

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

1727 30th Street MS-43

P.O. BOX 168041

SACRAMENTO, CA 95816-8041

FAX (916) 227-6214

TTY 711

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September 7, 2012

04-Ala-580-R8.4/R14.6

04-2908C4

Project ID 0400021248

ACIM-5801-1(055)E

HPLUL-6204(105)

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN ALAMEDA COUNTY IN LIVERMORE FROM 0.1 MILE WEST OF GREENVILLE ROAD UNDERCROSSING TO 0.5 MILE WEST OF 84/580 SEPARATION.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Wednesday, September 19, 2012.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book and the Federal Minimum Wages with Modification Number 11 dated 09/07/2012.

Project Plan Sheets 11, 106, 141, 509, 511, 513, 521, and 534 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheets 186A and 186B are added. Copies of the added sheets are attached for addition to the project plans.

In the Notice to Bidders and Special Provisions, in the "STANDARD PLANS LIST," the following Standard Plan is added as follows:

"B3-7 Retaining Wall Type 5"

In the Special Provisions, "NOTICE TO BIDDERS," the eleventh and thirteenth paragraphs are deleted.

In the Special Provisions, "NOTICE TO BIDDERS," the twelfth paragraph is revised as follows:

"Complete the work within 520 days."

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In the Special Provisions, Section 4, "BEGINNING OF WORK, TIME OF COMPLETION, AND LIQUIDATED DAMAGES," is revised as attached.

In the Special Provisions, Section 5-1.14, "SPECIES PROTECTION," the second paragraph is revised as follows:

"This project is within or near habitat for regulated species:

California Red-Legged Frog
California Tiger Salamander
San Joaquin Kit

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," is revised as attached.

In the Special Provisions, Section 10-1.03, "CONSTRUCTION SITE MANAGEMENT," subsection Waste Management, subsection Solid Waste, the first paragraph is revised as follows:

"Do not allow litter, trash, or debris to accumulate anywhere on the job site, including storm drain grates, trash racks, and ditch lines. Pick up and remove litter, trash, and debris from the job site daily. The WPC manager must monitor solid waste storage and disposal procedures on the job site."

In the Special Provisions, Section 10-1.20, "TIME-RELATED OVERHEAD," is revised as attached.

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In the Special Provisions in Section 10, Section 10-1.415, "IMPORTED BORROW (LIGHTWEIGHT AGGREGATE)," is added as attached.

In the Special Provisions, Section 10-1.80, "CONCRETE STRUCTURES," subsection "BRIDGE DECK SURFACE TEXTURE," is added as attached.

In the Bid book, in the "Bid Item List," Items 3, 22, 138, and 146 are revised, Items 269 and 270 are added and Item 268 is deleted as attached.

To Bid book holders:

Replace pages 3, 4, 9, 10 and 16 of the "Bid Item List" in the Bid book with the attached revised pages 3, 4, 9, 10 and 16 of the Bid Item List. The revised Bid Item List is to be used in the bid.

Inquiries or questions in regard to this addendum must be communicated as a bidder inquiry and must be made as noted in the Notice to Bidders section of the Notice to Bidders and Special Provisions.

Indicate receipt of this addendum by filling in the number of this addendum in the space provided on the signature page of the Bid book.

Submit bids in the Bid book you now possess. Holders who have already mailed their book will be contacted to arrange for the return of their book.

Inform subcontractors and suppliers as necessary.

This addendum, attachments and the modified federal wages are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/04/04-2908C4

If you are not a Bid book holder, but request a book to bid on this project, you must comply with the requirements of this letter before submitting your bid.

Sincerely,



for REBECCA D. HARNAGEL
Chief, Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

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

The 1st working day is the earlier of (1) the 55th day after contract approval or (2) the day you start work other than the measurement of controlling field dimensions or the location of utilities.

Do not start work at the job site until the Engineer approves your submittal for:

1. Baseline Progress Schedule (Critical Path Method)
2. Storm Water Pollution Prevention Plan (SWPPP)
3. Notification of Dispute Resolution Advisor (DRA) or Dispute Review Board (DRB) nominee and disclosure statement as specified in Section 5-1.15, "Dispute Resolution," of the Standard Specifications

You may enter the job site only to measure controlling field dimensions and locating utilities. Do not start other work activities until all the submittals from the above list are approved and the following information is submitted:

1. Notice of Materials To Be Used.
2. Contingency plan for reopening closures to public traffic.
3. Written statement from the vendor that the order for the sign panels has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.
4. Written statement from the vendor that the order for electrical material has been received and accepted by the vendor. The statement must show the dates that the materials will be shipped.

