August 17, 2007

The 2nd paragraph of Section 8-1.02, "Assignment," of the Standard Specifications is amended to read:

- If the Contractor assigns the right to receive contract payments, the Department accepts the assignment upon the Engineer's receipt of a notice. Assigned payments remain subject to

deductions and withholds described in the contract. The Department may use withheld payments for work completion whether payments are assigned or not.

SECTION 9: MEASUREMENT AND PAYMENT

Issue Date: August 17, 2007

The last sentence of the 1st paragraph of Section 9-1.02, "Scope of Payment," of the Standard Specifications is amended to read:

- Neither the payment of any estimate nor of any retained percentage or withhold relieves the Contractor of any obligation to make good any defective work or material.

The 6th paragraph of Section 9-1.03C, "Records," of the Standard Specifications is deleted.

The 2nd sentence of the 14th paragraph of Section 9-1.04, "Notice of Potential Claim," of the Standard Specifications is amended to read:

- Administrative disputes are disputes of administrative deductions or withholds, contract item quantities, contract item adjustments, interest payments, protests of contract change orders as provided in Section 4-1.03A, "Procedure and Protest," and protests of the Weekly Statement of Working Days as provided in Section 8-1.06, "Time of Completion."

Section 9-1.05, "Stop Notices," of the Standard Specifications is amended to read:

9-1.05 STOP NOTICE WITHHOLDS

- The Department may withhold payments to cover claims filed under Civ Code § 3179 et seq.

Section 9, "Measurement and Payment," of the Standard Specifications is amended by adding the following sections:

9-1.053 PERFORMANCE FAILURE WITHHOLDS

- During each estimate period you fail to comply with a contract part, including submittal of a document as specified, the Department withholds a part of the progress payment. The documents include quality control plans, schedules, traffic control plans, and water pollution control submittals.

- For 1 performance failure, the Department withholds 25 percent of the progress payment but does not withhold more than 10 percent of the total bid.

- For multiple performance failures, the Department withholds 100 percent of the progress payment but does not withhold more than 10 percent of the total bid.

- The Department returns performance-failure withholds in the progress payment following the correction of noncompliance.

9-1.055 PENALTY WITHHOLDS

- Penalties include fines and damages that are proposed, assessed, or levied against you or the Department by a governmental agency or citizen lawsuit. Penalties are also payments made or costs incurred in settling alleged permit violations of Federal, State, or local laws, regulations,

or requirements. The cost incurred may include the amount spent for mitigation or correcting a violation.

- If you or the Department is assessed a penalty, the Department may withhold the penalty amount until the penalty disposition has been resolved. The Department may withhold penalty funds and notify you within 15 days of the withhold. If the penalty amount is less than the amount being withheld from progress payments for retentions, the Department will not withhold the penalty amount.

- If the penalty is resolved for less than the amount withheld, the Department pays interest at a rate of 6 percent per year on the excess withhold. If the penalty is not resolved, the withhold becomes a deduction.

- Instead of the withhold, you may provide a bond payable to the Department of Transportation equal to the highest estimated liability for any disputed penalties proposed.

9-1.057 PROGRESS WITHHOLDS FOR FEDERAL-AID CONTRACTS

- Section 9-1.057, "Progress Withholds for Federal-Aid Contracts," applies to a Federal-aid contract.

- The Department withholds 10 percent of a partial payment for noncompliant progress. Noncompliant progress occurs when:

1. Total days to date exceed 75 percent of the revised contract working days
2. Percent of working days elapsed exceeds the percent of value of work completed by more than 15 percent

- The Engineer determines the percent of working days elapsed by dividing the total days to date by the revised contract working days and converting the quotient to a percentage.

- The Engineer determines the percent of value of work completed by summing payments made to date and the amount due on the current progress estimate, dividing this sum by the current total estimated value of the work, and converting the quotient to a percentage. These amounts are shown on the Progress Payment Voucher.

- When the percent of working days elapsed minus the percent of value of work completed is less than or equal to 15 percent, the Department returns the withhold in the next progress payment.

The 3rd paragraph of Section 9-1.06, "Partial Payments," of the Standard Specifications is amended to read:

- For a non-Federal-aid project, the Department retains 10 percent of the estimated value of the work done and 10 percent of the value of materials estimated to have been furnished and delivered and unused or furnished and stored as part security for the fulfillment of the contract by the Contractor, except that at any time after 20 percent of the work has been completed, if the Engineer finds that satisfactory progress is being made, the Department may reduce the total amount being retained from payment pursuant to the above requirements to 5 percent of the total estimated value of the work and materials and may also reduce the amount retained from any of the remaining partial payments to 5 percent of the estimated value of the work and materials. In addition, on any partial payment made after 95 percent of the work has been completed, the Department may reduce the amount retained from payment pursuant to the requirements of this Section 9-1.06, to such lesser amount as the Department determines is adequate security for the fulfillment of the balance of the work and other requirements of the contract, but in no event is that amount reduced to less than 125 percent of the estimated value of the work yet to be

completed as determined by the Engineer. The reduction is made only upon the request of the Contractor and must be approved in writing by the surety on the performance bond and by the surety on the payment bond. The approval of the surety must be submitted to the Disbursing Officer of the Department; the signature of the person executing the approval for the surety must be properly acknowledged and the power of attorney authorizing the person to give that consent must either accompany the document or be on file with the Department. The retentions specified in this paragraph are those defined in Pub Cont Code § 7107(b).

The 1st sentence of the 4th paragraph of Section 9-1.06, "Partial Payments," of the Standard Specifications is amended to read:

- The Department shall pay monthly to the Contractor, while carrying on the work, the balance not retained, as aforesaid, after deducting therefrom all previous payments and all sums to be deducted or withheld under the provisions of the contract.

The title and 1st and 2nd paragraphs of Section 9-1.065, "Payment of Withheld Funds," of the Standard Specifications are amended to read:

9-1.065 RELEASE OF RETAINED FUNDS

- The Department releases retained funds if you:
 1. Request release of the retention (Pub Cont Code § 10263) in writing
 2. Deposit securities equivalent to the funds you want released into escrow with the State Treasurer or with a bank acceptable to the Department
 3. Are the beneficial owner of and receive interest on the deposited securities substituted for the retained funds

The 2nd sentence Section 9-1.07A, "Payment Prior to Proposed Final Estimate," of the Standard Specifications is amended to read:

- The Department pays the balance due less previous payments, deductions, withholds, and retentions under the provisions of the contract and those further amounts that the Engineer determines to be necessary pending issuance of the proposed final estimate and payment thereon.

The 1st paragraph of Section 9-1.07B, "Final Payment and Claims," of the Standard Specifications is amended to read:

- After acceptance by the Director, the Engineer makes a proposed final estimate of the total amount payable to the Contractor, including an itemization of the total amount, segregated by contract item quantities, extra work, and other basis for payment, and shows each deduction made or to be made for prior payments and amounts to be deducted, withheld, or retained under the provisions of the contract. Prior estimates and payments are subject to correction in the proposed final estimate. The Contractor must submit written approval of the proposed final estimate or a written statement of claims arising under or by virtue of the contract so that the Engineer receives the written approval or statement of claims no later than close of business of the 30th day after receiving the proposed final estimate. The Contractor's receipt of the proposed final estimate must be evidenced by postal receipt. The Engineer's receipt of the Contractor's written approval or statement of claims must be evidenced by postal receipt or the Engineer's written receipt if delivered by hand.

SECTION 12: CONSTRUCTION AREA TRAFFIC CONTROL DEVICES

Issue Date: October 6, 2006

The first sentence of the second paragraph of Section 12-1.01, "Description," of the Standard Specifications is amended to read:

- Attention is directed to Part 6 of the California MUTCD.

Section 12-2.01, "Flaggers," of the Standard Specifications is amended to read:

12-2.01 FLAGGERS

• Flaggers while on duty and assigned to traffic control or to give warning to the public that the highway is under construction and of any dangerous conditions to be encountered as a result thereof, shall perform their duties and shall be provided with the necessary equipment in conformance with Part 6 of the California MUTCD. The equipment shall be furnished and kept clean and in good repair by the Contractor at the Contractor's expense.

The first paragraph of Section 12-3.01, "General," of the Standard Specifications is amended to read:

• In addition to the requirements in Part 6 of the California MUTCD, all devices used by the Contractor in the performance of the work shall conform to the provisions in this Section 12-3.

The second sentence of the first paragraph of Section 12-3.06, "Construction Area Signs," of the Standard Specifications is amended to read:

- Construction area signs are shown in or referred to in Part 6 of the California MUTCD.

The first sentence of the fourth paragraph of Section 12-3.06, "Construction Area Signs," of the Standard Specifications is amended to read:

• All construction area signs shall conform to the dimensions, color and legend requirements of the plans, Part 6 of the California MUTCD and these specifications.

The first sentence of the eighth paragraph of Section 12-3.06, "Construction Area Signs," of the Standard Specifications is amended to read:

• Used signs with the specified sheeting material will be considered satisfactory if they conform to the requirements for visibility and legibility and the colors conform to the requirements in Part 6 of the California MUTCD.

SECTION 19: EARTHWORK

Issue Date: July 31, 2007

Section 19-1.03, "Grade Tolerance," of the Standard Specifications is amended to read:

- Immediately prior to placing subsequent layers of material thereon, the grading plane shall conform to one of the following:
 - A. When hot mix asphalt is to be placed on the grading plane, the grading plane at any point shall not vary more than 0.05-foot above or below the grade established by the Engineer.
 - B. When subbase or base material to be placed on the grading plane is to be paid for by the ton, the grading plane at any point shall not vary more than 0.10-foot above or below the grade established by the Engineer.
 - C. When the material to be placed on the grading plane is to be paid for by the cubic yard, the grading plane at any point shall be not more than 0.05-foot above the grade established by the Engineer.

The first paragraph of Section 19-3.025C, "Soil Cement Bedding," of the Standard Specifications is amended to read:

- Cementitious material used in soil cement bedding shall conform to the provisions in Section 90-2.01, "Cementitious Materials." Supplementary cementitious material will not be required.

The fourth paragraph of Section 19-3.025C, "Soil Cement Bedding," of the Standard Specifications is amended to read:

- The aggregate, cementitious material, and water shall be proportioned either by weight or by volume. Soil cement bedding shall contain not less than 282 pounds of cementitious material per cubic yard. The water content shall be sufficient to produce a fluid, workable mix that will flow and can be pumped without segregation of the aggregate while being placed.

The first paragraph of Section 19-3.062, "Slurry Cement Backfill," of the Standard Specifications is amended to read:

- Slurry cement backfill shall consist of a fluid, workable mixture of aggregate, cementitious material, and water.

The fifth paragraph of Section 19-3.062, "Slurry Cement Backfill," of the Standard Specifications is amended to read:

- Cementitious material shall conform to the provisions in Section 90-2.01, "Cementitious Materials." Supplementary cementitious material will not be required.

The eighth paragraph of Section 19-3.062, "Slurry Cement Backfill," of the Standard Specifications is amended to read:

- The aggregate, cementitious material, and water shall be proportioned either by weight or by volume. Slurry cement backfill shall contain not less than 188 pounds of cementitious material per cubic yard. The water content shall be sufficient to produce a fluid, workable mix that will flow and can be pumped without segregation of the aggregate while being placed.

SECTION 20: EROSION CONTROL AND HIGHWAY PLANTING

Issue Date: August 17, 2007

Section 20-2.03, "Soil Amendment," of the Standard Specifications is amended to read:

20-2.03 SOIL AMENDMENT

- Soil amendment shall comply with the requirements in the California Food and Agricultural Code.
- Soil amendment producers shall comply with the following:
 1. Be fully permitted to produce compost as specified under the California Integrated Waste Management Board, Local Enforcement Agencies and any other State and Local Agencies that regulate Solid Waste Facilities. If exempt from State permitting requirements, the composting facility must certify that it follows guidelines and procedures for production of compost meeting the environmental health standards of Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7.
 2. Be a participant in United States Composting Council's Seal of Testing Assurance program.
- Soil amendment shall be composted and may be derived from any single, or mixture of any of the following feedstock materials:
 1. Green material consisting of chipped, shredded, or ground vegetation; or clean processed recycled wood products
 2. Biosolids
 3. Manure
 4. Mixed food waste
- Soil amendment feedstock materials shall be composted to reduce weed seeds, pathogens and deleterious materials as specified under Title 14, California Code of Regulations, Division 7, Chapter 3.1, Article 7, Section 17868.3.
 - Soil amendment shall not be derived from mixed municipal solid waste and must be reasonably free of visible contaminants. Soil amendment must not contain paint, petroleum products, pesticides or any other chemical residues harmful to animal life or plant growth. Soil amendment must not possess objectionable odors.
 - Metal concentrations in soil amendment must not exceed the maximum metal concentrations listed in Title 14, California Code of Regulations, Division 7, Chapter 3.1, Section 17868.2.
- Soil amendment must comply with the following:

| Physical/Chemical Requirements | | |
|--------------------------------|--|--|
| Property | Test Method | Requirement |
| pH | *TMECC 04.11-A, Elastometric pH 1:5 Slurry Method, pH Units | 6.0–8.0 |
| Soluble Salts | TMECC 04.10-A, Electrical Conductivity 1:5 Slurry Method dS/m (mmhos/cm) | 0-10.0 |
| Moisture Content | TMECC 03.09-A, Total Solids & Moisture at 70+/- 5 deg C, % Wet Weight Basis | 30–60 |
| Organic Matter Content | TMECC 05.07-A, Loss-On-Ignition Organic Matter Method (LOI), % Dry Weight Basis | 30–65 |
| Maturity | TMECC 05.05-A, Germination and Vigor Seed Emergence Seedling Vigor % Relative to Positive Control | 80 or Above 80 or Above |
| Stability | TMECC 05.08-B, Carbon Dioxide Evolution Rate mg CO ₂ -C/g OM per day | 8 or below |
| Particle Size | TMECC 02.02-B Sample Sieving for Aggregate Size Classification % Dry Weight Basis | 95% Passing 5/8 inch 70% Passing 3/8 inch |
| Pathogen | TMECC 07.01-B, Fecal Coliform Bacteria < 1000 MPN/gram dry wt. | Pass |
| Pathogen | TMECC 07.01-B, Salmonella < 3 MPN/4 grams dry wt. | Pass |
| Physical Contaminants | TMECC 02.02-C, Man Made Inert Removal and Classification: Plastic, Glass and Metal, % > 4mm fraction | Combined Total: < 1.0 |
| Physical Contaminants | TMECC 02.02-C, Man Made Inert Removal and Classification: Sharps (Sewing needles, straight pins and hypodermic needles), % > 4mm fraction | None Detected |

*TMECC refers to "Test Methods for the Examination of Composting and Compost," published by the United States Department of Agriculture and the United States Compost Council (USCC).

- Prior to application, the Contractor shall provide the Engineer with a copy of the soil amendment producer's Compost Technical Data Sheet and a copy of the compost producers STA certification. The Compost Technical Data Sheet shall include laboratory analytical test results, directions for product use, and a list of product ingredients.
- Prior to application, the Contractor shall provide the Engineer with a Certificate of Compliance in conformance with the provisions in Section 6-1.07, "Certificates of Compliance," of the Standard Specifications.

The last 3 paragraphs of Section 20-2.10, "Seed," of the Standard Specifications are deleted.

The last paragraph of Section 20-3.04A, "General," of the Standard Specifications is deleted.

Section 20-4.055, "Pruning," of the Standard Specifications is amended to read:

20-4.055 PRUNING

- Pruning of plants shall be consistent with American National Standards Institute (ANSI), "Tree, Shrub and Other Woody Plant Maintenance Standard Practices," ANSI 300 (Part 1)-2001 and "Best Management Practices Tree Pruning," 2002 (ISBN 1-881956318), published by the International Society of Arboriculture, P.O. Boc 3129, Champaign, IL 61826.

SECTION 25: AGGREGATE SUBBASES

Issue Date: February 16, 2007

The first paragraph of Section 25-1.02A, "Class 1, Class 2, and Class 3 Aggregate Subbases," of the Standard Specifications is amended to read:

- Aggregate must be clean and free from organic matter and other deleterious substances. Aggregate must consist of any combination of:

1. Broken stone
2. Crushed gravel
3. Natural rough surfaced gravel
4. Sand
5. Up to 100 percent of any combination of processed:
 - 5.1. Asphalt concrete
 - 5.2. Portland cement concrete
 - 5.3. Lean concrete base
 - 5.4. Cement treated base

The first paragraph of Section 25-1.02B, "Class 4 Aggregate Subbase," of the Standard Specifications is amended to read:

- Aggregate must be clean and free from organic matter and other deleterious substances. Aggregate must consist of any combination of:

1. Broken stone
2. Crushed gravel
3. Natural rough surfaced gravel
4. Sand
5. Up to 100 percent of any combination of processed:
 - 5.1. Asphalt concrete
 - 5.2. Portland cement concrete
 - 5.3. Lean concrete base
 - 5.4. Cement treated base

SECTION 26: AGGREGATE BASE

Issue Date: February 16, 2007

The first paragraph of Section 26-1.02A, "Class 2 Aggregate Base," of the Standard Specifications is amended to read:

- Aggregate must be clean and free from organic matter and other deleterious substances. Aggregate must consist of any combination of:

1. Broken stone

2. Crushed gravel
3. Natural rough surfaced gravel
4. Sand
5. Up to 100 percent of any combination of processed:
 - 5.1. Asphalt concrete
 - 5.2. Portland cement concrete
 - 5.3. Lean concrete base
 - 5.4. Cement treated base

The first paragraph of Section 26-1.02B, "Class 3 Aggregate Base," of the Standard Specifications is amended to read:

- Aggregate must be clean and free from organic matter and other deleterious substances. Aggregate must consist of any combination of:

1. Broken stone
2. Crushed gravel
3. Natural rough surfaced gravel
4. Sand
5. Up to 100 percent of any combination of processed:
 - 5.1. Asphalt concrete
 - 5.2. Portland cement concrete
 - 5.3. Lean concrete base
 - 5.4. Cement treated base

SECTION 27: CEMENT TREATED BASES

Issue Date: July 31, 2007

The first paragraph of Section 27-1.02, "Materials," of the Standard Specifications is amended to read:

- Cement shall be Type II portland cement conforming to the provisions in Section 90-2.01A, "Cement."

The third paragraph of Section 27-1.02, "Materials," of the Standard Specifications is amended to read:

- Aggregate for use in Class A cement treated base shall be of such quality that when mixed with cement in an amount not to exceed 5 percent by weight of the dry aggregate and compacted at optimum moisture content, the compressive strength of a sample of the compacted mixture shall not be less than 750 pounds per square inch at 7 days, when tested by California Test 312.

The fourth paragraph of Section 27-1.02, "Materials," of the Standard Specifications is amended to read:

- Aggregate for use in Class B cement treated base shall have a Resistance (R-value) of not less than 60 before mixing with cement and a Resistance (R-value) of not less than 80 after mixing with cement in an amount not to exceed 2.5 percent by weight of the dry aggregate.

The ninth paragraph of Section 27-1.07, "Compacting," of the Standard Specifications is amended to read:

- When surfacing material is hot mix asphalt, the low areas shall be filled with hot mix asphalt conforming to the requirements for the lowest layer of hot mix asphalt to be placed as surfacing. This filling shall be done as a separate operation prior to placing the lowest layer of surfacing, and full compensation for this filling will be considered as included in the contract price paid for cement treated base and no additional compensation will be allowed therefor.

SECTION 28: LEAN CONCRETE BASE

Issue Date: July 31, 2007

The first paragraph of Section 28-1.02, "Materials," of the Standard Specifications is amended to read:

- Cement shall be Type II portland cement conforming to the provisions in Section 90-2.01A, "Cement."

The sixth paragraph of Section 28-1.02, "Materials," of the Standard Specifications is amended to read:

- Aggregate shall be of such quality that, when mixed with cement in an amount not to exceed 300 pounds per cubic yard, and tested in conformance with the requirements in California Test 548, the compressive strength of a sample will be not less than 700 pounds per square inch at 7 days.

The second paragraph of Section 28-1.06, "Spreading, Compacting and Shaping," of the Standard Specifications is amended to read:

- In advance of curing operations, lean concrete base to be surfaced with hot mix asphalt shall be textured with a drag strip of burlap, a broom or a spring steel tine device which will produce scoring in the finished surface. The scoring shall be parallel with the centerline or transverse thereto. The operation shall be performed at a time and in a manner to produce the coarsest texture practical for the method used.

The second paragraph of Section 28-1.08, "Surfaces Not Within Tolerance," of the Standard Specifications is amended to read:

- Hardened lean concrete base with a surface lower than 0.05-foot below the grade established by the Engineer shall be removed and replaced with lean concrete base which complies with these specifications, or if permitted by the Engineer, the low areas shall be filled with pavement material as follows:

1. When pavement material is hot mix asphalt, the low areas shall be filled with hot mix asphalt conforming to the requirements for the lowest layer of hot mix asphalt to be placed as pavement. This shall be done as a separate operation prior to placing the lowest layer of pavement, and full compensation for this filling will be considered as included in the contract price paid per cubic yard for lean concrete base and no additional compensation will be allowed therefor.
2. When pavement material is portland cement concrete, the low areas shall be filled with pavement concrete at the time and in the same operation that the pavement is placed. Full compensation for this filling will be considered as included in the contract price paid per cubic yard for lean concrete base and no additional compensation will be allowed therefor.

SECTION 29: TREATED PERMEABLE BASES

Issue Date: July 31, 2007

The second paragraph of Section 29-1.02B, "Cement Treated Permeable Base," of the Standard Specifications is amended to read:

- Cement shall be Type II portland cement conforming to the provisions in Section 90-2.01A, "Cement."

The first paragraph of Section 29-1.04A, "Asphalt Treated Permeable Base," of the Standard Specifications is amended to read:

- Aggregates and asphalt for asphalt treated permeable base shall be stored, proportioned and mixed in the same manner provided for storing, proportioning and mixing aggregates and asphalt for hot mix asphalt in Section 39-1.08, "Production," except as follows:

1. The aggregate need not be separated into sizes.
2. The temperature of the aggregate before adding the asphalt binder shall be not less than 275° F nor more than 325° F.
3. Asphalt treated permeable base stored in excess of 2 hours shall not be used in the work.
4. The aggregate shall be combined with 2.5 percent paving asphalt by weight of the dry aggregate. After testing samples of the Contractor's proposed aggregate supply, the Engineer may order an increase or decrease in the asphalt content. If an increase or decrease is ordered, and the increase or decrease exceeds the specified amount by more than 0.1-percent by weight of the dry aggregate, the compensation payable to the Contractor for the asphalt treated permeable base will be increased or decreased on the basis of the total increase or decrease in asphalt.
5. The asphalt content of the asphalt mixture will be determined, at the option of the Engineer, by extraction tests in conformance with the requirements in California Test 310 or 362, or will be determined in conformance with the requirements in California Test 379. The bitumen ratio pounds of asphalt per 100 pounds of dry aggregate shall not vary by more than 0.5-pound of asphalt above or 0.5-pound of asphalt below the amount designated by the Engineer. Compliance with this requirement will be determined either by taking samples from trucks at the plant or from the mat behind the paver before rolling. If the sample is taken from the mat behind the paver, the bitumen ratio shall be

not less than the amount designated by the Engineer, less 0.7-pound of asphalt per 100 pounds of dry aggregate.

The second paragraph of Section 29-1.04B, "Cement Treated Permeable Base," of the Standard Specifications is amended to read:

- Cement treated permeable base shall contain not less than 287 pounds of cement per cubic yard.

The first paragraph of Section 29-1.05, "Spreading and Compacting Asphalt Treated Permeable Base," of the Standard Specifications is amended to read:

- Asphalt treated permeable base shall be spread and compacted as specified for hot mix asphalt under the "Method" construction process in Section 39, "Hot Mix Asphalt," and these specifications.

The second paragraph of Section 29-1.07, "Surfaces Not Within Tolerance," of the Standard Specifications is amended to read:

- Hardened treated permeable base with a surface lower than 0.05-foot below the grade established by the Engineer shall be removed and replaced with treated permeable base which complies with these specifications, or if permitted by the Engineer, the low areas shall be filled with pavement material as follows:

1. When pavement material is hot mix asphalt, the low areas shall be filled with hot mix asphalt conforming to the requirements for the lowest layer of hot mix asphalt to be placed as pavement. This shall be done as a separate operation prior to placing the lowest layer of pavement.
2. When pavement material is portland cement concrete, the low areas shall be filled with pavement concrete at the time and in the same operation in which the pavement is placed.
3. Full compensation for filling low areas will be considered as included in the contract price paid per cubic yard for treated permeable base and no additional compensation will be allowed therefor.

SECTION 37: BITUMINOUS SEALS

Issue Date: August 17, 2007

The fourth through sixth paragraphs in Section 37-1.03, "Maintaining Traffic," of the Standard Specifications are amended to read:

- On 2-lane two-way roadways, W8-7 "LOOSE GRAVEL" signs and W13-1 (35) speed advisory signs shall be furnished and placed adjacent to both sides of the traveled way where screenings are being spread on a traffic lane. The first W8-7 sign in each direction shall be placed where traffic first encounters loose screenings, regardless of which lane the screenings are being spread on. The W13-1 (35) signs need not be placed in those areas with posted speed limits of less than 40 MPH. The signs shall be placed at maximum 2,000-foot intervals along each side of the traveled way and at public roads or streets entering the seal coat area as directed by the Engineer.

- On multilane roadways (freeways, expressways and multilane conventional highways) where screenings are being spread on a traffic lane, W8-7 "LOOSE GRAVEL" signs and W13-1 (35) speed advisory signs shall be furnished and placed adjacent to the outside edge of the traveled way nearest to the lane being worked on. The first W8-7 sign shall be placed where the screenings begin with respect to the direction of travel on that lane. The W13-1 (35) signs need not be placed in those areas with posted speed limits of less than 40 MPH. The signs shall be placed at maximum 2,000-foot intervals along the edge of traveled way and at on-ramps, public roads or streets entering the seal coat area as directed by the Engineer.

- The W8-7 and W13-1 signs shall be maintained in place at each location until final brooming of the seal coat surface at that location is completed. The W8-7 and W13-1 signs shall conform to the provisions for construction area signs in Section 12, "Construction Area Traffic Control Devices." The signs may be set on temporary portable supports with the W13-1 below the W8-7 or on barricades with the W13-1 sign alternating with the W8-7 sign.

The second paragraph of Section 37-1.07, "Finishing," of the Standard Specifications is amended to read:

- Rollers shall be oscillating type pneumatic-tired rollers. A minimum of 2 pneumatic-tired rollers conforming to the provisions in Section 39-3.03 "Spreading and Compacting Equipment," shall be furnished.

The second paragraph in Section 37-1.09, "Payment," of the Standard Specifications is amended to read:

- The above prices and payments shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in applying seal coat, complete in place, including furnishing, placing, maintaining, and removing W8-7 and W13-1 signs, when required, and temporary supports or barricades for the signs, as shown on the plans, and as specified in these specifications and the special provisions, and as directed by the Engineer.

SECTION 40: PORTLAND CEMENT CONCRETE PAVEMENT

Issue Date: January 5, 2007

Section 40-1.015, "Cement Content," is deleted.

Section 40-1.05, "Proportioning," of the Standard Specifications is amended to read:

- Aggregate and cementitious material proportioning shall conform to the provisions in Section 90-5, "Proportioning."

The first paragraph in Section 40-1.105, "Exit Ramp Termini," of the Standard Specifications is amended to read:

- Concrete pavement shall be constructed at the ends of exit ramps when required by the plans or the special provisions. Texturing for exit ramp termini shall be by means of heavy brooming in a direction normal to ramp centerline. The hardened surface shall have a coefficient

of friction not less than 0.35 as determined by California Test 342. Minimum cementitious material content of concrete in pavement for exit ramp termini shall be 590 pounds per cubic yard.

The first paragraph in Section 40-1.14, "Payment," of the Standard Specifications is amended to read:

- The contract price paid per cubic yard for concrete pavement shall include full compensation for furnishing all labor, materials (including cementitious material in the amount specified), tools, equipment, and incidentals, and for doing all the work involved in constructing the portland cement concrete pavement, complete in place, as shown on the plans, and as specified in these specifications and the special provisions, and as directed by the Engineer.

SECTION 41: PAVEMENT SUBSEALING AND JACKING

Issue Date: January 5, 2007

The second paragraph of Section 41-1.02, "Materials," of the Standard Specifications is amended to read:

- Cement for grout shall be Type II portland cement conforming to the provisions in Section 90-2.01A, "Cement."

The third paragraph of Section 41-1.02, "Materials," of the Standard Specifications is amended to read:

- Fly ash shall conform to the requirements in AASHTO Designation: M 295 for either Class C or for Class F. The brand of fly ash used in the work shall conform to the provisions for approval of admixture brands in Section 90-4.03, "Admixture Approval."

The fifth paragraph of Section 41-1.02, "Materials," of the Standard Specifications is amended to read:

- Chemical admixtures and calcium chloride may be used. Chemical admixtures in the grout mix shall conform to the provisions in Section 90-4, "Admixtures." Calcium chloride shall conform to ASTM Designation: D 98.

SECTION 49: PILING

Issue Date: June 6, 2008

The 4th paragraph of Section 49-1.03, "Determination of Length," of the Standard Specifications is amended to read:

- Modification to the specified installation methods and specified pile tip elevation will not be considered at locations where settlement, tension demands, or lateral load demands control design pile tip elevations or when the plans state that specified pile tip elevation shall not be revised.

The first sentence of the sixth paragraph of Section 49-1.03, "Determination of Length," of the Standard Specifications is amended to read:

- Indicator compression pile load testing shall conform to the requirements in ASTM Designation: D 1143-81.

The first sentence of the seventh paragraph of Section 49-1.03, "Determination of Length," of the Standard Specifications is amended to read:

- Indicator tension pile load testing shall conform to the requirements in ASTM Designation: D 3689-90.

The 9th paragraph of Section 49-1.03, "Determination of Length," of the Standard Specifications is amended to read:

- The Contractor shall furnish piling of sufficient length to obtain the specified tip elevation shown on the plans or specified in the special provisions.

The sixth paragraph in Section 49-1.04, "Load Test Piles," of the Standard Specifications is amended to read:

- The Contractor may use additional cementitious material in the concrete for the load test and anchor piles.

The 1st paragraph of Section 49-6.01, "Measurement," of the Standard Specifications is amended to read:

- The length of timber, steel, and precast prestressed concrete piles, and of cast-in-place concrete piles consisting of driven shells filled with concrete, shall be measured along the longest side, from the tip elevation shown on the plans to the plane of pile cut-off.

Section 49-6.02, "Payment," of the Standard Specifications is amended by adding the following:

- When pile tips are revised by the Engineer for timber, steel, and precast prestressed concrete piles, and for cast-in-place concrete piles consisting of driven shells filled with concrete, the additional length required, including all materials, equipment, and labor for furnishing, splicing, and installing the piling, will be paid for as extra work as provided in Section 4-1.03D, "Extra Work."

- All remedial work required to achieve the required nominal resistance, including suspending driving operations above the required tip elevation and re-driving piles at a later time, when directed by the Engineer, will be paid for as extra work as provided in Section 4-1.03D, "Extra Work."

SECTION 50: PRESTRESSING CONCRETE

Issue Date: April 4, 2008

The 2nd paragraph in Section 50-1.07, "Ducts," of the Standard Specifications is amended to read:

- Ducts shall be fabricated with either welded or interlocked seams. Galvanizing of the welded seam will not be required. Ducts shall have sufficient strength to maintain their correct alignment during placing of concrete. Joints between sections of duct shall be positive metallic connections which do not result in angle changes at the joints. Waterproof tape shall be used at the connections. Ducts shall be bent without crimping or flattening. Transition couplings connecting the ducts to anchoring devices shall be either ferrous metal or polyolefin. Ferrous metal transition couplings need not be galvanized.

The 3rd paragraph in Section 50-1.05, "Prestressing Steel," of the Standard Specifications is amended by deleting item A.

The seventh paragraph in Section 50-1.07, "Ducts," of the Standard Specifications is amended to read:

- All ducts with a total length of 400 feet or more shall be vented. Vents shall be placed at intervals of not more than 400 feet and shall be located within 6 feet of every high point in the duct profile. Vents shall be 1/2 inch minimum diameter standard pipe or suitable plastic pipe. Connections to ducts shall be made with metallic or plastic structural fasteners. Plastic components, if selected, shall not react with the concrete or enhance corrosion of the prestressing steel and shall be free of water soluble chlorides. The vents shall be mortar tight, taped as necessary, and shall provide means for injection of grout through the vents and for sealing the vents. Ends of vents shall be removed one inch below the roadway surface after grouting has been completed.

Item B of the eleventh paragraph in Section 50-1.08, "Prestressing," of the Standard Specifications is amended to read:

B. When the concrete is designated by class or cementitious material content, either the concrete compressive strength shall have reached the strength shown on the plans at the time of stressing or at least 28 days shall have elapsed since the last concrete to be prestressed has been placed, whichever occurs first.

The second and third paragraphs in Section 50-1.09, "Bonding and Grouting," of the Standard Specifications are amended to read:

- Grout shall consist of cement and water and may contain an admixture if approved by the Engineer.
- Cement shall conform to the provisions in Section 90-2.01A, "Cement."

The first paragraph in Section 50-1.11, "Payment," of the Standard Specifications is amended to read:

- No separate payment will be made for pretensioning precast concrete members. Payment for pretensioning precast concrete members shall be considered as included in the contract price paid for furnish precast members as provided for in Section 51, "Concrete Structures."

SECTION 51: CONCRETE STRUCTURES

Issue Date: May 2, 2008

The first sentence of the eleventh paragraph of Section 51-1.05, "Forms," of the Standard Specifications is amended to read:

- Form panels for exposed surfaces shall be furnished and placed in uniform widths of not less than 3 feet and in uniform lengths of not less than 6 feet, except at the end of continuously formed surfaces where the final panel length required is less than 6 feet.

The first sentence of the eleventh paragraph of Section 51-1.06C, "Removing Falsework," of the Standard Specifications is amended to read:

- Falsework for box culverts and other structures with decks lower than the roadway pavement and with span lengths of 14 feet or less shall not be released until the last placed concrete has attained a compressive strength of 1,600 psi, provided that curing of the concrete is not interrupted.

The 6th paragraph of Section 51-1.11, "Construction Methods," of the Standard Specifications is amended to read:

- Construction methods and equipment employed by the Contractor shall conform to the provisions in Section 7-1.02, "Load Limitations."

The fourth paragraph in Section 51-1.12D, "Sheet Packing, Preformed Pads, and Board Fillers," of the Standard Specifications is amended to read:

- Expanded polystyrene shall be a commercially available polystyrene board. Expanded polystyrene shall have a minimum flexural strength of 35 psi determined in conformance with the requirements in ASTM Designation: C 203 and a compressive yield strength of between 16 and 40 psi at 5 percent compression. Surfaces of expanded polystyrene against which concrete is placed shall be faced with hardboard. Hardboard shall be 1/8 inch minimum thickness, conforming to ANSI A135.4, any class. Other facing materials may be used provided they furnish equivalent protection. Boards shall be held in place by nails, waterproof adhesive, or other means approved by the Engineer.

The 3rd paragraph of Section 51-1.12F, "Sealed Joints," of the Standard Specifications is amended to read:

- Type A and AL joint seals shall consist of a groove in the concrete that is filled with field-mixed silicone sealant.

The table in the 6th paragraph of Section 51-1.12F, "Sealed Joints," of the Standard Specifications is amended to read:

| Movement Rating (MR) | Seal Type |
|--------------------------|---|
| MR ≤ 1 inch | Type A or Type B |
| 1 inch < MR ≤ 2 inches | Type B |
| 2 inches < MR ≤ 4 inches | Joint Seal Assembly (Strip Seal) |
| MR > 4 inches | Joint Seal Assembly (Modular Unit) or Seismic Joint |

The 1st paragraph of Section 51-1.12F(3)(a), "Type A and AL Seal, " of the Standard Specifications is amended to read:

- The sealant must consist of a 2-component silicone sealant that will withstand up to ±50 percent movement.

The 2nd paragraph of Section 51-1.12F(3)(a), "Type A and AL Seal," of the Standard Specifications is amended to read:

- Silicone sealants must be tested under California Test 435 and must comply with the following:

| Specification | Requirement |
|---|---|
| Modulus at 150 percent elongation | 8–75 psi |
| Recovery | 21/32 inch max. |
| Notch Test | Notched or loss of bond 1/4 inch, max. |
| Water Resistance | Notched or loss of bond 1/4 inch, max. |
| Ultraviolet Exposure ASTM Designation: G 154, Table X2.1, Cycle 2. | No more than slight checking or cracking. |
| Cone Penetration | 4.5-12.0 mm |

The 3rd paragraph of Section 51-1.12F(3)(a), "Type A and AL Seal," of the Standard Specifications is deleted.

The 8th paragraph of Section 51-1.12F(3)(a), "Type A and AL Seal," of the Standard Specifications is deleted.

The 10th paragraph of Section 51-1.12F(3)(a), "Type A and AL Seal," of the Standard Specifications is amended to read:

- A Certificate of Compliance accompanied by a certified test report must be furnished for each batch of silicone sealant in conformance with the provisions in Section 6-1.07, "Certificates of Compliance."

