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March 25, 2010

02-Plu-70-56.5/57.2
02-373104
SARRA-P070(099)E

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN PLUMAS COUNTY NEAR KEDDIE FROM 0.3 KM WEST TO 0.3 KM EAST OF THE SPANISH CREEK BRIDGE.

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 Tuesday, April 13, 2010, instead of the original date of Tuesday, March 30, 2010.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions.

Project Plan Sheet 115 is revised as follows:

Above "STAGE 1" the callout the note is revised to read "Construct Pier 2 and Pier 6 arch foundations. Place arch rib sections in the order shown. The final rib section at the crown is not to be poured until all other sections of the arch rib have set for at least 7 days. Place crown strut at the same time as the adjacent rib section."

In the Notice to Bidders and Special Provisions, in the "SPECIAL NOTICES," the following Special Notice is added:

"Attention regarding SSPC QP certification: Submit SSPC QP certification required for cleaning and painting in these special provisions. Failure to submit the certification will result in a nonresponsive bid."

In the Special Provisions, Section 5-1.18, "RELATIONS WITH U.S. DEPARTMENT OF AGRICULTURE, FOREST SERVICE," the fourth paragraph is revised as follows:

"The Contractor's attention is directed to the following conditions which are among those established by the special use permit for this project:

1. The campground is expected to be closed to the public for three years (until 2012)."

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the following paragraph is added after the ninth paragraph as follows:

"Attention is directed to "Relations with U.S. Department of Agriculture, Forest Service," regarding use of the "permit area." The Contractor shall conduct and plan his operations with the knowledge that use of the "permit area" ceases 12/31/2012."

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In the Special Provisions, Section 10-1.36, "REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING (HAZARDOUS WASTE)," subsection "GENERAL," subsection "Submittals," subsection "Lead Compliance Plan," the last paragraph is revised as follows:

"Supply personal protective equipment, training, and washing facilities required by your lead compliance plan for 10 State employees."

In the Special Provisions, Section 10-1.38, "EXISTING HIGHWAY FACILITIES," subsection "EXISTING PAINT SYSTEMS," subsection "Safety and Health Provisions," the fifth paragraph is revised as follows:

"Prior to performing work in areas containing lead, personnel who have no prior training, including State personnel, shall complete a safety training program provided by the Contractor that meets the requirements of Title 8, California Code of Regulations, Section 1532.1, "Lead," and the Contractor's Lead Compliance Plan. Training required by the Contractor's Lead Compliance Plan shall be supplied to State personnel by the Contractor. The number of State personnel will be 10."

In the Special Provisions, Section 10-1.38, "EXISTING HIGHWAY FACILITIES," subsection "EARTH MATERIAL CONTAINING LEAD," subsection "Submittals," subsection "Lead Compliance Plan," the last paragraph is revised as follows:

"Supply personal protective equipment, training, and washing facilities required by your lead compliance plan for 10 State employees."

In the Special Provisions, Section 10-1.41, "WATERING," the second paragraph is deleted.

In the Special Provisions, Section 10-1.44, "SOIL NAIL ASSEMBLY," subsection "Materials," the fourth sentence in the second paragraph is revised as follows:

"The soil nail shall be an epoxy-coated reinforcing bar partially encapsulated in a grouted corrugated plastic sheathing."

In the Special Provisions, Section 10-1.44, "SOIL NAIL ASSEMBLY," subsection "Materials," the following paragraph is added after the ninth paragraph as follows:

"Pullout test nails designated on the plans are the same as proof soil nails specified in these special provisions."

In the Special Provisions, Section 10-1.44, "SOIL NAIL ASSEMBLY," subsection "Testing," the tenth paragraph is revised as follows:

"The Contractor shall perform proof testing on pullout test nails at locations shown on the plans in the presence of the Engineer. In addition to pullout test nails designated on the plans, the Engineer will instruct the Contractor to install and test 3 additional soil nails for proof testing at locations to be determined by the Engineer."

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In the Special Provisions, Section 10-1.58, "MICROPILING," subsection "TESTING," the following paragraph is added after the first paragraph as follows:

"The Contractor shall submit to the Engineer working drawings for the micropile test frame in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications and these special provisions. The drawings shall be signed by an engineer who is registered as a Civil Engineer in the State of California. Three sets of drawings shall be furnished to the Engineer. The working drawings shall include complete details for the fabrication of the micropile test frame and methods for handling and transporting frame including attachments as needed for handling the frame. The Contractor shall allow 14 days after complete drawings and support data are submitted for the review and approval of the micropile test frame working drawings."

In the Special Provisions, Section 10-1.59, "CONCRETE STRUCTURES, the attached "MASS CONCRETE" is added before subsection "FALSEWORK".