You may start work at the job site before the 55th day after contract approval if:

1. You obtain required approval for each submittal before the 55th day
2. The Engineer authorizes it in writing

The Department grants a time extension if a delay is beyond your control and prevents you from starting work at the job site on the 1st working day.

Complete the work within 520 working days.

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.

Installation of exclusion netting under all bridge structures prior to January 1 to prevent nesting and roosting.

All work outside of paved areas shall stop in areas delineated by Temporary Fence (Wildlife Exclusion) 30 minutes before sunset and shall not resume work until 30 minutes after sunrise from November 1 to June 15. Sunrise and sunset are determined by the times established by the U.S. Naval Observatory Astronomical Applications Department.

Any ground disturbance, including construction access, at Seasonal Wetland 1 (Station "B" 674+00), as shown in the Information Handout, USFWS Biological Opinion, shall occur between August 31 and October 1.

Attention is directed to "Nonhighway Facilities (including Utilities)" of these special provisions regarding the utility relocation works by PG&E. Contractor shall provide unfettered access to locations of existing and relocated PG&E.

The first order of work shall be to remove the existing OH sign at "B" 649+25 Rt within 70 days from contract approval.

Attention is directed to "Cooperation" of these special provisions. The Contractor shall not perform any activity between Station "B" 535+00 and 540+00 and between Station "B" 640+00 and 660+00 (in the eastbound direction only) for 300 days from contract approval.

Any temporary structures used for diversion/dewatering of the Creek shall utilize clean gravel, water bladders, gravel bags or other non-erodible material and shall be completely removed from the work area prior to October 1. Downstream flow of the creek shall be maintained at all times.

All construction personnel shall attend Environmental Awareness Training before performing any work on the project.

Provide the Engineer with an attendance list including the printed and signed name of each attendee of the Environmental Awareness Training. Provide the Engineer with the attendance list within one working day following each Environmental Awareness Training. Submit a separate list for each subsequent Environmental Awareness Training session for new workers.

Silt fences shall be installed on the slopes adjacent to construction activities to prevent silt and run-off from entering Arroyo Las Positas and Arroyo Seco.

Work within streams, wetlands or other bodies of water shall occur between April 15 and October 1. All temporary work items shall be removed from the streams, wetlands or bodies of water before October 1. The streams, wetlands or bodies of water shall be restored to its former condition or equivalent condition, except for the permanent work before October 1. This work includes:

1. Extension of existing box culvert at Arroyo Seco 33-0066.
2. Widening of Arroyo Las Positas Bridge No 33-0203.
3. Widening of Arroyo Las Positas Bridge No 33-0085.
4. Storm drain preconstruction activities, including removal of culverts, rock slope protection and concrete slope protection, development of access routes, and construction of temporary creek diversion system.
5. All temporary creek diversion system components shall be removed from creeks prior to October 1.
6. Reconstruction of temporary creek diversion system shall occur only between April 15th to October 1st.
7. All falsework shall be removed at creek locations by October 1.

Attention is directed to "Temporary Fence (Wildlife Exclusion)" of these special provisions. Prior to beginning work, the Temporary Fence (Wildlife Exclusion) shall be installed at locations shown on the plans or as directed by the Engineer.

Attention is directed to "Precast Concrete Quality Control" of these special provisions for quality control requirements that apply to precast concrete girders, individual slab replacement precast concrete panels, and precast prestressed concrete pavement.

Individual slab replacement precast concrete panels work on Lane No. 2 and 3 must be performed on weekends only.

Attention is directed to "Architectural Surface (Textured Concrete)," of these special provisions regarding requirements for preconstruction test panels for concrete texture.

Attention is directed to "Shotcrete," of these special provisions for shotcrete preconstruction requirements.

Prior to Start of cracking concrete pavement for crack, seat and overlay operations, schedule the crack activities to ensure that placement of both HMA and RHMA (gap graded) layers over entire cracked PCC pavement is completed before October 15, or as determined by the Engineer, of the same year.

Defer placement of HMA (Open Graded) until permanent pavement delineation can be placed.

Existing fence shall not be removed until replacement fence or temporary fence has been installed or until the existing fence is no longer required for access control, unless otherwise directed by the Engineer.