The 2nd paragraph of Section 51-1.12F(3)(b), "Type B Seal," of the Standard Specifications is amended to read:

- The preformed elastomeric joint seal must conform to the requirements in ASTM D 2628 and the following:

1. The seal must consist of a multichannel, nonporous, homogeneous material furnished in a finished extruded form.
2. The minimum depth of the seal measured at the contact surface must be at least 95 percent of the minimum uncompressed width of the seal as designated by the manufacturer.
3. When tested in conformance with the requirements in California Test 673 for Type B seals, joint seals must provide a movement rating (MR) of not less than that shown on the plans.
4. The top and bottom edges of the joint seal must maintain continuous contact with the sides of the groove over the entire range of joint movement.
5. The seal must be furnished full length for each joint with no more than 1 shop splice in any 60-foot length of seal.
6. The Contractor must demonstrate the adequacy of the procedures to be used in the work before installing seals in the joints.
7. One field splice per joint may be made at locations and by methods approved by the Engineer. The seals are to be manufactured full length for the intended joint, then cut at the approved splice section and rematched before splicing. The Contractor must submit splicing details prepared by the joint seal manufacturer for approval before beginning splicing work.
8. Shop splices and field splices must have no visible offset of exterior surfaces and must show no evidence of bond failure.
9. At all open ends of the seal that would admit water or debris, each cell must be filled to a depth of 3 inches with commercial quality open cell polyurethane foam or closed by other means subject to approval by the Engineer.

The 7th paragraph of Section 51-1.12F(3)(b), "Type B Seal," of the Standard Specifications is amended to read:

- The joint seal must be installed full length for each joint with equipment that does not twist or distort the seal, elongate the seal longitudinally, or otherwise cause damage to the seal or to the concrete forming the groove.

The first sentence of the eleventh paragraph of Section 51-1.12F(3)(b), "Type B Seal," of the Standard Specifications is amended to read:

- Samples of the prefabricated joint seals, not less than 3 feet in length, will be taken by the Engineer from each lot of material.

The fourth and fifth sentences of the sixth paragraph of Section 51-1.12H(1), "Plain and Fabric Reinforced Elastomeric Bearing Pads," of the Standard Specifications are amended to read:

- Each ply of fabric shall have a breaking strength of not less than 800 pounds per inch of width in each thread direction when 3" x 36" samples are tested on split drum grips. The bond between double plies shall have a minimum peel strength of 20 pounds per inch.

The hardness (Type A) requirement in the table in the eighth paragraph of Section 51-1.12H(1), "Plain and Fabric Reinforced Elastomeric Bearing Pads," of the Standard Specifications is amended to read:

| | | |
|-------------------|-----------------------|-------|
| Hardness (Type A) | D 2240 with 2kg mass. | 55 ±5 |
|-------------------|-----------------------|-------|

The first sentence of subparagraph A of the first paragraph of Section 51-1.12H(2), "Steel Reinforced Elastomeric Bearings," of the Standard Specifications is amended to read:

- The bearings shall consist of alternating steel laminates and internal elastomer laminates with top and bottom elastomer covers. Steel laminates shall have a nominal thickness of 0.075 inch (14 gage).

The first paragraph in Section 51-1.135, "Mortar," of the Standard Specifications is amended to read:

- Mortar shall be composed of cementitious material, sand, and water proportioned and mixed as specified in this Section 51-1.135.

The third paragraph in Section 51-1.135, "Mortar," of the Standard Specifications is amended to read:

- The proportion of cementitious material to sand, measured by volume, shall be one to 2 unless otherwise specified.

The third sentence of the fourth paragraph of Section 51-1.17, "Finishing Bridge Decks," of the Standard Specifications is amended to read:

- The surfaces shall have a profile trace showing no high points in excess of 0.25 inch, and the portions of the surfaces within the traveled way shall have a profile count of 5 or less in any 100-foot section.

Section 51-1.17, "Finishing Bridge Decks," of the Standard Specifications is amended by adding the following subsection:

51-1.17A DECK CRACK TREATMENT

- The Contractor shall use all means necessary to minimize the development of shrinkage cracks.
- The Contractor shall remove all equipment and materials from the deck and clean the surface as necessary for the Engineer to measure the surface crack intensity. Surface crack intensity will be determined by the Engineer after completion of concrete cure, before prestressing, and before the release of falsework. In any 500 square foot portion of deck within the limits of the new concrete deck, should the intensity of cracking be such that there are more than 16 feet of cracks whose width at any location exceeds 0.02 inch, the deck shall be treated with methacrylate resin. The area of deck to be treated shall have a width that extends for the entire width of new deck inside the concrete barriers and a length that extends at least 5 feet beyond the furthest single continuous crack outside the 500 square foot portion, measured from where that crack exceeds 0.02 inch in width, as determined by the Engineer.
- Deck crack treatment shall include furnishing, testing, and application of methacrylate resin and sand. If grinding is required, deck treatment shall take place before grinding.

51-1.17A(1) Submittals

- Before starting deck treatment, the Contractor shall submit plans in conformance with Section 5-1.02, "Plans and Working Drawings," for the following:

1. Public safety plan for the use of methacrylate resin
2. Placement plan for the construction operation

- The plans shall identify materials, equipment, and methods to be used.
- The public safety plan for the use of methacrylate resin shall include details for the following:

1. Shipping
2. Storage
3. Handling
4. Disposal of residual methacrylate resin and the containers

- The placement plan for construction shall include the following:

1. Schedule of deck treatment for each bridge. The schedule shall be consistent with "Maintaining Traffic" of the special provisions and shall include time for the Engineer to perform California Test 342.
2. Methods and materials to be used, including the following:
 - 2.1. Description of equipment for applying the resin
 - 2.2. Description of equipment for applying the sand
 - 2.3. Gel time range and final cure time for the resin

- If the measures proposed in the safety plan are inadequate to provide for public safety associated with the use of methacrylate resin, the Engineer will reject the plan and direct the Contractor to revise the plan. Directions for revisions will be in writing and include detailed comments. The Engineer will notify the Contractor of the approval or rejection of a submitted or revised plan within 15 days of receipt of that plan.

- In the event the Engineer fails to complete the review within the time allowed, and if, in the opinion of the Engineer, completion of the work is delayed or interfered with by reason of the Engineer's delay in completing the review, the Contractor will be compensated for any resulting loss, and an extension of time will be granted, in the same manner as provided for in Section 8-1.09, "Right of Way Delays."

51-1.17A(2) Materials

- Before using methacrylate resin, a Material Safety Data Sheet shall be submitted for each shipment of resin.

- Methacrylate resin shall be low odor and have a high molecular weight. Before adding initiator, the resin shall have a maximum volatile content of 30 percent when tested in conformance with the requirements in ASTM Designation: D 2369, and shall conform to the following:

| PROPERTY | REQUIREMENT | TEST METHOD |
|--|--|---|
| * Viscosity | 25 cP, maximum, (Brookfield RVT with UL adaptor, 50 RPM at 77°F | ASTM D 2196 |
| * Specific Gravity | 0.90 minimum, at 77°F | ASTM D 1475 |
| * Flash Point | 180°F, minimum | ASTM D 3278 |
| * Vapor Pressure | 1.0 mm Hg, maximum, at 77°F | ASTM D 323 |
| Tack-free Time | 400 minutes, maximum at 25°C | Specimen prepared per California Test 551 |
| PCC Saturated Surface-Dry Bond Strength | 3.5 MPa, minimum at 24 hours and 21±1°C | California Test 551 |
| * Test shall be performed before adding initiator. | | |

51-1.17A(3) Testing

- The Contractor shall allow 20 days for sampling and testing by the Engineer of the methacrylate resin before proposed use. If bulk resin is to be used, the Contractor shall notify the Engineer in writing at least 15 days before the delivery of the bulk resin to the job site. Bulk resin is any resin stored in containers in excess of 55 gallons.

- Before starting production treatment, the Contractor shall treat a test area of approximately 500 square feet that is within the project limits and at a location approved by the Engineer. When available the test area shall be outside of the traveled way. Weather and pavement conditions during the test treatment shall be similar to those expected on the deck. Equipment used for testing shall be similar to those used for deck treating operations.

- During test and production deck treatment, test tiles shall be used to evaluate the resin cure time. The Contractor shall coat at least one 4" x 4" commercial quality smooth glazed tile for each batch of methacrylate resin. The coated tile shall be placed adjacent to the corresponding treated area. Sand shall not be applied to the test tiles.

- The acceptance criteria for a treated area is as follows:

- The test tiles are dry to the touch.
- The treated deck surface is tack free (non-oily).
- The sand cover adheres and resists brushing by hand.
- Excess sand has been removed by vacuuming or sweeping.
- The coefficient of friction is at least 0.35 when tested in conformance with California Test 342.

- Deck treatment on the test area shall demonstrate that the methods and materials meet the acceptance criteria and that the production work will be completed within the specified time for maintaining traffic.

- If a test or production area fails to meet the acceptance criteria, as determined by the Engineer, the treatment will be rejected, and the treatment shall be removed and replaced until the area complies with the acceptance criteria.

51-1.17A(4) Construction

- Equipment shall be fitted with suitable traps, filters, drip pans, or other devices as necessary to prevent oil or other deleterious material from being deposited on the deck.
- Before deck treatment with methacrylate resin, the bridge deck surface shall be cleaned by abrasive blasting, and all loose material shall be blown from visible cracks using high-pressure air. Concrete curing seals shall be cleaned from the deck surface to be treated, and the deck shall be dry when blast cleaning is performed. If the deck surface becomes contaminated at any time before placing the resin, the deck surface shall be cleaned by abrasive blasting.
- Where abrasive blasting is being performed within 10 feet of a lane occupied by public traffic, the residue including dust shall be removed immediately after contact between the abrasive and the surface being treated. The removal shall be by a vacuum attachment operating concurrently with the abrasive blasting operation.
- A compatible promoter/initiator system shall be capable of providing the resin gel time range shown on the placement plan. Gel time shall be adjusted to compensate for the changes in temperature throughout treatment application.
- Resin shall be applied by machine and by using a two-part resin system with a promoted resin for one part and an initiated resin for the other part. This two-part resin system shall be combined at equal volumes to the spray bars through separate positive displacement pumps. Combining of the 2 components shall be by either static in-line mixers or by external intersecting spray fans. The pump pressure at the spray bars shall not be great enough to cause appreciable atomization of the resin. Compressed air shall not be used to produce the spray. A shroud shall be used to enclose the spray bar apparatus.
- At the Contractor's option, manual application may be used. For manual application, (1) the quantity of resin mixed with promoter and initiator shall be limited to 5 gallons at a time, and (2) the resin shall be distributed by squeegees and brooms within 10 minutes after application.
- The Contractor shall apply methacrylate resin only to the specified area. Barriers, railing, joints, and drainage facilities shall be adequately protected to prevent contamination by the treatment material. Contaminated items shall be repaired at the Contractor's expense.
- The relative humidity shall be less than 90 percent at the time of treatment. The prepared area shall be dry and the surface temperature shall be at least 50°F and not more than 100°F when the resin is applied. The rate of application of promoted/initiated resin shall be approximately 90 square feet per gallon; the exact rate shall be determined by the Engineer.
- The deck surfaces to be treated shall be completely covered with resin so the resin penetrates and fills all cracks. The resin shall be applied within 5 minutes after complete mixing. A significant increase in viscosity shall be cause for rejection. Excess material shall be redistributed by squeegees or brooms within 10 minutes after application. For textured deck surfaces, including grooved surfaces, excess material shall be removed from the texture indentations.
- After the resin has been applied, at least 20 minutes shall elapse before applying sand. The sand shall be commercial quality dry blast sand. At least 95 percent of the sand shall pass the No. 8 sieve and at least 95 percent shall be retained on the No. 20 sieve. The sand shall be applied at a rate of approximately 2 pounds per square yard or until refusal as determined by the Engineer.
- Traffic will not be allowed on treated areas until the acceptance criteria has been met as determined by the Engineer.

The second paragraph in Section 51-1.18C, "Class 2 Surface Finish (Gun Finish)," of the Standard Specifications is amended to read:

- When Class 2 surface finish (gun finish) is specified, ordinary surface finish shall first be completed. The concrete surfaces shall then be abrasive blasted to a rough texture and thoroughly washed down with water. While the washed surfaces are damp, but not wet, a finish coating of machine applied mortar, approximately 1/4 inch thick, shall be applied in not less than 2 passes. The coating shall be pneumatically applied and shall consist of either (1) sand, cementitious material, and water mechanically mixed prior to its introduction to the nozzle, or (2) premixed sand and cementitious material to which water is added prior to its expulsion from the nozzle. The use of admixtures shall be subject to the approval of the Engineer as provided in Section 90, "Portland Cement Concrete." Unless otherwise specified, supplementary cementitious materials will not be required. The proportion of cementitious material to sand shall be not less than one to 4, unless otherwise directed by the Engineer. Sand shall be of a grading suitable for the purpose intended. The machines shall be operated and the coating shall be applied in conformance with standard practice. The coating shall be firmly bonded to the concrete surfaces on which it is applied.

The fifth paragraph in Section 51-1.18C, "Class 2 Surface Finish (Gun Finish)," of the Standard Specifications is amended to read:

- When surfaces to be finished are in pedestrian undercrossings, the sand shall be silica sand and the cementitious material shall be standard white portland cement.

Section 51-1.23, "Payment," of the Standard Specifications is amended by adding the following:

- Full compensation for deck crack treatment, including execution of the public safety plan, shall be considered as included in the contract price paid per cubic yard for structural concrete, bridge, and no additional compensation will be allowed therefor.

SECTION 52: REINFORCEMENT

Issue Date: December 7, 2007

The table in the eleventh paragraph of Section 52-1.07, "Placing," of the Standard Specifications is amended to read:

| Height Zone (H) (Feet above ground) | Wind Pressure Value (psf) |
|--|------------------------------|
| $H \leq 30$ | 20 |
| $30 < H \leq 50$ | 25 |
| $50 < H \leq 100$ | 30 |
| $H > 100$ | 35 |

The table in the second paragraph of Section 52-1.08B(1), "Mechanical Splices," of the Standard Specifications is amended to read:

| Reinforcing Bar Number | Total Slip |
|------------------------|------------|
| 4 | 0.010-inch |
| 5 | 0.010-inch |
| 6 | 0.010-inch |
| 7 | 0.014-inch |
| 8 | 0.014-inch |
| 9 | 0.014-inch |
| 10 | 0.018-inch |
| 11 | 0.018-inch |
| 14 | 0.024-inch |
| 18 | 0.030-inch |

The subparagraph under the sixth paragraph of Section 52-1.08B(2), "Butt Welded Splices," of the Standard Specifications is amended to read:

- The minimum preheat and interpass temperatures shall be 400° F for Grade 40 bars and 600° F for Grade 60 bars. Immediately after completing the welding, at least 6 inches of the bar on each side of the splice shall be covered by an insulated wrapping to control the rate of cooling. The insulated wrapping shall remain in place until the bar has cooled below 200° F.

Item A of the 3rd paragraph of Section 52-1.08C, "Service Splice and Ultimate Butt Splice Testing Requirements," of the Standard Specifications is amended to read:

- A. Proper facilities, including a calibrated tensile testing machine capable of breaking the largest size of reinforcing bar to be tested.

The 5th paragraph of Section 52-1.08C, "Service Splice and Ultimate Butt Splice Testing Requirements," of the Standard Specifications is amended to read:

- Prequalification and production sample splices and testing shall conform to California Test 670 and these specifications.

The 6th paragraph of Section 52-1.08C, "Service Splice and Ultimate Butt Splice Testing Requirements," of the Standard Specifications is deleted.

The 5th paragraph of Section 52-1.08C(2)(a), "Production Test Requirements for Service Splices," of the Standard Specifications is amended to read:

- If 3 or more sample splices from a production test conform to the provisions in this Section 52-1.08C(2), "Service Splice Test Criteria," all splices in the lot represented by this production test will be considered acceptable.

The 2nd paragraph of Section 52-1.08C(3), "Ultimate Butt Splice Test Criteria," of the Standard Specifications is amended to read:

- A minimum of 1 control bar shall be removed from the same bar as, and adjacent to, all ultimate prequalification, production, and quality assurance sample splices. The lengths of control bars shall conform to the lengths specified for sample splices in California Test 670. The portion of adjacent bar remaining in the work shall also be identified with weatherproof markings that correspond to its adjacent control bar.

The 2nd sentence of the 6th paragraph of Section 52-1.08C(3), "Ultimate Butt Splice Test Criteria," of the Standard Specifications is amended to read:

- In addition, necking of the bar, as defined in California Test 670, shall occur at rupture regardless of whether the bar breaks inside or outside the affected zone.

SECTION 53: SHOTCRETE

Issue Date: November 2, 2007

The third paragraph in Section 53-1.01, "Description," of the Standard Specifications is amended to read:

- The dry-mix process shall consist of delivering dry mixed aggregate and cementitious material pneumatically or mechanically to the nozzle body and adding water and mixing the materials in the nozzle body. The wet-mix process shall consist of delivering mixed aggregate, cement, and water pneumatically to the nozzle and adding any admixture at the nozzle.

The first through fourth paragraphs in Section 53-1.02, "Materials," of the Standard Specifications is amended to read:

- Cementitious material, fine aggregate, and mixing water shall conform to the provisions in Section 90, "Portland Cement Concrete."
- Shotcrete to be mixed and applied by the dry-mix process shall consist of one part cementitious material to not more than 4.5 parts fine aggregate, thoroughly mixed in a dry state before being charged into the machine. Measurement may be either by volume or by weight. The fine aggregate shall contain not more than 6 percent moisture by weight.
- Shotcrete to be mixed and applied by the wet-mix process shall consist of cementitious material, fine aggregate, and water and shall contain not less than 632 pounds of cementitious material per cubic yard. A maximum of 30 percent pea gravel may be substituted for fine aggregate. The maximum size of pea gravel shall be such that 100 percent passes the 1/2 inch screen and at least 90 percent passes the 3/8 inch screen.
- Admixtures may be added to shotcrete and shall conform to the provisions in Section 90-4, "Admixtures."

Item C of the third paragraph in Section 53-1.04, "Placing Shotcrete," of the Standard Specifications is amended to read:

- C. Aggregate and cementitious material that have been mixed for more than 45 minutes shall not be used unless otherwise permitted by the Engineer.

Section 53-1.07, "Measurement," of the Standard Specifications is amended to read:

- Quantities of shotcrete will be measured by the cubic yard computed from measurements, along the slope, of actual areas placed and the theoretical thickness shown on the plans. The Department does not pay for shotcrete placed outside the dimensions shown on the plans or to fill low foundation.

Section 53-1.08, "Payment," of the Standard Specifications is amended to read:

- The contract price paid per cubic yard for shotcrete shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in placing shotcrete, including preparing the foundation, wire reinforcement, structure backfill, joint filling material, and if required by the plans, drains with sacked pervious backfill material, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

SECTION 55: STEEL STRUCTURES

Issue Date: May 2, 2008

The 3rd paragraph of Section 55-1.05, "Falsework," of the Standard Specifications is amended to read:

- Construction methods and equipment employed by the Contractor shall conform to the provisions in Section 7-1.02, "Load Limitations."

The CVN impact value for Grade HPS 50W in the table in the fifth paragraph of Section 55-2.01, "Description," of the Standard Specifications is amended to read:

| | |
|--|-------------|
| Grade HPS 50W* (4 inches and under in thickness) | 20 at 10° F |
|--|-------------|

The first paragraph in Section 55-3.05, "Flatness of Faying and Bearing Surfaces," of the Standard Specifications is amended to read:

- Surfaces of bearing and base plates and other metal surfaces that are to come in contact with each other or with ground concrete surfaces or with asbestos sheet packing shall be flat to within 1/32-inch tolerance in 12 inches and to within 1/16-inch tolerance overall. Surfaces of bearing and base plates and other metal bearing surfaces that are to come in contact with preformed fabric pads, elastomeric bearing pads, or mortar shall be flat to within 1/8-inch tolerance in 12 inches and to within 3/16-inch tolerance overall.

Item B of the first paragraph of Section 55-3.10, "Fastener Threads," of the Standard Specifications is amended to read:

B. Internal threads shall conform to the requirements in ASTM Designation: A 563.

The third paragraph in Section 55-3.19, "Bearings and Anchorages," of the Standard Specifications is amended to read:

- Immediately before setting bearing assemblies or masonry plates directly on ground concrete surfaces, the Contractor shall thoroughly clean the surfaces of the concrete and the metal to be in contact and shall apply a coating of nonsag polysulfide or polyurethane caulking conforming to the requirements in ASTM Designation: C 920 to contact areas to provide full bedding.

The fifth paragraph in Section 55-3.19, "Bearings and Anchorages," of the Standard Specifications is amended to read:

- Mortar to be placed below masonry plates or bearing plates of the bearing assemblies and in anchor bolt sleeves or canisters shall conform to the provisions in Section 51-1.135, "Mortar," except that the proportion of cementitious material to sand shall be 1:3.

Item D of the first paragraph of Section 55-4.01, "Measurement," of the Standard Specifications is amended to read:

- D. To determine the pay quantities of galvanized metal, the weight to be added to the calculated weight of the base metal for the galvanizing will be determined from the table of weights of zinc coatings specified in ASTM Designation: A 153/A 153M.

SECTION 56: SIGNS

Issue Date: March 16, 2007

The fifth paragraph in Section 56-1.03, "Fabrication," of the Standard Specifications is amended to read:

- Clips, eyes, or removable brackets shall be affixed to all signs and all posts and shall be used to secure the sign during shipping and for lifting and moving during erection as necessary to prevent damage to the finished galvanized or painted surfaces. Brackets on tubular sign structures shall be removed after erection. Details of the devices shall be shown on the working drawings.

The fourth paragraph of Section 56-1.10, "Payment," of the Standard Specifications is amended to read:

- The contract price paid per pound for install sign structure of the type or types designated in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in installing sign structures, complete in place, including installing anchor bolt assemblies, removable sign panel frames, and sign panels and performing any welding, painting or galvanizing required during installation, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

The fourth paragraph in Section 56-2.03, "Construction," of the Standard Specifications is amended to read:

- Backfill material for metal posts shall consist of minor concrete conforming to the provisions in Section 90-10, "Minor Concrete," and shall contain not less than 463 pounds of cementitious material per cubic yard.

SECTION 59: PAINTING

Issue Date: May 1, 2006

The third paragraph of Section 59-2.12, "Painting," of the Standard Specifications is amended to read:

- Contact surfaces of stiffeners, railings, built up members or open seam exceeding 6 mils in width that would retain moisture, shall be caulked with polysulfide or polyurethane sealing compound conforming to the requirements in ASTM Designation: C 920, Type S, Grade NS, Class 25, Use O, or other approved material.

The fourth paragraph of Section 59-2.12, "Painting," of the Standard Specifications is amended to read:

- The dry film thickness of the paint will be measured in place with a calibrated Type 2 magnetic film thickness gage in conformance with the requirements in SSPC-PA 2, "Measurement of Dry Coating Thickness with Magnetic Gages," of the "SSPC: The Society for Protective Coatings," except that there shall be no limit to the number or location of spot measurements to verify compliance with specified thickness requirements.

SECTION 64: PLASTIC PIPE

Issue Date: July 31, 2007

The first paragraph of Section 64-1.06, "Concrete Backfill," of the Standard Specifications is amended to read:

- At locations where pipe is to be backfilled with concrete as shown on the plans, the concrete backfill shall be constructed of minor concrete or Class 4 concrete conforming to the provisions in Section 90, "Portland Cement Concrete." Minor concrete shall contain not less than 380 pounds of cementitious material per cubic yard. The concrete to be used will be designated in the contract item or shown on the plans.

The third paragraph of Section 64-1.06, "Concrete Backfill," of the Standard Specifications is amended to read:

- The surface of the concrete backfill shall be broomed with a heavy broom to produce a uniform rough surface if hot mix asphalt is to be placed directly thereon.

SECTION 65: REINFORCED CONCRETE PIPE

Issue Date: July 31, 2007

The first paragraph of Section 65-1.02, "Materials," of the Standard Specifications is amended to read:

- Cementitious material and aggregate shall conform to the provisions in Section 90-2, "Materials" except that mortar strengths relative to Ottawa sand and grading requirements shall not apply to the aggregate. Use of supplemental cementitious material shall conform to AASHTO Designation: M 170.

Subparagraph "c" of the eleventh paragraph of Section 65-1.02A(1) "Circular Reinforced Concrete Pipe (Designated or Selected by Class)," of the Standard Specifications is amended to read:

- c. Cementitious material and aggregate for non-reinforced concrete pipe shall conform to the provisions in Section 65-1.02, "Materials."

The first paragraph of Section 65-1.035, "Concrete Backfill," of the Standard Specifications is amended to read:

- At locations where pipe is to be backfilled with concrete as shown on the plans, the concrete backfill shall be constructed of minor concrete or Class 4 concrete in conformance with the provisions in Section 90, "Portland Cement Concrete." Minor concrete shall contain not less than 380 pounds of cementitious material per cubic yard. The concrete to be used will be designated in the contract item.

The third paragraph of Section 65-1.035, "Concrete Backfill," of the Standard Specifications is amended to read:

- The surface of the concrete backfill shall be broomed with a heavy broom to produce a uniform rough surface if hot mix asphalt is to be placed directly thereon.

The first subparagraph of the second paragraph of Section 65-1.06, "Joints," of the Standard Specifications is amended to read:

- Cement Mortar.- Mortar shall be composed of one part cementitious material and 2 parts sand by volume. Supplementary cementitious material will not be required.

SECTION 66: CORRUGATED METAL PIPE

Issue Date: July 31, 2007

The first paragraph of Section 66-1.045, "Concrete Backfill," of the Standard Specifications is amended to read:

- At locations where pipe is to be backfilled with concrete as shown on the plans, the concrete backfill shall be constructed of minor concrete or Class 4 concrete conforming to the provisions in Section 90, "Portland Cement Concrete." Minor concrete shall contain not less than 380 pounds of cementitious material per cubic yard. The concrete to be used will be designated in the contract item or shown on the plans.

The third paragraph of Section 66-1.045, "Concrete Backfill," of the Standard Specifications is amended to read:

- The surface of the concrete backfill shall be broomed with a heavy broom to produce a uniform rough surface if hot mix asphalt is to be placed directly thereon.

SECTION 68: SUBSURFACE DRAINS

Issue Date: July 31, 2007

The first and second paragraphs of Section 68-3.02D, "Miscellaneous," of the Standard Specifications are amended to read:

- Concrete for splash pads shall be produced from minor concrete conforming to the provisions in Section 90-10, "Minor Concrete." Minor concrete shall contain not less than 470 pounds of cementitious material per cubic yard.
- Mortar placed where edge drain outlets and vents connect to drainage pipe and existing drainage inlets shall conform to the provisions in Section 51-1.135, "Mortar."

The thirteenth paragraph of Section 68-3.03, "Installation," of the Standard Specifications is amended to read:

- Cement treated permeable material, which is not covered with hot mix asphalt within 12 hours after compaction of the permeable material, shall be cured by either sprinkling the material with a fine spray of water every 4 hours during daylight hours or covering the material with a white polyethylene sheet, not less than 6 mils thick. The above curing requirements shall begin at 7:00 a.m. on the morning following compaction of the cement treated permeable material and continue for the next 72 hours or until the material is covered with hot mix asphalt, whichever is less. The cement treated permeable material shall not be sprayed with water during the first 12 hours after compacting, but may be covered with the polyethylene sheet during the first 12 hours or prior to the beginning of the cure period.

The seventeenth and eighteenth paragraphs of Section 68-3.03, "Installation," of the Standard Specifications are amended to read:

- Hot mix asphalt for backfilling trenches in existing paved areas shall be produced from commercial quality aggregates and asphalt and mixed at a central mixing plant. The aggregate shall conform to the 3/4 inch grading, or the 1/2 inch grading for Type A and Type B hot mix asphalt specified in Section 39-1.02E, "Aggregate." The amount of asphalt binder to be mixed with the aggregate shall be between 4 percent and 7 percent by weight of the dry aggregate, as determined by the Engineer.
- Hot mix asphalt backfill shall be spread and compacted in approximately 2 equal layers by methods that will produce a hot mix asphalt surfacing of uniform smoothness, texture and density. Each layer shall be compacted before the temperature of the mixture drops below 250° F. Prior to placing the hot mix asphalt backfill, a tack coat of asphaltic emulsion conforming to the provisions in Section 94, "Asphaltic Emulsions," shall be applied to the vertical edges of existing pavement at an approximate rate of 0.05-gallon per square yard.

The twentieth paragraph of Section 68-3.03, "Installation," of the Standard Specifications is amended to read:

- Type A pavement markers conforming to the details shown on the plans and the provisions in Section 85, "Pavement Markers," shall be placed on paved shoulders or dikes at outlet, vent and cleanout locations as directed by the Engineer. The waiting period for placing pavement markers on new hot mix asphalt surfacing will not apply.

Section 68-3.05, "Payment," of the Standard Specifications is amended to read:

- The contract price paid per linear foot for plastic pipe (edge drain) of the size or sizes shown in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing edge drains complete in place, including excavation (and removal of any concrete deposits that may occur along the lower edge of the concrete pavement in Type 1 installations) and hot mix asphalt backfill for Type 1 edge drain installation, tack coat, filter fabric, and treated permeable material, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

- The contract price paid per linear foot for plastic pipe (edge drain outlet) of the size or sizes shown in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in installing edge drain outlets, vents and cleanouts complete in place, including outlet and vent covers, expansion plugs, pavement markers, concrete splash pads, connecting outlets and vents to drainage facilities, and excavation and backfill [aggregate base, hot mix asphalt, tack coat, and native material] for outlets, vents, and cleanouts to be installed in embankments and existing shoulders, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer.

SECTION 69: OVERSIDE DRAINS

Issue Date: July 31, 2007

The first paragraph of Section 69-1.01, "Description," of the Standard Specifications is amended to read:

- This work shall consist of furnishing and installing entrance tapers, pipe downdrains, tapered inlets, flume downdrains, anchor assemblies, reducers, slip joints and hot mix asphalt overside drains to collect and carry surface drainage down the roadway slopes as shown on the plans or as directed by the Engineer and as specified in these specifications and the special provisions.

Section 69-1.02D, "Asphalt Concrete," of the Standard Specifications is amended to read:

69-1.02D Hot Mix Asphalt

- Hot mix asphalt for overside drains shall conform to the provisions in Section 39-1.13, "Miscellaneous Areas."

Section 69-1.04, "Asphalt Concrete Overside Drains," is amended to read:

69-1.04 HOT MIX ASPHALT OVERSIDE DRAINS

- Hot mix asphalt overside drains shall be constructed as shown on the plans or as directed by the Engineer. The hot mix asphalt shall be placed in conformance with the provisions in Section 39-1.13, "Miscellaneous Areas."

The second paragraph of Section 69-1.06, "Payment," of the Standard Specifications is amended to read:

- Quantities of hot mix asphalt placed for overside drains will be paid for as provided in Section 39-5, "Measurement and Payment," for hot mix asphalt placed in miscellaneous areas.

SECTION 70: MISCELLANEOUS FACILITIES

Issue Date: January 5, 2007

The second paragraph of Section 70-1.02C, "Flared End Sections," of the Standard Specifications is amended to read:

- Precast concrete flared end sections shall conform to the requirements for Class III Reinforced Concrete Pipe in AASHTO Designation: M 170M. Cementitious materials and aggregate shall conform to the provisions in Section 90-2, "Materials," except that mortar strengths relative to Ottawa sand and grading requirements shall not apply to the aggregate. Use of supplementary cementitious material shall conform to the requirements in AASHTO Designation: M 170. The area of steel reinforcement per meter of flared end section shall be at least equal to the minimum steel requirements for circular reinforcement in circular pipe for the internal diameter of the circular portion of the flared end section. The basis of acceptance of the precast concrete flared end section shall conform to the requirements of Section 5.1.2 of AASHTO Designation: M 170.

The first paragraph of Section 70-1.02H, "Precast Concrete Structures," of the Standard Specifications is amended to read:

- Precast concrete pipe risers and pipe reducers, and precast concrete pipe sections, adjustment rings and tapered sections for pipe energy dissipators, pipe inlets and pipe manholes shall conform to the requirements in AASHTO Designation: M 199M/M 199, except that the cementitious material and aggregate shall conform to the provisions in Section 90-2, "Materials," except that mortar strengths relative to Ottawa sand and grading requirements shall not apply to the aggregate. Use of supplementary cementitious material shall conform to the requirements in AASHTO Designation: M 170.

The second paragraph of Section 70-1.03, "Installation," of the Standard Specifications is amended to read:

- Cutoff walls for precast concrete flared end sections shall be constructed of minor concrete conforming to the provisions in Section 90-10, "Minor Concrete." Minor concrete shall contain not less than 470 pounds of cementitious material per cubic yard.

SECTION 73: CONCRETE CURBS AND SIDEWALKS

Issue Date: July 31, 2007

The second subparagraph of the second paragraph of Section 73-1.01, "Description," of the Standard Specifications is amended to read:

2. Minor concrete shall contain not less than 463 pounds of cementitious material per cubic yard except that when extruded or slip-formed curbs are constructed using

3/8-inch maximum size aggregate, minor concrete shall contain not less than 548 pounds of cementitious material per cubic yard.

The fifteenth paragraph of Section 73-1.06, "Sidewalk, Gutter Depression, Island Paving, Curb Ramp (Wheelchair Ramp) and Driveway Construction," of the Standard Specifications is amended to read:

- Where hot mix asphalt or portland cement concrete pavements are to be placed around or adjacent to manholes, pipe inlets or other miscellaneous structures in sidewalk, gutter depression, island paving, curb ramps or driveway areas, the structures shall not be constructed to final grade until after the pavements have been constructed for a reasonable distance on each side of the structures.

SECTION 75: MISCELLANEOUS METAL

Issue Date: January 18, 2008

The 13th paragraph of Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications is amended to read:

- Concrete anchorage devices shall be mechanical expansion or resin capsule types installed in drilled holes or cast-in-place insert types. The anchorage devices shall be selected from the Department's Pre-Qualified Products List at:

http://www.dot.ca.gov/hq/esc/approved_products_list

- The anchorage devices shall be a complete system, including threaded studs, hex nuts, and cut washers. Thread dimensions for externally threaded concrete anchorage devices prior to zinc coating, shall conform to the requirements in ANSI Standard: B1.1 having Class 2A tolerances or ANSI Standard: B1.13M having Grade 6g tolerances. Thread dimensions for internally threaded concrete anchorage devices shall conform to the requirements in ASTM A 563.

The 18th paragraph of Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications is amended to read:

- Mechanical expansion anchors shall, when installed in accordance with the manufacturer's instructions and these specifications and tested in conformance with the requirements in California Test 681, withstand the application of a sustained tension test load of at least the following values for at least 48 hours with a movement not greater than 0.035 inch:

| Stud Diameter (inches) | Sustained Tension Test Load (pounds) |
|---------------------------|---|
| *3/4 | 5,000 |
| 5/8 | 4,100 |
| 1/2 | 3,200 |
| 3/8 | 2,100 |
| 1/4 | 1,000 |

* Maximum stud diameter permitted for mechanical expansion anchors.

- Resin capsule anchors shall, when installed in accordance with the manufacturer's instructions and these specifications and tested in conformance with the requirements in California Test 681, withstand the application of a sustained tension test load of at least the following values for at least 48 hours with a movement not greater than 0.010 inch:

| Stud Diameter (inches) | Sustained Tension Test Load (pounds) |
|---------------------------|---|
| 1-1/4 | 31,000 |
| 1 | 17,900 |
| 7/8 | 14,400 |
| 3/4 | 5,000 |
| 5/8 | 4,100 |
| 1/2 | 3,200 |
| 3/8 | 2,100 |
| 1/4 | 1,000 |

- At least 25 days before use, the Contractor shall submit one sample of each resin capsule anchor per lot to the Transportation Laboratory for testing. A lot of resin capsule anchors is 100 units, or fraction thereof, of the same brand and product name.

The 20th paragraph of Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications is amended to read:

- The Pre-Qualified Products List for concrete anchorage devices has been developed from data previously furnished by suppliers or manufacturers for each type and size. Approval of additional anchorage device types and sizes is contingent upon the Contractor submitting to the Engineer one sample of each type of concrete anchorage device, manufacturer's installation instructions, and certified results of tests, either by a private testing laboratory or the manufacturer, indicating compliance with the above requirements.

The twenty-fourth paragraph of Section 75-1.03, "Miscellaneous Bridge Metal," of the Standard Specifications is amended to read:

- Sealing compound, for caulking and adhesive sealing, shall be a polysulfide or polyurethane material conforming to the requirements in ASTM Designation: C 920, Type S, Grade NS, Class 25, Use O.

The 1st sentence of the 3rd paragraph of Section 75-1.035, "Bridge Joint Restrainer Units." of the Standard Specifications is amended to read:

Cables shall be 3/4 inch preformed, 6 x 19, wire strand core or independent wire rope core (IWRC), galvanized in conformance with the requirements in Federal Specification RR-W-410, right regular lay, manufactured of improved plow steel with a minimum breaking strength of 23 tons.

Item C of the fourth paragraph of Section 75-1.035, "Bridge Joint Restrainer Units," of the Standard Specifications is amended to read:

- C. Nuts shall conform to the requirements in ASTM Designation: A 563 including Appendix X1, except lubrication is not required.

The twelfth paragraph in Section 75-1.035, "Bridge Joint Restrainer Units," of the Standard Specifications is amended to read:

- Concrete for filling cable drum units shall conform to the provisions in Section 90-10, "Minor Concrete," or at the option of the Contractor, may be a mix with 3/8-inch maximum size aggregate and not less than 675 pounds of cementitious material per cubic yard.

The sixth paragraph of Section 75-1.05, "Galvanizing," of the Standard Specifications is amended to read:

- Galvanizing of iron and steel hardware and nuts and bolts, when specified or shown on the plans, shall conform to the requirements in ASTM Designation: A 153/A 153M, except whenever threaded studs, bolts, nuts, and washers are specified to conform to the requirements in ASTM Designation: A 307, A 325, A 449, A 563, or F 436 and zinc coating is required, they shall be hot-dip zinc coated or mechanically zinc coated in conformance with the requirements in the ASTM Designations. Unless otherwise specified, galvanizing shall be performed after fabrication.