In the Special Provisions, Section 10-1.83, "CALIFORNIA ST-20S MODIFIED BRIDGE RAIL," subsection "PREPARING AND PAINTING," the following paragraph is added after the first paragraph as follows:

"Proof of certification under the SSPC QP Certification Program must be submitted with your bid. Required certifications are as follows:

1. SSPC-QP3, Enclosed Shop Facility or AISC Sophisticated Paint Endorsement Quality Program, P1-Enclosed.

Prior to performing any painting or paint removal, the Contractor shall submit to the Engineer, in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications, 3 copies of a separate Painting Quality Work Plan (PQWP) for each item of work for which painting or paint removal is to be performed. As a minimum, each PQWP shall include the following:

- A. The name of each Contractor or subcontractor to be used.
- B. One copy each of all current "SSPC: The Society for Protective Coatings" specifications or qualification procedures which are applicable to the painting or paint removal to be performed. These documents shall become the permanent property of the Department.
- C. A copy of the coating manufacturer's guidelines and recommendations for surface preparation, painting, drying, curing, handling, shipping, and storage of painted structural steel, including testing methods and maximum allowable levels for soluble salts.
- D. Proposed methods and equipment to be used for any paint application.
- E. Proof of each of any required certifications, SSPC-QP 1 and SSPC-QP 3. In lieu of certification in conformance with the requirements in SSPC-QP 1 for this project, the Contractor may submit written documentation showing conformance with the requirements in Section 3, "General Qualification Requirements," of SSPC-QP 1.
- F. Proposed methods to control environmental conditions in accordance with the manufacturer's recommendations and these special provisions.
- G. Proposed methods to protect the coating during curing, shipping, handling, and storage.
- H. Proposed rinse water collection plan.
- I. A detailed paint repair plan for the repair of damaged areas.
- J. Procedures for containing blast media and water during application of coatings and coating repair of erected steel.
- K. Examples of proposed daily reports for all testing to be performed, including type of testing, location, lot size, time, weather conditions, test personnel, and results.

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The Engineer shall have 3 weeks to approve the PQWP submittal after a complete plan has been received. No painting or paint removal shall be performed until the PQWP for that work is approved by the Engineer. Should the Engineer fail to complete the review within this time allowance and if, in the opinion of the Engineer, the Contractor's controlling operation is delayed or interfered with by reason of the delay in approving the PQWP, the delay will be considered a right of way delay in conformance with the provisions in Section 8-1.09, "Right of Way Delays," of the Standard Specifications.

The Engineer's review of the Contractor's PQWP shall not relieve the Contractor of any responsibility under the contract for the successful completion of the work in conformity with the requirements of the plans and specifications.

Fresh, potable water with a maximum chloride content of 75 mg/L and a maximum sulfate content of 200 mg/L shall be used for water rinsing or pressure washing operations. No continuous recycling of rinse water will be permitted. If rinse water is collected into a tank and subsequent testing determines the collected water conforms to the specified requirements, reuse may be permitted by the Engineer if no collected water is added to the tank after sample collection for determination of conformance to specified requirements."

To Bid book holders:

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 and attachments are available for the Contractors' download on the Web site:

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/02/02-373104

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,

ORIGINAL SIGNED BY

IGNACIO SANCHEZ DEL REAL
Acting Office Chief
Office of Plans, Specifications & Estimates
Office Engineer
Division of Engineering Services

Attachments

MASS CONCRETE

Pier 2 and Pier 6 concrete footings shown on the plans shall be constructed as mass concrete and shall conform to the details shown on the plans and these special provisions.

Thermal Control Plan

Prior to mass concrete construction, the Contractor shall submit to the Engineer for approval, a Thermal Control Plan with design calculations in conformance with the provisions in Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications for each mass concrete element. The number of sets of the Thermal Control Plan and design calculations and review time shall be the same as those specified for falsework working drawings in Section 51-1.06A, "Falsework Design and Drawings," of the Standard Specifications.

The Thermal Control Plan shall show complete details and determine the maximum allowable temperature differentials between the hottest point of the concrete and the exterior faces based on the design assumption that cracking as a result of heat of hydration shall not occur. As a minimum, the Thermal Control Plan shall include the following:

- A. Mix design.
- B. Duration and method of curing.
- C. Procedures to control concrete temperature at time of placement.
- D. Methods of controlling temperature differentials.
- E. Temperature sensor types and locations.
- F. Temperature monitoring and recording system.
- G. Field measures to ensure conformance with the maximum concrete temperature and temperature differential requirements.