The Contractor shall notify the Engineer and Metropolitan Transportation Commission (MTC) Service Authority for Freeways and Expressways (SAFE) Contact 14 calendar days prior to performing any excavation or other work close to call boxes. The MTC SAFE Regional Notification Center's contact information is as follows: MTC SAFE Contact, Call Box Program Coordinator, Metropolitan Transportation Commission SAFE, 101 Eighth Street, Oakland, CA 94607, Phone (510) 817-5695.

Grinding work associated with slab replacement will take place after dowel bar retrofit concrete backfill.

Attention is directed to "Miscellaneous Concrete Construction" of these special provisions regarding constructing a 2' x 2' test panel prior to constructing curb ramps with detectable warning surfaces.

Attention is directed to "Sound Wall (Precast Concrete Panel)" of these special provisions regarding constructing a 3' x 3' test panel prior to constructing the precast reinforced concrete panels for the sound wall.

Attention is directed to "Environmentally Sensitive Area" and "Temporary Fence (Type ESA)" of these special provisions. Prior to beginning work, the boundaries of the Environmentally Sensitive Areas (ESA) shall be clearly delineated in the field. The boundaries shall be delineated by the installation of temporary fence (Type ESA).

The first order of work shall be to place the order for the electrical equipment. The uppermost layer of new pavement shall not be placed until all underlying conduits and loop detectors have been installed.

Prior to commencement of the traffic signal functional test at any location, all items of work related to signal control shall be completed and all roadside signs, pavement delineation, and pavement markings shall be in place at that location.

Attention is directed to "Maintaining Traffic" and "Temporary Pavement Delineation" of these special provisions and to the stage construction sheets of the plans.

The work shall be performed in conformance with the stages of construction shown on the plans. Nonconflicting work in subsequent stages may proceed concurrently with work in preceding stages, provided satisfactory progress is maintained in the preceding stages of construction.

In each stage, after completion of the preceding stage, the first order of work shall be the removal of existing pavement delineation as directed by the Engineer. Pavement delineation removal shall be coordinated with new delineation so that lane lines are provided at all times on traveled ways open to public traffic.

Before obliterating any pavement delineation (traffic stripes, pavement markings, and pavement markers) that is to be replaced on the same alignment and location, as determined by the Engineer, the pavement delineation shall be referenced by the Contractor, with a sufficient number of control points to reestablish the alignment and location of the new pavement delineation. The references shall include the limits or changes in striping pattern, including one- and 2-way barrier lines, limit lines, crosswalks and other pavement markings. Full compensation for referencing existing pavement delineation shall be considered as included in the contract prices paid for new pavement delineation and no additional compensation will be allowed therefor.

Prior to applying hot mix asphalt concrete or rubberized hot mix asphalt concrete, the Contractor shall cover all manholes, valve and monument covers, grates, or other exposed facilities located within the area of application, using a plastic or oil resistant construction paper secured to the facility being covered by tape or adhesive. The covered facilities shall be referenced by the Contractor, with a sufficient number of control points to relocate the facilities after the hot mix asphalt concrete has been placed. After completion of the hot mix asphalt concrete operation, all covers shall be removed and disposed of in a manner satisfactory to the Engineer. Full compensation for covering manholes, valve and monument covers, grates, or other exposed facilities, referencing, and removing temporary cover shall be considered as included in the contract price paid per ton for hot mix asphalt concrete, and no additional compensation will be allowed therefor.

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 excavations within 8 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 placing of the structural section commences, structural material 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 (horizontal:vertical) or flatter to the bottom of the excavation. Treated 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 the material is required, and subsequent removing or reshaping of the material to the lines and grades shown on the plans shall be considered as included in the contract price paid for the materials involved and no additional compensation will be allowed therefor. No payment will be made for material placed in excess of that required for the structural section.

At those locations exposed to public traffic where guard railings or barriers are to be constructed, reconstructed, or removed and replaced, the Contractor shall schedule operations so that at the end of each working day there shall be no post holes open nor shall there be any railing or barrier posts installed without the blocks and rail elements assembled and mounted thereon.

At least 60 days before applying seeds, furnish the Engineer a statement from the vendor that the order for the seed required for this contract has been received and accepted by the vendor. The statement from the vendor must include the names and quantity of seed ordered and the anticipated date of delivery.