The eighth paragraph of Section 75-1.05, "Galvanizing," of the Standard Specifications is amended to read:

- Tapping of nuts or other internally threaded parts to be used with zinc coated bolts, anchor bars or studs shall be done after galvanizing and shall conform to the requirements for thread dimensions and overtapping allowances in ASTM Designation: A 563.

SECTION 80: FENCES

Issue Date: January 5, 2007

The fourth paragraph of Section 80-3.01F, "Miscellaneous," of the Standard Specifications is amended to read:

- Portland cement concrete for metal post and brace footings and for deadmen shall be minor concrete conforming to the provisions in Section 90-10, "Minor Concrete." Minor concrete shall contain not less than 470 pounds of cementitious material per cubic yard.

The fourth paragraph of Section 80-4.01C, "Miscellaneous," of the Standard Specifications is amended to read:

- Portland cement concrete for metal post and for deadmen shall be produced from minor concrete conforming to the provisions in Section 90-10, "Minor Concrete." Minor concrete shall contain not less than 470 pounds of cementitious material per cubic yard.

SECTION 83: RAILINGS AND BARRIERS

Issue Date: August 17, 2007

The seventh paragraph in Section 83-1.02, "Materials and Construction," of the Standard Specifications is amended to read:

- Mortar shall conform to the provisions in Section 51-1.135, "Mortar," and shall consist of one part by volume of cementitious material and 3 parts of clean sand.

The 1st sentence of the 8th subparagraph of the 24th paragraph of Section 83-1.02B, "Metal Beam Guard Railing," of the Standard Specifications is amended to read:

Anchor cable shall be 3/4 inch preformed, 6 x 19, wire strand core or independent wire rope core (IWRC), galvanized in conformance with the requirements in Federal Specification RR-W-410, right regular lay, manufactured of improved plow steel with a minimum breaking strength of 23 tons.

The 2nd sentence of the 6th paragraph of Section 83-1.02E, "Cable Railing," of the Standard Specifications is amended to read:

Cable shall be galvanized in conformance with the requirements in Federal Specification RR-W-410.

The 5th paragraph of Section 83-1.02I, "Chain Link Railing," of the Standard Specifications is amended to read:

Where shown on the plans, cables used in the frame shall be 5/16 inch in diameter, wire rope, with a minimum breaking strength of 5,000 pounds and shall be galvanized in conformance with the requirements in Federal Specification RR-W-410.

The 14th paragraph of Section 83-1.02I, "Chain Link Railing," of the Standard Specifications is amended to read:

Chain link fabric shall be either 11-gage Type I zinc-coated fabric conforming to the requirements in AASHTO M 181 or 11-gage Type IV polyvinyl chloride (PVC) coated fabric conforming to the requirements in Federal Specification RR-F-191/1.

Item b of the first paragraph in Section 83-2.02D(2), "Materials," of the Standard Specifications is amended to read:

- b. If the 3/8-inch maximum size aggregate grading is used to construct extruded or slip-formed concrete barriers, the cementitious material content of the minor concrete shall be not less than 675 pounds per cubic yard.

The third paragraph in Section 83-2.02D(2), "Materials," of the Standard Specifications is amended to read:

- The concrete paving between the tops of the 2 walls of concrete barrier (Types 50E, 60E, 60GE, and 60SE) and the optional concrete slab at the base between the 2 walls of concrete barrier (Types 50E, 60E, 60GE, and 60SE) shall be constructed of minor concrete conforming to the provisions of Section 90-10, "Minor Concrete," except that the minor concrete shall contain not less than 505 pounds of cementitious material per cubic yard.

SECTION 85: PAVEMENT MARKERS

Issue Date: July 31, 2007

The sixth paragraph in Section 85-1.06, "Placement," of the Standard Specifications is amended to read:

- Pavement markers shall not be placed on new hot mix asphalt surfacing or seal coat until the surfacing or seal coat has been opened to public traffic for a period of not less than 7 days when hot melt bituminous adhesive is used, and not less than 14 days when epoxy adhesive is used.

The second sentence of the fourteenth paragraph in Section 85-1.06, "Placement," of the Standard Specifications is amended to read:

- Cleaning shall be done by blast cleaning on all surfaces regardless of age or type, except that blast cleaning of clean, new hot mix asphalt and clean, new seal coat surfaces will not be required when hot melt bituminous adhesive is used.

SECTION 86: SIGNALS, LIGHTING AND ELECTRICAL SYSTEMS

Issue Date: July 31, 2007

The first sentence of the first paragraph of Section 86-2.02, "Removing and Replacing Improvements," of the Standard Specifications is amended to read:

- Improvements such as sidewalks, curbs, gutters, portland cement concrete and hot mix asphalt pavement, underlying material, lawns and plants and any other improvements removed, broken or damaged by the Contractor's operations, shall be replaced or reconstructed with the same kind of material as found on the work or with materials of equal quality.

The fourth paragraph in Section 86-2.03, "Foundations," of the Standard Specifications is amended to read:

- After each post, standard, and pedestal on structures is in proper position, mortar shall be placed under the base plate as shown on the plans. The exposed portions shall be formed to

present a neat appearance. Mortar shall conform to Section 51-1.135, "Mortar," except the mortar shall consist of one part by volume of cementitious material and 3 parts of clean sand and shall contain only sufficient moisture to permit packing. Mortar shall be cured by keeping it damp for 3 days.

Item D of the eighteenth paragraph in Section 86-2.05C, "Installation," of the Standard Specifications is amended to read:

- D. The conduit shall be placed in the bottom of the trench, and the trench shall be backfilled with minor concrete conforming to the provisions in Section 90-10, "Minor Concrete." Minor concrete shall contain not less than 590 pounds of cementitious material per cubic yard. Concrete backfill shall be placed to the pavement surface except, when the trench is in hot mix asphalt pavement and additional pavement is not being placed, the top 0.10 foot of the trench shall be backfilled with hot mix asphalt produced from commercial quality paving asphalt and aggregates.

Item E of the eighteenth paragraph in Section 86-2.05C, "Installation," of the Standard Specifications is amended to read:

- E. Prior to spreading hot mix asphalt, tack coat shall be applied in conformance with the provisions in Section 39, "Hot Mix Asphalt." Spreading and compacting of hot mix asphalt shall be performed by any method which will produce a hot mix asphalt surfacing of uniform smoothness, texture and density.

Item C of the twenty-third paragraph in Section 86-2.05C, "Installation," of the Standard Specifications is amended to read:

- C. Precast concrete conduit cradles shall conform to the dimensions shown on the plans and shall be constructed of minor concrete and commercial quality welded wire fabric. Minor concrete shall conform to the provisions in Section 90-10, "Minor Concrete," and shall contain not less than 590 pounds of cementitious material per cubic yard. The cradles shall be moist cured for not less than 3 days.

Item G of the twenty-third paragraph in Section 86-2.05C, "Installation," of the Standard Specifications is amended to read:

- G. The space around conduits through bridge abutment walls shall be filled with mortar conforming to the provisions in Section 51-1.135, "Mortar," except that the proportion of cementitious material to sand shall be one to 3.

The fifth paragraph in Section 86-2.07, "Traffic Pull Boxes," of the Standard Specifications is amended to read:

- Concrete placed around and under traffic pull boxes as shown on the plans shall be minor concrete conforming to the provisions in Section 90-10, "Minor Concrete."

The traffic signal controller cabinet requirement in the table in Section 86-2.08A, "Conductor Identification," of the Standard Specifications is amended to read:

| | | | | | |
|--------------------|------------------------------|-----|------|-------|---|
| Traffic Signal | Ungrounded Circuit Conductor | Blk | None | CON-1 | 6 |
| Controller Cabinet | Grounded Circuit Conductor | Wht | None | CON-2 | 6 |

The first sentence of the first paragraph of Section 86-4.06, "Pedestrian Signal Faces," of the Standard Specifications is amended to read:

- Message symbols for pedestrian signal faces shall be white WALKING PERSON and Portland orange UPRAISED HAND conforming to the requirements in the Institute of Transportation Engineers Standards: "Pedestrian Traffic Control Signal Indications" and the "California MUTCD."

The second sentence of the tenth paragraph of Section 86-4.07, "Light Emitting Diode Pedestrian Signal Face 'Upraised Hand' Module," of the Standard Specifications is amended to read:

- The color of "UPRAISED HAND" shall be Portland orange conforming to the requirements of the Institute of Transportation Engineers Standards: "Pedestrian Traffic Control Signal Indications" and the "California MUTCD."

The second sentence of the first paragraph of subsection, "Elastomeric Sealant," of Section 86-5.01A(5), "Installation Details," of the Standard Specifications is amended to read:

- Sealant shall be suitable for use in both hot mix asphalt and portland cement concrete.

The first sentence of the first paragraph of subsection, "Asphatic Emulsion Sealant," of Section 86-5.01A(5), "Installation Details," of the Standard Specifications is amended to read:

- Asphaltic emulsion sealant shall conform to the requirements in State Specification 8040-41A-15 and shall be used only for filling slots in hot mix asphalt pavement.

The third sentence of the first paragraph of subsection, "Hot-Melt Rubberized Asphalt Sealant," of Section 86-5.01A(5), "Installation Details," of the Standard Specifications is amended to read:

- Sealant shall be suitable for use in both hot mix asphalt and portland cement concrete.

The tenth paragraph of subsection, "Hot-Melt Rubberized Asphalt Sealant," of Section 86-5.01A(5), "Installation Details," of the Standard Specifications is amended to read:

- If hot mix asphalt surfacing is to be placed, the loop conductors shall be installed prior to placing the uppermost layer of hot mix asphalt. The conductors shall be installed, as shown on the plans, in the compacted layer of hot mix asphalt immediately below the uppermost layer. Installation details shall be as shown on the plans, except the sealant shall fill the slot flush to the surface.

The first paragraph in Section 86-5.01D, "Removing or Abandoning Existing Pressure-Sensitive Detectors," of the Standard Specifications is amended to read:

- When a foundation for a pressure-sensitive vehicle detector is to be removed, the hole left by removing the detector frame and foundation shall be filled with minor concrete, except the roadway surface shall be reconstructed with material to match existing surfacing. Minor concrete shall conform to the provisions in Section 90-10, "Minor Concrete," except that the concrete shall contain not less than 420 pounds of cementitious material per cubic yard for hot mix asphalt surfaced roadways and not less than 590 pounds of cementitious material per cubic yard for portland cement concrete surfaced roadways.

The first paragraph of Section 86-8.01, "Payment," of the Standard Specifications is amended to read:

- The contract lump sum price or prices paid for signal, ramp metering, flashing beacon, lighting, sign illumination, traffic monitoring station, highway advisory radio systems, closed circuit television systems, or combinations thereof; for modifying or removing those systems; for temporary systems; or the lump sum or unit prices paid for various units of those systems; or the lump sum or per foot price paid for conduit of the various sizes, types and installation methods listed in the Engineer's Estimate shall include full compensation for furnishing all labor, materials, tools, equipment and incidentals, and for doing all the work involved in furnishing and installing, modifying, or removing the systems, combinations or units thereof, as shown on the plans, as specified in these specifications and the special provisions, and as directed by the Engineer, including any necessary pull boxes (except when the type required is shown as a separate contract item); excavation and backfill; concrete foundations (except when shown as a separate contract item); pedestrian barricades; furnishing and installing illuminated street name signs; installing sign panels on pedestrian barricades, on flashing beacon standards, and on traffic signal mast arms; restoring sidewalk, pavement and appurtenances damaged or destroyed during construction; salvaging existing materials; and making all required tests.

SECTION 90: PORTLAND CEMENT CONCRETE

Issue Date: January 5, 2007

Section 90, "Portland Cement Concrete," of the Standard Specifications is amended to read:

SECTION 90: PORTLAND CEMENT CONCRETE

90-1 GENERAL

90-1.01 DESCRIPTION

- Portland cement concrete shall be composed of cementitious material, fine aggregate, coarse aggregate, admixtures if used, and water, proportioned and mixed as specified in these specifications.
- The Contractor shall determine the mix proportions for concrete in conformance with these specifications.
- Class 1 concrete shall contain not less than 675 pounds of cementitious material per cubic yard.
- Class 2 concrete shall contain not less than 590 pounds of cementitious material per cubic yard.
- Class 3 concrete shall contain not less than 505 pounds of cementitious material per cubic yard.

- Class 4 concrete shall contain not less than 420 pounds of cementitious material per cubic yard.
- Minor concrete shall contain not less than 550 pounds of cementitious material per cubic yard unless otherwise specified in these specifications or the special provisions.
- Unless otherwise designated on the plans or specified in these specifications or the special provisions, the amount of cementitious material used per cubic yard of concrete in structures or portions of structures shall conform to the following:

| Use | Cementitious Material Content (Pounds/CY) |
|--|--|
| Concrete designated by compressive strength: | |
| Deck slabs and slab spans of bridges | 675 min., 800 max. |
| Roof sections of exposed top box culverts | 675 min., 800 max. |
| Other portions of structures | 590 min., 800 max. |
| Concrete not designated by compressive strength: | |
| Deck slabs and slab spans of bridges | 675 min. |
| Roof sections of exposed top box culverts | 675 min. |
| Prestressed members | 675 min. |
| Seal courses | 675 min. |
| Other portions of structures | 590 min. |
| Concrete for precast members | 590 min., 925 max. |

- Whenever the 28-day compressive strength shown on the plans is greater than 3,600 pounds per square inch, the concrete shall be designated by compressive strength. If the plans show a 28-day compressive strength that is 4,000 pounds per square inch or greater, an additional 14 days will be allowed to obtain the specified strength. The 28-day compressive strengths shown on the plans that are 3,600 pounds per square inch or less are shown for design information only and are not a requirement for acceptance of the concrete.
- Concrete designated by compressive strength shall be proportioned such that the concrete will attain the strength shown on the plans or specified in the special provisions.
- Before using concrete for which the mix proportions have been determined by the Contractor, or in advance of revising those mix proportions, the Contractor shall submit in writing to the Engineer a copy of the mix design.
- Compliance with cementitious material content requirements will be verified in conformance with procedures described in California Test 518 for cement content. For testing purposes, supplementary cementitious material shall be considered to be cement. Batch proportions shall be adjusted as necessary to produce concrete having the specified cementitious material content.
- If any concrete has a cementitious material, portland cement, or supplementary cementitious material content that is less than the minimum required, the concrete shall be removed. However, if the Engineer determines that the concrete is structurally adequate, the concrete may remain in place and the Contractor shall pay to the State \$0.25 for each pound of cementitious material, portland cement, or supplementary cementitious material that is less than the minimum required. The Department may deduct the amount from any moneys due, or that may become due, the Contractor under the contract. The deductions will not be made unless the difference between the contents required and those actually provided exceeds the batching tolerances permitted by Section 90-5, "Proportioning." No deductions will be made based on the results of California Test 518.
- The requirements of the preceding paragraph shall not apply to minor concrete or commercial quality concrete.

90-2 MATERIALS

90-2.01 CEMENTITIOUS MATERIALS

- Unless otherwise specified, cementitious material shall be either a combination of Type II or Type V portland cement and a supplementary cementitious material, or a blended cement.
- Cementitious materials used in cast-in-place concrete for exposed surfaces of like elements of a structure shall be from the same sources and of the same proportions.
- Cementitious materials shall be protected from moisture until used. Sacked cementitious materials shall be piled to permit access for tallying, inspecting, and identifying each shipment.
- Facilities shall be provided to ensure that cementitious materials meeting this Section 90-2.01 are kept separate from other cementitious materials. Sampling cementitious materials shall be in conformance with California Test 125.
- The Contractor shall furnish a Certificate of Compliance for cementitious materials in conformance with the provisions in Section 6-1.07, "Certificates of Compliance." The Certificate of Compliance shall indicate the source by name and location (including country, state, and city). If cementitious material is delivered directly to the job site, the Certificate of Compliance shall be signed by the cementitious material supplier. If the cementitious material is used in ready-mixed concrete or in precast concrete products purchased as such by the Contractor, the Certificate of Compliance shall be signed by the manufacturer of the concrete or product.

90-2.01A CEMENT

- Portland cement shall conform to the requirements in ASTM Designation: C 150 except, using a 10-sample moving average, limestone shall not exceed 2.5 percent. The C₃S content of Type II cement shall not exceed 65 percent.
- Blended cement shall conform to the requirements for Portland Blast-Furnace Slag, Cement Type IS (MS) or Portland-Pozzolan Cement, Type IP (MS) in AASHTO Designation: M 240 and shall be comprised of an intimate and uniform blend of Type II or Type V cement and supplementary cementitious material in an amount conforming to the requirements in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials."
- In addition, blended cement, Type II portland cement, and Type V portland cement shall conform to the following requirements:
 - A. The cement shall not contain more than 0.60-percent by mass of alkalis, calculated as the percentage of Na₂O plus 0.658 times the percentage of K₂O, when determined by methods as required in AASHTO Designation: T 105;
 - B. The autoclave expansion shall not exceed 0.50-percent; and
 - C. Mortar, containing the cement to be used and Ottawa sand, when tested in conformance with California Test 527, shall not expand in water more than 0.010-percent and shall not contract in air more than 0.048-percent, except that when cement is to be used for precast prestressed concrete piling, precast prestressed concrete members, or steam cured concrete products, the mortar shall not contract in air more than 0.053-percent.
- Type III portland cement shall be used only as specified in the special provisions or with the approval of the Engineer. Type III portland cement shall conform to the additional requirements listed above for Type II portland cement, except when tested in conformance with California Test 527, mortar containing Type III portland cement shall not contract in air more than 0.075-percent.

90-2.01B SUPPLEMENTARY CEMENTITIOUS MATERIALS (SCM)

- Fly ash shall conform to the requirements in AASHTO Designation: M 295, Class F, and the following:

- A. Calcium oxide content shall not exceed 10 percent.
- B. The available alkali, as sodium oxide equivalent, shall not exceed 1.5 percent when determined in conformance with the requirements in ASTM Designation: C 311 or the total alkali, as sodium oxide equivalent, shall not exceed 5.0 percent when determined in conformance with the requirements in AASHTO Designation: T 105.
- C. Commingling of fly ash from different sources at uncontrolled ratios is permissible only if the following criteria are satisfied:
 1. Sources of fly ash to be commingled shall be on the approved list of materials for use in concrete.
 2. Testing of the commingled product is the responsibility of the fly ash supplier.
 3. Each fly ash's running average of density shall not differ from any other by more than 0.01-pound per cubic inch at the time of commingling.
 4. Each fly ash's running average of loss on ignition shall not differ from any other by more than one percent at the time of commingling.
 5. The final product of commingled fly ash shall conform to the requirement in AASHTO Designation: M 295.

- Raw or calcined natural pozzolans shall conform to the requirements in AASHTO Designation: M 295, Class N and the following requirements:

- A. Calcium oxide content shall not exceed 10 percent.
- B. The available alkali, as sodium oxide equivalent, shall not exceed 1.5 percent when determined in conformance with the requirements in ASTM Designation: C 311 or the total alkali, as sodium oxide equivalent, shall not exceed 5.0 percent when determined in conformance with the requirements in AASHTO Designation: T 105.

- Ground Granulated Blast Furnace Slag (GGBFS) shall conform to the requirements in AASHTO Designation: M 302, Grade 100 or Grade 120.

- Silica Fume shall conform to the requirements of AASHTO Designation: M 307, with reduction in mortar expansion of 80 percent, minimum, using the cement from the proposed mix design.

90-2.01C REQUIRED USE OF SUPPLEMENTARY CEMENTITIOUS MATERIALS

- The amount of portland cement and SCM used in portland cement concrete shall conform to the minimum cementitious material content provisions in Section 90-1.01, "Description," or Section 90-4.05, "Optional Use of Chemical Admixtures," and the following:

- A. If a blended cement conforming to the provisions in Section 90-2.01A, "Cement," is used, the minimum amount of SCM incorporated into the cement shall conform to the provisions in this Section 90-2.01C.
- B. Fly ash or natural pozzolan, silica fume, or GGBFS shall not be used with Type IP or Type IS cements.

- Use of SCMs shall conform to the following:

- A. If fly ash or natural pozzolan is used:
1. The minimum amount of portland cement shall not be less than 75 percent by weight of the specified minimum cementitious material content.
 2. The minimum amount of fly ash or natural pozzolan shall be:
 - a. Fifteen percent by weight of the total amount of cementitious material if the calcium oxide content of fly ash or natural pozzolan is equal to or less than 2 percent by weight;
 - b. Twenty-five percent by weight of the total amount of cementitious material if the calcium oxide content of fly ash or natural pozzolan is greater than 2 percent by weight.
 3. The total amount of fly ash or natural pozzolan shall not exceed 35 percent by weight of the total amount of cementitious material to be used in the mix. If Section 90-1.01, "Description," specifies a maximum cementitious material content in pounds per cubic yard, the total weight of portland cement and fly ash or natural pozzolan per cubic yard shall not exceed the specified maximum cementitious material content.
- B. If silica fume is used:
1. The amount of silica fume shall not be less than 10 percent by weight of the total amount of cementitious material.
 2. The amount of portland cement shall not be less than 75 percent by weight of the specified minimum cementitious material content.
 3. If Section 90-1.01, "Description," specifies a maximum cementitious material content in pounds per cubic yard, the total weight of portland cement and silica fume per cubic yard shall not exceed the specified maximum cementitious material content.
- C. If GGBFS is used:
1. The minimum amount of GGBFS shall be either:
 - a. Forty percent of the total cementitious material to be used, if the aggregates used in the concrete are on the Department's list of "Approved Aggregates For Use in Concrete with Reduced Fly Ash."
 - b. No less than 50 percent.
 2. The amount of GGBFS shall not exceed 60 percent by weight of the total amount of cementitious materials to be used.

90-2.02 AGGREGATES

- Aggregates shall be free from deleterious coatings, clay balls, roots, bark, sticks, rags, and other extraneous material.
- The Contractor shall provide safe and suitable facilities, including necessary splitting devices for obtaining samples of aggregates, in conformance with California Test 125.
- Aggregates shall be of such character that it will be possible to produce workable concrete within the limits of water content provided in Section 90-6.06, "Amount of Water and Penetration."

- Aggregates shall have not more than 10 percent loss when tested for soundness in conformance with the requirements in California Test 214. The soundness requirement for fine aggregate will be waived, provided that the durability index, D_f , of the fine aggregate is 60 or greater when tested for durability in conformance with California Test 229.

- If the results of any one or more of the Cleanness Value, Sand Equivalent, or aggregate grading tests do not meet the requirements specified for "Operating Range" but all meet the "Contract Compliance" requirements, the placement of concrete shall be suspended at the completion of the current pour until tests or other information indicate that the next material to be used in the work will comply with the requirements specified for "Operating Range."

- If the results of either or both the Cleanness Value and coarse aggregate grading tests do not meet the requirements specified for "Contract Compliance," the concrete that is represented by the tests shall be removed. However, if the Engineer determines that the concrete is structurally adequate, the concrete may remain in place, and the Contractor shall pay to the State \$3.50 per cubic yard for paving concrete and \$5.50 per cubic yard for all other concrete for the concrete represented by these tests and left in place. The Department may deduct the amount from any moneys due, or that may become due, the Contractor under the contract.

- If the results of either or both the Sand Equivalent and fine aggregate grading tests do not meet the requirements specified for "Contract Compliance," the concrete which is represented by the tests shall be removed. However, if the Engineer determines that the concrete is structurally adequate, the concrete may remain in place, and the Contractor shall pay to the State \$3.50 per cubic yard for paving concrete and \$5.50 per cubic yard for all other concrete for the concrete represented by these tests and left in place. The Department may deduct the amount from any moneys due, or that may become due, the Contractor under the contract.

- The 2 preceding paragraphs apply individually to the "Contract Compliance" requirements for coarse aggregate and fine aggregate. When both coarse aggregate and fine aggregate do not conform to the "Contract Compliance" requirements, both paragraphs shall apply. The payments specified in those paragraphs are in addition to any payments made in conformance with the provisions in Section 90-1.01, "Description."

- No single Cleanness Value, Sand Equivalent, or aggregate grading test shall represent more than 300 cubic yards of concrete or one day's pour, whichever is smaller.

- When the source of an aggregate is changed, the Contractor shall adjust the mix proportions and submit in writing to the Engineer a copy of the mix design before using the aggregates.

90-2.02A COARSE AGGREGATE

- Coarse aggregate shall consist of gravel, crushed gravel, crushed rock, reclaimed aggregate, crushed air-cooled iron blast furnace slag or combinations thereof. Crushed air-cooled blast furnace slag shall not be used in reinforced or prestressed concrete.

- Reclaimed aggregate is aggregate that has been recovered from plastic concrete by washing away the cementitious material. Reclaimed aggregate shall conform to all aggregate requirements.

- Coarse aggregate shall conform to the following quality requirements:

| Tests | California Test | Requirements |
|---|-----------------|--------------|
| Loss in Los Angeles Rattler (after 500 revolutions) | 211 | 45% max. |
| Cleanness Value | | |
| Operating Range | 227 | 75 min. |
| Contract Compliance | 227 | 71 min. |

- In lieu of the above Cleanness Value requirements, a Cleanness Value "Operating Range" limit of 71, minimum, and a Cleanness Value "Contract Compliance" limit of 68, minimum, will be used to determine the acceptability of the coarse aggregate if the Contractor furnishes a Certificate of Compliance, as provided in Section 6-1.07, "Certificates of Compliance," certifying that:

- Coarse aggregate sampled at the completion of processing at the aggregate production plant had a Cleanness Value of not less than 82 when tested in conformance with the requirements in California Test 227; and
- Prequalification tests performed in conformance with the requirements in California Test 549 indicated that the aggregate would develop a relative strength of not less than 95 percent and would have a relative shrinkage not greater than 105 percent, based on concrete.

90-2.02B FINE AGGREGATE

- Fine aggregate shall consist of natural sand, manufactured sand produced from larger aggregate or a combination thereof. Manufactured sand shall be well graded.
- Fine aggregate shall conform to the following quality requirements:

| Test | California Test | Requirements |
|--|-----------------|---------------------------|
| Organic Impurities | 213 | Satisfactory ^a |
| Mortar Strengths Relative to Ottawa Sand | 515 | 95%, min. |
| Sand Equivalent: | | |
| Operating Range | 217 | 75, min. |
| Contract Compliance | 217 | 71, min. |

a Fine aggregate developing a color darker than the reference standard color solution may be accepted if it is determined by the Engineer, from mortar strength tests, that a darker color is acceptable.

- In lieu of the above Sand Equivalent requirements, a Sand Equivalent "Operating Range" limit of 71, minimum, and a Sand Equivalent "Contract Compliance" limit of 68, minimum, will be used to determine the acceptability of the fine aggregate if the Contractor furnishes a Certificate of Compliance, as provided in Section 6-1.07, "Certificates of Compliance," certifying that:

- Fine aggregate sampled at the completion of processing at the aggregate production plant had a Sand Equivalent value of not less than 82 when tested by California Test 217; and
- Prequalification tests performed in conformance with California Test 549 indicated that the aggregate would develop a relative strength of not less than 95 percent and would have a relative shrinkage not greater than 105 percent, based on concrete.

90-2.03 WATER

- In conventionally reinforced concrete work, the water for curing, for washing aggregates, and for mixing shall be free from oil and shall not contain more than 1,000 parts per million of chlorides as Cl, when tested in conformance with California Test 422, nor more than 1,300 parts per million of sulfates as SO₄, when tested in conformance with California Test 417. In prestressed concrete work, the water for curing, for washing aggregates, and for mixing shall be free from oil and shall not contain more than 650 parts per million of chlorides as Cl, when tested in conformance with California Test 422, nor more than 1,300 parts per million of sulfates as SO₄, when tested in conformance with California Test 417. In no case shall the water contain an amount of impurities that will cause either: 1) a change in the setting time of cement of more than 25 percent when tested in conformance with the requirements in ASTM Designation: C 191 or ASTM Designation: C 266 or 2) a reduction in the compressive strength of mortar at 14 days of more than 5 percent, when tested in conformance with the requirements in ASTM Designation: C 109, when compared to the results obtained with distilled water or deionized water, tested in conformance with the requirements in ASTM Designation: C 109.

- In nonreinforced concrete work, the water for curing, for washing aggregates and for mixing shall be free from oil and shall not contain more than 2,000 parts per million of chlorides as Cl, when tested in conformance with California Test 422, or more than 1,500 parts per million of sulfates as SO₄, when tested in conformance with California Test 417.

- In addition to the above provisions, water for curing concrete shall not contain impurities in a sufficient amount to cause discoloration of the concrete or produce etching of the surface.

- Water reclaimed from mixer wash-out operations may be used in mixing concrete. The water shall not contain coloring agents or more than 300 parts per million of alkalis (Na₂O + 0.658 K₂O) as determined on the filtrate. The specific gravity of the water shall not exceed 1.03 and shall not vary more than ±0.010 during a day's operations.

90-2.04 ADMIXTURE MATERIALS

- Admixture materials shall conform to the requirements in the following ASTM Designations:

A. Chemical Admixtures—ASTM Designation: C 494.

B. Air-entraining Admixtures—ASTM Designation: C 260.

90-3 AGGREGATE GRADINGS

90-3.01 GENERAL

- Before beginning concrete work, the Contractor shall submit in writing to the Engineer the gradation of the primary aggregate nominal sizes that the Contractor proposes to furnish. If a primary coarse aggregate or the fine aggregate is separated into 2 or more sizes, the proposed gradation shall consist of the gradation for each individual size, and the proposed proportions of each individual size, combined mathematically to indicate one proposed gradation. The proposed gradation shall meet the grading requirements shown in the table in this section, and shall show the percentage passing each of the sieve sizes used in determining the end result.

- The Engineer may waive, in writing, the gradation requirements in this Section 90-3.01 and in Sections 90-3.02, "Coarse Aggregate Grading," 90-3.03, "Fine Aggregate Grading," and 90-3.04, "Combined Aggregate Gradings," if, in the Engineer's opinion, furnishing the gradation is not necessary for the type or amount of concrete work to be constructed.

- Gradations proposed by the Contractor shall be within the following percentage passing limits:

| Primary Aggregate Nominal Size | Sieve Size | Limits of Proposed Gradation |
|--------------------------------|------------|------------------------------|
| 1 1/2" x 3/4" | 1" | 19 - 41 |
| 1" x No. 4 | 3/4" | 52 - 85 |
| 1" x No. 4 | 3/8" | 15 - 38 |
| 1/2" x No. 4 | 3/8" | 40 - 78 |
| 3/8" x No. 8 | 3/8" | 50 - 85 |
| Fine Aggregate | No. 16 | 55 - 75 |
| Fine Aggregate | No. 30 | 34 - 46 |
| Fine Aggregate | No. 50 | 16 - 29 |

- Should the Contractor change the source of supply, the Contractor shall submit in writing to the Engineer the new gradations before their intended use.

90-3.02 COARSE AGGREGATE GRADING

- The grading requirements for coarse aggregates are shown in the following table for each size of coarse aggregate:

| Sieve Sizes | Percentage Passing Primary Aggregate Nominal Sizes | | | | | | | |
|-------------|--|---------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|
| | 1 1/2" x 3/4" | | 1" x No. 4 | | 1/2" x No. 4 | | 3/8" x No. 8 | |
| | Operating Range | Contract Compliance | Operating Range | Contract Compliance | Operating Range | Contract Compliance | Operating Range | Contract Compliance |
| 2" | 100 | 100 | — | — | — | — | — | — |
| 1 1/2" | 88 - 100 | 85 - 100 | 100 | 100 | — | — | — | — |
| 1" | X ±18 | X ±25 | 88 - 100 | 86 - 100 | — | — | — | — |
| 3/4" | 0 - 17 | 0 - 20 | X ±15 | X ±22 | 100 | 100 | — | — |
| 1/2" | — | — | — | — | 82 - 100 | 80 - 100 | 100 | 100 |
| 3/8" | 0 - 7 | 0 - 9 | X ±15 | X ±22 | X ±15 | X ±22 | X ±15 | X ±20 |
| No. 4 | — | — | 0 - 16 | 0 - 18 | 0 - 15 | 0 - 18 | 0 - 25 | 0 - 28 |
| No. 8 | — | — | 0 - 6 | 0 - 7 | 0 - 6 | 0 - 7 | 0 - 6 | 0 - 7 |

- In the above table, the symbol X is the gradation that the Contractor proposes to furnish for the specific sieve size as provided in Section 90-3.01, "General."

- Coarse aggregate for the 1 1/2 inch, maximum, combined aggregate grading as provided in Section 90-3.04, "Combined Aggregate Gradings," shall be furnished in 2 or more primary aggregate nominal sizes. Each primary aggregate nominal size may be separated into 2 sizes and stored separately, provided that the combined material conforms to the grading requirements for that particular primary aggregate nominal size.

- When the one inch, maximum, combined aggregate grading as provided in Section 90-3.04, "Combined Aggregate Gradings," is to be used, the coarse aggregate may be separated into 2 sizes and stored separately, provided that the combined material shall conform to the grading requirements for the 1" x No. 4 primary aggregate nominal size.

90-3.03 FINE AGGREGATE GRADING

- Fine aggregate shall be graded within the following limits:

| Sieve Sizes | Percentage Passing | |
|-------------|--------------------|---------------------|
| | Operating Range | Contract Compliance |
| 3/8" | 100 | 100 |
| No. 4 | 95 - 100 | 93 - 100 |
| No. 8 | 65 - 95 | 61 - 99 |
| No. 16 | X ±10 | X ±13 |
| No. 30 | X ±9 | X ±12 |
| No. 50 | X ±6 | X ±9 |
| No. 100 | 2 - 12 | 1 - 15 |
| No. 200 | 0 - 8 | 0 - 10 |

- In the above table, the symbol X is the gradation that the Contractor proposes to furnish for the specific sieve size as provided in Section 90-3.01, "General."
- In addition to the above required grading analysis, the distribution of the fine aggregate sizes shall be such that the difference between the total percentage passing the No. 16 sieve and the total percentage passing the No. 30 sieve shall be between 10 and 40, and the difference between the percentage passing the No. 30 and No. 50 sieves shall be between 10 and 40.
- Fine aggregate may be separated into 2 or more sizes and stored separately, provided that the combined material conforms to the grading requirements specified in this Section 90-3.03.

90-3.04 COMBINED AGGREGATE GRADINGS

- Combined aggregate grading limits shall be used only for the design of concrete mixes. Concrete mixes shall be designed so that aggregates are combined in proportions that shall produce a mixture within the grading limits for combined aggregates as specified herein.
- The combined aggregate grading, except when otherwise specified in these specifications or the special provisions, shall be either the 1 1/2 inch, maximum grading, or the 1 inch, maximum grading, at the option of the Contractor.

Grading Limits of Combined Aggregates

| Sieve Sizes | Percentage Passing | | | |
|-------------|--------------------|----------|-----------|-----------|
| | 1 1/2" Max. | 1" Max. | 1/2" Max. | 3/8" Max. |
| 2" | 100 | — | — | — |
| 1 1/2" | 90 - 100 | 100 | — | — |
| 1" | 50 - 86 | 90 - 100 | — | — |
| 3/4" | 45 - 75 | 55 - 100 | 100 | — |
| 1/2" | — | — | 90 - 100 | 100 |
| 3/8" | 38 - 55 | 45 - 75 | 55 - 86 | 50 - 100 |
| No. 4 | 30 - 45 | 35 - 60 | 45 - 63 | 45 - 63 |
| No. 8 | 23 - 38 | 27 - 45 | 35 - 49 | 35 - 49 |
| No. 16 | 17 - 33 | 20 - 35 | 25 - 37 | 25 - 37 |
| No. 30 | 10 - 22 | 12 - 25 | 15 - 25 | 15 - 25 |
| No. 50 | 4 - 10 | 5 - 15 | 5 - 15 | 5 - 15 |
| No. 100 | 1 - 6 | 1 - 8 | 1 - 8 | 1 - 8 |
| No. 200 | 0 - 3 | 0 - 4 | 0 - 4 | 0 - 4 |

- Changes from one grading to another shall not be made during the progress of the work unless permitted by the Engineer.

90-4 ADMIXTURES

90-4.01 GENERAL

- Admixtures used in portland cement concrete shall conform to and be used in conformance with the provisions in this Section 90-4 and the special provisions. Admixtures

shall be used when specified or ordered by the Engineer and may be used at the Contractor's option as provided herein.

- Chemical admixtures and air-entraining admixtures containing chlorides as Cl in excess of one percent by weight of admixture, as determined by California Test 415, shall not be used.
- Admixtures shall be uniform in properties throughout their use in the work. Should it be found that an admixture as furnished is not uniform in properties, its use shall be discontinued.
- If more than one admixture is used, the admixtures shall be compatible with each other so that the desirable effects of all admixtures used will be realized.
- Chemical admixtures shall be used in conformance with the manufacturer's written recommendations.

90-4.02 MATERIALS

- Admixture materials shall conform to the provisions in Section 90–2.04, "Admixture Materials."

90-4.03 ADMIXTURE APPROVAL

- No admixture brand shall be used in the work unless it is on the Department's current list of approved brands for the type of admixture involved.
- Admixture brands will be considered for addition to the approved list if the manufacturer of the admixture submits to the Transportation Laboratory a sample of the admixture accompanied by certified test results demonstrating that the admixture complies with the requirements in the appropriate ASTM Designation and these specifications. The sample shall be sufficient to permit performance of all required tests. Approval of admixture brands will be dependent upon a determination as to compliance with the requirements, based on the certified test results submitted, together with tests the Department may elect to perform.
- If the Contractor proposes to use an admixture of a brand and type on the current list of approved admixture brands, the Contractor shall furnish a Certificate of Compliance from the manufacturer, as provided in Section 6-1.07, "Certificates of Compliance," certifying that the admixture furnished is the same as that previously approved. If a previously approved admixture is not accompanied by a Certificate of Compliance, the admixture shall not be used in the work until the Engineer has had sufficient time to make the appropriate tests and has approved the admixture for use. The Engineer may take samples for testing at any time, whether or not the admixture has been accompanied by a Certificate of Compliance.

