

DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
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Flex your power!
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March 11, 2010

06-Fre-41-R27.6/R29.8
06-0E9704
NH-P041(111)E

Addendum No. 4

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN FRESNO COUNTY IN FRESNO AT VARIOUS LOCATIONS FROM ASHLAN AVENUE OVERCROSSING TO 0.2 MILE NORTH OF BULLARD AVENUE OVERCROSSING.

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, March 17, 2010.

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

Project Plan Sheet 61 is revised. A copy of the revised sheet is attached for substitution for the like-numbered sheet.

In the Special Provisions, Section 8-2, "BLANK," is replaced with Section 8-2, "CONCRETE" and Section 8-2.01, "PORTLAND CEMENT CONCRETE," as attached.

In the Bid book, in the "Bid Item List," Items 80 and 81 are added and Item 79 is deleted as attached.

To Bid book holders:

Replace page 6 of the "Bid Item List" in the Bid book with the attached revised page 6 and add page 6A 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.

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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/06/06-0E9704

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

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

Attachments

SECTION 8-2. CONCRETE

8-2.01 PORTLAND CEMENT CONCRETE

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

STRENGTH DEVELOPMENT TIME

The time allowed to obtain the minimum required compressive strength as specified in Section 90-1.01, "Description," of the Standard Specifications will be 56 days when the Contractor chooses cementitious material that satisfies the following equation:

$$\frac{(41 \times UF) + (19 \times F) + (11 \times SL)}{TC} \geq 7.0$$

Where:

- F = Fly ash or natural pozzolan conforming to the requirements in AASHTO Designation: M 295, Class F or N, including the amount in blended cement, pounds per cubic yard. F is equivalent to either FA or FB as defined in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials," of the Standard Specifications
- SL = GGBFS, including the amount in blended cement, pounds per cubic yard
- UF = Silica fume, metakaolin, or UFFA, including the amount in blended cement, pounds per cubic yard
- TC = Total amount of cementitious material used, pounds per cubic yard

For concrete satisfying the equation above, the Contractor shall test for the modulus of rupture or compressive strength specified for the concrete involved, at least once every 500 cubic yards, at 28, 42, and 56 days. The Contractor shall submit test results to the Engineer and the Transportation Laboratory, Attention: Office of Concrete Materials.

SUPPLEMENTARY CEMENTITIOUS MATERIALS

The Contractor may use rice hull ash as a supplementary cementitious material (SCM) to make minor concrete. Rice hull ash shall conform to the requirements in AASHTO Designation: M 321 and the following chemical and physical requirements:

Chemical Requirements	Percent
Silicon Dioxide (SiO ₂) ^a	90 min.
Loss on ignition	5.0 max.
Total Alkalies (as Na ₂ O) equivalent	3.0 max.
Physical Requirements	Percent
Particle size distribution	
Less than 45 microns	95
Less than 10 microns	50
Strength Activity Index with portland cement ^b	
7 days	95 (minimum % of control)
28 days	110 (minimum % of control)
Expansion at 16 days when testing job materials in conformance with ASTM C 1567 ^c	0.10 max.
Surface Area when testing by nitrogen adsorption in conformance with ASTM D 5604	40.0 m ² /g min.

Notes:

^a A maximum of 1.0% of the SiO₂ may exist in crystalline form.

^b When tested in conformance with the requirements for strength activity testing of silica fume in AASHTO Designation: M 307

^c In the test mix, Type II or Type V portland cement shall be replaced with at least 12% RHA by weight.

Rice hull ash will be considered as a Type UF SCM for the purposes of calculating cementitious material requirements in Section 90-2.01C, "Required Use of Supplementary Cementitious Materials," of the Standard Specifications and these special provisions

BID ITEM LIST**06-0E9704**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	839581	END ANCHOR ASSEMBLY (TYPE SFT)	EA	5		
62	839585	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	4		
63	017416	ALTERNATIVE CRASH CUSHION SYSTEM	EA	1		
64	839701	CONCRETE BARRIER (TYPE 60)	LF	400		
65	839704	CONCRETE BARRIER (TYPE 60D)	LF	2,620		
66	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	7,290		
67	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	4,220		
68	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	1,110		
69	840526	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	1,290		
70	850101	PAVEMENT MARKER (NON- REFLECTIVE)	EA	170		
71	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	300		
72	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
73	017417	FIBER OPTIC SYSTEM	LS	LUMP SUM	LUMP SUM	
74	861101	RAMP METERING SYSTEM (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
75	861102	RAMP METERING SYSTEM (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
76	861103	RAMP METERING SYSTEM (LOCATION 3)	LS	LUMP SUM	LUMP SUM	
77	861104	RAMP METERING SYSTEM (LOCATION 4)	LS	LUMP SUM	LUMP SUM	
78	861504	MODIFY LIGHTING AND SIGN ILLUMINATION	LS	LUMP SUM	LUMP SUM	
79	BLANK					
80	731517	MINOR CONCRETE (GUTTER)	CY	80		

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

TOTAL BID: _____