CONTRACT NO. 04-2908C4

REVISED PER ADDENDUM NO. 2 DATED SEPTEMBER 7, 2012

10-1.20 TIME-RELATED OVERHEAD

The Contractor will be compensated for time-related overhead as described below and in conformance with "Force Account Payment" of these special provisions. The Contractor will not be compensated for time-related overhead for delays to the controlling operations caused by the Engineer that occur prior to the first working day, but will be compensated for actual overhead costs incurred, as determined by an independent Certified Public Accountant audit examination and report.

Attention is directed to "Beginning of Work, Time of Completion and Liquidated Damages," "Force Account Payment," and "Progress Schedule (Critical Path Method)" of these special provisions.

The provisions in Section 9-1.08D(2)(b), "Overhead Claims," of the Standard Specifications shall not apply.

Time-related overhead shall consist of those overhead costs, including field and home office overhead, that are in proportion to the time required to complete the work. Time-related overhead shall not include costs that are not related to time, including but not limited to, mobilization, licenses, permits, and other charges incurred only once during the contract. Time-related overhead shall not apply to subcontractors of any tier, suppliers, fabricators, manufacturers, or other parties associated with the Contractor.

Field office overhead expenses include time-related costs associated with the normal and recurring operations of the construction project, and shall not include costs directly attributable to the work of the contract. Time-related costs of field office overhead include, but are not limited to, salaries, benefits, and equipment costs of project managers, general superintendents, field office managers and other field office staff assigned to the project, and rent, utilities, maintenance, security, supplies, and equipment costs of the project field office.

Home office overhead or general and administrative expenses refer to the fixed costs of operating the Contractor's business. These costs include, but are not limited to, general administration, insurance, personnel and subcontract administration, purchasing, accounting, and project engineering and estimating. Home office overhead costs shall exclude expenses specifically related to other contracts or other businesses of the Contractor, equipment coordination, material deliveries, and consultant and legal fees.

The quantity of time-related overhead associated with a reduction in contract time for an accepted VECP under Section 4-1.035B, "Value Engineering Change Proposal," of the Standard Specifications shall be considered a construction cost attributable to the resultant estimated net savings due to the cost reduction incentive.

If the final increased quantity of time-related overhead exceeds 149 percent of the number of working days specified in the verified Bid Item List, the Contractor shall, within 60 days of the Engineer's written request, submit to the Engineer an audit examination and report performed by an independent Certified Public Accountant of the Contractor's actual overhead costs. The audit examination and report shall depict the Contractor's project and company-wide financial records and shall specify the actual overall average daily rates for both field and home office overhead for the entire duration of the project, and whether the costs have been properly allocated. The rates of field and home office overhead shall exclude unallowable costs as determined in the Federal Acquisition Regulations, 48 CFR, Chapter 1, Part 31.

Independent Certified Public Accountant's audit examinations shall be performed in conformance with the requirements of the American Institute of Certified Public Accountants Attestation Standards. Audit examinations and reports shall determine if the rates of field office overhead and home office overhead are:

- A. Allowable in conformance with the requirements of the Federal Acquisition Regulations, 48 CFR, Chapter 1, Part 31.
- B. Adequately supported by reliable documentation.
- C. Related solely to the project under examination.

Within 20 days of receipt of the Engineer's written request, the Contractor shall make its financial records available for audit by the State for the purpose of verifying the actual rate of time-related overhead specified in the audit submitted by the Contractor. The actual rate of time-related overhead specified in the audit, submitted by the Contractor, will be subject to approval by the Engineer.

If the Engineer requests the independent Certified Public Accountant audit, or if it is requested in writing by the Contractor, the contract item payment rate for time-related overhead, in excess of 149 percent of the number of working days specified in the verified Bid Item List, will be adjusted to reflect the actual rate.

The cost of performing an independent Certified Public Accountant audit examination and submitting the report, requested by the Engineer, will be borne equally by the State and the Contractor. The division of the cost will be made by determining the cost of providing an audit examination and report in conformance with the provisions of Section 9-1.04, "Extra Work Performed by Specialists," of the Standard Specifications, and paying to the Contractor one-half of that cost. The cost of performing an audit examination and submitting the independent Certified Public Accountant audit report for overhead claims other than for the purpose of verifying the actual rate of time-related overhead shall be entirely borne by the Contractor. The cost of performing an audit examination and submitting the independent Certified Public Accountant audit report to verify actual overhead costs incurred prior to the first working day shall be entirely borne by the Contractor.