90-4.04 REQUIRED USE OF CHEMICAL ADMIXTURES

- If the use of a chemical admixture is specified, the admixture shall be used at the dosage specified, except that if no dosage is specified, the admixture shall be used at the dosage normally recommended by the manufacturer of the admixture.

90-4.05 OPTIONAL USE OF CHEMICAL ADMIXTURES

- The Contractor may use Type A or F, water-reducing; Type B, retarding; or Type D or G, water-reducing and retarding admixtures as described in ASTM Designation: C 494 to conserve cementitious material or to facilitate any concrete construction application subject to the following conditions:

- A. If a water-reducing admixture or a water-reducing and retarding admixture is used, the cementitious material content specified or ordered may be reduced by a maximum of

5 percent by weight, except that the resultant cementitious material content shall be not less than 505 pounds per cubic yard; and

B. When a reduction in cementitious material content is made, the dosage of admixture used shall be the dosage used in determining approval of the admixture.

- Unless otherwise specified, a Type C accelerating chemical admixture conforming to the requirements in ASTM Designation: C 494, may be used in portland cement concrete. Inclusion in the mix design submitted for approval will not be required provided that the admixture is added to counteract changing conditions that contribute to delayed setting of the portland cement concrete, and the use or change in dosage of the admixture is approved in writing by the Engineer.

90-4.06 REQUIRED USE OF AIR-ENTRAINING ADMIXTURES

- When air-entrainment is specified or ordered by the Engineer, the air-entraining admixture shall be used in amounts to produce a concrete having the specified air content as determined by California Test 504.

90-4.07 OPTIONAL USE OF AIR-ENTRAINING ADMIXTURES

- When air-entrainment has not been specified or ordered by the Engineer, the Contractor will be permitted to use an air-entraining admixture to facilitate the use of any construction procedure or equipment provided that the average air content, as determined by California Test 504, of 3 successive tests does not exceed 4 percent, and no single test value exceeds 5.5 percent. If the Contractor elects to use an air-entraining admixture in concrete for pavement, the Contractor shall so indicate at the time the Contractor designates the source of aggregate.

90-4.08 BLANK

90-4.09 BLANK

90-4.10 PROPORTIONING AND DISPENSING LIQUID ADMIXTURES

- Chemical admixtures and air-entraining admixtures shall be dispensed in liquid form. Dispensers for liquid admixtures shall have sufficient capacity to measure at one time the prescribed quantity required for each batch of concrete. Each dispenser shall include a graduated measuring unit into which liquid admixtures are measured to within ± 5 percent of the prescribed quantity for each batch. Dispensers shall be located and maintained so that the graduations can be accurately read from the point at which proportioning operations are controlled to permit a visual check of batching accuracy prior to discharge. Each measuring unit shall be clearly marked for the type and quantity of admixture.

- Each liquid admixture dispensing system shall be equipped with a sampling device consisting of a valve located in a safe and readily accessible position such that a sample of the admixture may be withdrawn slowly by the Engineer.

- If more than one liquid admixture is used in the concrete mix, each liquid admixture shall have a separate measuring unit and shall be dispensed by injecting equipment located in such a manner that the admixtures are not mixed at high concentrations and do not interfere with the effectiveness of each other. When air-entraining admixtures are used in conjunction with other liquid admixtures, the air-entraining admixture shall be the first to be incorporated into the mix, unless it is demonstrated that a different sequence improves performance.

- When automatic proportioning devices are required for concrete pavement, dispensers for liquid admixtures shall operate automatically with the batching control equipment. The dispensers shall be equipped with an automatic warning system in good operating condition that will provide a visible or audible signal at the point at which proportioning operations are controlled when the quantity of admixture measured for each batch of concrete varies from the preselected dosage by more than 5 percent, or when the entire contents of the measuring unit are not emptied from the dispenser into each batch of concrete.

- Unless liquid admixtures are added to premeasured water for the batch, their discharge into the batch shall be arranged to flow into the stream of water so that the admixtures are well dispersed throughout the batch, except that air-entraining admixtures may be dispensed directly into moist sand in the batching bins provided that adequate control of the air content of the concrete can be maintained.

- Liquid admixtures requiring dosages greater than one-half gallon per cubic yard shall be considered to be water when determining the total amount of free water as specified in Section 90-6.06, "Amount of Water and Penetration."

90-4.11 BLANK

90-5 PROPORTIONING

90-5.01 STORAGE OF AGGREGATES

- Aggregates shall be stored or stockpiled in such a manner that separation of coarse and fine particles of each size shall be avoided and the various sizes shall not become intermixed before proportioning.

- Aggregates shall be stored or stockpiled and handled in a manner that prevent contamination by foreign materials. In addition, storage of aggregates at batching or mixing facilities that are erected subsequent to the award of the contract and that furnish concrete to the project shall conform to the following:

A. Intermingling of the different sizes of aggregates shall be positively prevented. The Contractor shall take the necessary measures to prevent intermingling. The preventive measures may include, but are not necessarily limited to, physical separation of stockpiles or construction of bulkheads of adequate length and height; and

B. Contamination of aggregates by contact with the ground shall be positively prevented. The Contractor shall take the necessary measures to prevent contamination. The preventive measures shall include, but are not necessarily limited to, placing aggregates on wooden platforms or on hardened surfaces consisting of portland cement concrete, asphalt concrete, or cement treated material.

- In placing aggregates in storage or in moving the aggregates from storage to the weigh hopper of the batching plant, any method that may cause segregation, degradation, or the combining of materials of different gradings that will result in any size of aggregate at the weigh hopper failing to meet the grading requirements, shall be discontinued. Any method of handling aggregates that results in excessive breakage of particles shall be discontinued. The use of suitable devices to reduce impact of falling aggregates may be required by the Engineer.

90-5.02 PROPORTIONING DEVICES

- Weighing, measuring, or metering devices used for proportioning materials shall conform to the requirements in Section 9-1.01, "Measurement of Quantities," and this Section 90-5.02. In

addition, automatic weighing systems shall comply with the requirements for automatic proportioning devices in Section 90-5.03A, "Proportioning for Pavement." Automatic devices shall be automatic to the extent that the only manual operation required for proportioning the aggregates, cement, and supplementary cementitious material for one batch of concrete is a single operation of a switch or starter.

- Proportioning devices shall be tested as frequently as the Engineer may deem necessary to ensure their accuracy.

- Weighing equipment shall be insulated against vibration or movement of other operating equipment in the plant. When the plant is in operation, the weight of each batch of material shall not vary from the weight designated by the Engineer by more than the tolerances specified herein.

- Equipment for cumulative weighing of aggregate shall have a zero tolerance of ± 0.5 percent of the designated total batch weight of the aggregate. For systems with individual weigh hoppers for the various sizes of aggregate, the zero tolerance shall be ± 0.5 percent of the individual batch weight designated for each size of aggregate. Equipment for cumulative weighing of cement and supplementary cementitious material shall have a zero tolerance of ± 0.5 percent of the designated total batch weight of the cement and supplementary cementitious material. Equipment for weighing cement or supplementary cementitious material separately shall have a zero tolerance of ± 0.5 percent of their designated individual batch weights. Equipment for measuring water shall have a zero tolerance of ± 0.5 percent of its designated weight or volume.

- The weight indicated for any batch of material shall not vary from the preselected scale setting by more than the following:

- A. Aggregate weighed cumulatively shall be within 1.0 percent of the designated total batch weight of the aggregate. Aggregates weighed individually shall be within 1.5 percent of their respective designated batch weights; and
- B. Cement shall be 99 to 102 percent of its designated batch weight. When weighed individually, supplementary cementitious material shall be 99 to 102 percent of its designated batch weight. When supplementary cementitious material and cement are permitted to be weighed cumulatively, cement shall be weighed first to 99 to 102 percent of its designated batch weight, and the total for cement and supplementary cementitious material shall be 99 to 102 percent of the sum of their designated batch weights; and
- C. Water shall be within 1.5 percent of its designated weight or volume.

- Each scale graduation shall be approximately 0.001 of the total capacity of the scale. The capacity of scales for weighing cement, supplementary cementitious material, or cement plus supplementary cementitious material and aggregates shall not exceed that of commercially available scales having single graduations indicating a weight not exceeding the maximum permissible weight variation above, except that no scale shall be required having a capacity of less than 1,000 pounds, with one pound graduations.

90-5.03 PROPORTIONING

- Proportioning shall consist of dividing the aggregates into the specified sizes, each stored in a separate bin, and combining them with cementitious material and water as provided in these specifications. Aggregates shall be proportioned by weight.

- At the time of batching, aggregates shall have been dried or drained sufficiently to result in a stable moisture content such that no visible separation of water from aggregate will take place during transportation from the proportioning plant to the point of mixing. In no event shall

the free moisture content of the fine aggregate at the time of batching exceed 8 percent of its saturated, surface-dry weight.

- Should separate supplies of aggregate material of the same size group, but of different moisture content or specific gravity or surface characteristics affecting workability, be available at the proportioning plant, withdrawals shall be made from one supply exclusively and the materials therein completely exhausted before starting upon another.

- Bulk Type IP (MS) cement shall be weighed in an individual hopper and shall be kept separate from the aggregates until the ingredients are released for discharge into the mixer.

- Bulk cement and supplementary cementitious material may be weighed in separate, individual weigh hoppers or may be weighed in the same weigh hopper and shall be kept separate from the aggregates until the ingredients are released for discharge into the mixer. If the cement and supplementary cementitious material are weighed cumulatively, the cement shall be weighed first.

- If cement and supplementary cementitious material are weighed in separate weigh hoppers, the weigh systems for the proportioning of the aggregate, the cement, and the supplementary cementitious material shall be individual and distinct from all other weigh systems. Each weigh system shall be equipped with a hopper, a lever system, and an indicator to constitute an individual and independent material-weighing device. The cement and the supplementary cementitious material shall be discharged into the mixer simultaneously with the aggregate.

- The scales and weigh hoppers for bulk weighing cement, supplementary cementitious material, or cement plus supplementary cementitious material shall be separate and distinct from the aggregate weighing equipment.

- For batches of one cubic yard or more, the batching equipment shall conform to one of the following combinations:

- A. Separate boxes and separate scale and indicator for weighing each size of aggregate.

- B. Single box and scale indicator for all aggregates.

- C. Single box or separate boxes and automatic weighing mechanism for all aggregates.

- In order to check the accuracy of batch weights, the gross weight and tare weight of batch trucks, truck mixers, truck agitators, and non-agitating hauling equipment shall be determined when ordered by the Engineer. The equipment shall be weighed on scales designated by the Engineer.

90-5.03A PROPORTIONING FOR PAVEMENT

- Aggregates and bulk supplementary cementitious material for use in pavement shall be proportioned by weight by means of automatic proportioning devices of approved type conforming to these specifications.

- The Contractor shall install and maintain in operating condition an electronically actuated moisture meter that will indicate, on a readily visible scale, changes in the moisture content of the fine aggregate as it is batched within a sensitivity of 0.5 percent by weight of the fine aggregate.

- The batching of cement, supplementary cementitious material, or cement plus supplementary cementitious material and aggregate shall be interlocked so that a new batch cannot be started until all weigh hoppers are empty, the proportioning devices are within zero tolerance, and the discharge gates are closed. The interlock shall permit no part of the batch to be discharged until all aggregate hoppers and the cement and supplementary cementitious material hoppers or the cement plus supplementary cementitious material hopper are charged

with weights that are within the tolerances specified in Section 90-5.02, "Proportioning Devices."

- If interlocks are required for cement and supplementary cementitious material charging mechanisms and cement and supplementary cementitious material are weighed cumulatively, their charging mechanisms shall be interlocked to prevent the introduction of mineral admixture until the weight of cement in the cement weigh hopper is within the tolerances specified in Section 90-5.02, "Proportioning Devices."

- If concrete is completely mixed in stationary paving mixers, the supplementary cementitious materials shall be weighed in a separate weigh hopper and the supplementary cementitious material and cement shall be introduced simultaneously into the mixer proportionately with the aggregate. If the Contractor provides certification that the stationary mixer is capable of mixing the cement, supplementary cementitious material, aggregates, and water uniformly before discharge, weighing the supplementary cementitious material cumulatively with the cement is permitted. Certification shall contain the following:

- A. Test results for 2 compressive strength test cylinders of concrete taken within the first one-third and 2 compressive strength test cylinders of concrete taken within the last one-third of the concrete discharged from a single batch from the stationary paving mixer. Strength tests and cylinder preparation will be in conformance with the provisions of Section 90-9, "Compressive Strength";
- B. Calculations demonstrating that the difference in the averages of 2 compressive strengths taken in the first one-third is no greater than 7.5 percent different than the averages of 2 compressive strengths taken in the last one-third of the concrete discharged from a single batch from the stationary paving mixer. Strength tests and cylinder preparation will be in conformance with the provisions of Section 90-9, "Compressive Strength;" and
- C. The mixer rotation speed and time of mixing before discharge that are required to produce a mix that meets the requirements above.

- The discharge gate on the cement and supplementary cementitious material hoppers or the cement plus supplementary cementitious material hopper shall be designed to permit regulating the flow of cement, supplementary cementitious material, or cement plus supplementary cementitious material into the aggregate as directed by the Engineer.

- If separate weigh boxes are used for each size of aggregate, the discharge gates shall permit regulating the flow of each size of aggregate as directed by the Engineer.

- Material discharged from the several bins shall be controlled by gates or by mechanical conveyors. The means of withdrawal from the several bins, and of discharge from the weigh box, shall be interlocked so that not more than one bin can discharge at a time, and so that the weigh box cannot be tripped until the required quantity from each of the several bins has been deposited therein. Should a separate weigh box be used for each size of aggregate, all may be operated and discharged simultaneously.

- If the discharge from the several bins is controlled by gates, each gate shall be actuated automatically so that the required mass is discharged into the weigh box, after which the gate shall automatically close and lock.

- The automatic weighing system shall be designed so that all proportions required may be set on the weighing controller at the same time.

90-6 MIXING AND TRANSPORTING

90-6.01 GENERAL

- Concrete shall be mixed in mechanically operated mixers, except that when permitted by the Engineer, batches not exceeding 1/3 cubic yard may be mixed by hand methods in conformance with the provisions in Section 90-6.05, "Hand-Mixing."
- Equipment having components made of aluminum or magnesium alloys that would have contact with plastic concrete during mixing, transporting, or pumping of portland cement concrete shall not be used.
- Concrete shall be homogeneous and thoroughly mixed, and there shall be no lumps or evidence of undispersed cementitious material.
- Uniformity of concrete mixtures will be determined by differences in penetration as determined by California Test 533, or slump as determined by ASTM Designation: C 143, and by variations in the proportion of coarse aggregate as determined by California Test 529.
- When the mix design specifies a penetration value, the difference in penetration, determined by comparing penetration tests on 2 samples of mixed concrete from the same batch or truck mixer load, shall not exceed 1/2-inch. When the mix design specifies a slump value, the difference in slump, determined by comparing slump tests on 2 samples of mixed concrete from the same batch or truck mixer load, shall not exceed the values given in the table below. Variation in the proportion of coarse aggregate will be determined by comparing the results of tests of 2 samples of mixed concrete from the same batch or truck mixer load and the difference between the 2 results shall not exceed 170 pounds per cubic yard of concrete.

| Average Slump | Maximum Permissible Difference |
|-----------------------|--------------------------------|
| Less than 4" | 1" |
| 4" to 6" | 1 1/2" |
| Greater than 6" to 9" | 2" |

- The Contractor shall furnish samples of the freshly mixed concrete and provide satisfactory facilities for obtaining the samples.

90-6.02 MACHINE MIXING

- Concrete mixers may be of the revolving drum or the revolving blade type, and the mixing drum or blades shall be operated uniformly at the mixing speed recommended by the manufacturer. Mixers and agitators that have an accumulation of hard concrete or mortar shall not be used.
- The temperature of mixed concrete, immediately before placing, shall be not less than 50° F or more than 90° F. Aggregates and water shall be heated or cooled as necessary to produce concrete within these temperature limits. Neither aggregates nor mixing water shall be heated to exceed 150° F. If ice is used to cool the concrete, discharge of the mixer will not be permitted until all ice is melted.
- The batch shall be so charged into the mixer that some water will enter in advance of cementitious materials and aggregates. All water shall be in the drum by the end of the first one-fourth of the specified mixing time.
- Cementitious materials shall be batched and charged into the mixer by means that will not result either in loss of cementitious materials due to the effect of wind, in accumulation of cementitious materials on surfaces of conveyors or hoppers, or in other conditions that reduce or vary the required quantity of cementitious material in the concrete mixture.

- Paving and stationary mixers shall be operated with an automatic timing device. The timing device and discharge mechanism shall be interlocked so that during normal operation no part of the batch will be discharged until the specified mixing time has elapsed.
- The total elapsed time between the intermingling of damp aggregates and all cementitious materials and the start of mixing shall not exceed 30 minutes.
- The size of batch shall not exceed the manufacturer's guaranteed capacity.
- When producing concrete for pavement or base, suitable batch counters shall be installed and maintained in good operating condition at job site batching plants and stationary mixers. The batch counters shall indicate the exact number of batches proportioned and mixed.
- Concrete shall be mixed and delivered to the job site by means of one of the following combinations of operations:

- A. Mixed completely in a stationary mixer and the mixed concrete transported to the point of delivery in truck agitators or in nonagitating hauling equipment (central-mixed concrete).
- B. Mixed partially in a stationary mixer, and the mixing completed in a truck mixer (shrink-mixed concrete).
- C. Mixed completely in a truck mixer (transit-mixed concrete).
- D. Mixed completely in a paving mixer.

- Agitators may be truck mixers operating at agitating speed or truck agitators. Each mixer and agitator shall have attached thereto in a prominent place a metal plate or plates on which is plainly marked the various uses for which the equipment is designed, the manufacturer's guaranteed capacity of the drum or container in terms of the volume of mixed concrete and the speed of rotation of the mixing drum or blades.
- Truck mixers shall be equipped with electrically or mechanically actuated revolution counters by which the number of revolutions of the drum or blades may readily be verified.
- When shrink-mixed concrete is furnished, concrete that has been partially mixed at a central plant shall be transferred to a truck mixer and all requirements for transit-mixed concrete shall apply. No credit in the number of revolutions at mixing speed will be allowed for partial mixing in a central plant.

90-6.03 TRANSPORTING MIXED CONCRETE

- Mixed concrete may be transported to the delivery point in truck agitators or truck mixers operating at the speed designated by the manufacturer of the equipment as agitating speed, or in non-agitating hauling equipment, provided the consistency and workability of the mixed concrete upon discharge at the delivery point is suitable for adequate placement and consolidation in place, and provided the mixed concrete after hauling to the delivery point conforms to the provisions in Section 90-6.01, "General."
- Truck agitators shall be loaded not to exceed the manufacturer's guaranteed capacity and shall maintain the mixed concrete in a thoroughly mixed and uniform mass during hauling.
- Bodies of nonagitating hauling equipment shall be constructed so that leakage of the concrete mix, or any part thereof, will not occur at any time.
- Concrete hauled in open-top vehicles shall be protected during hauling against rain or against exposure to the sun for more than 20 minutes when the ambient temperature exceeds 75° F.
- No additional mixing water shall be incorporated into the concrete during hauling or after arrival at the delivery point, unless authorized by the Engineer. If the Engineer authorizes additional water to be incorporated into the concrete, the drum shall be revolved not less than 30 revolutions at mixing speed after the water is added and before discharge is commenced.

- The rate of discharge of mixed concrete from truck mixer-agitators shall be controlled by the speed of rotation of the drum in the discharge direction with the discharge gate fully open.
- If a truck mixer or agitator is used for transporting concrete to the delivery point, discharge shall be completed within 1.5 hours or before 250 revolutions of the drum or blades, whichever occurs first, after the introduction of the cement to the aggregates. Under conditions contributing to quick stiffening of the concrete, or if the temperature of the concrete is 85° F or above, the time allowed may be less than 1.5 hours. If an admixture is used to retard the set time, the temperature of the concrete shall not exceed 85° F, the time limit shall be 2 hours, and the revolution limitation shall be 300.
- If nonagitating hauling equipment is used for transporting concrete to the delivery point, discharge shall be completed within one hour after the addition of the cement to the aggregates. Under conditions contributing to quick stiffening of the concrete, or when the temperature of the concrete is 85° F or above, the time between the introduction of cement to the aggregates and discharge shall not exceed 45 minutes.
- Each load of concrete delivered at the job site shall be accompanied by a weighmaster certificate showing the mix identification number, nonrepeating load number, date and time at which the materials were batched, the total amount of water added to the load, and for transit-mixed concrete, the reading of the revolution counter at the time the truck mixer is charged with cement. This weighmaster certificate shall also show the actual scale weights (pounds) for the ingredients batched. Theoretical or target batch weights shall not be used as a substitute for actual scale weights.
- Weighmaster certificates shall be provided in printed form, or if approved by the Engineer, the data may be submitted in electronic media. Electronic media shall be presented in a tab-delimited format on a 3 1/2-inch diskette with a capacity of at least 1.4 megabytes. Captured data, for the ingredients represented by each batch shall be "line feed, carriage return" (LFCR) and "one line, separate record" with allowances for sufficient fields to satisfy the amount of data required by these specifications.
- The Contractor may furnish a weighmaster certificate accompanied by a separate certificate that lists the actual batch weights or measurements for a load of concrete provided that both certificates are imprinted with the same nonrepeating load number that is unique to the contract and delivered to the jobsite with the load.
- Weighmaster certificates furnished by the Contractor shall conform to the provisions in Section 9-1.01, "Measurement of Quantities."

90-6.04 TIME OR AMOUNT OF MIXING

- Mixing of concrete in paving or stationary mixers shall continue for the required mixing time after all ingredients, except water and admixture, if added with the water, are in the mixing compartment of the mixer before any part of the batch is released. Transfer time in multiple drum mixers shall not be counted as part of the required mixing time.
- The required mixing time, in paving or stationary mixers, of concrete used for concrete structures, except minor structures, shall be not less than 90 seconds or more than 5 minutes, except that when directed by the Engineer in writing, the requirements of the following paragraph shall apply.
 - The required mixing time, in paving or stationary mixers, except as provided in the preceding paragraph, shall be not less than 50 seconds or more than 5 minutes.
 - The minimum required revolutions at the mixing speed for transit-mixed concrete shall not be less than that recommended by the mixer manufacturer, but in no case shall the number of revolutions be less than that required to consistently produce concrete conforming to the provisions for uniformity in Section 90-6.01, "General."

- When a high range water-reducing admixture is added to the concrete at the job site, the total number of revolutions shall not exceed 300.

90-6.05 HAND-MIXING

- Hand-mixed concrete shall be made in batches of not more than 1/3 cubic yard and shall be mixed on a watertight, level platform. The proper amount of coarse aggregate shall be measured in measuring boxes and spread on the platform and the fine aggregate shall be spread on this layer, the 2 layers being not more than one foot in total depth. On this mixture shall be spread the dry cementitious materials and the whole mass turned no fewer than 2 times dry; then sufficient clean water shall be added, evenly distributed, and the whole mass again turned no fewer than 3 times, not including placing in the carriers or forms.

90-6.06 AMOUNT OF WATER AND PENETRATION

- The amount of water used in concrete mixes shall be regulated so that the penetration of the concrete as determined by California Test 533 or the slump of the concrete as determined by ASTM Designation: C 143 is within the nominal values shown in the following table. When the penetration or slump of the concrete is found to exceed the nominal values listed, the mixture of subsequent batches shall be adjusted to reduce the penetration or slump to a value within the nominal range shown. Batches of concrete with a penetration or slump exceeding the maximum values listed shall not be used in the work. If Type F or Type G chemical admixtures are added to the mix, the penetration requirements shall not apply and the slump shall not exceed 9 inches after the chemical admixtures are added.

| Type of Work | Nominal | | Maximum | |
|------------------------------------|----------------------|----------------|----------------------|----------------|
| | Penetration (inches) | Slump (inches) | Penetration (inches) | Slump (inches) |
| Concrete Pavement | 0 - 1 | — | 1 1/2 | — |
| Non-reinforced concrete facilities | 0 - 1 1/2 | — | 2 | — |
| Reinforced concrete structures | | | | |
| Sections over 12 inches thick | 0 - 1 1/2 | — | 2 1/2 | — |
| Sections 12 inches thick or less | 0 - 2 | — | 3 | — |
| Concrete placed under water | — | 6 - 8 | — | 9 |
| Cast-in-place concrete piles | 2 1/2 - 3 1/2 | 5 - 7 | 4 | 8 |

- The amount of free water used in concrete shall not exceed 310 pounds per cubic yard, plus 20 pounds for each required 100 pounds of cementitious material in excess of 550 pounds per cubic yard.
 - The term free water is defined as the total water in the mixture minus the water absorbed by the aggregates in reaching a saturated surface-dry condition.
 - If there are adverse or difficult conditions that affect the placing of concrete, the above specified penetration and free water content limitations may be exceeded providing the Contractor is granted permission by the Engineer in writing to increase the cementitious material content per cubic yard of concrete. The increase in water and cementitious material shall be at a ratio not to exceed 30 pounds of water per added 100 pounds of cementitious material per cubic yard. Full compensation for additional cementitious material and water added under these conditions shall be considered as included in the contract price paid for the concrete work involved and no additional compensation will be allowed therefor.
 - The equipment for supplying water to the mixer shall be constructed and arranged so that the amount of water added can be measured accurately. Any method of discharging water into the mixer for a batch shall be accurate within 1.5 percent of the quantity of water required to be

added to the mix for any position of the mixer. Tanks used to measure water shall be designed so that water cannot enter while water is being discharged into the mixer and discharge into the mixer shall be made rapidly in one operation without dribbling. All equipment shall be arranged so as to permit checking the amount of water delivered by discharging into measured containers.

90-7 CURING CONCRETE

90-7.01 METHODS OF CURING

- Newly placed concrete shall be cured by the methods specified in this Section 90-7.01 and the special provisions.

90-7.01A WATER METHOD

- The concrete shall be kept continuously wet by the application of water for a minimum curing period of 7 days after the concrete has been placed.

- Cotton mats, rugs, carpets, or earth or sand blankets may be used as a curing medium to retain the moisture during the curing period.

- If a curing medium consisting of cotton mats, rugs, carpets, polyethylene sheeting, polyethylene sheeting on burlap, or earth or sand blankets is to be used to retain the moisture, the entire surface of the concrete shall be kept damp by applying water with a nozzle that so atomizes the flow that a mist and not a spray is formed, until the surface of the concrete is covered with the curing medium. The moisture from the nozzle shall not be applied under pressure directly upon the concrete and shall not be allowed to accumulate on the concrete in a quantity sufficient to cause a flow or wash the surface. At the expiration of the curing period, the concrete surfaces shall be cleared of all curing media.

- At the option of the Contractor, a curing medium consisting of white opaque polyethylene sheeting extruded onto burlap may be used to cure concrete structures. The polyethylene sheeting shall have a minimum thickness of 4-mil, and shall be extruded onto 10-ounce burlap.

- At the option of the Contractor, a curing medium consisting of polyethylene sheeting may be used to cure concrete columns. The polyethylene sheeting shall have a minimum thickness of 10-mil achieved in a single layer of material.

- If the Contractor chooses to use polyethylene sheeting or polyethylene sheeting on burlap as a curing medium, these media and any joints therein shall be secured as necessary to provide moisture retention and shall be within 3 inches of the concrete at all points along the surface being cured. When these media are used, the temperature of the concrete shall be monitored during curing. If the temperature of the concrete cannot be maintained below 140° F, use of these curing media shall be disallowed.

- When concrete bridge decks and flat slabs are to be cured without the use of a curing medium, the entire surface of the bridge deck or slab shall be kept damp by the application of water with an atomizing nozzle as specified above, until the concrete has set, after which the entire surface of the concrete shall be sprinkled continuously with water for a period of not less than 7 days.

90-7.01B CURING COMPOUND METHOD

- Surfaces of the concrete that are exposed to the air shall be sprayed uniformly with a curing compound.

- Curing compounds to be used shall be as follows:

1. Pigmented curing compound conforming to the requirements in ASTM Designation: C 309, Type 2, Class B, except the resin type shall be poly-alpha-methylstyrene.
2. Pigmented curing compound conforming to the requirements in ASTM Designation: C 309, Type 2, Class B.
3. Pigmented curing compound conforming to the requirements in ASTM Designation: C 309, Type 2, Class A.
4. Nonpigmented curing compound conforming to the requirements in ASTM Designation: C 309, Type 1, Class B.
5. Nonpigmented curing compound conforming to the requirements in ASTM Designation: C 309, Type 1, Class A.
6. Nonpigmented curing compound with fugitive dye conforming to the requirements in ASTM Designation: C 309, Type 1-D, Class A.

- The infrared scan for the dried vehicle from curing compound (1) shall match the infrared scan on file at the Transportation Laboratory.

- The loss of water for each type of curing compound, when tested in conformance with the requirements in California Test 534, shall not be more than 0.28-pounds per square yard in 24 hours.

- The curing compound to be used will be specified elsewhere in these specifications or in the special provisions.

- If the use of curing compound is required or permitted elsewhere in these specifications or in the special provisions and no specific kind is specified, any of the curing compounds listed above may be used.

- Curing compound shall be applied at a nominal rate of one gallon per 150 square feet, unless otherwise specified.

- At any point, the application rate shall be within ± 50 square feet per gallon of the nominal rate specified, and the average application rate shall be within ± 25 square feet per gallon of the nominal rate specified when tested in conformance with the requirements in California Test 535. Runs, sags, thin areas, skips, or holidays in the applied curing compound shall be evidence that the application is not satisfactory.

- Curing compounds shall be applied using power operated spray equipment. The power operated spraying equipment shall be equipped with an operational pressure gage and a means of controlling the pressure. Hand spraying of small and irregular areas that are not reasonably accessible to mechanical spraying equipment, in the opinion of the Engineer, may be permitted.

- The curing compound shall be applied to the concrete following the surface finishing operation, immediately before the moisture sheen disappears from the surface, but before any drying shrinkage or craze cracks begin to appear. In the event of any drying or cracking of the surface, application of water with an atomizing nozzle as specified in Section 90-7.01A, "Water Method," shall be started immediately and shall be continued until application of the compound is resumed or started; however, the compound shall not be applied over any resulting freestanding water. Should the film of compound be damaged from any cause before the expiration of 7 days after the concrete is placed in the case of structures and 72 hours in the case of pavement, the damaged portion shall be repaired immediately with additional compound.

- At the time of use, compounds containing pigments shall be in a thoroughly mixed condition with the pigment uniformly dispersed throughout the vehicle. A paddle shall be used to loosen all settled pigment from the bottom of the container, and a power driven agitator shall be used to disperse the pigment uniformly throughout the vehicle.

- Agitation shall not introduce air or other foreign substance into the curing compound.

- The manufacturer shall include in the curing compound the necessary additives for control of sagging, pigment settling, leveling, de-emulsification, or other requisite qualities of a satisfactory working material. Pigmented curing compounds shall be manufactured so that the pigment does not settle badly, does not cake or thicken in the container, and does not become granular or curdled. Settlement of pigment shall be a thoroughly wetted, soft, mushy mass permitting the complete and easy vertical penetration of a paddle. Settled pigment shall be easily redispersed, with minimum resistance to the sideways manual motion of the paddle across the bottom of the container, to form a smooth uniform product of the proper consistency.

- Curing compounds shall remain sprayable at temperatures above 40° F and shall not be diluted or altered after manufacture.

- The curing compound shall be packaged in clean 274-gallon totes, 55-gallon barrels or 5-gallon pails shall be supplied from a suitable storage tank located at the jobsite. The containers shall comply with "Title 49, Code of Federal Regulations, Hazardous Materials Regulations." The 274-gallon totes and the 55-gallon barrels shall have removable lids and airtight fasteners. The 5-gallon pails shall be round and have standard full open head and bail. Lids with bungholes will not be permitted. Settling or separation of solids in containers, except tanks, must be completely redispersed with low speed mixing prior to use, in conformance with these specifications and the manufacturer's recommendations. Mixing shall be accomplished either manually by use of a paddle or by use of a mixing blade driven by a drill motor, at low speed. Mixing blades shall be the type used for mixing paint. On-site storage tanks shall be kept clean and free of contaminants. Each tank shall have a permanent system designed to completely redisperse settled material without introducing air or other foreign substances.

- Steel containers and lids shall be lined with a coating that will prevent destructive action by the compound or chemical agents in the air space above the compound. The coating shall not come off the container or lid as skins. Containers shall be filled in a manner that will prevent skinning. Plastic containers shall not react with the compound.

- Each container shall be labeled with the manufacturer's name, kind of curing compound, batch number, volume, date of manufacture, and volatile organic compound (VOC) content. The label shall also warn that the curing compound containing pigment shall be well stirred before use. Precautions concerning the handling and the application of curing compound shall be shown on the label of the curing compound containers in conformance with the Construction Safety Orders and General Industry Safety Orders of the State.

- Containers of curing compound shall be labeled to indicate that the contents fully comply with the rules and regulations concerning air pollution control in the State.

- When the curing compound is shipped in tanks or tank trucks, a shipping invoice shall accompany each load. The invoice shall contain the same information as that required herein for container labels.

- Curing compound will be sampled by the Engineer at the source of supply, at the job site, or at both locations.

- Curing compound shall be formulated so as to maintain the specified properties for a minimum of one year. The Engineer may require additional testing before use to determine compliance with these specifications if the compound has not been used within one year or whenever the Engineer has reason to believe the compound is no longer satisfactory.

- Tests will be conducted in conformance with the latest ASTM test methods and methods in use by the Transportation Laboratory.

90-7.01C WATERPROOF MEMBRANE METHOD

- The exposed finished surfaces of concrete shall be sprayed with water, using a nozzle that so atomizes the flow that a mist and not a spray is formed, until the concrete has set, after which

the curing membrane, shall be placed. The curing membrane shall remain in place for a period of not less than 72 hours.

- Sheeting material for curing concrete shall conform to the requirements in AASHTO Designation: M 171 for white reflective materials.

- The sheeting material shall be fabricated into sheets of such width as to provide a complete cover for the entire concrete surface. Joints in the sheets shall be securely cemented together in such a manner as to provide a waterproof joint. The joint seams shall have a minimum lap of 0.33-foot.

- The sheets shall be securely weighted down by placing a bank of earth on the edges of the sheets or by other means satisfactory to the Engineer.

- Should any portion of the sheets be broken or damaged before the expiration of 72 hours after being placed, the broken or damaged portions shall be immediately repaired with new sheets properly cemented into place.

- Sections of membrane that have lost their waterproof qualities or have been damaged to such an extent as to render them unfit for curing the concrete shall not be used.

90-7.01D FORMS-IN-PLACE METHOD

- Formed surfaces of concrete may be cured by retaining the forms in place. The forms shall remain in place for a minimum period of 7 days after the concrete has been placed, except that for members over 20 inches in least dimension the forms shall remain in place for a minimum period of 5 days.

- Joints in the forms and the joints between the end of forms and concrete shall be kept moisture tight during the curing period. Cracks in the forms and cracks between the forms and the concrete shall be resealed by methods subject to the approval of the Engineer.

90-7.02 CURING PAVEMENT

- The entire exposed area of the pavement, including edges, shall be cured by the waterproof membrane method, or curing compound method using curing compound (1) or (2) as the Contractor may elect. Should the side forms be removed before the expiration of 72 hours following the start of curing, the exposed pavement edges shall also be cured. If the pavement is cured by means of the curing compound method, the sawcut and all portions of the curing compound that have been disturbed by sawing operations shall be restored by spraying with additional curing compound.

- Curing shall commence as soon as the finishing process provided in Section 40-1.10, "Final Finishing," has been completed. The method selected shall conform to the provisions in Section 90-7.01, "Methods of Curing."

- When the curing compound method is used, the compound shall be applied to the entire pavement surface by mechanical sprayers. Spraying equipment shall be of the fully atomizing type equipped with a tank agitator that provides for continual agitation of the curing compound during the time of application. The spray shall be adequately protected against wind, and the nozzles shall be so oriented or moved mechanically transversely as to result in the minimum specified rate of coverage being applied uniformly on exposed faces. Hand spraying of small and irregular areas, and areas inaccessible to mechanical spraying equipment, in the opinion of the Engineer, will be permitted. When the ambient air temperature is above 60° F, the Contractor shall fog the surface of the concrete with a fine spray of water as specified in Section 90-7.01A, "Water Method." The surface of the pavement shall be kept moist between the hours of 10:00 a.m. and 4:30 p.m. on the day the concrete is placed. However, the fogging done after the curing compound has been applied shall not begin until the compound has set

sufficiently to prevent displacement. Fogging shall be discontinued if ordered in writing by the Engineer.

90-7.03 CURING STRUCTURES

- Newly placed concrete for cast-in-place structures, other than highway bridge decks, shall be cured by the water method, the forms-in-place method, or, as permitted herein, by the curing compound method, in conformance with the provisions in Section 90-7.01, "Methods of Curing."

- The curing compound method using a pigmented curing compound may be used on concrete surfaces of construction joints, surfaces that are to be buried underground, and surfaces where only ordinary surface finish is to be applied and on which a uniform color is not required and that will not be visible from a public traveled way. If the Contractor elects to use the curing compound method on the bottom slab of box girder spans, the curing compound shall be curing compound (1).

- The top surface of highway bridge decks shall be cured by both the curing compound method and the water method. The curing compound shall be curing compound (1).

- Concrete surfaces of minor structures, as defined in Section 51-1.02, "Minor Structures," shall be cured by the water method, the forms-in-place method or the curing compound method.

- When deemed necessary by the Engineer during periods of hot weather, water shall be applied to concrete surfaces being cured by the curing compound method or by the forms-in-place method, until the Engineer determines that a cooling effect is no longer required. Application of water for this purpose will be paid for as extra work as provided in Section 4-1.03D, "Extra Work."