Materials

Materials used for mass concrete shall conform to the provisions in Section 90, "Portland Cement Concrete," of the Standard Specifications, and these special provisions.

Concrete shall conform to the requirements in "Freezing Condition Requirements" of these special provisions.

Mass concrete shall contain a minimum of 300 kg of cementitious material per cubic meter of concrete. When the supplementary cementitious material (SCM) is GGBFS, the amount of SCM shall be 50 to 75 percent by mass of the total cementitious material used in the mix. When the SCM is not GGBFS, the SCM content shall be from 25 percent to 35 percent by mass of the total cementitious material used in the mix.

Construction

Prior to mass concrete placement, an engineer for the Contractor who is registered as a Civil Engineer in the State of California shall inspect and test the temperature monitoring and recording system. The Contractor's registered engineer shall be present at the jobsite when the mass concrete operation is in progress and shall report to the Engineer in writing on a daily basis the progress of the operation. A copy of the daily report shall be available at the jobsite.

Mechanical cooling systems may be used to control the internal temperature of mass concrete during curing.

If the Contractor elects to use a mechanical cooling system, the mechanical cooling system shall be designed in conformance with the Thermal Control Plan and the following requirements:

- A. The mechanical cooling system shall be embedded within mass concrete elements and surface connections to cooling pipes shall be removable to a depth of 100 mm from the surface.
- B. Forms shall be designed so that removal of the forms shall not disrupt the cooling or temperature monitoring.
- C. Cooling pipes shall not break and deform during mass concrete placement and shall be secured to prevent movement. Damaged cooling pipes shall be removed and replaced immediately.
- D. The mechanical cooling system shall be pressure tested at 0.2 MPa for 30 minutes for leaking prior to mass concrete placement. Coolant circulation shall be in progress at the time that concrete placement begins.
- E. After cooling is completed, cooling pipes shall be fully grouted under pressure with a nonshrink grout mixture in conformance with ASTM Designation: C 1107 and ASTM Designation: C 827 for 0.0 percent shrinkage, and 0.0 percent minimum and 4.0 percent maximum expansion. The placement of nonshrink grout shall be in conformance with the manufacturer's recommendations.
- F. After surface connections to the cooling pipes are removed, the holes shall be reamed and filled with mortar conforming to Section 51-1.135, "Mortar," of the Standard Specifications.

The temperature monitoring and recording system for mass concrete shall consist of temperature sensors connected to a data acquisition system capable of printing, storing, and downloading data to a computer. Temperature sensors shall be located such that the maximum temperature difference within a mass concrete element can be monitored. As a minimum, concrete temperatures shall be monitored at the calculated hottest location, on at least 2 outer faces, 2 corners, and top surfaces.

Temperature readings shall be automatically recorded on an hourly or more frequent basis. A redundant set of sensors shall be installed near the primary set. Provisions shall be made for recording the redundant set, but records of the redundant sensors need not be made if the primary set is operational. The hourly temperature recording may be discontinued when the maximum internal temperature is falling, the difference between the interior concrete temperature and the average daily air temperature is less than the allowable temperature difference for three consecutive days, and there are no mass concrete elements to be cast adjacent. Data shall be printed and submitted to the Engineer daily.

Methods of concrete consolidation shall prevent damage to the temperature monitoring and recording system. Wiring from temperature sensors cast into the concrete shall be protected to prevent movement. Wire runs shall be kept as short as possible. The ends of the temperature sensors shall not come into contact with either a support or concrete form, or bar reinforcing steel.

When any equipment used in the temperature control and monitoring and recording system fails during the mass concrete construction operation, the Contractor shall take immediate measures to correct the situation as specified in the Thermal Control Plan. Failure to conform to the temperature requirements will be cause for rejection of the concrete.

Acceptance

Mass concrete shall conform to the concrete acceptance criteria and the following temperature requirements:

- A. The maximum allowable temperature of mass concrete shall not exceed 70 °C.
- B. The maximum temperature differential of mass concrete shall not exceed the requirement as determined in the Thermal Control Plan.

If the Contractor fails to conform to any of the temperature requirements above, the mass concrete elements will be rejected. The rejected mass concrete shall be removed at the Contractor's expense. The contractor shall modify the Thermal Control Plan and design calculations to correct the problem and resubmit the revised Thermal Control Plan.

The Contractor shall allow the Engineer 15 days for review and approval of the revised Thermal Control Plan. Mass concrete placement shall not begin until the Engineer has approved the revised Thermal Control Plan. No extension of time or compensation will be made for any rejected mass concrete element or revisions of the Thermal Control Plan.

Mass concrete will be measured and paid for in conformance with the provisions in Section 90-11, "Measurement and Payment," of the Standard Specifications.

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