The quantity of time-related overhead to be paid will be measured by the working day, designated in the verified Bid Item List as WDAY. The estimated number of working days is the number of working days, excluding days for plant establishment, as specified in "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions. The quantity of time-related overhead will be increased or decreased only as a result of suspensions or adjustments of contract time which revise the current contract completion date, and which satisfy any of the following criteria:

- A. Suspensions of work ordered in conformance with the provisions in Section 8-1.05, "Temporary Suspension of Work," of the Standard Specifications, except:
 1. Suspensions ordered due to weather conditions being unfavorable for the suitable prosecution of the controlling operation or operations.
 2. Suspensions ordered due to the failure on the part of the Contractor to carry out orders given, or to perform the provisions of the contract.
 3. Suspensions ordered due to factors beyond the control of and not caused by the State or the Contractor, for which the Contractor is granted non-working days.
 4. Other suspensions that mutually benefit the State and the Contractor.
- B. Adjustments of contract time granted by the State set forth in approved contract change orders, in conformance with the provisions in Section 4-1.03, "Changes," of the Standard Specifications.

A delay to the controlling operation may be concurrent and any of the following:

1. Nonexcusable: A nonexcusable delay is caused by the fault, nonperformance, or deficiency of the Contractor, subcontractors of any tier, or suppliers. The days during a nonexcusable delay are working days. No time or payment adjustment for a nonexcusable delay is allowed.
2. Excusable: An excusable delay is caused by factors beyond the control and without the fault of the State or the Contractor. The days during an excusable delay are non-working days.
3. Compensable: A compensable delay is caused solely by the fault, deficiency, error, omission, or change made by the State. A time adjustment and a payment adjustment for the actual cost without markup or profit are allowed.

A concurrent delay occurs when 2 or more separate delays overlap partially or entirely. A nonexcusable delay concurrent with either an excusable or a compensable delay is a nonexcusable delay. An excusable delay concurrent with a compensable delay is an excusable delay.

The quantity of time-related overhead is only adjusted as a result of a compensable delay and is not adjusted as a result of either a nonexcusable or an excusable delay.

An approved time impact analysis submitted as specified in "Progress Schedule (Critical Path Method)" of these special provisions is used to determine the type and duration of a delay.

In the event an early completion progress schedule, as defined in "Progress Schedule (Critical Path Method)" of these special provisions, is submitted by the Contractor and approved by the Engineer, the amount of time-related overhead eligible for payment will be based on the total number of working days for the project, in conformance with the provisions in "Beginning of Work, Time of Completion and Liquidated Damages" of these special provisions, rather than the Contractor's early completion progress schedule.

The contract price paid per working day for time-related overhead shall include full compensation for time-related overhead, including the Contractor's share of costs of the independent Certified Public Accountant audit of overhead costs requested by the Engineer, as specified in these special provisions, and as directed by the Engineer.

The provisions in Sections 4-1.03B, "Increased or Decreased Quantities," and 4-1.03C, "Changes in Character of the Work," of the Standard Specifications shall not apply to the contract item of time-related overhead.

Full compensation for additional overhead costs incurred during days of inclement weather when the contract work is extended into additional construction seasons due to delays caused by the State shall be considered as included in the time-related overhead paid during the contract working days, and no additional compensation will be allowed therefor.

Full compensation for additional overhead costs involved in performing additional contract item work that is not a controlling operation shall be considered as included in the contract items of work involved and no additional compensation will be allowed therefor.

Full compensation for overhead, other than time-related overhead measured and paid for as specified above, and other than overhead costs included in the markups specified in "Force Account Payment" of these special provisions, shall be considered as included in the various items of work and no additional compensation will be allowed therefor.

Overhead costs incurred by subcontractors of any tier, suppliers, fabricators, manufacturers, and other parties associated with the Contractor shall be considered as included in the various items of work and as specified in Section 9-1.03, "Force Account Payment," of the Standard Specifications.

For the purpose of making progress payments pursuant to the provisions in Section 9-1.07, "Progress Payments," of the Standard Specifications, the number of working days to be paid for time-related overhead in each monthly partial payment will be the number of working days, specified above to be measured for payment that occurred during that monthly estimate period, including compensable suspensions and right of way delays. Working days granted by contract change order due to extra work or changes in character of the work, will be paid for upon completion of the contract. The amount earned per working day for time-related overhead shall be the lesser of the following amounts:

- A. The contract item price.
- B. Twenty percent of the original total contract amount divided by the number of working days specified in "Beginning of Work, Time of Completion and Liquidated Damages," of these special provisions.