90-7.04 CURING PRECAST CONCRETE MEMBERS

- Precast concrete members shall be cured in conformance with any of the methods specified in Section 90-7.01, "Methods of Curing." Curing shall be provided for the minimum time specified for each method or until the concrete reaches its design strength, whichever is less. Steam curing may also be used for precast members and shall conform to the following provisions:

- A. After placement of the concrete, members shall be held for a minimum 4-hour presteaming period. If the ambient air temperature is below 50° F, steam shall be applied during the presteaming period to hold the air surrounding the member at a temperature between 50° F and 90° F.
- B. To prevent moisture loss on exposed surfaces during the presteaming period, members shall be covered as soon as possible after casting or the exposed surfaces shall be kept wet by fog spray or wet blankets.
- C. Enclosures for steam curing shall allow free circulation of steam about the member and shall be constructed to contain the live steam with a minimum moisture loss. The use of tarpaulins or similar flexible covers will be permitted, provided they are kept in good repair and secured in such a manner as to prevent the loss of steam and moisture.
- D. Steam at the jets shall be at low pressure and in a saturated condition. Steam jets shall not impinge directly on the concrete, test cylinders, or forms. During application of the steam, the temperature rise within the enclosure shall not exceed 40° F per hour. The curing temperature throughout the enclosure shall not exceed 150° F and shall be maintained at a constant level for a sufficient time necessary to develop the required transfer strength. Control cylinders shall be covered to prevent moisture loss and shall be

- placed in a location where temperature is representative of the average temperature of the enclosure.
- E. Temperature recording devices that will provide an accurate, continuous, permanent record of the curing temperature shall be provided. A minimum of one temperature recording device per 200 feet of continuous bed length will be required for checking temperature.
 - F. Members in pretension beds shall be detensioned immediately after the termination of steam curing while the concrete and forms are still warm, or the temperature under the enclosure shall be maintained above 60° F until the stress is transferred to the concrete.
 - G. Curing of precast concrete will be considered completed after termination of the steam curing cycle.

90-7.05 CURING PRECAST PRESTRESSED CONCRETE PILES

- Newly placed concrete for precast prestressed concrete piles shall be cured in conformance with the provisions in Section 90-7.04, "Curing Precast Concrete Members," except that piles in a corrosive environment shall be cured as follows:

- A. Piles shall be either steam cured or water cured. If water curing is used, the piles shall be kept continuously wet by the application of water in conformance with the provisions in Section 90-7.01A, "Water Method."
- B. If steam curing is used, the steam curing provisions in Section 90-7.04, "Curing Precast Concrete Members," shall apply except that the piles shall be kept continuously wet for their entire length for a period of not less than 3 days, including the holding and steam curing periods.

90-7.06 CURING SLOPE PROTECTION

- Concrete slope protection shall be cured in conformance with any of the methods specified in Section 90-7.01, "Methods of Curing."
- Concreted-rock slope protection shall be cured in conformance with any of the methods specified in Section 90-7.01, "Methods of Curing," with a blanket of earth kept wet for 72 hours, or by sprinkling with a fine spray of water every 2 hours during the daytime for a period of 3 days.

90-7.07 CURING MISCELLANEOUS CONCRETE WORK

- Exposed surfaces of curbs shall be cured by pigmented curing compounds as specified in Section 90-7.01B, "Curing Compound Method."
- Concrete sidewalks, gutter depressions, island paving, curb ramps, driveways, and other miscellaneous concrete areas shall be cured in conformance with any of the methods specified in Section 90-7.01, "Methods of Curing."
- Shotcrete shall be cured for at least 72 hours by spraying with water, by a moist earth blanket, or by any of the methods provided in Section 90-7.01, "Methods of Curing."
- Mortar and grout shall be cured by keeping the surface damp for 3 days.
- After placing, the exposed surfaces of sign structure foundations, including pedestal portions, if constructed, shall be cured for at least 72 hours by spraying with water, by a moist earth blanket, or by any of the methods provided in Section 90-7.01, "Methods of Curing."

90-8 PROTECTING CONCRETE

90-8.01 GENERAL

- In addition to the provisions in Section 7-1.16, "Contractor's Responsibility for the Work and Materials," the Contractor shall protect concrete as provided in this Section 90-8. If required by the Engineer, the Contractor shall submit a written outline of the proposed methods for protecting the concrete.
 - The Contractor shall protect concrete from damage from any cause, which shall include, but not be limited to: rain, heat, cold, wind, Contractor's actions, and actions of others.
 - Concrete shall not be placed on frozen or ice-coated ground or subgrade nor on ice-coated forms, reinforcing steel, structural steel, conduits, precast members, or construction joints.
 - Under rainy conditions, placing of concrete shall be stopped before the quantity of surface water is sufficient to damage surface mortar or cause a flow or wash of the concrete surface, unless the Contractor provides adequate protection against damage.
 - Concrete that has been frozen or damaged by other causes, as determined by the Engineer, shall be removed and replaced by the Contractor at the Contractor's expense.

90-8.02 PROTECTING CONCRETE STRUCTURES

- Structure concrete and shotcrete used as structure concrete shall be maintained at a temperature of not less than 45° F for 72 hours after placing and at not less than 40° F for an additional 4 days.

90-8.03 PROTECTING CONCRETE PAVEMENT

- Pavement concrete shall be maintained at a temperature of not less than 40° F for 72 hours.
 - Except as provided in Section 7-1.08, "Public Convenience," the Contractor shall protect concrete pavement against construction and other activities that abrade, scar, discolor, reduce texture depth, lower coefficient of friction, or otherwise damage the surface. Stockpiling, drifting, or excessive spillage of soil, gravel, petroleum products, and concrete or asphalt mixes on the surface of concrete pavement is prohibited unless otherwise specified in these specifications, the special provisions or permitted by the Engineer.
 - If ordered by the Engineer or shown on the plans or specified in the special provisions, pavement crossings shall be constructed for the convenience of public traffic. The material and work necessary for the construction of the crossings, and their subsequent removal and disposal, will be paid for at the contract unit prices for the items of work involved and if there are no contract items for the work involved, payment for pavement crossings will be made by extra work as provided in Section 4-1.03D, "Extra Work.". Where public traffic will be required to cross over the new pavement, Type III portland cement may be used in concrete, if permitted in writing by the Engineer. The pavement may be opened to traffic as soon as the concrete has developed a modulus of rupture of 550 pounds per square inch. The modulus of rupture will be determined by California Test 523.
 - No traffic or Contractor's equipment, except as hereinafter provided, will be permitted on the pavement before a period of 10 days has elapsed after the concrete has been placed, nor before the concrete has developed a modulus of rupture of at least 550 pounds per square inch. Concrete that fails to attain a modulus of rupture of 550 pounds per square inch within 10 days shall not be opened to traffic until directed by the Engineer.
 - Equipment for sawing weakened plane joints will be permitted on the pavement as specified in Section 40-1.08B, "Weakened Plane Joints."

- When requested in writing by the Contractor, the tracks on one side of paving equipment will be permitted on the pavement after a modulus of rupture of 350 pounds per square inch has been attained, provided that:

- A. Unit pressure exerted on the pavement by the paver shall not exceed 20 pounds per square inch;
- B. Tracks with cleats, grousers, or similar protuberances shall be modified or shall travel on planks or equivalent protective material, so that the pavement is not damaged; and
- C. No part of the track shall be closer than one foot from the edge of pavement.

- In case of visible cracking of, or other damage to the pavement, operation of the paving equipment on the pavement shall be immediately discontinued.

- Damage to the pavement resulting from early use of pavement by the Contractor's equipment as provided above shall be repaired by the Contractor.

- The State will furnish the molds and machines for testing the concrete for modulus of rupture, and the Contractor, at the Contractor's expense, shall furnish the material and whatever labor the Engineer may require.

90-9 COMPRESSIVE STRENGTH

90-9.01 GENERAL

- Concrete compressive strength requirements consist of a minimum strength that shall be attained before various loads or stresses are applied to the concrete and, for concrete designated by strength, a minimum strength at the age of 28 days or at the age otherwise allowed in Section 90-1.01, "Description." The various strengths required are specified in these specifications or the special provisions or are shown on the plans.

- The compressive strength of concrete will be determined from test cylinders that have been fabricated from concrete sampled in conformance with the requirements of California Test 539. Test cylinders will be molded and initially field cured in conformance with California Test 540. Test cylinders will be cured and tested after receipt at the testing laboratory in conformance with the requirements of California Test 521. A strength test shall consist of the average strength of 2 cylinders fabricated from material taken from a single load of concrete, except that, if any cylinder should show evidence of improper sampling, molding, or testing, that cylinder shall be discarded and the strength test shall consist of the strength of the remaining cylinder.

- When concrete compressive strength is specified as a prerequisite to applying loads or stresses to a concrete structure or member, test cylinders for other than steam cured concrete will be cured in conformance with Method 1 of California Test 540. The compressive strength of concrete determined for these purposes will be evaluated on the basis of individual tests.

- When concrete is designated by 28-day compressive strength rather than by cementitious material content, the concrete strength to be used as a basis for acceptance of other than steam cured concrete will be determined from cylinders cured in conformance with Method 1 of California Test 540. If the result of a single compressive strength test at the maximum age specified or allowed is below the specified strength but is 95 percent or more of the specified strength, the Contractor shall make corrective changes, subject to approval of the Engineer, in the mix proportions or in the concrete fabrication procedures, before placing additional concrete, and shall pay to the State \$10 for each in-place cubic yard of concrete represented by the deficient test. If the result of a single compressive strength test at the maximum age specified or allowed is below 95 percent of the specified strength, but is 85 percent or more of the specified strength, the Contractor shall make the corrective changes specified above, and shall pay to the

State \$15 for each in-place cubic yard of concrete represented by the deficient test. In addition, such corrective changes shall be made when the compressive strength of concrete tested at 7 days indicates, in the judgment of the Engineer, that the concrete will not attain the required compressive strength at the maximum age specified or allowed. Concrete represented by a single test that indicates a compressive strength of less than 85 percent of the specified 28-day compressive strength will be rejected in conformance with the provisions in Section 6-1.04, "Defective Materials."

- If the test result indicates that the compressive strength at the maximum curing age specified or allowed is below the specified strength, but is 85 percent or more of the specified strength, payments to the State as required above shall be made, unless the Contractor, at the Contractor's expense, obtains and submits evidence acceptable to the Engineer that the strength of the concrete placed in the work meets or exceeds the specified 28-day compressive strength. If the test result indicates a compressive strength at the maximum curing age specified or allowed below 85 percent, the concrete represented by that test will be rejected, unless the Contractor, at the Contractor's expense, obtains and submits evidence acceptable to the Engineer that the strength and quality of the concrete placed in the work are acceptable. If the evidence consists of tests made on cores taken from the work, the cores shall be obtained and tested in conformance with the requirements in ASTM Designation: C 42.

- No single compressive strength test shall represent more than 320 cubic yards.

- If a precast concrete member is steam cured, the compressive strength of the concrete will be determined from test cylinders that have been handled and stored in conformance with Method 3 of California Test 540. The compressive strength of steam cured concrete will be evaluated on the basis of individual tests representing specific portions of production. If the concrete is designated by 28-day compressive strength rather than by cementitious material content, the concrete shall be considered to be acceptable whenever its compressive strength reaches the specified 28-day compressive strength provided that strength is reached in not more than the maximum number of days specified or allowed after the member is cast.

- When concrete is specified by compressive strength, prequalification of materials, mix proportions, mixing equipment, and procedures proposed for use will be required prior to placement of the concrete. Prequalification shall be accomplished by the submission of acceptable certified test data or trial batch reports by the Contractor. Prequalification data shall be based on the use of materials, mix proportions, mixing equipment, procedures, and size of batch proposed for use in the work.

- Certified test data, in order to be acceptable, shall indicate that not less than 90 percent of at least 20 consecutive tests exceed the specified strength at the maximum number of cure days specified or allowed, and none of those tests are less than 95 percent of specified strength. Strength tests included in the data shall be the most recent tests made on concrete of the proposed mix design and all shall have been made within one year of the proposed use of the concrete.

- Trial batch test reports, in order to be acceptable, shall indicate that the average compressive strength of 5 consecutive concrete cylinders, taken from a single batch, at not more than 28 days (or the maximum age allowed) after molding shall be at least 580 pounds per square inch greater than the specified 28-day compressive strength, and no individual cylinder shall have a strength less than the specified strength at the maximum age specified or allowed. Data contained in the report shall be from trial batches that were produced within one year of the proposed use of specified strength concrete in the project. Whenever air-entrainment is required, the air content of trial batches shall be equal to or greater than the air content specified for the concrete without reduction due to tolerances.

- Tests shall be performed in conformance with either the appropriate California Test methods or the comparable ASTM test methods. Equipment employed in testing shall be in good condition and shall be properly calibrated. If the tests are performed during the life of the contract, the Engineer shall be notified sufficiently in advance of performing the tests in order to witness the test procedures.

- The certified test data and trial batch test reports shall include the following information:
 - A. Date of mixing.
 - B. Mixing equipment and procedures used.
 - C. The size of batch in cubic yards and the weight, type, and source of all ingredients used.
 - D. Penetration or slump (if the concrete will be placed under water or placed in cast-in-place concrete piles) of the concrete.
 - E. The air content of the concrete if an air-entraining admixture is used.
 - F. The age at time of testing and strength of all concrete cylinders tested.

- Certified test data and trial batch test reports shall be signed by an official of the firm that performed the tests.

- When approved by the Engineer, concrete from trial batches may be used in the work at locations where concrete of a lower quality is required and the concrete will be paid for as the type or class of concrete required at that location.

- After materials, mix proportions, mixing equipment, and procedures for concrete have been prequalified for use, additional prequalification by testing of trial batches will be required prior to making changes that, in the judgment of the Engineer, could result in a strength of concrete below that specified.

- The Contractor's attention is directed to the time required to test trial batches and the Contractor shall be responsible for production of trial batches at a sufficiently early date so that the progress of the work is not delayed.

- When precast concrete members are manufactured at the plant of an established manufacturer of precast concrete members, the mix proportions of the concrete shall be determined by the Contractor, and a trial batch and prequalification of the materials, mix proportions, mixing equipment, and procedures will not be required.

90-10 MINOR CONCRETE

90-10.01 GENERAL

- Concrete for minor structures, slope paving, curbs, sidewalks and other concrete work, when designated as minor concrete on the plans, in the specifications, or in the contract item, shall conform to the provisions specified herein.

- The Engineer, at the Engineer's discretion, will inspect and test the facilities, materials and methods for producing the concrete to ensure that minor concrete of the quality suitable for use in the work is obtained.

90-10.02 MATERIALS

- Minor concrete shall conform to the following requirements:

90-10.02A CEMENTITIOUS MATERIAL

- Cementitious material shall conform to the provisions in Section 90-1.01, "Description."

90-10.02B AGGREGATE

- Aggregate shall be clean and free from deleterious coatings, clay balls, roots, and other extraneous materials.
- Use of crushed concrete or reclaimed aggregate is acceptable only if the aggregate satisfies all aggregate requirements.
- The Contractor shall submit to the Engineer for approval, a grading of the combined aggregate proposed for use in the minor concrete. After acceptance of the grading, aggregate furnished for minor concrete shall conform to that grading, unless a change is authorized in writing by the Engineer.
- The Engineer may require the Contractor to furnish periodic test reports of the aggregate grading furnished. The maximum size of aggregate used shall be at the option of the Contractor, but in no case shall the maximum size be larger than 1 1/2-inch or smaller than 3/4-inch.
- The Engineer may waive, in writing, the gradation requirements in this Section 90-10.02B, if, in the Engineer's opinion, the furnishing of the gradation is not necessary for the type or amount of concrete work to be constructed.

90-10.02C WATER

- Water used for washing, mixing, and curing shall be free from oil, salts, and other impurities that would discolor or etch the surface or have an adverse affect on the quality of the concrete.

90-10.02D ADMIXTURES

- The use of admixtures shall conform to the provisions in Section 90-4, "Admixtures."

90-10.03 PRODUCTION

- Cementitious material, water, aggregate, and admixtures shall be stored, proportioned, mixed, transported, and discharged in conformance with recognized standards of good practice that will result in concrete that is thoroughly and uniformly mixed, that is suitable for the use intended, and that conforms to requirements specified herein. Recognized standards of good practice are outlined in various industry publications such as are issued by American Concrete Institute, AASHTO, or the Department.
- The cementitious material content of minor concrete shall conform to the provisions in Section 90-1.01, "Description."
- The amount of water used shall result in a consistency of concrete conforming to the provisions in Section 90-6.06, "Amount of Water and Penetration." Additional mixing water shall not be incorporated into the concrete during hauling or after arrival at the delivery point, unless authorized by the Engineer.
- Discharge of ready-mixed concrete from the transporting vehicle shall be made while the concrete is still plastic and before stiffening occurs. An elapsed time of 1.5 hours (one hour in non-agitating hauling equipment), or more than 250 revolutions of the drum or blades, after the introduction of the cementitious material to the aggregates, or a temperature of concrete of more than 90° F will be considered conditions contributing to the quick stiffening of concrete. The Contractor shall take whatever action is necessary to eliminate quick stiffening, except that the addition of water will not be permitted.
- The required mixing time in stationary mixers shall be not less than 50 seconds or more than 5 minutes.

- The minimum required revolutions at mixing speed for transit-mixed concrete shall be not less than that recommended by the mixer manufacturer, and shall be increased, if necessary, to produce thoroughly and uniformly mixed concrete.
- When a high range water-reducing admixture is added to the concrete at the job site, the total number of revolutions shall not exceed 300.
- Each load of ready-mixed concrete shall be accompanied by a weighmaster certificate that shall be delivered to the Engineer at the discharge location of the concrete, unless otherwise directed by the Engineer. The weighmaster certificate shall be clearly marked with the date and time of day when the load left the batching plant and, if hauled in truck mixers or agitators, the time the mixing cycle started.
- A Certificate of Compliance conforming to the provisions in Section 6-1.07, "Certificates of Compliance," shall be furnished to the Engineer, prior to placing minor concrete from a source not previously used on the contract, stating that minor concrete to be furnished meets contract requirements, including minimum cementitious material content specified.

90-10.04 CURING MINOR CONCRETE

- Curing minor concrete shall conform to the provisions in Section 90-7, "Curing Concrete."

90-10.05 PROTECTING MINOR CONCRETE

- Protecting minor concrete shall conform to the provisions in Section 90-8, "Protecting Concrete," except the concrete shall be maintained at a temperature of not less than 40° F for 72 hours after placing.

90-10.06 MEASUREMENT AND PAYMENT

- Minor concrete will be measured and paid for in conformance with the provisions specified in the various sections of these specifications covering concrete construction when minor concrete is specified in the specifications, shown on the plans, or indicated by contract item in the Engineer's Estimate.

90-11 MEASUREMENT AND PAYMENT

90-11.01 MEASUREMENT

- Portland cement concrete will be measured in conformance with the provisions specified in the various sections of these specifications covering construction requiring concrete.
- For concrete measured at the mixer, the volume in cubic feet shall be computed as the total weight of the batch in pounds divided by the density of the concrete in pounds per cubic foot. The total weight of the batch shall be calculated as the sum of all materials, including water, entering the batch. The density of the concrete will be determined in conformance with the requirements in California Test 518.

90-11.02 PAYMENT

- Portland cement concrete will be paid for in conformance with the provisions specified in the various sections of these specifications covering construction requiring concrete.
- Full compensation for furnishing and incorporating admixtures required by these specifications or the special provisions will be considered as included in the contract prices paid for the concrete involved and no additional compensation will be allowed therefor.
- Should the Engineer order the Contractor to incorporate any admixtures in the concrete when their use is not required by these specifications or the special provisions, furnishing the

admixtures and adding them to the concrete will be paid for as extra work as provided in Section 4-1.03D, "Extra Work."

- Should the Contractor use admixtures in conformance with the provisions in Section 90-4.05, "Optional Use of Chemical Admixtures," or Section 90-4.07, "Optional Use of Air-entraining Admixtures," or should the Contractor request and obtain permission to use other admixtures for the Contractor's benefit, the Contractor shall furnish those admixtures and incorporate them into the concrete at the Contractor's expense and no additional compensation will be allowed therefor.

SECTION 91: PAINT

Issue Date: May 1, 2006

Section 91-3, "Paints for Timber," of the Standard Specifications is amended to read:

91-3 PAINTS FOR TIMBER

91-3.01 WOOD PRIMER, LATEX-BASE

Classification:

- This specification covers a ready-mixed priming paint for use on unpainted wood or exterior woodwork. It shall conform with the requirements in the Detailed Performance Standards of the Master Painters Institute (MPI) for exterior wood primers, and be listed on the Exterior Latex Wood Primer MPI List Number 6.

91-3.02 PAINT; LATEX-BASE FOR EXTERIOR WOOD, WHITE AND TINTS

Classification:

- This specification covers a ready-mixed paint for use on wood surfaces subject to outside exposures. This paint shall conform to the requirements in the Detailed Performance Standards of the Master Painters Institute (MPI) for Paint, Latex, Exterior, and shall be listed on the following MPI Approved Products List:

- A. Exterior Latex, Flat MPI Gloss Level 1, MPI List Number 10.
- B. Exterior Latex, Semi-Gloss, MPI Gloss Level 5, MPI List Number 11.
- C. Exterior Latex, Gloss, MPI Gloss Level 6, MPI List Number 119.

- Unpainted wood shall first be primed with wood primer conforming to the provisions in Section 91-3.01, "Wood Primer, Latex-Base."

Section 91-4, "Miscellaneous Paints," of the Standard Specifications is amended to read:

91-4 MISCELLANEOUS PAINTS

91-4.01 THROUGH 91-4.04 (BLANK)

91-4.05 PAINT; ACRYLIC EMULSION, EXTERIOR WHITE AND LIGHT AND MEDIUM TINTS

Classification:

- This specification covers an acrylic emulsion paint designed for use on exterior masonry. This paint shall conform to the requirements in the Detailed Performance Standards of the

Master Painters Institute (MPI) for Paint, Latex, Exterior, and shall be listed on the following MPI Approved Products Lists:

- A. Exterior Latex, Flat MPI Gloss Level 1, MPI List Number 10.
 - B. Exterior Latex, Semi-Gloss, MPI Gloss Level 5, MPI List Number 11.
 - C. Exterior Latex, Gloss, MPI Gloss Level 6, MPI List Number 119.
- This paint may be tinted by using "universal" or "all purpose" concentrates.

SECTION 92: ASPHALTS

Issue Date: March 21, 2008

Section 92, "Asphalts," of the Standard Specifications is amended to read:

92-1.01 DESCRIPTION

- Asphalt is refined petroleum or a mixture of refined liquid asphalt and refined solid asphalt that are prepared from crude petroleum. Asphalt is:
 1. Free from residues caused by the artificial distillation of coal, coal tar, or paraffin
 2. Free from water
 3. Homogeneous

92-1.02 MATERIALS

GENERAL

- Furnish asphalt under the Department's "Certification Program for Suppliers of Asphalt." The Department maintains the program requirements, procedures, and a list of approved suppliers at:

<http://www.dot.ca.gov/hq/esc/Translab/fpm/fpmcoc.htm>

- Transport, store, use, and dispose of asphalt safely.
- Prevent the formation of carbonized particles caused by overheating asphalt during manufacturing or construction.

GRADES

- Performance graded (PG) asphalt binder is:

Performance Graded Asphalt Binder

| Property | AASHTO Test Method | Specification | | | | |
|---|--------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| | | Grade | | | | |
| | | PG 58-22 ^a | PG 64-10 | PG 64-16 | PG 64-28 | PG 70-10 |
| Original Binder | | | | | | |
| Flash Point, Minimum °C | T 48 | 230 | 230 | 230 | 230 | 230 |
| Solubility, Minimum % ^b | T 44 | 99 | 99 | 99 | 99 | 99 |
| Viscosity at 135°C, ^c Maximum, Pa·s | T 316 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa | T 315 | 58 1.00 | 64 1.00 | 64 1.00 | 64 1.00 | 70 1.00 |
| RTFO Test, ^e Mass Loss, Maximum, % | T 240 | 1.00 | 1.00 | 1.00 | 1.00 | 1.00 |
| RTFO Test Aged Binder | | | | | | |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa | T 315 | 58 2.20 | 64 2.20 | 64 2.20 | 64 2.20 | 70 2.20 |
| Ductility at 25°C Minimum, cm | T 51 | 75 | 75 | 75 | 75 | 75 |
| PAV ^f Aging, Temperature, °C | R 28 | 100 | 100 | 100 | 100 | 110 |
| RTFO Test and PAV Aged Binder | | | | | | |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Maximum G*·sin(delta), kPa | T 315 | 22 ^d 5000 | 31 ^d 5000 | 28 ^d 5000 | 22 ^d 5000 | 34 ^d 5000 |
| Creep Stiffness, Test Temperature, °C Maximum S-value, Mpa Minimum M-value | T 313 | -12 300 0.300 | 0 300 0.300 | -6 300 0.300 | -18 300 0.300 | 0 300 0.300 |

Notes:

- a. Use as asphalt rubber base stock for high mountain and high desert area.
- b. The Engineer waives this specification if the supplier is a Quality Supplier as defined by the Department's "Certification Program for Suppliers of Asphalt."
- c. The Engineer waives this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- d. Test the sample at 3°C higher if it fails at the specified test temperature. G*·sin(delta) remains 5000 kPa maximum.
- e. "RTFO Test" means the asphaltic residue obtained using the Rolling Thin Film Oven Test, AASHTO Test Method T 240 or ASTM Designation: D 2872. The residue from mass change determination may be used for other tests.
- f. "PAV" means Pressurized Aging Vessel.

- Performance graded polymer modified asphalt binder (PG Polymer Modified) is:

Performance Graded Polymer Modified Asphalt Binder ^a

| Property | AASHTO Test Method | Specification Grade | | |
|---|--------------------|---------------------|---------------------|---------------------|
| | | PG 58-34 PM | PG 64-28 PM | PG 76-22 PM |
| Original Binder | | | | |
| Flash Point, Minimum °C | T 48 | 230 | 230 | 230 |
| Solubility, Minimum % ^b | T 44 ^c | 98.5 | 98.5 | 98.5 |
| Viscosity at 135°C, ^d Maximum, Pa·s | T 316 | 3.0 | 3.0 | 3.0 |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa | T 315 | 58 1.00 | 64 1.00 | 76 1.00 |
| RTFO Test, Mass Loss, Maximum, % | T 240 | 1.00 | 1.00 | 1.00 |
| RTFO Test Aged Binder | | | | |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Minimum G*/sin(delta), kPa | T 315 | 58 2.20 | 64 2.20 | 76 2.20 |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Maximum (delta), % | T 315 | Note e 80 | Note e 80 | Note e 80 |
| Elastic Recovery ^f , Test Temp., °C Minimum recovery, % | T 301 | 25 75 | 25 75 | 25 65 |
| PAV ^g Aging, Temperature, °C | R 28 | 100 | 100 | 110 |
| RTFO Test and PAV Aged Binder | | | | |
| Dynamic Shear, Test Temp. at 10 rad/s, °C Maximum G*sin(delta), kPa | T 315 | 16 5000 | 22 5000 | 31 5000 |
| Creep Stiffness, Test Temperature, °C Maximum S-value, MPa Minimum M-value | T 313 | -24 300 0.300 | -18 300 0.300 | -12 300 0.300 |

Notes:

- a. Do not modify PG Polymer Modified using acid modification.
- b. The Engineer waives this specification if the supplier is a Quality Supplier as defined by the Department's "Certification Program for Suppliers of Asphalt."
- c. The Department allows ASTM D 5546 instead of AASHTO T 44
- d. The Engineer waives this specification if the supplier certifies the asphalt binder can be adequately pumped and mixed at temperatures meeting applicable safety standards.
- e. Test temperature is the temperature at which G*/sin(delta) is 2.2 kPa. A graph of log G*/sin(delta) plotted against temperature may be used to determine the test temperature when G*/sin(delta) is 2.2 kPa. A graph of (delta) versus temperature may be used to determine delta at the temperature when G*/sin(delta) is 2.2 kPa. The Engineer also accepts direct measurement of (delta) at the temperature when G*/sin(delta) is 2.2 kPa.
- f. Tests without a force ductility clamp may be performed.
- g. "PAV" means Pressurized Aging Vessel.

SAMPLING

- Provide a sampling device in the asphalt feed line connecting the plant storage tanks to the asphalt weighing system or spray bar. Make the sampling device accessible between 24 and 30 inches above the platform. Provide a receptacle for flushing the sampling device.
- Include with the sampling device a valve:

1. Between 1/2 and 3/4 inch in diameter
 2. Manufactured in a manner that a one-quart sample may be taken slowly at any time during plant operations
 3. Maintained in good condition
- Replace failed valves.
 - In the Engineer's presence, take 2 one-quart samples per operating day. Provide round, friction top, one-quart containers for storing samples.

92-1.03 EXECUTION

- If asphalt is applied, you must comply with the heating and application specifications for liquid asphalt in Section 93, "Liquid Asphalts."

92-1.04 MEASUREMENT

- If the contract work item for asphalt is paid by weight, the Department measures asphalt tons by complying with the specifications for weight determination of liquid asphalt in Section 93, "Liquid Asphalts."

- The Engineer determines the asphalt weight from volumetric measurements if you:

1. Use a partial asphalt load
2. Use asphalt at a location other than a mixing plant and no scales within 20 miles are available and suitable
3. Deliver asphalt in either of the following:
 - 3.1. A calibrated truck with each tank accompanied by its measuring stick and calibration card
 - 3.2. A truck equipped with a calibrated thermometer that determines the asphalt temperature at the delivery time and with a vehicle tank meter complying with the specifications for weighing, measuring, and metering devices in Section 9-1.01, "Measurement of Quantities"

- If you furnish hot mix asphalt from a mixing plant producing material for only one project, the Engineer determines the asphalt quantity by measuring the volume in the tank at the project's start and end provided the tank is calibrated and equipped with its measuring stick and calibration card.

- The Engineer determines pay quantities from volumetric measurements as follows:

1. Before converting the volume to weight, the Engineer reduces the measured volume to that which the asphalt would occupy at 60 °F.
2. The Engineer uses 235 gallons per ton and 8.51 pounds per gallon for the average weight and volume for PG and PG Polymer Modified asphalt grades at 60 °F.
3. The Engineer uses the Conversion Table in Section 93, "Liquid Asphalts."

SECTION 93: LIQUID ASPHALTS

Issue Date: November 3, 2006

The ninth paragraph of Section 93-1.04, "Measurement," of the Standard Specifications is amended to read:

- The following Legend and Conversion Table is to be used for converting volumes of liquid asphalt products, Grades 70 to 3000, inclusive, and paving asphalt Grades PG 58-22, PG 64-10, PG 64-16, PG 64-28, and PG 70-10, and Grades PG 58-34 PM, PG 64-28 PM, and PG 76-22 PM.

END OF AMENDMENTS

APPENDIX B

SPILL CONTINGENCY PLAN FROM SWPPP

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
CONTRACT NO. PW 11-30593, CIP NO. 95192**

SPILL CONTINGENCY PLAN

I. SEWAGE SPILLS:

A. Agency Contacts:

| <u>Agency</u> | <u>Contact Person</u> | <u>Phone</u> |
|--|--------------------------------|----------------------|
| 1. South Tahoe Public Utility District | Randy Curtis | 544-6474 |
| 2. County of El Dorado Environmental Management Division | Karen Bender | 573-3453 |
| 3. Water Quality Control Board Lahontan Region | Dale Payne | 542-5464 |
| 4. County of El Dorado Transportation Division | Donaldo Palaroan Amy Dillon | 573-7920 573-7903 |

B. Contractor Representative:

Clean up operation shall be directed by _____,
phone number _____ in cooperation with agencies listed in A.

C. Containment and Disposal:

Spills shall be contained with earthen berms or other approved methods. Liquid sewage shall be disinfected as necessary, and pumped to an adjacent sewer or transported to South Tahoe Public Utility District facilities by approved methods as instructed by South Tahoe Public Utility District.

II. PETROLEUM AND CHEMICAL SPILLS

A. Agency Contacts:

| <u>Agency</u> | <u>Contact Person</u> | <u>Phone</u> |
|--|--------------------------------|----------------------|
| 1. South Tahoe Public Utility District | Randy Curtis | 544-6474 |
| 2. County of El Dorado Environmental Management Division | Karen Bender | 573-3453 |
| 3. Water Quality Control Board Lahontan Region | Dale Payne | 542-5464 |
| 4. County of El Dorado Transportation Division | Donaldo Palaroan Amy Dillon | 573-7920 573-7903 |

B. Contractor Representative:

Clean up operation shall be directed by _____,
phone number _____ in cooperation with agencies listed in A.

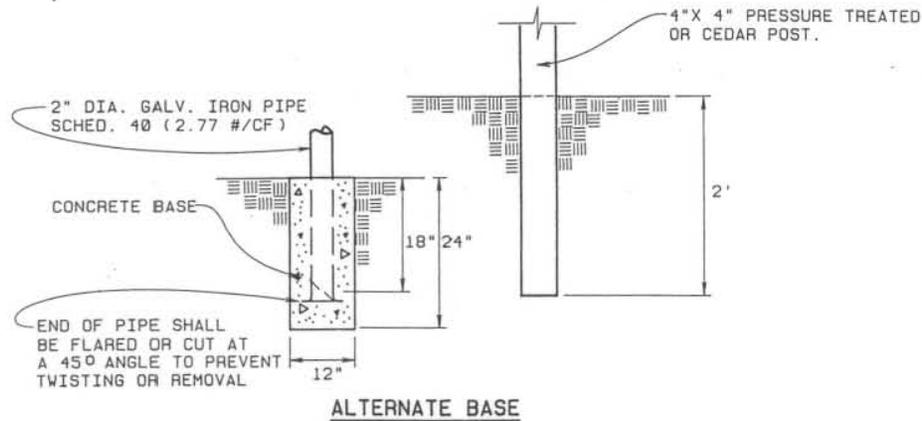
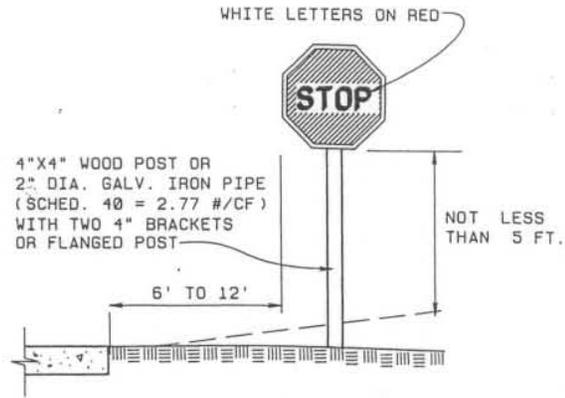
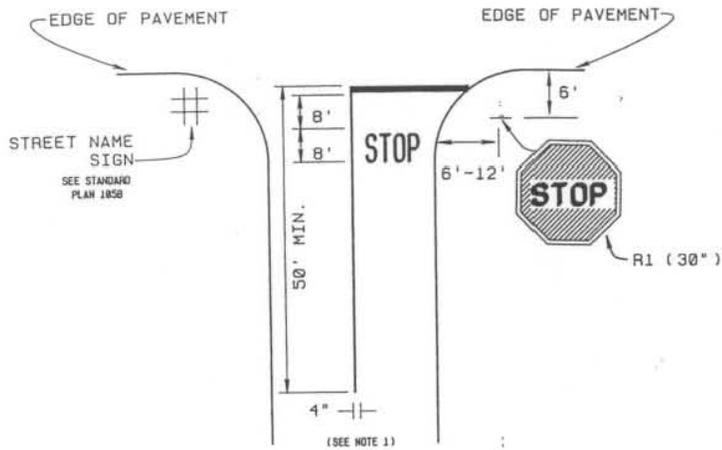
C. Materials shall be excavated with a backhoe or other excavation equipment and placed on an impermeable membrane _____ (type) and covered with such membrane, as required for containment.

D. Materials shall be disposed of as directed by County of El Dorado Environmental Management Department.

Minor Spills – South Tahoe Refuse – Jeanne Lear 542-8366
Major Spills – Forward Inc. Manteca, CA (209) 466-4482
Or as approved by Environmental Management

E. Contractor shall keep petroleum and chemical absorbent materials on site at all times.

APPENDIX C
STANDARD PLANS



NOTES:

1. 4" STRIPE TO BE YELLOW REFLECTORIZED TRAFFIC PAINT. TWO 4" STRIPES WILL BE USED IF ADT'S WARRANT.
2. 12" STOP BAR TO BE WHITE REFLECTORIZED TRAFFIC PAINT AND LOCATED TO PROVIDE MAXIMUM VISIBILITY ALONG THROUGH STREET.
3. ALL SIGNS SHALL BE FABRICATED OF HIGH INTENSITY REFLECTIVE SHEETING ON AN ALUMINUM BLANK PER EL DORADO COUNTY SPECIFICATIONS.

NOT TO SCALE

14-0483 B 333 of 381

| GENERATED | REVISIONS |
|--------------------|-----------|
| DATE: 3/14/90 | |
| DESIGNED: JM/SR/BS | |
| CHECKED: SKP | |
| APPROVED: | |

APPROVED:

Gott Child
 DIRECTOR OF TRANSPORTATION

Frank Kley C 33427
 SENIOR CIVIL ENGINEER P.E. NO.