After acceptance of the contract in conformance with the provisions in Section 7-1.17, "Acceptance of Contract," of the Standard Specifications, the amount of the total contract item price for time-related overhead not yet paid, will be included for payment in the first estimate made after acceptance of the contract in conformance with the provisions in Section 9-1.08, "Payment After Contract Acceptance," of the Standard Specifications.

10-1.415 IMPORTED BORROW (LIGHTWEIGHT AGGREGATE)

Imported borrow (lightweight aggregate) shall conform to the provisions in Section 19, "Earthwork," of the Standard Specifications and these special provisions.

Imported borrow (lightweight aggregate) shall consist of a rotary kiln expanded shale aggregate of the extruded type or a processed, naturally-occurring volcanic aggregate.

Imported borrow (lightweight aggregate) material, when deposited in place, shall conform to the following requirements:

Grading Requirements

Sieve Sizes	Percentage Passing
1.500-inch	100
1.000-inch	95 - 100
0.750-inch	90 - 100
0.375-inch	15 - 85
0.003-inch	0 - 9

Grading will be determined in conformance with the requirements of California Test 202, except shaking in the sieves shall be limited to 5 minutes.

Quality Requirements

Test	Requirement
Resistance (R-Value)	50 min
Durability Index	35 min

The imported borrow (lightweight aggregate) shall have a chloride content less than or equal to 500 parts per million and a sulfate content less than or equal to 1500 parts per million.

At locations directed by the Engineer, the structure backfill placed within 2-foot of finished ground around abutments, abutment wingwalls, retaining walls, and other portions of structures shall be a compacted impervious material, conforming to the provisions in Section 19-3.06, "Structure Backfill," of the Standard Specifications.

Imported borrow (lightweight aggregate) shall have a maximum calculated saturated surface dry unit weight of 60 lb/ft³. The saturated surface dry unit weight shall be calculated using the dry loose unit weight and the absorption of the coarse and fine aggregates. Dry loose unit weight shall be determined in conformance with the requirements in California Test Method 212, using test procedure (b) Compaction Method (by jiggling). Absorption of the coarse and fine aggregates shall be determined in conformance with the requirements in California Test Methods 206 and 207, except that the samples shall be oven dry before soaking and shall be soaked for 24 hours plus or minus 30 minutes. Saturated surface dry unit weight shall be calculated as follows:

1. Multiply the percent coarse aggregate by the absorption of the coarse aggregate;
2. Multiply the percent fine aggregate by the absorption of the fine aggregate;
3. Add the two values from 1. and 2. and divide by 10000;
4. Add one (1) to the result from 3. and multiply by the dry loose unit weight.

Imported borrow (lightweight aggregate) shall be placed and compacted to the designated dimensions in conformance with the provisions in Sections 19-1.03, "Grade Tolerance," and 19-6, "Embankment Construction," of the Standard Specifications. The provisions in Section 19-5, "Compaction," of the Standard Specifications shall not apply.

Initial layers of imported borrow (lightweight aggregate) may be placed by end dumping from trucks, or by any other method approved by the Engineer.

Imported borrow (lightweight aggregate) shall be spread or placed in such manner that will prevent bulking of the material and minimize particle breakdown. Imported borrow (lightweight aggregate) shall be compacted in uniform layers not to exceed 0.66-ft thickness before compaction. Compaction shall be obtained by a minimum of 3 complete coverage passes using smooth drum steel roller compaction equipment imposing contact force of 672 lb per-foot-width of the roller face. Track type equipment which imposes the equivalent contact pressure as that specified for steel drum rollers, as determined by the Engineer, may be used provided the 3 complete coverages of the tracks of the track type equipment are achieved. Sufficient moisture treatment shall be made to aid the compactive effort. Compaction using pneumatic-tired equipment or compaction within trenches or other limited-access areas, or compaction in areas of low confining pressure, shall be by a method approved by the Engineer.

When alternative compaction equipment and methods of compaction (including use of pneumatic-tired equipment in trenches, in limited-access areas, and areas of low confining pressure) are proposed by the Contractor, a test site placing and compacting lightweight aggregate material shall be constructed. The alternative compaction equipment and methods of compaction shall not be used until, evaluation of the test site by the Engineer and the alternative methods and equipment have been approved by the Engineer.