EL DORADO COUNTY
 DEPARTMENT OF TRANSPORTATION

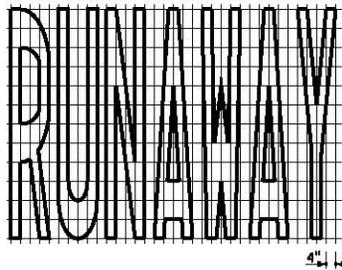
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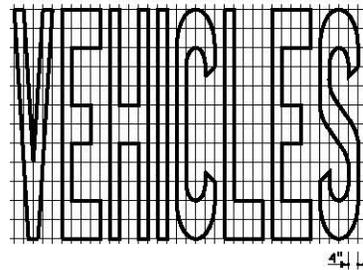
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STD. PLAN

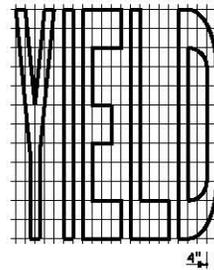
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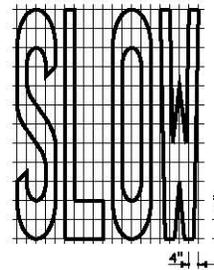
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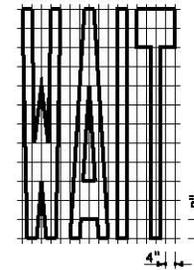
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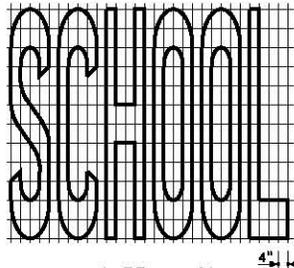
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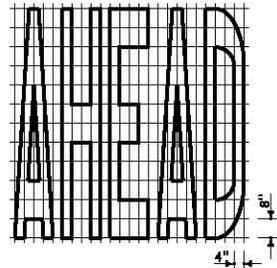
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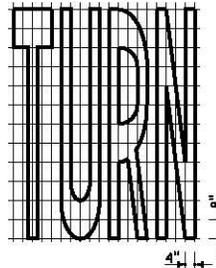
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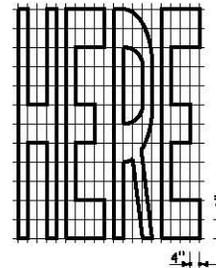
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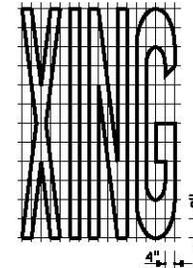
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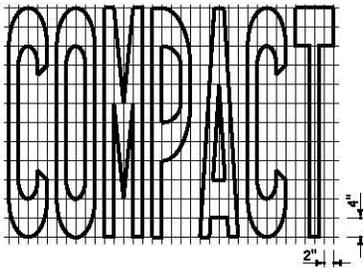
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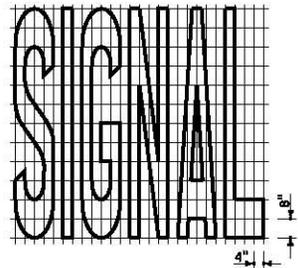
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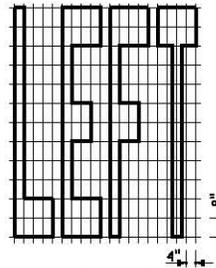
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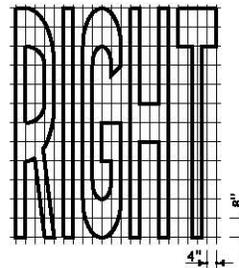
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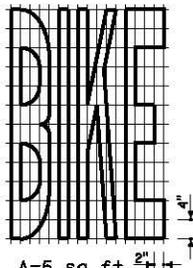
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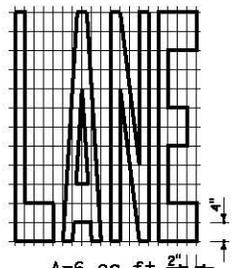
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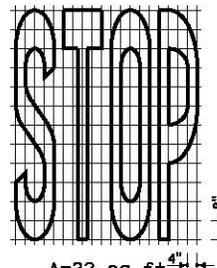
A=26 sq ft



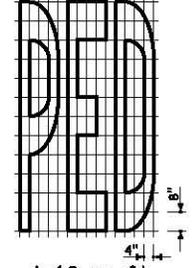
A=5 sq ft



A=6 sq ft



A=22 sq ft



A=18 sq ft

| | | | | | |
|------|--------|-------|--------------------------|-----------|--------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
| | | | | | |

Donald E. Howe
REGISTERED CIVIL ENGINEER

PLANS APPROVAL DATE
May 1, 2006

REGISTERED PROFESSIONAL SOCIETY
Donald E. Howe
No. C46402
Exp. 3-31-07
CIVIL
STATE OF CALIFORNIA

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To get to the Caltrans web site, go to: <http://www.dot.ca.gov>

NOTES:

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.

| WORD MARKINGS | | | | | |
|---------------|-------|--------|-------|----------|-------|
| ITEM | sq ft | ITEM | sq ft | ITEM | sq ft |
| XING | 21 | YIELD | 24 | BIKE | 5 |
| AHEAD | 31 | SCHOOL | 35 | SLOW | 23 |
| WAIT | 19 | SIGNAL | 32 | STOP | 22 |
| LANE | 6 | TURN | 24 | LEFT | 19 |
| RIGHT | 26 | HERE | 26 | VEHICLES | 42 |

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
**PAVEMENT MARKINGS
WORDS**

NO SCALE

A 24D

| | | | | | |
|------|--------|-------|-----------------------------|--------------|-----------------|
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
| | | | | | |

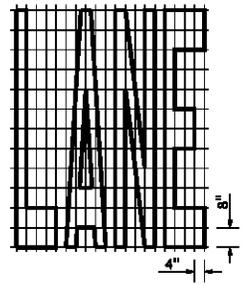
Roberto L. McLaughlin
REGISTERED CIVIL ENGINEER

July 20, 2012
PLANS APPROVAL DATE

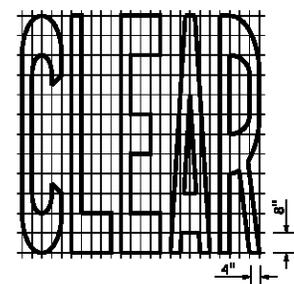
The State of California or its officers or agents shall not be responsible for the accuracy or completeness of electronic copies of this plan sheet.

Roberto L. McLaughlin
No. C40575
Exp. 3-31-13
CIVIL
STATE OF CALIFORNIA

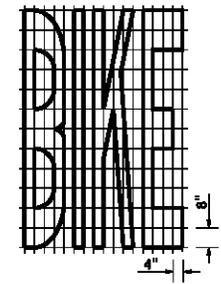
To accompany plans dated _____



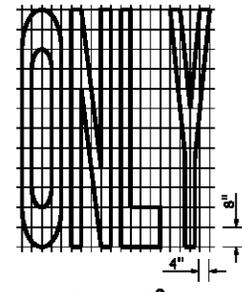
A=24 f+2



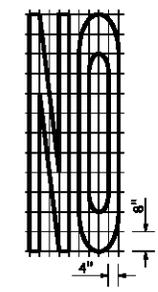
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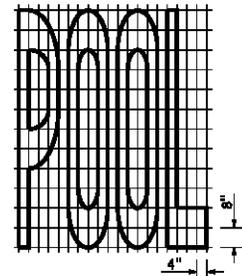
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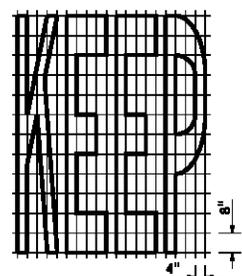
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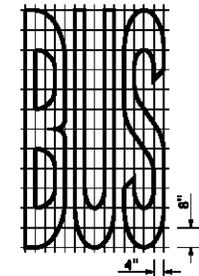
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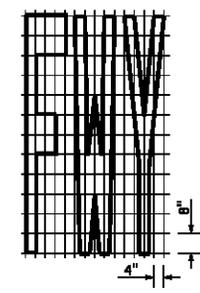
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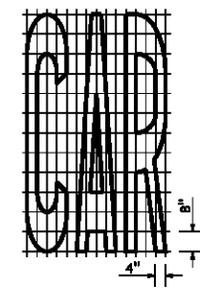
A=24 f+2



A=20 f+2

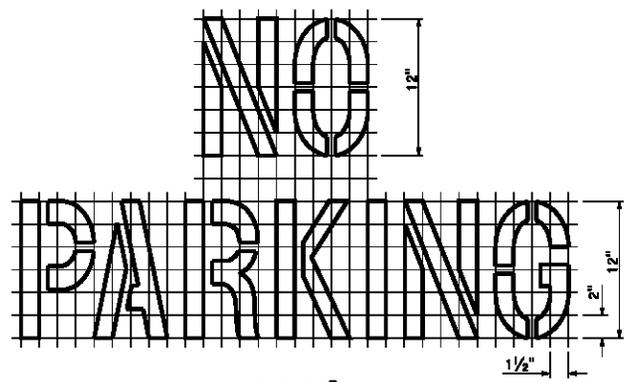


A=16 f+2

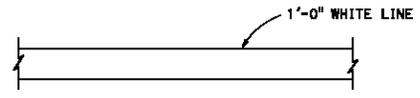


A=17 f+2

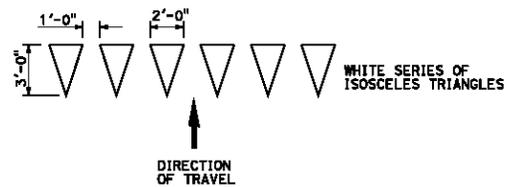
| WORD MARKINGS | | | |
|---------------|-----|------|-----|
| ITEM | f+2 | ITEM | f+2 |
| LANE | 24 | NO | 14 |
| POOL | 23 | BIKE | 21 |
| CAR | 17 | BUS | 20 |
| CLEAR | 27 | ONLY | 22 |
| KEEP | 24 | FWY | 16 |



A=2 f+2
See Notes 6 and 7



LIMIT LINE (STOP LINE)



YIELD LINE

1. If a message consists of more than one word, it should read "UP", i.e., the first word should be nearest the driver.
2. The space between words should be at least four times the height of the characters for low speed roads, but not more than ten times the height of the characters. The space may be reduced appropriately where there is limited space because of local conditions.
3. Minor variations in dimensions may be accepted by the Engineer.
4. Portions of a letter, number or symbol may be separated by connecting segments not to exceed 2" in width.
5. The words "NO PARKING" pavement marking is to be used for parking facilities. For typical locations of markings, see Standard Plans A90A and A90B.
6. The words "NO PARKING", shall be painted in white letters no less than 1'-0" high on a contrasting background and located so that it is visible to traffic enforcement officials.

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
WORDS, LIMIT AND YIELD LINES
NO SCALE

RSP A24E DATED JULY 20, 2012 SUPERSEDES STANDARD PLAN A24E
DATED MAY 1, 2006 - PAGE 13 OF THE STANDARD PLANS BOOK DATED MAY 2006.
REVISED STANDARD PLAN RSP A24E

14-0483 B 336 of 381

234

14-0483 B 338 of 381

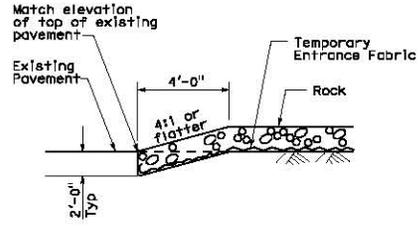
| DIST | COUNTY | ROUTE | POST MILES TOTAL PROJECT | SHEET NO. | TOTAL SHEETS |
|------|--------|-------|--------------------------|-----------|--------------|
| | | | | | |

Robert B. Roberts
LICENSED LANDSCAPE ARCHITECT

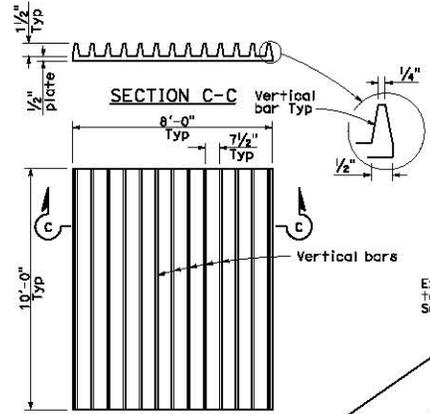
May 1, 2006
PLANS APPROVAL DATE

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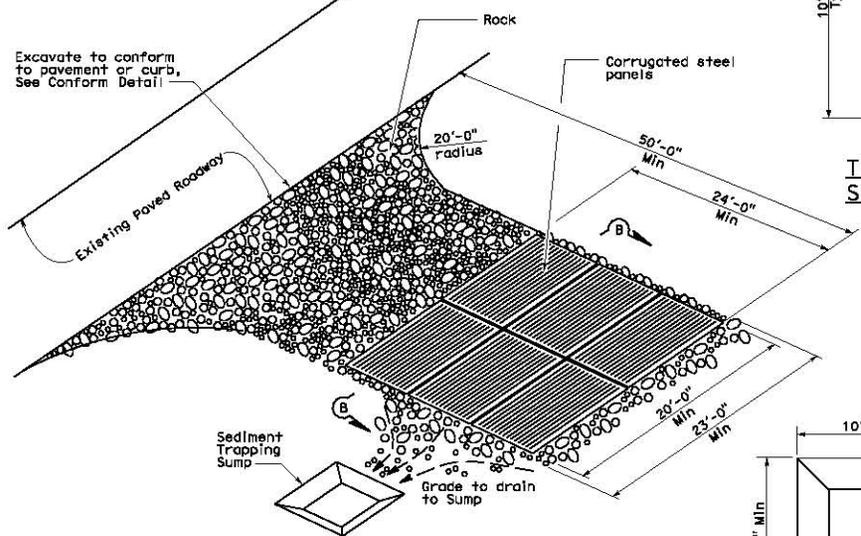
To get to the Caltrans web site go to <http://www.dot.ca.gov>

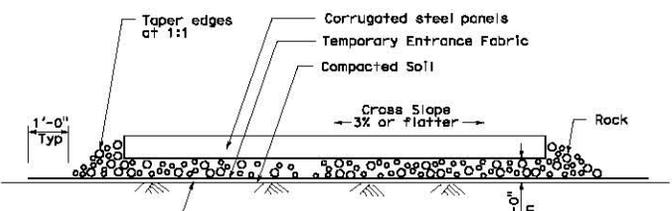
SECTION CONFORM DETAIL



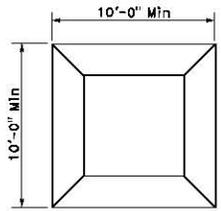
PLAN TYPICAL CORRUGATED STEEL PANEL DETAIL



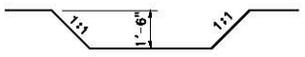
PERSPECTIVE TEMPORARY CONSTRUCTION ENTRANCE (TYPE 2)



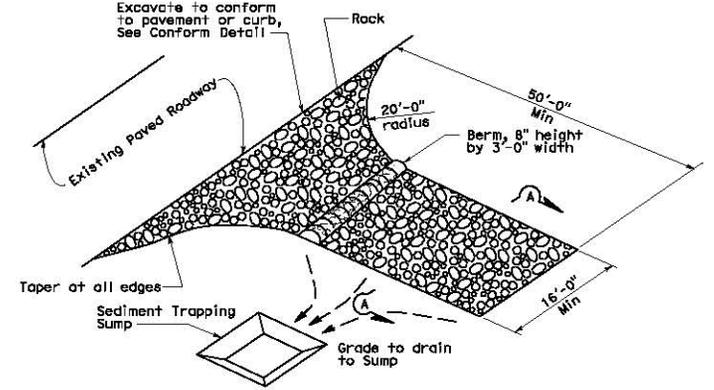
SECTION B-B



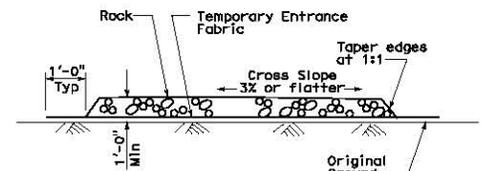
PLAN



ELEVATION SEDIMENT TRAPPING SUMP



PERSPECTIVE TEMPORARY CONSTRUCTION ENTRANCE (TYPE 1)



SECTION A-A

STATE OF CALIFORNIA
DEPARTMENT OF TRANSPORTATION

TEMPORARY WATER POLLUTION CONTROL DETAILS (TEMPORARY CONSTRUCTION ENTRANCE)

NO SCALE

T58

2006 STANDARD PLAN T58

APPENDIX D

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD,
LAHONTAN REGION, BOARD ORDERS**

Lahontan Regional Water Quality Control Board

March 27, 2014

Brendan Ferry
El Dorado County Department of Transportation
924 B Emerald Bay Road
South Lake Tahoe, CA 96150

BOARD ORDER NO. R6T-2014-0025, FOR CLEAN WATER ACT SECTION 401 WATER QUALITY CERTIFICATION FOR THE SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT, EL DORADO COUNTY, WDID 6A091401001

The California Regional Water Quality Control Board, Lahontan Region (Water Board) has received a complete Clean Water Act section 401 Water Quality Certification (WQC) application and applicable fee for the Sawmill 2B Bike Path and Erosion Control Project (Project) from the El Dorado County Department of Transportation (Applicant). The Water Board also received information to support granting an exemption from a waste discharge prohibition in the Water Board's *Water Quality Control Plan for the Lahontan Region* (Basin Plan). This Order for WQC hereby assigns this Project the following reference number: Waste Discharger Identification (WDID) No. 6A091401001. Please use this reference number in all future communications regarding this Project.

Any person aggrieved by this action of the Water Board may petition the State Water Resources Control Board (State Water Board) to review the action in accordance with Water Code section 13320 and California Code of Regulations (CCR), title 23, sections 2050 and following. The State Water Board must receive the petition by 5:00 p.m., 30 days after the date of this Order, except that if the thirtieth day following the date of this Order falls on a Saturday, Sunday, or state holiday, the petition must be received by the State Water Board by 5:00 p.m. on the next business day. Copies of the law and regulations applicable to filing petitions may be found on the Internet at: http://www.waterboards.ca.gov/public_notices/petitions/water_quality or will be provided upon request.

PROJECT DESCRIPTION

Table of Project Information:

| | |
|--------------|--|
| WDID Number | 6A091401001 |
| Applicant | Brendan Ferry El Dorado County Department of Transportation 924 B Emerald Bay Road South Lake Tahoe, CA 96150 |
| Project Name | Sawmill 2B Bike Path and Erosion Control Project |

Table of Project Information continued:

| | | | | | | | |
|--|--|------------------|-------------|-------------|------------------|-------------|------------|
| Project Purpose and Description | The Applicant would install a Class 1 bike path consisting of an eight-foot wide paved bike path with a two-foot wide unpaved shoulder on each side of the path along the south side of Sawmill Road from Echo View Estates to Highway 50. Associated drainage, water quality and erosion control features will be installed including replacing existing culverts and installing sediment traps, rock bowls, rock lined channels, rock slope protection, shallow detention features and vegetation. | | | | | | |
| Project Type | Bike Path and Erosion Control Project | | | | | | |
| Project County | El Dorado | | | | | | |
| Project Address or other Locating Information | Between Echo View Road and Highway 50 in South Lake Tahoe, El Dorado County | | | | | | |
| Location Latitude/Longitude | Latitude: 38.8888; Longitude: 120.0269 | | | | | | |
| Hydrologic Unit(s) | South Tahoe Hydrologic Area 634.10, in the Lake Tahoe Hydrologic Unit 634.00 | | | | | | |
| Overall Project Area | 11 acres | | | | | | |
| Receiving Water(s) Name | Seasonal wetlands, ephemeral streams and swales, and Stream Environment Zones (SEZs) draining to Angora Creek, a tributary to the Upper Truckee River. Angora Creek parallels the Project area but will not be directly impacted by the Project. | | | | | | |
| Water Body Type(s) | Seasonal wetlands and ephemeral streams and swales. | | | | | | |
| Designated Beneficial Uses | MUN, AGR, GWR, NAV, REC-1, REC-2, COMM, COLD, WILD, BIO, MIGR, SPWN | | | | | | |
| Potential Water Quality Impacts | Discharge of materials to Waters of the U.S. (WOUS) | | | | | | |
| Area of Water(s) within the Overall Project Area | 150 square feet of seasonal wetland 13,686 square feet of ephemeral stream | | | | | | |
| Project Impacts (Fill) to waters of the state, including WOUS | Waterbody Type | Permanent | | | Temporary | | |
| | | Square Feet | Linear Feet | Cubic Yards | Square Feet | Linear Feet | Cubic Yard |
| | <i>Lake</i> | | | | | | |
| | <i>Riparian</i> | 23,487 | 6,179 | 982 | 9,148 | | |
| | <i>Stream</i> | | | | | | |
| | <i>Wetland</i> | 131 | | 52 | | 784 | |
| Project Impacts (Dredge/Excavation) to waters of the state, including WOUS | Waterbody Type | Permanent | | | Temporary | | |
| | | Sq. Ft. | Linear Feet | Cubic Yards | Acres / Sq. Ft. | Linear Feet | Cubic Yard |
| | <i>Lake</i> | | | | | | |
| | <i>Riparian</i> | | | | | | |
| | <i>Stream</i> | | | | | | |
| | <i>Wetland</i> | | | | | | |
| | Total | | | | | | |
| Federal Permit(s) | The Applicant has applied for U.S. Army Corps of Engineers (USACOE) authorization to proceed under a Nationwide Permit, pursuant to CWA section 404. | | | | | | |
| Non-Compensatory Mitigation | Site-specific Best Management Practices (BMPs) will be used through Project completion to control erosion. | | | | | | |

Table of Project Information Continued:

| | |
|-------------------------|--|
| Compensatory Mitigation | The Applicant successfully restored stream and wetland habitat with the Angora Creek and SEZ Restoration Project, completed in 2010. The permanent impacts associated with the Sawmill 2B Project will be mitigated at a 1.5:1 ratio by permanently dedicating 0.48 acre of credited area from the Angora Restoration Project site as advance impact offset for the permanent impacts of this Project. |
| Applicable Fees | \$1,216.55 (\$1097.00 base fee + \$14.00 discharge fee for 0.003 acre (131 square feet) of impacts to Federal Jurisdictional Waters at \$4,717.00 per acre + \$105.55 ambient surcharge at 9.5% of the total of base fee + discharge fee) |
| Fees Received | \$2854.00 received- \$1,216.55 recalculated fees = \$1,637.45 will be refunded |

WATER QUALITY CONTROL PLAN WASTE DISCHARGE PROHIBITION

To protect beneficial uses and achieve water quality objectives for the waters of Lake Tahoe and its tributaries, the Basin Plan specifies the following discharge prohibition:

The discharge or threatened discharge, attributable to new development or permanent disturbance in Stream Environment Zones or which is not in accordance with land capability, of solid or liquid waste, including soil, silt, sand, clay, rock, metal, plastic, or other organic, mineral or earthen materials, to Stream Environment Zones in the Lake Tahoe Basin is prohibited.

The proposed Project is located within the SEZ and wetland areas of tributary streams to Lake Tahoe and will impact SEZ areas with proposed new permanent disturbance.

EXEMPTION GRANTED

The Water Board has determined the Project meets the conditions and criteria for an exemption to the above waste discharge prohibition. On March 12, 2014, the Water Board adopted Resolution No. R6T-2014-0022, with the necessary findings and conditions granting an exemption to the above-cited waste discharge prohibition (enclosed).

CEQA COMPLIANCE

El Dorado County adopted a Mitigated Negative Declaration (State Clearinghouse No. 2009102016) on December 8, 2010, and filed a Notice of Determination on December 10, 2009 for the Sawmill 2 Bike Path and Erosion Control Project, pursuant to the California Environmental Quality Act, (CEQA Public Resources Code 21000, et seq.).

The Water Board, acting as a CEQA Responsible Agency in compliance with CCR, title 14, section 15096, has considered El Dorado County's Mitigated Negative Declaration (MND) for the Project and mitigation measures incorporated into the MND to reduce potentially significant water quality impacts to less than significant with mitigation. As a result of the analysis, the Water Board finds, with the conditions required herein, the mitigation measures in the MND are adequate to reduce potentially significant water

quality impacts to less than significant. This Order includes mitigation monitoring requirements for impacts to waters of the state, including WOUS.

SECTION 401 WATER QUALITY CERTIFICATION

Authority

Section 401 of the CWA (33 U.S.C., paragraph 1341) requires that any applicant for a CWA section 404 permit, who plans to conduct any activity that may result in discharge of dredged or fill materials to WOUS, must provide to the permitting agency a certification that the discharge will be in compliance with applicable water quality standards of the state in which the discharge will originate. No section 404 permit may be granted (or valid) until such certification is obtained. The Applicant submitted a complete application and the application filing fee required for WQC under section 401 for the Project. The Applicant has applied for USACOE authorization to proceed under General Permit No. 16 pursuant to CWA section 404.

CCR, title 23, section 3831(e) grants the Water Board Executive Officer the authority to grant or deny WQC for projects in accordance with CWA section 401. The Project qualifies for such WQC.

Standard Conditions

Pursuant to CCR title 23, section 3860, the following standard conditions are requirements of this certification:

1. This certification action is subject to modification or revocation upon administrative or judicial review, including review and amendment pursuant to Water Code section 13330 and CCR, title 23, section 3867.
2. This certification action is not intended and must not be construed to apply to any discharge from any activity involving a hydroelectric facility requiring a Federal Energy Regulatory Commission (FERC) license unless the pertinent certification application was filed pursuant to CCR title 23, section 3855(b) and the application specifically identified that a FERC license or amendment to a FERC license for a hydroelectric facility was being sought.
3. The validity of any non-denial certification action must be conditioned upon total payment of the full fee required under CCR title 23, section 3833, unless otherwise stated in writing by the certifying agency.
4. Neither Project construction activities nor operation of the Project may cause a violation of the Basin Plan, may cause a condition or threatened condition of pollution or nuisance, or cause any other violation of the Water Code.

5. The Project must be constructed and operated in accordance with the Project described in the application for WQC that was submitted to the Water Board. Deviation from the Project description constitutes a violation of the conditions upon which the certification was granted. Any significant changes to this Project that would have a significant or material effect on the findings, conclusions, or conditions of this certification, including Project operation, must be submitted to the Executive Officer for prior review and written approval.
6. This WQC is subject to the acquisition of all local, regional, state, and federal permits and approvals as required by law. Failure to meet any conditions contained herein or any conditions contained in any other permit or approval issued by the state of California or any subdivision thereof may result in the revocation of this certification and civil or criminal liability.
7. The Water Board may add to or modify the conditions of this certification as appropriate to implement any new or revised water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the CWA, or as appropriate to coordinate the operations of this Project with other projects where coordination of operations is reasonably necessary to achieve water quality standards or protect the beneficial uses of water. Notwithstanding any more specific conditions in this certification, the Project must be constructed and operated in a manner consistent with all water quality standards and implementation plans adopted or approved pursuant to the Porter-Cologne Water Quality Control Act or section 303 of the CWA.
8. This certification does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under the California Endangered Species Act (Fish and Game Code section 2050 et seq.) or the federal Endangered Species Act (16 U.S.C. sections 1531 et seq.). If a "take" will result from any act authorized under this certification, the Applicant must obtain authorization for the take prior to construction or operation of the Project. The Applicant is responsible for meeting all applicable requirements of the Endangered Species Act for the Project authorized under this certification.

Additional Conditions

Pursuant to CCR title 23, section 3859(a), the following additional conditions are requirements of this certification:

1. All temporary BMPs must be inspected (a) daily during Project construction and (b) weekly during the October 15 to May 1 period(s), when not snow-covered, to ensure they are functioning properly. The Applicant must maintain and keep daily inspection logs onsite during Project construction and provide a copy of inspection logs and records of any corrective actions to Water Board staff. The Applicant must provide an annual report of the construction season inspections and corrective actions implemented to the Water Board by **October 15** of each year in which construction occurs.

2. The Applicant must stabilize from erosion all areas of temporary impacts to waters of the state and all other areas of temporary upland disturbance that could result in a discharge or a threatened discharge to waters of the state for the Project to be considered complete.
3. The Applicant must temporarily stabilize the site from erosion (winterize) prior to October 15 in a manner that will remain effective until May 1 of the following year.
4. Wetland and or SEZ areas that will be avoided near the Project site and/or staging areas must be protected by colored construction fencing or equivalent barriers.
5. Prior to initiating construction of the Project, the Applicant must document whether there are any subsurface utilities in the area of construction. This can be accomplished by: (1) contacting all utilities (both public and private) that provide service in the area, documenting these contacts; (2) contacting Underground Service Alert, documenting this contact; or, (3) some other equivalent affirmative action to determine whether or not there are any subsurface utilities in the area of construction. The area of construction is defined as any area within the Project boundaries where there will be excavation, construction of borings or driving of piles. If subsurface utilities are located in the construction area, the Applicant must also prepare a utility avoidance plan that will be followed during construction.
6. A copy of this WQC Order, a copy of the complete WQC application submitted to the Water Board, and the utility avoidance plan (if required by additional condition above) must be available at the Project site during construction of the Project.
7. The Applicant must prevent the introduction or spread of noxious/invasive weeds within the Project and staging areas. Control measures may include removing existing invasive vegetation, cleaning all equipment and gear prior to use on the site, using weed-free erosion control materials (including straw), and using weed-free seeds and plant material for revegetation of disturbed areas.
8. Water Board staff must be notified 48 hours prior to commencement of ground disturbance.
9. The Applicant must allow Water Board staff or its authorized representative upon presentation of credentials:
 - a) Entry onto Project premises, including all areas on which wetland fill or wetland mitigation is located or in which records are kept.
 - b) Access to copy any record required to be kept under the terms and conditions of this Order.
 - c) Inspection of any treatment equipment, monitoring equipment, or monitoring method required by this Order.
 - d) Sampling of any discharge or surface water covered by this Order.

10. No debris, cement, concrete (or wash water therefrom), oil or petroleum products must enter into or be placed where it may be washed from the Project site by rainfall or runoff into waters of the state. When operations are completed, any excess material must be removed from the Project work area, and from any areas adjacent to the work area where such material may be transported into waters of the state.
11. The Applicant must immediately (within two hours) notify Water Board staff by telephone whenever an adverse condition occurs as a result of this Project. Such a condition includes, but is not limited to, a violation of the conditions of this Order, a significant spill of petroleum products or toxic chemicals, or damage to control facilities that would cause noncompliance. A written notification of the adverse condition must be provided to the Water Board within two weeks of occurrence. The written notification must identify the adverse condition, describe the actions necessary to remedy the condition, and specify a timetable, subject to any modifications by Water Board staff, for the remedial actions.
12. The Applicant is responsible for informing any contractors of the specific conditions contained in this WQC Order and maintaining compliance with the conditions of this Order.
13. A copy of this Order must be maintained at the Project site so as to be available at all reasonable times to site operating personnel and Water Board staff.
14. Construction equipment must be monitored for leaks, and removed from service if necessary to protect water quality.
15. An emergency spill kit must be at the Project site at all times.

Enforcement

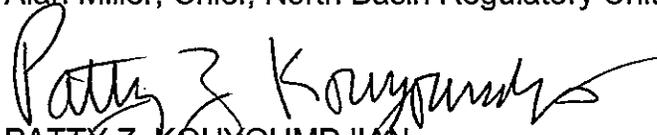
1. In the event of any violation or threatened violation of the conditions of this certification, the violation or threatened violation must be subject to any remedies, penalties, process or sanctions as provided for under state law. For purposes of CWA section 401(d), the applicability of any state law authorizing remedies, penalties, process or sanctions for the violation or threatened violation constitutes a limitation necessary to assure compliance with the water quality standards and other pertinent requirements incorporated into this certification.
2. In response to a suspected violation of any condition of this certification, the State Water Board or the Water Board may require the holder of any permit or license subject to this certification to furnish, under penalty of perjury, any technical or monitoring report the State Water Board or Water Board deems appropriate, provided that the burden, including costs, of the reports must be a reasonable relationship to the need for the reports and the benefits to be obtained from the reports.
3. In response to any violation of the conditions of this certification, the Water Board may add to or modify the conditions of this certification as appropriate to ensure compliance.

Section 401 Water Quality Certification Requirements Granted

I hereby issue an Order certifying that any discharge from the referenced Project will comply with the applicable provisions of CWA sections 301 (Effluent Limitations), 302 (Water Quality Related Effluent Limitations), 303 (Water Quality Standards and Implementation Plans), 306 (National Standards of Performance), and 307 (Toxic and Pretreatment Effluent Standards), and with other applicable requirements of state law. This discharge is also regulated under State Water Board Order No. 2003-0017-DWQ, "General Waste Discharge Requirements for Dredge and Fill Discharges That Have Received State Water Quality Certification," which requires compliance with all conditions of this WQC.

Except insofar as may be modified by any preceding conditions, all WQC certification actions are contingent on (a) the discharge being limited and all proposed mitigation being completed in strict compliance with the Applicant's Project description and the terms specified in this WQC Order, and (b) compliance with all applicable requirements of the Basin Plan.

We look forward to working with you in your efforts to protect water quality. If you have questions, please contact Dale Payne, Environmental Scientist, at (530) 542-5464 or Alan Miller, Chief, North Basin Regulatory Unit, at (530) 542-5430.


PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Enclosure: Resolution No. R6T-2014-0022

cc: Brian Judge / Tahoe Regional Planning Agency
Patrick Moeszinger / California Department of Fish and Wildlife, Rancho Cordova
Dave Smith / Wetlands Regulatory Office (WTR-8), US EPA, Region 9
(via email at R9-WTR8-Mailbox@epa.gov)
Kristine Hansen / U.S. Army Corps of Engineers, Reno Office
Bill Orme / State Water Resources Control Board, Division of Water Quality
(via email at Stateboard401@waterboards.ca.gov)

DYP/adw/T: R6T-2014-0025_Sawmill 2B Bike Path 401_6A091401001.docx
File: El Dorado County DOT Sawmill 2B Bike Path and Erosion Control Project

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LAHONTAN REGION**

RESOLUTION R6T-2014-0022

**SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT, EL DORADO
COUNTY DEPARTMENT OF TRANSPORTATION - EXEMPTION TO A WASTE
DISCHARGE PROHIBITION CONTAINED IN THE WATER QUALITY CONTROL
PLAN FOR THE LAHONTAN REGION**

_____ El Dorado County _____

WHEREAS, the California Regional Water Quality Control Board, Lahontan Region (Water Board) finds:

1. El Dorado County Department of Transportation (Applicant) submitted information to the Water Board to complete a Report of Waste Discharge (ROWD) and an Application for Clean Water Act Section 401 Water Quality Certification (Water Quality Certification) for the Sawmill 2B Bike Path and Erosion Control Project (hereinafter referred to as the "Project"). The primary purpose of the Project is to construct a Class 1 bike path aligned next to Sawmill Road between Echo View Drive and Highway 50. The Applicant has also proposed erosion control and treatment Best Management Practices (BMPs) for storm water runoff from Sawmill Road as part of this Project.
2. The Project site is located south of Lake Tahoe Boulevard along Sawmill Road between Echo View Drive and Highway 50 (Sections 18, 19, and 20 within Township 12 North, Range 18 East).
3. The Project involves constructing a Class 1 bicycle path along the southwest side of Sawmill Road. The eight-foot wide asphalt trail will have shoulders two feet wide on each side and will cross through California Tahoe Conservancy property, Washoe Meadows State Park property, USDA Forest Service property, and private property. Another component of the Project will be to install drainage improvements and erosion control features to improve water quality draining from the Project area. The Applicant has proposed to capture, convey and treat storm water runoff from Sawmill Road by installing approximately 5,632 square feet of erosion control features, including rock-lined channels, sediment traps, rock bowls, and grass-lined channels to reduce sediment loads to Angora Creek, which is the closest receiving water in proximity to the Project.
4. The bike path will cross several ephemeral drainages classified as Stream Environment Zones (SEZs) due to the alignment of Sawmill Road between the hillside on the northeast and Angora Creek on the southwest. The Project will require permanent and temporary disturbance to areas designated as SEZs. The Applicant evaluated several alternatives during the planning phase of the Project and chose the current plan, which will increase coverage in land capability district 1b

(SEZ) by 9,932 square feet. The bike trail alignment was chosen to minimize disturbance and impacts; it is sited as close to the existing roadway as possible in areas where SEZ occurs or where drainages cross under Sawmill Road. Culverts will convey stormwater flows beneath the bike path in the SEZ and drainage areas, and rock will be installed at the end of culverts to slow flow velocity and promote infiltration of runoff.

5. The Water Board adopted the *Water Quality Control Plan for the Lahontan Region* (Basin Plan). Chapter 5 specifies the following discharge prohibition:

The discharge or threatened discharge, attributable to new development or permanent disturbance in Stream Environment Zones, of solid or liquid waste, including soil, silt, sand, clay, rock, metal, plastic, or other organic, mineral or earthen materials, to Stream Environment Zones in the Lake Tahoe Basin is prohibited.

6. The proposed Project would violate the above-cited prohibition as it involves land disturbance and discharge of earthen and fill material within SEZs in the Lake Tahoe Basin. The Project will disturb a total of 23,618 square feet of SEZs due to temporary and permanent disturbance. Construction of the bike path will temporarily disturb by grading or permanently disturb by hard coverage 19,218 square feet of SEZ. The disturbance includes (a) grading and paving for a new bike path and (b) removing, replacing and extending existing culverts for Sawmill Road to pass beneath the bike path. Construction of the erosion control improvements will temporarily and/or permanently disturb 4400 square feet of SEZ for dredge and fill impacts from grading improvements constructed in wetland and SEZ.
7. The primary purpose of the bike trail element of the Project is public recreation. The secondary purpose of the Project is to provide improved erosion and drainage control for the portion of Sawmill Road from Echo View Drive to Highway 50. These elements are evaluated separately below.
8. The Basin Plan allows exemptions to the above-cited discharge prohibition for public recreation projects that meet the following exemption criteria:

- (a) The project by its nature must be sited in a Stream Environment Zone.

The bike trail Project element is a linear recreation/transportation project that parallels an existing County-maintained road that crosses several minor stream channels. Because SEZ areas are adjacent to Sawmill Road and because small stream channels cross perpendicular to Sawmill Road, the bike path must cross SEZ areas to accomplish the overall Sawmill 2 Project goal of connecting Highway 50 to Lake Tahoe Boulevard with a Class 1 bike path that is located off of the roadway. The proposed bike path is part of the Tahoe Regional Planning Agency's (TRPA) adopted Bicycle and Pedestrian Master Plan and is a key link in El Dorado County's planned and existing bicycle path network. The Project, by its nature, must be sited in SEZs.

- (b) There is no feasible alternative which would reduce the extent of SEZ encroachment.

The bike path has been designed to minimize SEZ encroachment by placing the bike path as close to the road as possible in SEZ areas. The bike path has also been designed to cover existing previously disturbed SEZ areas wherever possible. Where SEZ areas are perpendicular to the bike path, the SEZ encroachment has been minimized in the most sensitive SEZ boundaries by using appropriately sized culverts under the bike trail so as not to adversely alter hydrologic function of the ephemeral channels.

- (c) Impacts are fully mitigated.

Temporary impacts to water quality will be mitigated by using erosion and sediment control BMPs, such as seeding, mulching and tackifying on moderately steep slopes, and rock slope protection on steeper slopes; revegetation of areas where clearing of vegetation or excavation is required; and use of filter fences, fiber rolls, and gravel-bags. Permanent impacts to SEZs in the Project area will be mitigated with credit through an off-site restoration project that the Applicant completed in 2010. The mitigation site is the Angora Creek and SEZ Restoration Project near View Circle in El Dorado County. The Angora Creek and SEZ Restoration Project restored or enhanced 6.85 acres (298,392 square feet) of SEZ and/or wetland within and adjacent to Angora Creek. A portion of this restoration is sufficient to mitigate for the impacts of the proposed new bike path. Wetlands in the Lake Tahoe Hydrologic Unit are also SEZs. The Sawmill 2A project used 10,061 square feet of credit from the Angora Creek project to mitigate impacts; 288,331 square feet remains as available credit toward the Sawmill 2B Project, as discussed below.

- (d) SEZs are restored in an amount 1.5 times the area of SEZ disturbed or developed for the project.

The bike trail Project elements involve restoring disturbed areas where feasible, but will increase hard coverage and reduce soft coverage such that, with other permanent disturbance, a total of 19,218 square feet of permanent development or disturbance will occur that requires offsetting mitigation. To comply with the mitigation requirement of 1.5 times the area permanently disturbed or developed, the Project will utilize a total of 28,827 square feet (0.66 acre) of wetland and SEZ restoration credit from the Angora Creek and SEZ Restoration Project site (298,392 square feet of SEZ was restored in 2010; 10,061 square feet was used with the Sawmill 2A Project in 2011. A total of 288,331 square feet is available as restoration credit).

9. The Basin Plan also allows exemptions to the above-cited discharge prohibition for erosion control projects that meet the following exemption criteria:

- (a) The project, program, or facility is necessary for environmental protection.

The Project will capture, convey and treat storm water runoff from County administered rights of way by installing approximately 5,632 square feet of rock-lined channels, sediment traps, rock bowls, and grass-lined channels to reduce sediment load. The erosion control elements of the Project are necessary for environmental protection and water quality improvements.

- (b) There is no reasonable alternative, including relocation, which avoids or reduces the extent of encroachment in the Stream Environment Zone.

The erosion control and water quality Best Management Practices (BMPs) are designed for areas where problems with erosion and water quality exist, which typically are the areas with culverts and drainage areas next to the road. In most cases, SEZ areas are sited where culverts exist, which is where the water quality improvements must be installed. Various alternatives were considered during the design process and the county's environmental review process under the California Environmental Quality Act (CEQA). There is no reasonable alternative to avoid or further reduce the extent of encroachment into the SEZ.

- (c) Impacts are fully mitigated.

The impacts from the Project will be fully mitigated by the incorporation of temporary BMPs during construction and permanent (post-construction) BMPs to prevent soil erosion and water quality degradation downstream of the Project area. Temporary impacts will be mitigated by restoring vegetation in disturbed areas and stabilizing the areas from erosion with vegetation and soil cover treatments. Permanent BMPs include sediment traps, rock bowls, grass-lined swales and rock-lined channels, which will trap sediment discharges from roadways.

10. Compliance with California Environmental Quality Act (CEQA, Public Resources Code 21000, et seq.) – The Applicant certified a Mitigated Negative Declaration (MND, State Clearinghouse No. 2009102016) on December 8, 2009, and filed a Notice of Determination on December 10, 2009 for the Sawmill 2 Bike Path and Erosion Control Project, pursuant to the CEQA. The Water Board, acting as a CEQA Responsible Agency in compliance with California Code of Regulations, Title 14, section 15096, has considered the Applicant's MND for the Sawmill 2 Project and mitigation measures incorporated into the MND to reduce potentially significant water quality impacts to less than significant. As a result of the analysis, the Water Board finds the mitigation measures in the MND are adequate to reduce potentially significant water quality impacts to less than significant levels. The Applicant has applied for and must obtain a Clean Water Act Section 401 Water Quality Certification (WQC) Order from the Water Board to implement the Project. The Water Board filed a Notice of Determination for the above-referenced MND with the

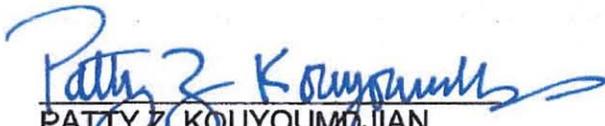
State Clearinghouse on July 18, 2011 with the WQC for the Sawmill 2B Project that includes conditions and monitoring requirements to verify the implementation of the water quality-related aspects of the Applicant's CEQA Mitigated Negative Declaration.

11. The Water Board has notified the Applicant and interested agencies and persons of its intent to adopt this Resolution.
12. The Water Board, in a public meeting, heard and considered all comments and determined that the Project satisfies the exemption criteria stated above.

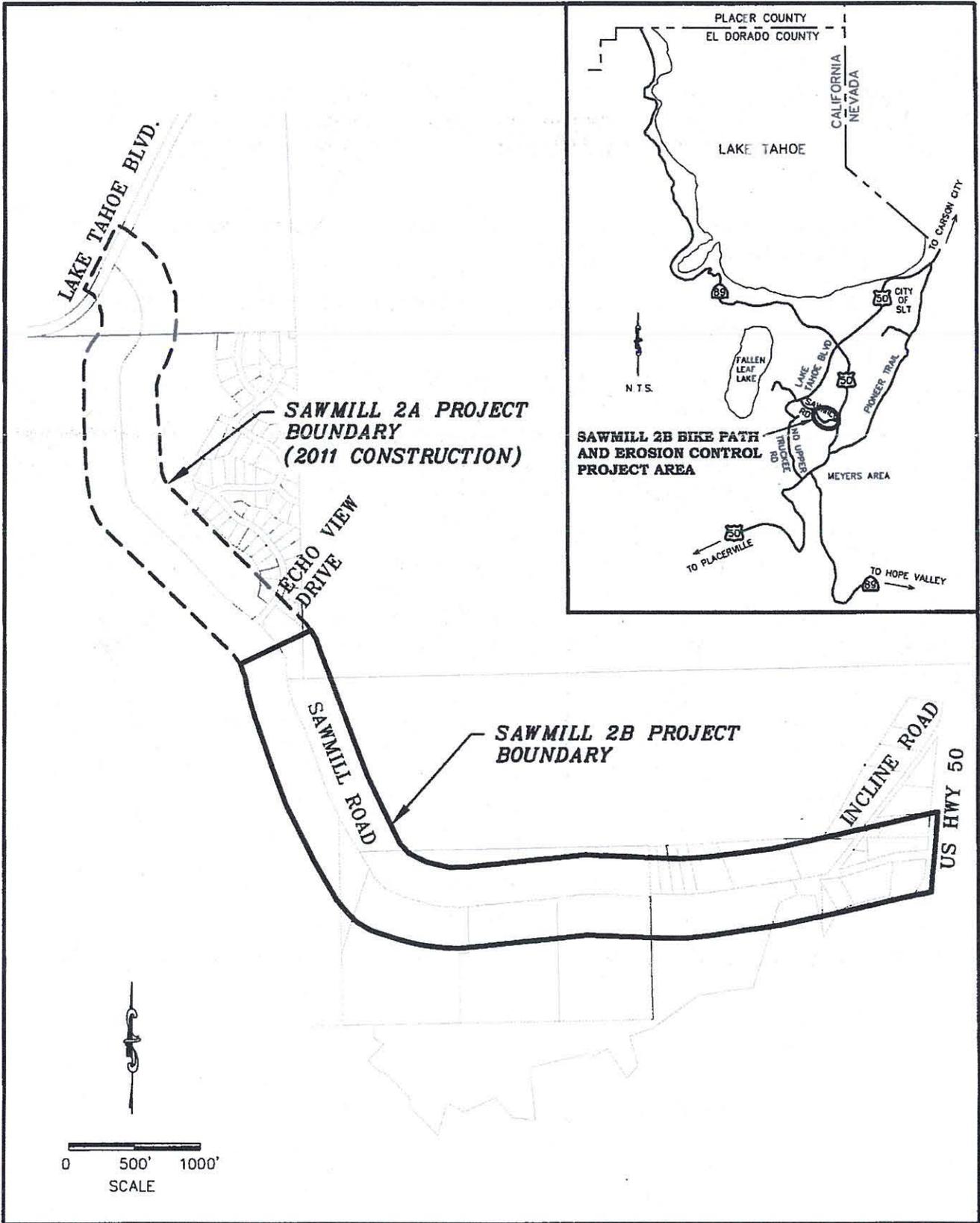
THEREFORE, BE IT RESOLVED THAT:

1. Pursuant to Finding Nos. 8 and 9, above, the criteria established for exemption to the Basin Plan prohibition stated in Finding No. 5 is satisfied for the Sawmill 2B Bike Path and Erosion Control Project.
2. The Water Board hereby grants an exemption to the Basin Plan prohibition stated in Finding No. 5 for the Sawmill 2B Bike Path and Erosion Control Project.
3. Prior to initiating any construction activity or disturbance in surface waters, including wetlands, the Applicant must obtain for the Project a WQC Order from the Water Board.
4. Based on the credit available for SEZ restoration at the Angora Creek and SEZ Restoration Project site (298,392 square feet), a total of 28,827 square feet is hereby deducted as compensatory mitigation for the Sawmill 2B Bike Path and Erosion Control Project.

I, Patty Z. Kouyoumdjian, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of a Resolution adopted by the California Regional Water Quality Control Board, Lahontan Region, on **March 12, 2014**.


PATTY Z. KOUYOUMDJIAN
EXECUTIVE OFFICER

Attachment: A. Project Vicinity and Site Map



| | | | | |
|---|--|--------------------|---------|--------------------|
| COUNTY OF EL DORADO TRANSPORTATION DIVISION SOUTH LAKE TAHOE OFFICE | SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT LOCATION MAP | | | FIGURE A |
| | DATE: 11 2013 | PROJECT NO.: 95192 | BY: AID | |

APPENDIX E
TAHOE REGIONAL PLANNING AGENCY PERMIT



**TAHOE
REGIONAL
PLANNING
AGENCY**

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.org



PERMIT

PROJECT DESCRIPTION: Sawmill 2B Bike Path and Erosion Control Project

TRPA Project Number: 520-101-00

PERMITTEE(S): El Dorado County Department of Transportation FILE # EIPC2013-0022

COUNTY/LOCATION: El Dorado County/Sawmill Road from Echo View Drive to U.S. Highway 50

Having made the findings required by Agency ordinances and rules, TRPA approved the project on February 25, 2014, subject to the Standard Conditions of Approval attached hereto (Attachment Q) and the special conditions found in this permit.

This permit shall expire on February 25, 2017, without further notice unless the construction has commenced prior to this date and diligently pursued thereafter. Commencement of construction consists of pouring concrete for a foundation and does not include grading, installation of utilities or landscaping. Diligent pursuit is defined as completion of the project within the approved construction schedule. The expiration date shall not be extended unless the project is determined by TRPA to be the subject of legal action which delayed or rendered impossible the diligent pursuit of the permit.

NO TREE REMOVAL, CONSTRUCTION OR GRADING SHALL COMMENCE UNTIL:

- (1) TRPA RECEIVES A COPY OF THIS PERMIT UPON WHICH THE PERMITTEE(S) HAS ACKNOWLEDGED RECEIPT OF THE PERMIT AND ACCEPTANCE OF THE CONTENTS OF THE PERMIT;
- (2) ALL PRE-CONSTRUCTION CONDITIONS OF APPROVAL ARE SATISFIED AS EVIDENCED BY TRPA'S ACKNOWLEDGEMENT OF THIS PERMIT;
- (3) A TRPA PRE-GRADING INSPECTION HAS BEEN CONDUCTED WITH THE PROPERTY OWNER AND/OR THE CONTRACTOR.

 2-24-14
TRPA Executive Director/Designee Date

PERMITTEE'S ACCEPTANCE: I have read the permit and the conditions of approval and understand and accept them. I also understand that I am responsible for compliance with all the conditions of the permit and am responsible for my agents' and employees' compliance with the permit conditions. I also understand that if the property is sold, I remain liable for the permit conditions until or unless the new owner acknowledges the transfer of the permit and notifies TRPA in writing of such acceptance. I also understand that certain mitigation fees associated with this permit are non-refundable once paid to TRPA. I understand that it is my sole responsibility to obtain any and all required approvals from any other state, local or federal agencies that may have jurisdiction over this project whether or not they are listed in this permit.

Signature of Permittee(s) David R. Power Date 2/27/14
/brj PERMIT CONTINUED ON NEXT PAGE

TRPA Project Number 520-101-00
FILE NO. EIPC2013-0022

Security Posted: N/A

Required plans determined to be in conformance with approval: Date: _____

TRPA ACKNOWLEDGEMENT: The permittee has complied with all pre-construction conditions of approval as of this date:

TRPA Executive Director/Designee

Date

SPECIAL CONDITIONS

This permit specifically authorizes the construction of a Class I bike trail and water quality improvements near Sawmill Road from Echo View Drive to U.S. Highway 50.

1. The Standard Conditions of Approval listed in Attachment Q shall apply to this permit.
2. Prior to permit acknowledgement, the following conditions of approval must be satisfied.
 - A. The project plans and/or specifications shall be revised to include:
 - (1) Provide a land coverage table by land capability district. The table should show new coverage, coverage removed, and bike trail coverage over existing coverage.
 - B. A resource protection plan shall be prepared by a qualified professional and may provide for surface or subsurface recovery of data and artifacts and recordation of structural and other data.
 - C. Grading, operation of equipment or other soil disturbance is prohibited in areas where a designated historic resource is present or could be damaged, except in accordance with a TRPA-approved resource protection plan. The resource protection plan shall indicate all such known areas on the site and shall indicate the measures that shall be taken to protect them

- D. Submit a de-watering plan.
 - E. Submit 3 sets of final revised plans to TRPA.
 - F. Submit a copy of the final Specifications to TRPA.
3. Prior to commencement of construction:
- A. The permittee shall submit an updated construction schedule to TRPA prior to commencement of construction. This schedule shall identify dates for the following:
 - When installation of temporary erosion control structures will occur;
 - When each stage of construction will start;
 - When construction spoils and debris will be removed;
 - When installation of all permanent erosion control structures will occur;
 - When construction will be completed;
 - When restoration of staging areas will occur (within 30 days of project finish, staging areas shall be fully restored, mulched, and re-seeded);
 - The estimated date for when the final inspection by TRPA Environmental Compliance staff will take place to ensure that all conditions of project approval have been satisfied.
 - B. The permittee shall submit a copy of the completed Storm Water Pollution Prevention Plan (SWPPP) and/or Water Pollution Control Program (WPCP).
4. The color and texture of rock or concrete shall be approved by TRPA prior to placement.
5. All new galvanized or reflective metal surfaces visible from bike trails, or Highway 50 and owned by El Dorado County including but not limited to guardrails, guardrail posts, traffic signal posts, light posts, utility boxes, sign posts, backs of signs, and exposed culverts shall be Brown (Federal Standard 595 FS 30059) or an approved equivalent. The proposed chain-link fence finish may remain galvanized if brown slats are placed in the openings. Samples of colored structures shall be submitted to TRPA and approved prior to installation.

6. An onsite inspection by TRPA staff is required prior to any construction or grading activity. TRPA staff shall determine if the onsite improvements required by Attachment Q (Standard Conditions of Approval) have been properly installed. No grading or construction shall commence until TRPA pre-grade conditions of approval are met.
7. The adequacy of all required BMPs, as shown on the final construction plans, shall be confirmed at the time of the TRPA pre-grading or pre-construction inspection. Any required modifications, as determined by TRPA, shall be incorporated into the project permit at that time. Adequate BMPs must be installed prior to construction, regardless of the amount or type of BMPs shown on final construction plans.
8. All construction equipment working in or near Stream Environment Zones (SEZ) areas must be steam cleaned prior to mobilization at the project site and maintained in clean and good working order with maintenance logs made available to TRPA at their request.
9. All material obtained from any excavation work that is not contained within foundations, retaining walls, or by other methods approved by TRPA shall be removed from the subject parcel and disposed of at a site approved by TRPA.
10. If artifacts, archaeological soils, or unusual amounts of bone or shell are uncovered during the construction activities, all work in the area will be stopped and a qualified archeologist will be immediately contacted for on-site consultation.
11. The roots of trees (adjacent to the pathway) over four inches in diameter shall not be severed, if avoidable, pursuant to Subsection 65.2F of the TRPA Code of Ordinances.
12. Although not expected, if groundwater is intercepted during construction, the permittee shall immediately notify the TRPA Environmental Compliance Division. All activities in the vicinity of the intercepted groundwater shall cease until permission to recommence work has been granted by TRPA, based on an approved dewatering plan.
13. No trees shall be removed (other than those shown on the approved site plan) or trimmed for view enhancement purposes without prior TRPA written approval as per the Landscape and Revegetation Plan.
14. The trail and revegetated areas will be maintained over time consistent with the approved plans. Modifications to this facility, including improvements

constructed in association with this project, shall be subject to TRPA review and approval.

15. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval, or take other appropriate action.
16. Any modifications to the TRPA approved plans shall be submitted to TRPA for review and approval.
17. Any normal construction activities creating noise in excess to the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 A.M. and 6:30 P.M.
18. The permittee is responsible for insuring that the project, as built, does not exceed the approved land coverage figures shown on the site plan. The approved land coverage figures shall supersede scaled drawings when discrepancies occur.
19. Grading is prohibited any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow, or is in a saturated, muddy, or instable conditions (pursuant to Subsection 64.2.C of the TRPA Code of Ordinances).
20. This site shall be winterized in accordance with the provisions of Attachment Q by October 15th of each construction season. All disturbed areas shall be stabilized with a 3-inch layer of mulch or covered with an erosion control blanket.
21. The permittee will not access private property without prior approval from the land owner.
22. If there is conflicting information between the project specifications and the special conditions in this Permit, the special conditions in the TRPA Permit shall take precedence.
23. El Dorado County shall request a final inspection from TRPA once the project is complete.

END OF PERMIT



**TAHOE
REGIONAL
PLANNING
AGENCY**

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.org



MITIGATED STATEMENT OF NO SIGNIFICANT EFFECT

PROJECT DESCRIPTION: Sawmill 2B Bike Path and Erosion Control Project

TRPA PROJECT NUMBER: 520-101-00

FILE #EIPC2013-0022

PERMITTEE(S): El Dorado County Department of Transportation

COUNTY/LOCATION: El Dorado County/ Sawmill Road from Echo View Drive to U.S. Highway 50

Staff Analysis: In accordance with Article IV of the Tahoe Regional Planning Compact, as amended, and Section 6.3 of the TRPA Rules and Regulations of Practice and Procedure, the TRPA staff has reviewed the information submitted with the subject project. On the basis of this initial environmental evaluation, Agency staff has found that the subject project will not have a significant effect on the environment.

Determination: Based on the above-stated finding, the subject project is conditionally exempt from the requirement to prepare an Environmental Impact Statement. The conditions of this exemption are the conditions of permit approval.



TRPA Chairman or Executive Director/Designee

2-24-14

Date



OFFICE
128 Market St.
Stateline, NV
Phone: (775) 588-4547
Fax: (775) 588-4527

MAIL
PO Box 5310
Stateline, NV 89449-5310
trpa@trpa.org
www.trpa.org

HOURS
Mon. Wed. Thurs. Fri.
9 am-12 pm/1 pm-4 pm
Closed Tuesday
New Applications Until 3:00
pm

ATTACHMENT Q

STANDARD CONDITIONS OF APPROVAL FOR GRADING PROJECTS

This handout on the standard conditions that must be met in all projects involving grading is divided into the following three sections:

- I. Pre-Grading Conditions (Pre-activity, where applicable)
- II. Construction/Grading Conditions
- III. General Conditions/Design Standards

Please read all of the conditions carefully to avoid any delays in construction of your project.

NOTE: Your plans have been reviewed and approved as required under Tahoe Regional Planning Agency (TRPA) Rules, Regulations and Ordinances only. TRPA has not reviewed and shall not be responsible for any elements contained in your plans, i.e., structural, electrical, mechanical, etc., which are not required for review under said Rules, Regulations and Ordinances.

I. PRE-GRADING/PRE-ACTIVITY CONDITIONS:

The following conditions must be completely complied with prior to any site disturbance or commencement of activity.

A. Final Construction Plans:

Final construction plans must be submitted to and reviewed by TRPA to determine conformance with the approval. Said plans shall clearly depict the following:

1. Slope stabilization methods to stabilize all existing and proposed cut and fill slopes.
2. Areas to be revegetated, including complete specifications for such revegetation.
3. Fencing for vegetation protection.
4. Temporary and permanent erosion control devices.
5. Utility trenches.
6. Dust control measures.
7. All water quality improvements (BMPs) required in the conditional approval. Drainage facilities shall be designed to be capable of retaining runoff water for a two (2) year, six (6) hour storm.
8. The final plans shall contain equipment specifications necessary to establish compliance with Standard Conditions III. A-F.

B. Securities:

A security shall be posted with the TRPA to insure compliance with all permit conditions. The security shall include an amount equal to 110 percent of the cost of the BMPs and other erosion control and water quality improvements required. For further information on the acceptable types of securities, see Attachment J.

C. Mitigation Fees:

All required air quality, water quality, and excess coverage and offsite coverage mitigation fees shall be paid to TRPA.

D. Temporary BMPs:

The following temporary BMPs are required to be installed onsite prior to any grading activity occurring:

1. Installation of temporary erosion controls.
2. Installation of vegetation protection measures.
3. Installation of construction site boundary fencing.

E. Required Inspection:

An onsite inspection by TRPA staff is required prior to any construction or grading activity occurring. TRPA staff shall determine if the onsite improvements required by Condition II (1), above, have been properly installed. No grading or construction shall be undertaken by the permittee until receipt of TRPA notification that the pre-grading/pre-activity conditions of approval have been satisfied.

F. Required Notices:

The following notices to the TRPA are required prior to any grading or construction occurring on the project site:

1. Notice for Pre-Grading Inspection: The permittee shall notify the TRPA when all onsite improvements required under Condition II(1), above, have been installed so that the required pre-grading inspection may be scheduled.
2. Notice of Commencement of Construction: The permittee shall notify the TRPA at least 48 hours prior to commencement of construction or grading on the project site. Said notice shall include the date when construction will commence.

II. CONSTRUCTION/GRADING CONDITIONS:

The following conditions shall be complied with during the grading and construction phase of the project.

- A. All construction shall be accomplished in strict compliance with the plans approved by TRPA.
- B. The TRPA permit and the final construction drawings bearing the TRPA stamp of approval shall be present on the construction site from the time construction commences to final TRPA site inspection. The permit and plans shall be available for inspection upon request by any TRPA employee. Failure to present the TRPA permit and approved plans may result in the issuance of a Cease and Desist Order by the TRPA.
- C. Whenever possible, utilities shall occupy common trenches to minimize site disturbance.
- D. There shall be no grading or land disturbance performed with respect to the project between October 15 and May 1, except as follows:
 1. The grading or land disturbance is for excavation and backfilling for a volume not in excess of three cubic yards.
 2. The activity is completed within a 48-hour period.
 3. The excavation site is stabilized to prevent erosion.
 4. The pregrade inspection is performed by TRPA staff, and the activity passes the inspection.

5. The grading/project does not represent or involve a series of excavations, which, when viewed as a whole, would exceed the provisions of this Standard Condition of Approval, and Subsection 2.3 of the TRPA Code of Ordinances.

Grading is prohibited any time of the year during periods of precipitation and for the resulting period of time when the site is covered with snow, or is in a saturated, muddy, or unstable condition (pursuant to Subsection 33.3.1.A of the TRPA Code of Ordinances.)

- E. All material obtained from any excavation work that is not contained within foundations, retaining walls, or by other methods approved by TRPA shall be removed from the subject parcel and disposed of at a site approved by TRPA.
- F. Replanting of all exposed surfaces, in accordance with the revegetation and slope stabilization plan, shall be accomplished within the first growing season following disturbance, unless an approved construction/inspection schedule establishes otherwise.
- G. All trees and natural vegetation to remain on the site shall be fenced for protection. Scarring of trees shall be avoided and, if scarred, damaged areas shall be repaired with tree seal.
 1. Fencing specified shall be at least 48 inches high and shall be constructed of metal posts and either orange construction fencing or metal mesh fencing also at least 48 inches high (Section 33.6.1). Job sites with violations of the fencing standards will be required to re-fence the job site with a high gauge metal fencing.
 2. No material or equipment shall enter or be placed in the areas protected by fencing or outside the construction areas without prior approval from TRPA. Fences shall not be moved without prior approval (Section 33.6).
 3. To reduce soil disturbance and damage to vegetation, the area of disturbance during the construction of a structure shall be limited to the area between the footprint of the building and the public road. For the remainder of the site the disturbance areas shall not exceed 12 feet from the footprint of the structure, parking area or cut/fill slope. The approved plans should show the fencing and approved exceptions (Section 36.2).
- H. Soil and construction material shall not be tracked off the construction site. Grading operations shall cease in the event that a danger of violating this condition exists. The site shall be cleaned up and road right-of-way swept clean when necessary.
- I. During grading and construction, environmental protection devices such as erosion control devices, dust control, and vegetation protection barriers shall be maintained.
- J. Loose soil mounds or surfaces shall be protected from wind or water erosion by being appropriately covered when construction is not in active progress or when required by TRPA.
- K. Excavated material shall be stored upgrate from the excavated areas to the extent possible. No material shall be stored in any stream zone or wet areas.
- L. Only equipment of a size and type that, under prevailing site conditions, and considering the nature of the work to be performed, will do the least amount of damage to the environment shall be used.
- M. Limit idling time for diesel powered vehicles exceeding 10,000 GVW and self-propelled equipment exceeding 25 hp to no more than 15 minutes in Nevada and 5 minutes in California, or as otherwise required by state or local permits.
- N. Utilize existing power sources (e.g. power poles) or clean-fuel generators rather than temporary diesel power generators wherever feasible.
- O. No washing of vehicles or construction equipment, including cement mixers, shall be permitted anywhere on the subject property unless authorized by TRPA in writing.

- P. No vehicles or heavy equipment shall be allowed in any stream environment zone or wet areas, except as authorized by TRPA.
- Q. Locate construction staging areas as far as feasible from sensitive air pollution receptors (e.g. schools or hospitals).
- R. All construction sites shall be winterized by October 15 to reduce the water quality impacts associated with winter weather as follows:
 - 1. For the sites that will be inactive between October 15 and May 1:
 - (a) Temporary erosion controls shall be installed;
 - (b) Temporary vegetation protection fencing shall be installed;
 - (c) Disturbed areas shall be stabilized;
 - (d) Onsite construction slash and debris shall be cleaned up and removed;
 - (e) Where feasible, mechanical stabilization and drainage improvements shall be installed; and
 - (f) Spoil piles shall be removed from the site.
 - 2. For sites that will be active between October 15 and May 1, in addition to the above requirements:
 - (a) Permanent mechanical erosion control devices shall be installed, including paving of driveway and parking areas; and
 - (b) Parking of vehicles and storage of building materials shall be restricted to paved areas.

III. GENERAL CONDITIONS/DESIGN STANDARDS:

- A. Projects approved by TRPA shall be subject to inspections by TRPA at any reasonable time. The permittee shall be responsible for making the project area accessible for inspection purposes. TRPA shall not be liable for any expense incurred by the permittee as a result of TRPA inspections.
- B. Construction shall be completed in accordance with an approved construction schedule. An extension of a completion schedule for a project may be granted provided the request is made in writing prior to the expiration of the completion schedule, a security is posted to ensure completion or abatement of the project, and TRPA makes either of the following findings:
 - 1. The project was diligently pursued, as defined in Subparagraph 2.2.4.C of the Code of Ordinances, during each building season (May 1 - October 15) since commencement of construction.
 - 2. That events beyond the control of the permittee, which may include engineering problems, labor disputes, natural disasters, or weather problems, have prevented diligent pursuit of the project.
- C. Water conservation appliances and fixtures shall be installed in all new facilities or, when replaced, in existing facilities: low flow flush toilets; low flow showerheads (3 gpm rated maximum flow); faucet aerators; and water-efficient appliances (e.g., washing machines and dishwashers).
- D. Water heaters shall not emit nitrogen oxides greater than 40 nanograms of nitrogen oxide (NO₂) per joule of heat output.
- E. Space heaters shall not emit greater than 40 nanograms of nitrogen oxides (as NO₂) per joule of useful heat delivered to the heated space.

- F. Wood heaters to be installed in the Region shall meet the safety regulations established by applicable city, county, and state codes. Coal shall not be used as a fuel source.
1. Emission Standards: Wood heaters installed in the Region shall not cause emissions of more than 7.5 grams of particulates per hour for noncatalytic wood heaters or 4.1 grams per hour for catalytically equipped wood heaters.
 2. Limitations: Wood heaters shall be sized appropriately for the space they are designed to serve. Multi-residential projects of five or more units, tourist accommodations, commercial, recreation and public service projects shall be limited to one wood heater per project area.
 3. List of Approved Heaters: TRPA shall maintain a list of wood heaters which may be installed in the Region. The list shall include the brand names, model number, description of the model and the name and address of the manufacturer. Wood heaters certified for use in either Colorado or Oregon shall be considered in compliance with 6(a), above.
- G. Construction materials shall be secured to prevent them from rolling, washing, or blowing off the project site. Rehabilitation and clean-up of the site following construction must include removal of all construction waste and debris.
- H. Plant species on the TRPA Recommended Native and Adapted Plant List shall be used for lawns and landscaping.
- I. The following sizes and spacing shall be required for woody plant materials at time of planting:
1. Trees shall be a minimum six feet tall or 1-1/2 inch caliper size or diameter at breast height;
 2. Shrubs shall be a minimum three gallon pot size where upright shrubs have a minimum height of 18 inches and a minimum spread of 18 inches; and spreading shrubs have a minimum spread of 18-24 inches.
 3. Groundcovers shall be a minimum four inch pot size or one gallon container and shall be maximum 24 inches on center spacing.
- J. Plant species not found on the TRPA Recommended Native and Adapted Plant List may be used for landscaping as accent plantings but shall be limited to borders, entryways, flower-beds, and other similar locations to provide accent to the overall native or adapted landscape design.
- K. The following exterior lighting standards shall apply:
1. Exterior lights shall not blink, flash or change intensity. String lights, building or roofline tube lighting, reflective or luminescent wall surfaces are prohibited.
 2. Exterior lighting shall not be attached to trees except for Christmas season.
 3. Parking lot, walkway, and building lights shall be directed downward.
 4. Fixture mounting height shall be appropriate to the purpose. The height shall not exceed the limitations set forth in Chapter 37 of the Code.
 5. Outdoor lighting shall be used for purposes of illumination only, and shall not be designed for, or used as, an advertising display. Illumination for aesthetic or dramatic purposes of any building or surrounding landscape utilizing exterior light fixtures projected above the horizontal is prohibited.
 6. The commercial operation of searchlights for advertising or any other purpose is prohibited. Seasonal lighting displays and lighting for special events which conflict with other provisions of this section may be permitted on a temporary basis.

- L. Any normal construction activities creating noise in excess of the TRPA noise standards shall be considered exempt from said standards provided all such work is conducted between the hours of 8:00 a.m. and 6:30 p.m.
- M. Engine doors shall remain closed during periods of operation except during necessary engine maintenance.
- N. Stationary equipment (e.g. generators or pumps) shall be located as far as feasible from noise-sensitive receptors and residential areas. Stationary equipment near sensitive noise receptors or residential areas shall be equipped with temporary sound barriers.
- O. Sonic pile driving shall be utilized instead of impact pile driving, wherever feasible. Pile driving holes shall be predrilled to the extent feasible subject to design engineer's approval.
- P. Fertilizer use on this property shall be managed to include the appropriate type of fertilizer, rate, and frequency of application to avoid release of excess nutrients and minimize use of fertilizer.
- Q. No trees shall be removed or trimmed without prior TRPA written approval unless otherwise specifically exempted under Chapter 2 of the Code of Ordinances.
- R. The architectural design of this project shall include elements that screen from public view all external mechanical equipment, including refuse enclosures, satellite receiving disks, communication equipment, and utility hardware on roofs, buildings or the ground. Roofs, including mechanical equipment and skylights, shall be constructed of nonglare finishes that minimize reflectivity.
- S. The permittee is responsible for insuring that the project, as built, does not exceed the approved land coverage figures shown on the site plan. The approved land coverage figures shall supersede scaled drawings when discrepancies occur.
- T. The adequacy of all required BMPs as shown on the final construction plans shall be confirmed at the time of the TRPA pre-grading inspection. Any required modifications, as determined by TPRA, shall be incorporated into the project permit at that time.
- U. It is the permittee's obligation to locate all subsurface facilities and/or utilities prior to any grading, dredging or other subsurface activity. The permittee is responsible for contacting the Northern Underground Service Alert (USA, usually known as USA DIGS 1-800-227-2600) prior to commencement of any activity on the site.
- V. This approval is based on the permittee's representation that all plans and information contained in the subject application are true and correct. Should any information or representation submitted in connection with the project application be incorrect or untrue, TRPA may rescind this approval or take other appropriate action.

APPENDIX F

**U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE**

SPECIAL USE PERMIT

Auth ID: ELD100323
Contact ID: ELDORADO COUNTY
Expiration Date: 12/31/2021
Use Code: 753

FS-2700-4b (10/09)
OMB No. 0596-0082

**U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE**

**FOREST ROAD SPECIAL USE PERMIT
AUTHORITY:
FEDERAL LAND POLICY AND MGMT ACT, AS AMENDED October 21, 1976**

El Dorado County Department of Transportation, 924 Emerald Bay Road, South Lake Tahoe, CA 96150 (hereafter called the holder) is hereby authorized to construct and use the following described National Forest Development Road within the Lake Tahoe Basin Management Unit for the following purposes:

El Dorado County will construct and maintain a paved bike path and wooden fence on National Forest System land, APN #033-090-14, as described in the project proposal. Construction and restoration of disturbed areas will be completed by October 2014.

The area to be permitted is as follows:

Bike path: paved surface is 5,752 square feet (719 feet long and 8 feet wide, .13 acre), with wood fence.

Maintenance and access: 7,190 square feet (719 feet long, 2 feet cleared on each side of the path, and an additional 3 feet from each side of the path, .16 acre)

Total bike path permitted area: 12,942 square feet, .29 acre (719 feet long by 18 feet wide).

Temporary area for construction: 2,876 square feet (719 feet long, 2 feet on each side of the path beyond the total bike path permitted area, .06 acre)

Total bike path plus temporary permitted area: 15,818 square feet, .36 acre

The road covered by this permit is located in the County of El Dorado, State of California, and is shown on the attached maps and identified as follows: Mt. Diablo Meridian, Sec. 20, T. 12 N., R. 18 E., SE ¼ NE ¼.

This permit authorizes use of approximately .13 mile of road/trail. The term of the permit is ten years. If the permit is not renewed or the holder is no longer able or willing to maintain the trail, the holder must remove the trail and restore the disturbed area in a timely manner.

This permit is made subject to the following terms, provisions, and conditions:

1. This permit is subject to all existing easements and valid rights existing on this date.
2. Holder shall comply with applicable Federal or State law and shall comply with State standards for public health and safety, environmental protection, and siting construction, operation, and maintenance if those standards are more stringent than applicable Federal standards.
3. The holder shall cut no timber except as authorized by construction stipulations or maintenance agreements.
4. Holder shall pay the United States for all injury, loss, or damage, including fire suppression costs, in accordance with Federal and State laws and regulations.
5. Holder shall indemnify the United States for any and all injury, loss, or damage, including fire suppression costs the United States may suffer as a result of claims, demands, losses, or judgments caused by the holder's use or occupancy under this permit.
6. Holder shall pay annually in advance a sum determined by the Forest Service to be the fair market value of the use authorized by this permit. The initial payment is set at NA for the remainder of the calendar year.

Payments for each subsequent calendar year shall be the amount of NA adjusted using the Implicit Price Deflator-Gross National Product index (IPD-GNP), or other factor selected by the Forest Service, to reflect more nearly the current fair market value of the use. At intervals to be determined by certain changes in the indexes used to establish the linear rights-of-way fee schedule, the fee shall be reviewed and adjusted as necessary to assure that it is commensurate with the value of the rights and privileges authorized. In addition to the annual payment, the holder shall pay its proportionate share of road costs prior to using the road for commercial use. Failure of the holder to pay the annual payment, late charges, or other fees or charges shall cause the permit to terminate.