Quantities of imported borrow (lightweight aggregate) shall be paid for by the cubic yard calculated on the basis of the mass, measured in place in conformance with the provisions in Section 9-1.01, "Measurement of Quantities," of the Standard Specifications divided by the 95 percent of the dry unit weight measured in conformance with the requirements in California Test Method 212, using test procedure (b) Compaction Method (by jiggling).

The contract price paid per cubic yard for imported borrow (lightweight aggregate) shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in constructing imported borrow (lightweight aggregate), complete in place (including constructing and removing any test sites required), as shown on the plans, as specified in these special provisions, and as directed by the Engineer.

BRIDGE DECK SURFACE TEXTURE

General

This work includes the longitudinal texturing of new bridge decks including approach slabs.

Construction

General

For bridge widenings, texture the deck surface longitudinally using longitudinal tining.

After receiving surface texture, portions of surfaces that do not meet the friction requirements of Section 51-1.17, "Finishing Bridge Decks," of the Standard Specifications shall be ground or grooved parallel to the centerline in conformance with the provisions of Section 42, "Groove and Grind Pavement," of the Standard Specifications until the friction criteria are met.

Longitudinal Tining

Construct the surface texture by longitudinal deck tining.

Perform initial texturing with a burlap drag or broom device that produces striations parallel to the centerline. Perform final texturing with spring steel tines that produce grooves parallel with the centerline.

Construct grooves to within 6 inches of the layout line for the toe of the concrete barrier. The tines must be rectangular in cross section and be from 3/32 to 1/8 inch wide, on 3/4-inch centers, and have enough length, thickness, and resilience to form grooves approximately 3/16 inch deep. Grooves must be from 1/8 to 3/16 inch deep and 3/16 inch wide after concrete has hardened.

For irregular areas and areas inaccessible to the grooving machine, you may hand-construct grooves. Hand-constructed grooves must comply with the specifications for machine-constructed grooves.

Grooving must not cause tearing of the surface or visible separation of coarse aggregate at the surface.

Measurement and Payment

Full compensation for bridge deck surface texture is included in the contract price paid per cubic yard for the structural concrete item requiring the texturing, and no additional compensation will be allowed therefor.

BID ITEM LIST

04-2908C4

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070012	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
2	071325	TEMPORARY FENCE (TYPE ESA)	LF	5,030		
3	024157	TEMPORARY FENCE (WILDLIFE EXCLUSION)	LF	27,200		
4	074016	CONSTRUCTION SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
5	074019	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
6	074028	TEMPORARY FIBER ROLL	LF	11,200		
7	074029	TEMPORARY SILT FENCE	LF	6,200		
8	074033	TEMPORARY CONSTRUCTION ENTRANCE	EA	9		
9	074034	TEMPORARY COVER	SQYD	3,000		
10	074035	TEMPORARY CHECK DAM	LF	100		
11	074037	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	8		
12	074038	TEMPORARY DRAINAGE INLET PROTECTION	EA	36		
13	074040	TEMPORARY HYDRAULIC MULCH (BONDED FIBER MATRIX)	SQYD	12,900		
14	074041	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
15	074042	TEMPORARY CONCRETE WASHOUT (PORTABLE)	LS	LUMP SUM	LUMP SUM	
16	024158	TEMPORARY CREEK DIVERSION SYSTEM	LS	LUMP SUM	LUMP SUM	
17	074056	RAIN EVENT ACTION PLAN	EA	85	500.00	42,500.00
18	074057	STORM WATER ANNUAL REPORT	EA	4	2,000.00	8,000.00
19	074058	STORM WATER SAMPLING AND ANALYSIS DAY	EA	70		
20	024159	WATER QUALITY MONITORING REPORT	EA	5		

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Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	024160	WATER QUALITY SAMPLING AND ANALYSIS DAY	EA	60		
22	090100	TIME-RELATED OVERHEAD (WDAY)	WDAY	520		
23	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
24	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
25	120120	TYPE III BARRICADE	EA	17		
26	120149	TEMPORARY PAVEMENT MARKING (PAINT)	SQFT	810		
27	120159	TEMPORARY TRAFFIC STRIPE (PAINT)	LF	358,000		
28	120165	CHANNELIZER (SURFACE MOUNTED)	EA	990		
29	120300	TEMPORARY PAVEMENT MARKER	EA	24,100		
30	129000	TEMPORARY RAILING (TYPE K)	LF	102,000		
31	129100	TEMPORARY CRASH CUSHION MODULE	EA	380		
32	024161	ALTERNATIVE TEMPORARY CRASH CUSHION	EA	33		
33	141103	REMOVE YELLOW THERMOPLASTIC TRAFFIC STRIPE (HAZARDOUS WASTE)	LF	40,300		
34	148005	NOISE MONITORING	LS	LUMP SUM	LUMP SUM	
35	150204	ABANDON CULVERT (LF)	LF	360		
36	150605	REMOVE FENCE	LF	4,000		
37	150662	REMOVE METAL BEAM GUARD RAILING	LF	2,270		
38	024162	REMOVE SINGLE THRIE BEAM BARRIER	LF	590		
39	150668	REMOVE FLARED END SECTION	EA	8		
40	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	73,900		

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Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	411105	INDIVIDUAL SLAB REPLACEMENT (RSC)	CY	1,370		
122	415101	CRACK EXISTING CONCRETE PAVEMENT	SQYD	102,000		
123	460210	GROUND ANCHOR (SUBHORIZONTAL)	EA	18		
124 (F)	460300	SOIL NAIL	LF	61,824		
125	490513	FURNISH STEEL PILING (HP 12 X 53)	LF	1,678		
126	490514	DRIVE STEEL PILE (HP 12 X 53)	EA	68		
127 (F)	510051	STRUCTURAL CONCRETE, BRIDGE FOOTING	CY	85		
128 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	1,069		
129 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	CY	6,286		
130 (F)	510088	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE N MODIFIED)	CY	57		
131 (F)	510090	STRUCTURAL CONCRETE, BOX CULVERT	CY	126		
132	510501	MINOR CONCRETE	CY	130		
133 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	230		
134	510526	MINOR CONCRETE (BACKFILL)	CY	220		
135	511049	PAINT BRIDGE IDENTIFICATION	LS	LUMP SUM	LUMP SUM	
136 (F)	511064	FRACTURED RIB TEXTURE	SQFT	81,116		
137	511106	DRILL AND BOND DOWEL	LF	94		
138	511118	CLEAN EXPANSION JOINT	LF	500		
139	511124	RAPID SETTING CONCRETE PATCH	CF	5		
140	511130	INJECT CRACK (EPOXY)	LF	100		

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Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141	512207	FURNISH PRECAST PRESTRESSED CONCRETE GIRDER (80'-90')	EA	6		
142	512500	ERECT PRECAST PRESTRESSED CONCRETE GIRDER	EA	6		
143	515060	CORE CONCRETE (1")	LF	34		
144	517992	SOUND WALL (PRECAST CONCRETE PANEL)	SQFT	4,650		
145	519081	JOINT SEAL (MR 1/2")	LF	88		
146 (F)	519133	JOINT SEAL (ASPHALTIC PLUG)	LF	575		
147 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	357,075		
148 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	737,584		
149 (F)	520107	BAR REINFORCING STEEL (BOX CULVERT)	LB	26,820		
150 (F)	530100	SHOTCRETE	CY	924		
151 (F)	560203	FURNISH SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	LB	1,700		
152 (F)	560204	INSTALL SIGN STRUCTURE (BRIDGE MOUNTED WITH WALKWAY)	LB	1,700		
153 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	LB	161,950		
154 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	161,950		
155	560233	FURNISH FORMED PANEL SIGN (OVERHEAD)	SQFT	1,880		
156	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	750		
157	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	100		
158	561016	60" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	240		
159 (F)	562002	METAL (BARRIER MOUNTED SIGN)	LB	322		
160	566011	ROADSIDE SIGN - ONE POST	EA	26		

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Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
261	024206	RAMP METERING SYSTEM (LOCATION 9)	LS	LUMP SUM	LUMP SUM	
262	024207	RAMP METERING SYSTEM (LOCATION 10)	LS	LUMP SUM	LUMP SUM	
263	024208	HIGH SPEED WEIGH IN MOTION COMPLIANCE SYSTEM	LS	LUMP SUM	LUMP SUM	
264	024209	SLOW WEIGH-IN-MOTION SYSTEM	LS	LUMP SUM	LUMP SUM	
265	860251	SIGNAL AND LIGHTING (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
266	860252	SIGNAL AND LIGHTING (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
267	860253	SIGNAL AND LIGHTING (LOCATION 3)	LS	LUMP SUM	LUMP SUM	
268	BLANK					
269	198010	IMPORTED BORROW (LIGHT WEIGHT AGGREGATE)	CY	2,610		
270	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID:**\$** _____