7. Late Payment Interest, Administrative Costs and Penalties. Pursuant to 31 U.S.C. 3717, et seq., interest shall be charged on any fee amount not paid within 30 days from the date the fee or fee calculation financial statement specified in this authorization becomes due. The rate of interest assessed shall be the higher of the rate of the current value of funds to the U.S. Treasury (i.e., Treasury tax and loan account rate), as prescribed and published by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins annually or quarterly or at the Prompt Payment Act rate. Interest on the principal shall accrue from the date the fee or fee calculation financial statement is due.

In the event the account becomes delinquent, administrative costs to cover processing and handling of the delinquency will be assessed.

A penalty of 6 percent per annum shall be assessed on the total amount delinquent in excess of 90 days and shall accrue from the same date on which interest charges begin to accrue.

Payments will be credited on the date received by the designated collection officer or deposit location. If the due date for the fee or fee calculation statement falls on a non-workday, the charges shall not apply until the close of business on the next workday.

Disputed fees are due and payable by the due date. No appeal of fees will be considered by the Forest Service without full payment of the disputed amount. Adjustments, if necessary, will be made in accordance with settlement terms or the appeal decision.

If the fees become delinquent, the Forest Service will:

Liquidate any security or collateral provided by the authorization.

If no security or collateral is provided, the authorization will terminate and the holder will be responsible for delinquent fees as well as any other costs of restoring the site to its original condition including hazardous waste cleanup.

Upon termination or revocation of the authorization, delinquent fees and other charges associated with the authorization will be subject to all rights and remedies afforded the United States pursuant to 31 U.S.C. 3711 et seq. Delinquencies may be subject to any or all of the following conditions:

Administrative offset of payments due the holder from the Forest Service.

Delinquencies in excess of 60 days shall be referred to United States Department of Treasury for appropriate collection action as provided by 31 U.S.C. 3711 (g), (1).

The Secretary of the Treasury may offset an amount due the debtor for any delinquency as provided by 31 U.S.C. 3720, et seq.)

8. Holder shall pay the Forest Service for its share of maintenance cost or perform maintenance, as determined by the Forest Service for all commercial use of the road. The maintenance obligation of the holder shall be proportionate to total use and commensurate with its use. Any maintenance to be performed by the holder shall be authorized by and shall be performed in accordance with an approved maintenance plan. In the event the road requires maintenance, restoration, or reconstruction work to accommodate the holder's needs, the Forest Service shall authorize the work required in the same manner as provided herein for maintenance or in clause 10 for reconstruction. The holder shall perform such work at its own expense.

9. The exercise of the use permitted shall be subordinate to any easement on said road subsequently granted by the United States to a public road agency for operation as a public highway.

10. Any construction or reconstruction of the road shall be in accordance with plans, specifications, and written stipulations approved by the Forest Service prior to beginning such construction or reconstruction.

11. The United States shall have unrestricted use of the road and right-of-way for all purposes deemed necessary or desirable in connection with the protection, administration, management, and utilization of Federal lands or resources, and it shall have the right alone to extend rights and privileges for use of the right-of-way and road thereon to States and local subdivisions thereof and to other users including members of the public, except users of land or resources owned or controlled by the holder. The Forest Service shall control such use to avoid unreasonable interference with use of the road by the holder.

12. The Forest Service may relocate the road to the extent necessary to accommodate the management needs of the National Forests.

13. This permit may be terminated or suspended upon breach of any of the conditions herein, or revoked at the discretion of the Regional Forester.

14. Unless sooner terminated, or revoked by the Regional Forester, this permit shall expire and terminate on **12/31/2021**. At that time, if the holder still needs the road for the purposes for which this permit is granted, the permit will be reissued for a period of 10 years (or the estimated remaining life of the project, whichever is less). At the time of re-issuance, the terms and conditions may be modified and new conditions or stipulations added at the discretion of the Forest Service.

15. Nonexclusive Use and Public Access. Unless expressly provided for in additional terms, use of the permit area is not exclusive. The Forest Service reserves the right to use or allow others to use any part of the permit area, including roads, for any purpose, provided, such use does not materially interfere with the holder's authorized use. A final determination of conflicting uses is reserved to the Forest Service.

16. Forest Service Right of Entry and Inspection. The Forest Service has the right of unrestricted access of the permitted area or facility to ensure compliance with laws, regulations, and ordinances and the terms and condition of this permit.

17. Liability. For purposes of this section, "holder" includes the holder's heirs, assigns, agents, employees, and contractors.

A. The holder assumes all risk of loss to the authorized improvements.

B. The holder shall indemnify, defend, and hold the United States harmless for any violations incurred under any such laws and regulations or for judgments, claims, or demands assessed against the United States in connection with the holder's use or occupancy of the property. The holder's indemnification of the United States shall include any loss by personal injury, loss of life or damage to property in connection with the occupancy or use of the property during the term of this permit. Indemnification shall include, but is not limited to, the value of resources damaged or destroyed; the costs of restoration, cleanup, or other mitigation; fire suppression or other types of abatement costs; third party claims and judgments; and all administrative, interest, and other legal costs. This paragraph shall survive the termination or revocation of this authorization, regardless of cause.

C. The holder has an affirmative duty to protect from damage the land, property, and interests of the United States.

D. In the event of any breach of the conditions of this authorization by the holder, the authorized officer may, on reasonable notice, cure the breach for the account at the expense of the holder. If the Forest Service at any time pays any sum of money or does any act which will require payment of money, or incurs any expense, including reasonable attorney's fees, in instituting, prosecuting, and/or defending any action or proceeding to enforce the United States rights hereunder, the sum or sums so paid by the United States, with all interests, costs and damages shall, at the election of the Forest Service, be deemed to be additional fees hereunder and shall be due from the holder to the Forest Service on the first day of the month following such election.

E. With respect to roads, the holder shall be proportionally liable for damages to all roads and trails of the United States open to public use caused by the holder's use to the same extent as provided above, except that liability shall not include reasonable and ordinary wear and tear.

F. The Forest Service has no duty to inspect the permit area or to warn of hazards and, if the Forest Service does inspect the permit area, it shall incur no additional duty nor liability for identified or non-identified hazards. This covenant may be enforced by the United States in a court of competent jurisdiction.

18. Members of Congress. No Member of or Delegate to Congress or Resident Commissioner shall benefit from this permit either directly or indirectly, except when the authorized use provides a general benefit to a corporation.

19. Appeals and Remedies. Any discretionary decisions or determinations by the authorized officer are subject to the appeal regulations at 36 CFR 251, Subpart C, or revisions thereto.

20. Assignability. This authorization is not assignable or transferable. If Holder, through death, voluntary transfer, enforcement of contract, foreclosure, or other valid legal proceeding shall cease to be owner of the above described real property accessed by the authorized road, this authorization shall terminate.

21. Superior Clauses. In the event of any conflict between any of the preceding printed clauses or any provision thereof and any of the following clauses or any provision thereof, the preceding printed clauses shall control.

22. Noxious Weeds. The permit holder shall prepare, in cooperation with the Forest Service, a noxious weed plan for surveying, preventing, reporting, controlling and monitoring noxious weed populations on the authorized areas and within the holder's area of responsibility. These measures may include, where appropriate, equipment inspection for soil, seeds, and vegetative matter, equipment cleaning, and use of weed-free materials (soil, gravel, straw, mulch) and seed mixes. A current list of noxious weeds of concern is available at the Forest Supervisor's Office.

23. Operating Plan. The holder shall provide an Operating Plan and revise the plan as needed. The plan shall be prepared in consultation with the authorized officer or designated representative and cover operation and maintenance of facilities, dates or season of operations, and other information required by the authorized officer to manage and evaluate the occupation and/or use of National Forest System lands. The provisions of the Operating Plan and the annual revisions shall become a part of this authorization and shall be submitted by the holder and approved by the authorized officer or their designated representative(s). This Operating Plan is hereby made a part of the authorization.

24. Surveys, Land Corners. The holder shall protect, in place, all public land survey monuments, private property corners, and Forest boundary markers. In the event that any such land markers or monuments are destroyed in the exercise of the privileges permitted by this authorization, depending on the type of monument destroyed, the holder shall see that they are reestablished or referenced in accordance with (1) the procedures outlined in the "Manual of Instructions for the Survey of the Public Land of the United States," (2) the specifications of the county surveyor, or (3) the specifications of the Forest Service.

Further, the holder shall cause such official survey records as are affected to be amended as provided by law. Nothing in this clause shall relieve the holder's liability for the willful destruction or modification of any Government survey marker as provided at 18 U.S.C. 1858.

25. Removal and Planting of Vegetation and Other Resources. The holder shall obtain prior written approval from the authorized officer before removing or altering vegetation or other resources. The holder shall obtain prior written approval from the authorized officer before planting trees, shrubs, or other vegetation within the authorized area.

26. Revegetation of Ground Cover and Surface Restoration. The holder shall be responsible for prevention and control of soil erosion and gulying on lands covered by this authorization and adjacent thereto, resulting from construction, operation, maintenance, and termination of the authorized use. The holder shall so construct permitted improvements to avoid the accumulation of excessive heads of water and to avoid encroachment on streams. The holder shall revegetate or otherwise stabilize all ground where the soil has been exposed as a result of the holder's construction, maintenance, operation, or termination of the authorized use and shall construct and maintain necessary preventive measures to supplement the vegetation.

27. Timber Payment. All National Forest timber cut or destroyed in the construction of the permitted improvements shall be paid for at current stumpage rates for similar timber in the National Forest. Young-growth timber below merchantable size will be paid for at current damage-appraisal value; and all slash and debris

resulting from the cutting or destruction of such timber shall be disposed of as necessary or as the Forest Service may direct.

28. Protection of Habitat of Endangered, Threatened, and Sensitive Species. Location of areas needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act of 1973, as amended, or as sensitive by the Regional Forester under authority of FSM 2670, derived from ESA Section 7 consultation, may be shown on a separate map, hereby made a part of this authorization, or identified on the ground. Protective and mitigative measures specified by the authorized officer shall be the responsibility of the authorization holder.

If protection measures prove inadequate, if other such areas are discovered, or if new species are listed as Federally threatened or endangered or as sensitive by the Regional Forester, the authorized officer may specify additional protection regardless of when such facts become known. Discovery of such areas by either party shall be promptly reported to the other party.

29. Archaeological-Paleontological Discoveries. The holder shall immediately notify the authorized officer of any and all antiquities or other objects of historic or scientific interest. These include, but are not limited to, historic or prehistoric ruins, fossils, or artifacts discovered as the result of operations under this authorization, and shall leave such discoveries intact until authorized to proceed by the authorized officer. Protective and mitigative measures specified by the authorized officer shall be the responsibility of the holder.

In Witness Whereof, the parties hereto have caused this permit to be duly executed on this 14th day of February 2012.

El Dorado County Department of
Transportation

USDA - Forest Service

By: _____

James W. Ware, P.E.
Director of Transportation

By: _____

Nancy Gibson
Forest Supervisor
Lake Tahoe Basin Management Unit

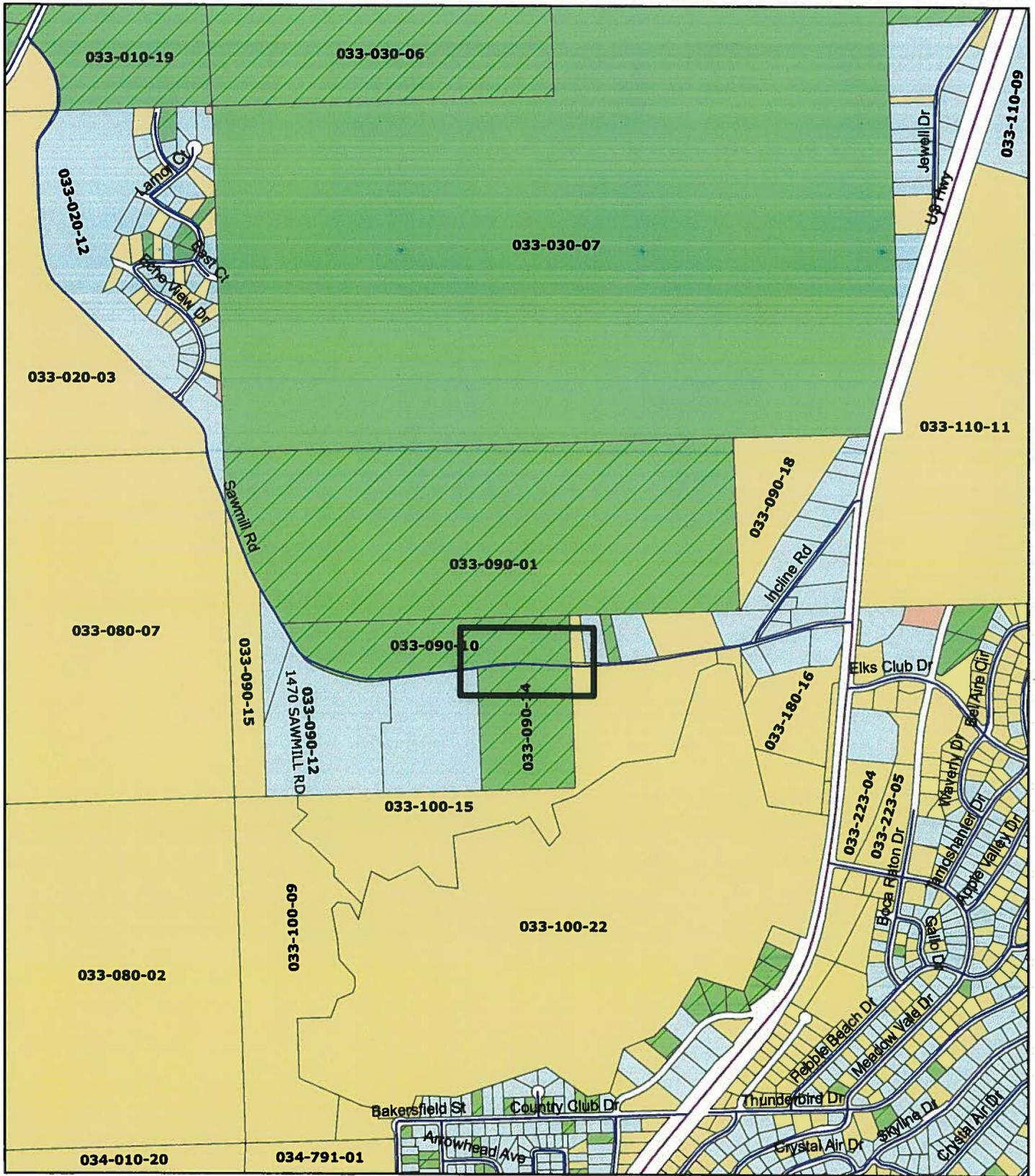
According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average one (1) hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.

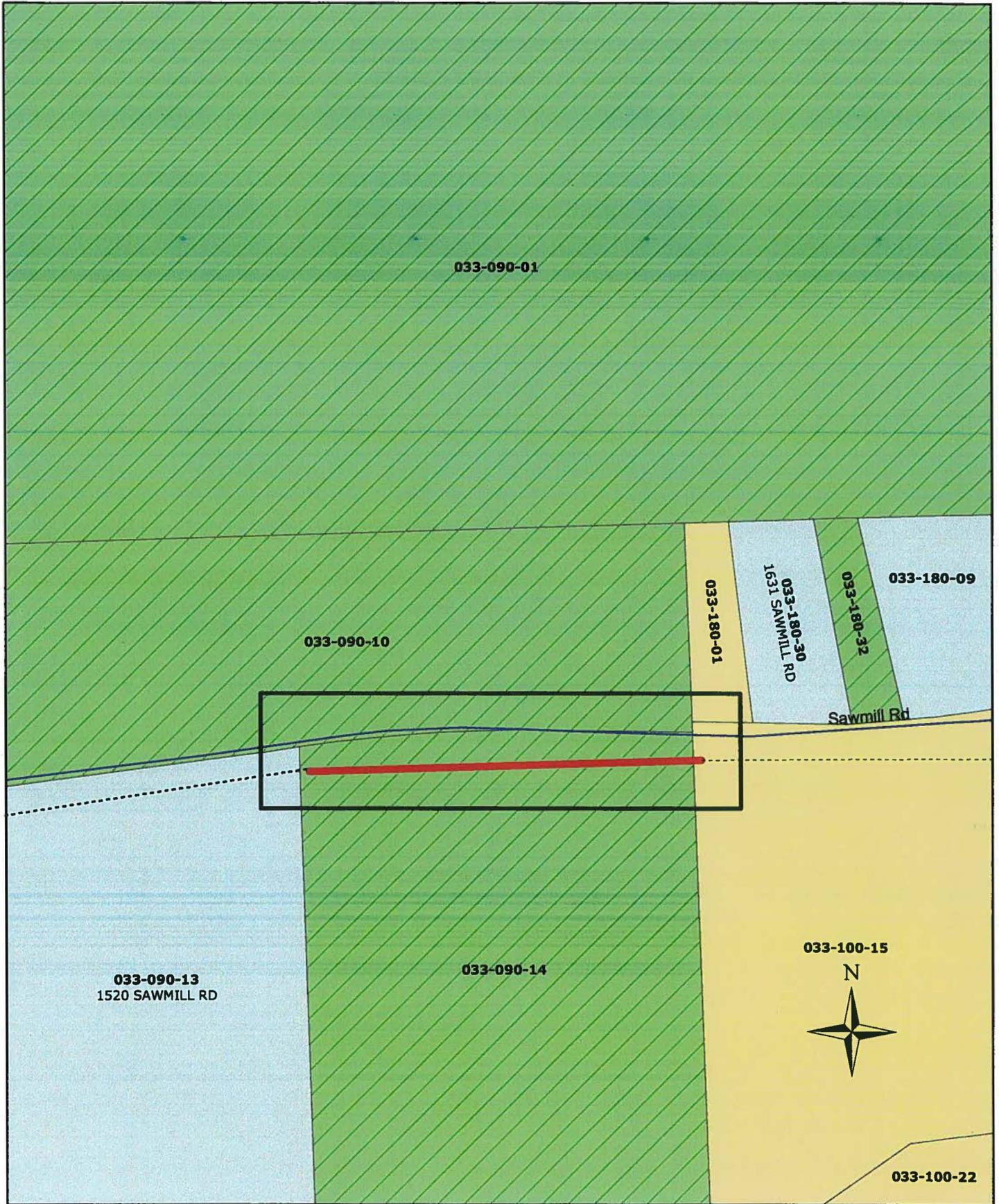
Sawmill Bike Path location map



0 0.05 0.1 0.2 0.3 Miles



Sawmill Bike Path site map



0 137.5 275 550 Feet

APPENDIX G

**UNITED STATES ARMY CORPS OF ENGINEERS
GENERAL PERMIT**



DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO CA 95814-2922

REPLY TO
ATTENTION OF

May 7, 2014

Regulatory Division (SPK-2005-00082)

Brendan Ferry, Principle Planner
El Dorado County Department of Transportation
924 B Emerald Bay Road
South Lake Tahoe, California 96150

Dear Mr. Ferry:

We are responding to your December 4, 2013, request for a Department of the Army permit for the EDOT Sawmill 2B Bike Path and Erosion Control project. This approximately 6-acre project involves activities, including discharges of dredged or fill material, in waters of the United States to construct a bike path aligned next to Sawmill Road between Echo View Drive and Highway 50. The project is located near the Upper Truckee River, Section 18, Township 12 North, Range 18 East, Mount Diablo Meridian, Latitude 38.87253°, Longitude -120.01632°, South Lake Tahoe, El Dorado County, California.

Based on the information, the proposed activity, resulting in the placement of up to 30-cubic yards of clean fill material into 0.01-acres of riverine scrub shrub wetlands and up to 30-cubic yards of clean fill material into 0.016-acres of palustrine scrub shrub wetlands and placement of up to 985-cubic yards of clean fill material below the Ordinary High Water Mark of 12 unnamed ephemeral drainages for the construction of a public use bike path and storm water runoff improvement project which would be performed in accordance with the enclosed plans dated May 6, 2014, is authorized by Nationwide Permit Number 14, *Linear Transportation Projects*. Your work must comply with the general terms and conditions listed on the enclosed Nationwide Permit information sheets and regional conditions, and the following special conditions:

Special Conditions

1. Until Section 401 Water Quality Certification for the activity has been issued or waived, our authorization is denied without prejudice. Once you have provided us evidence of water quality certification, the activity is authorized and the work may proceed subject to the conditions of certification and the Nationwide Permit.
2. The permittee shall provide copies of all State and local approvals (permits and leases) to the U.S. Army Corps of Engineers, Sacramento District, Reno Regulatory Field Office prior to commencement of construction.

You must sign the enclosed Compliance Certification and return it to this office within 30 days after completion of the authorized work.

This verification is valid until March 18, 2017, when the existing Nationwide Permits are scheduled to be modified, reissued, or revoked. Furthermore, if you commence or are under contract to commence this activity before the date that the relevant NWP is modified, reissued or

revoked, you will have twelve (12) months from the date of the modification, reissuance or revocation of the NWP to complete the activity under the present terms and conditions. Failure to comply with the General and Regional Conditions of this Nationwide Permit, or the project-specific Special Conditions of this authorization, may result in the suspension or revocation of your authorization.

We would appreciate your feedback. At your earliest convenience, please tell us how we are doing by completing the customer survey on our website under *Customer Service Survey*.

Please refer to identification number SPK-2005-00082 in any correspondence concerning this project. If you have any questions, please contact me at our Reno Field Office, 300 Booth Street, Room 3050, Reno, Nevada 89509, email Aaron.C.Park@usace.army.mil, or telephone 775-784-5305. For more information regarding our program, please visit our website at www.spk.usace.army.mil/regulatory.aspx.

Sincerely,

-Original Signed By-

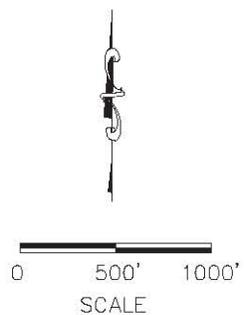
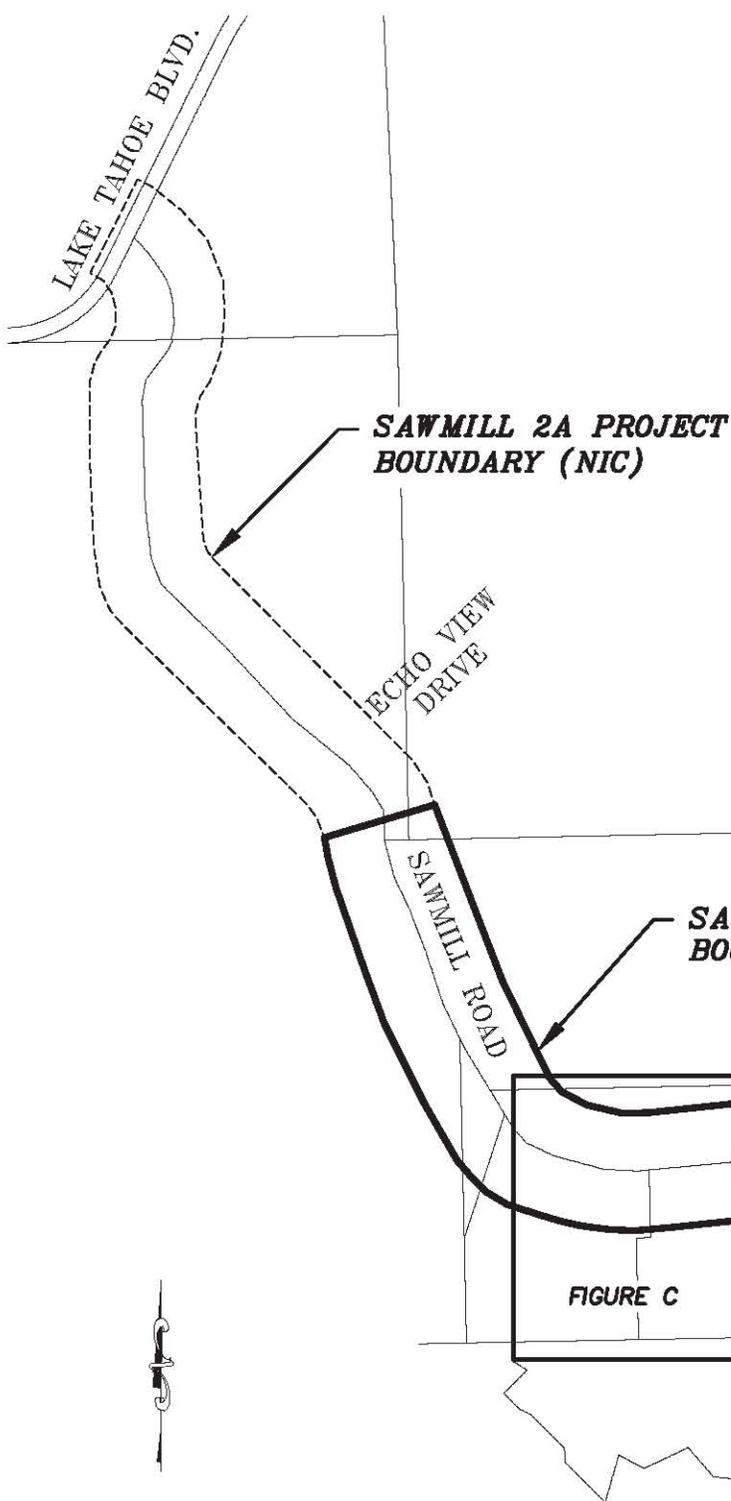
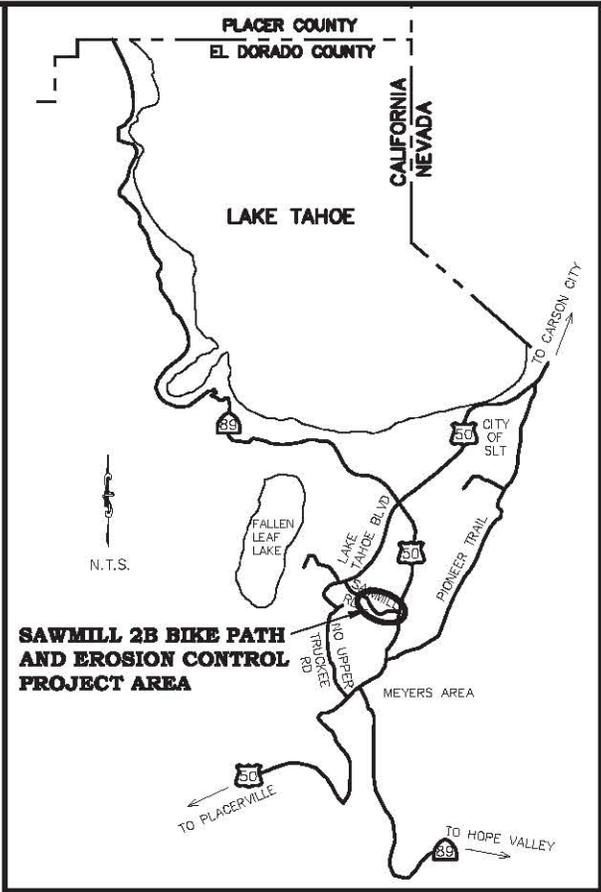
Aaron Park
Project Manager, NV-UT Branch
Regulatory Division

Enclosures

cc: (w/figures)

Tobi Tyler, California Water Quality Control Board, Lahontan Region, 2501 South Lake Tahoe Boulevard, South Lake Tahoe, California 96150-7747

Patrick Moeszinger, California Department of Fish and Game, pmoeszinger@dfg.ca.gov



Applicant: El Dorado County
 File No.: SPK-2005-00082
 Waterway: Upper Truckee River
 Proposed activity: Linear Transportation Project
 Sec. 18 T. 12 N. R. 18 E M. Mount Diablo
 Lat.: 38.87253° Long: -120.01632°
 Date 5/6/14 Sheet 1 of 3



COMMUNITY DEVELOPMENT AGENCY
 TRANSPORTATION DIVISION
 SOUTH LAKE TAHOE OFFICE

SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
 LOCATION MAP AND FIGURE INDEX

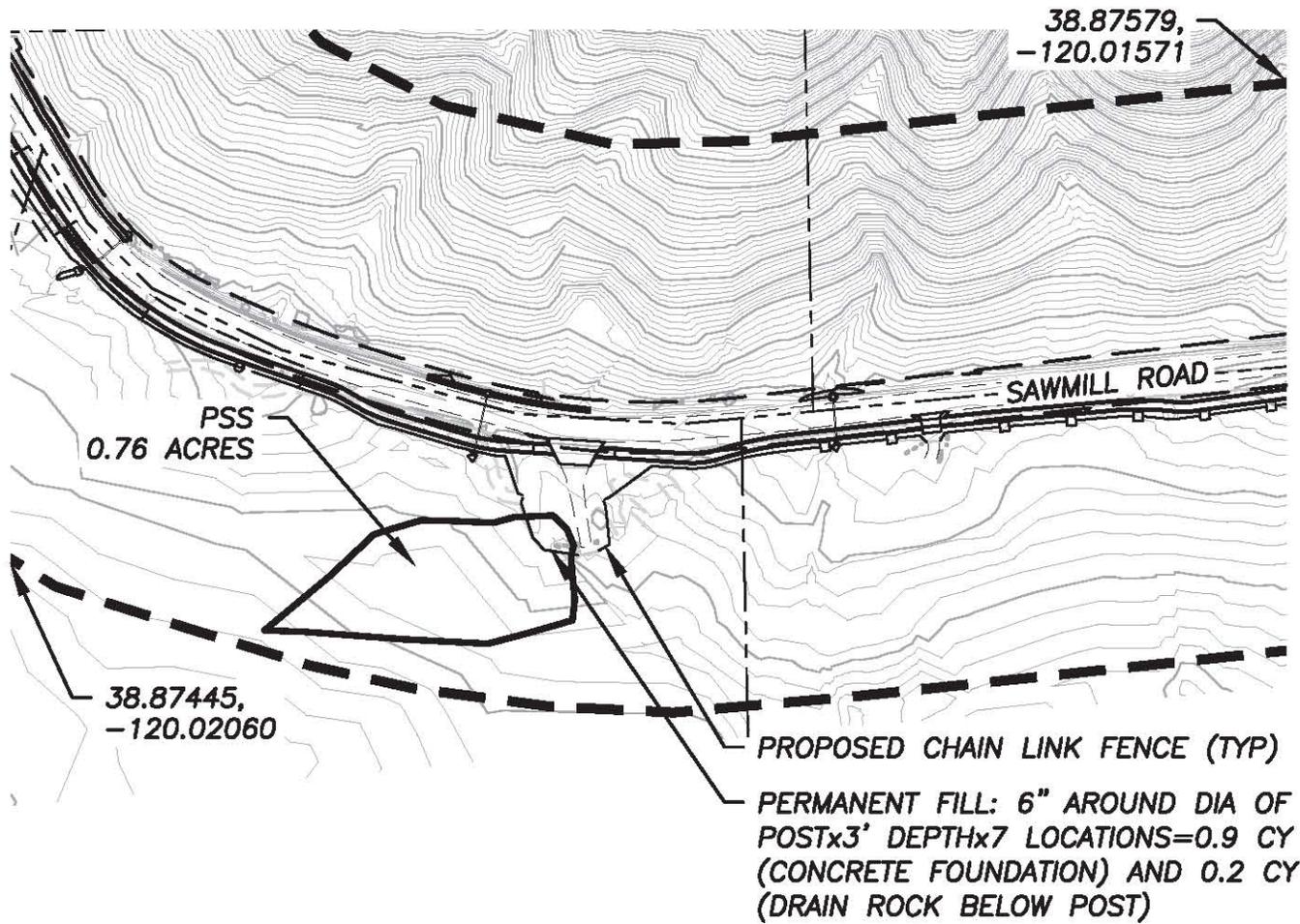
FIGURE

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DATE: 05/2013

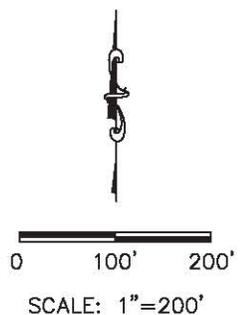
PROJECT NO.: 95192

BY: ALD



LEGEND

- — — — — PROJECT BOUNDARY
- - - - - RIGHTS-OF-WAY (ROW) AND/OR PROPERTY LINE
- - - - - ROADWAY EASEMENT
- — — — — WOUS LIMITS
- EXISTING STRUCTURE
- PSS PALUSTRINE SCRUB SHRUB WETLANDS
- RSS RIVERINE SCRUB SHRUB WETLANDS



Applicant: El Dorado County
 File No.: SPK-2005-00082
 Waterway: Upper Truckee River
 Proposed activity: Linear Transportation Project
 Sec. 18 T. 12 N R. 18 E M. Mount Diablo
 Lat.: 38.87253° Long: -120.01632°
 Date 5/6/14 Sheet 2 of 3

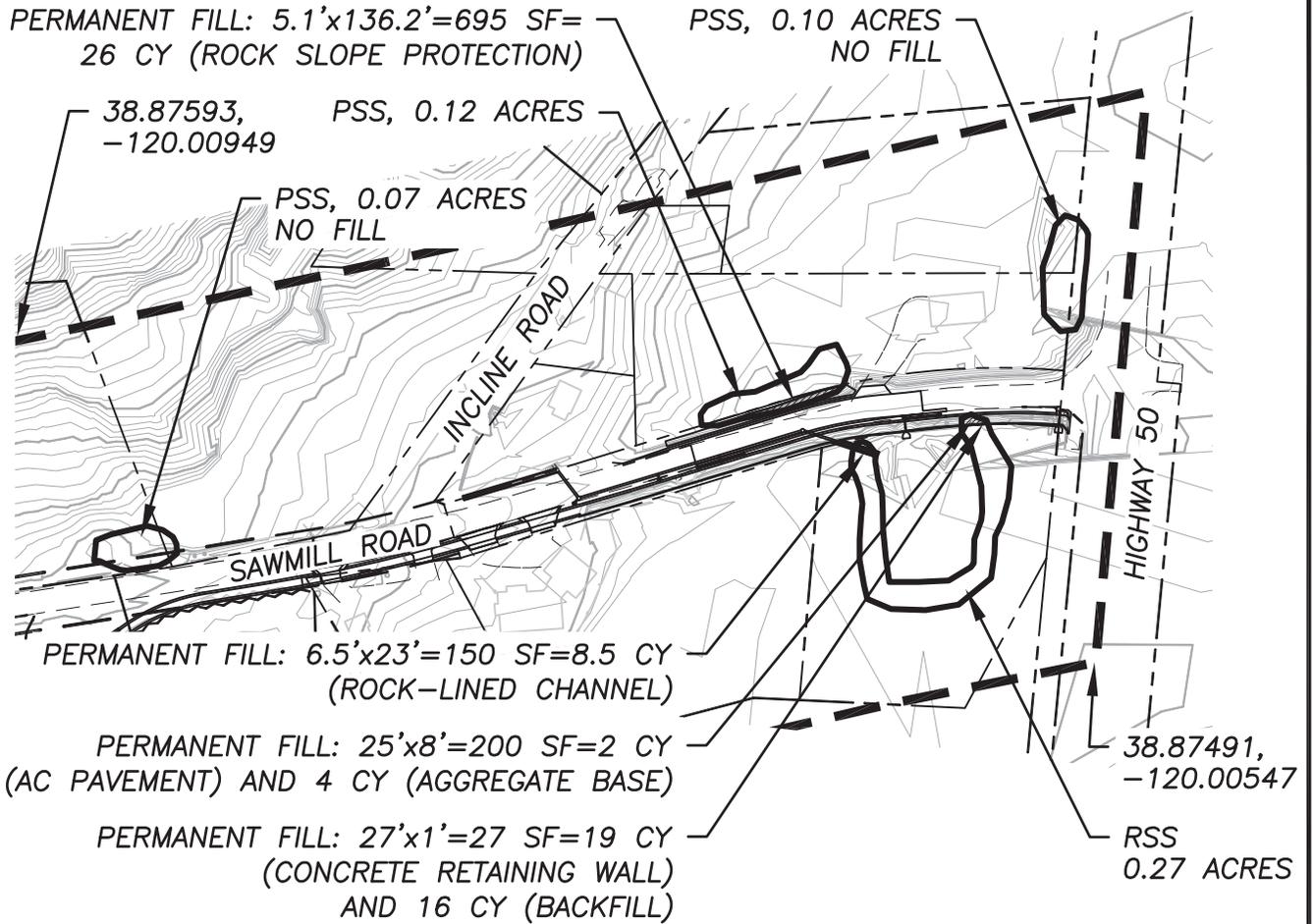


COMMUNITY DEVELOPMENT AGENCY
 TRANSPORTATION DIVISION
 SOUTH LAKE TAHOE OFFICE

SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT
 PLAN VIEW

FIGURE
C

DATE: 05/2013 PROJECT NO.: 95192 BY: AFD
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LEGEND

-  PROJECT BOUNDARY
-  RIGHTS-OF-WAY (ROW) AND/OR PROPERTY LINE
-  ROADWAY EASEMENT
-  WOUS LIMITS
-  EXISTING STRUCTURE
-  PSS PALUSTRINE SCRUB SHRUB WETLANDS
-  RSS RIVERINE SCRUB SHRUB WETLANDS



SCALE: 1"=200'

REFERENCE DATUM: NGVD 29

Applicant: El Dorado County
 File No.: SPK-2005-00082
 Waterway: Upper Truckee River
 Proposed activity: Linear Transportation Project
 Sec. 18 T. 12 N R. 18 E M. Mount Diablo
 Lat.: 38.87253° Long: -120.01632°
 Date 5/6/14 Sheet 3 of 3



COMMUNITY DEVELOPMENT AGENCY
 TRANSPORTATION DIVISION
 SOUTH LAKE TAHOE OFFICE

SAWMILL 2B BIKE PATH AND EROSION CONTROL PROJECT PLAN VIEW

FIGURE

D

DATE: 05/2013

PROJECT NO.: 95102

BY: AFD

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