

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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www.dot.ca.gov/hq/esc/oe



*Serious Drought.  
Help save water!*

October 1, 2014

11-SD-67-R0.0/R5.9

11-275504

Project ID 1100000276

ACSTPNH-P067(071)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN SAN DIEGO COUNTY IN AND NEAR EL CAJON AND SANTEE FROM ROUTE 8/67 SEPARATION TO SAN DIEGO RIVER 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 Thursday, October 16, 2014.

This addendum is being issued to revise the project plans, the *Notice to Bidders and Special Provisions* and the *Bid* book.

Project plan sheets 5, 7, 13, 103, 108, 111, 112 and 128 are replaced and attached for substitution for the like-numbered sheets.

In the *Notice to Bidders*, the tenth paragraph is replaced as follows:

"For the Federal training program, the number of trainees or apprentices is 3."

In the *Special Provisions*, Section 8, "PROSECUTION AND PROGRESS," is added as attached.

In the *Special Provisions*, Section 12-2.02, the blank table following the fourth paragraph is deleted.

In the *Special Provisions*, Section 12-3.19, is added as attached.

In the *Special Provisions*, Section 15-2.03A(2)(b), is added as attached.

In the *Special Provisions*, DIVISION IV "SUBBASES AND BASES," Section 28, "CONCRETE BASES," is added as attached.

In the *Special Provisions*, Section 39-2.02F, is added as follows:

**"Delete section 39-2.02F of the RSS for section 39."**

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In the *Bid* book, in the "Bid Item List," Items 36 and 47 are replaced.

In the *Bid* book, in the "Bid Item List," Items 93 and 94 are added.

In the *Bid* book, in the "Bid Item List," Item 92 is deleted.

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*.

Submit the *Bid* book as described in the *Electronic Bidding Guide* at the Bidders' Exchange website.

**[http://www.dot.ca.gov/hq/esc/oe/electronic\\_bidding/electronic\\_bidding.html](http://www.dot.ca.gov/hq/esc/oe/electronic_bidding/electronic_bidding.html)**

Inform subcontractors and suppliers as necessary.

This addendum, EBS addendum file and attachments are available for the Contractors' download on the Web site:

**[http://www.dot.ca.gov/hq/esc/oe/project\\_ads\\_addenda/11/11-275504](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/11/11-275504)**

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,



LAURIE BERMAN  
District Director

Attachments

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## 8 PROSECUTION AND PROGRESS

Replace "Reserved" in section 8-1.04C with:

Section 8-1.04B does not apply.

Start job site activities within 55 days after receiving notice that the Contract has been approved by the Attorney General or the attorney appointed and authorized to represent the Department.

Do not start job site activities until the Department authorizes or accepts your submittal for:

1. CPM baseline schedule
2. WPCP
3. Notification of DRA or DRB nominee and disclosure statement
4. Contingency plan for opening closures to public traffic

You may enter the job site only to measure controlling field dimensions and locate utilities.

Do not start other job site activities until all the submittals from the above list are authorized or accepted and the following information is received by the Engineer:

1. *Notice of Materials To Be Used* form.

You may start job site activities before the 55th day after Contract approval if you:

1. Obtain specified authorization or acceptance for each submittal before the 55th day
2. Receive authorization to start

Submit a notice 72 hours before starting job site activities. If the project has more than 1 location of work, submit a separate notice for each location.

Replace section 12-3.19 of the RSS for section 12-3 with:

**12-3.19 PORTABLE TRANSVERSE RUMBLE STRIPS**

**12-3.19A General**

**12-3.19A(1) Summary**

Section 12-3.19 includes specifications for placing portable transverse rumble strips.

**12-3.19A(2) Definitions**

Not Used

**12-3.19A(3) Submittals**

Submit a copy of the manufacturer's instructions.

**12-3.19A(4) Quality Control and Assurance**

Not Used

**12-3.19B Materials**

The portable transverse rumble strip must be either the RoadQuake 2 or the RoadQuake 2 Folding rumble strip manufactured by Plastic Safety Systems, Inc. For information on obtaining the rumble strips, contact:

Customer Service  
Plastic Safety Systems, Inc.  
2444 Baldwin Road  
Cleveland, OH 44104

Telephone Number: (800) 662-6338 or (216) 231-8590

**12-3.19C Construction**

Use a traffic break or an impact attenuator vehicle as a shadow vehicle when placing and removing the portable transverse rumble strips. Rumble strips must be in place before road construction begins.

If used for flagging operations, place 2 arrays of portable transverse rumble strips transverse to the vehicular traffic movement in advance of and approach to each flagger station. Each array must consist of 3 rumble strips spaced from 6 to 10 feet apart. Place the 1st array adjacent to the W20-4 (One Lane Road Ahead) sign. Place the 2nd array adjacent to C9A(CA) (CA flagger symbol) sign.

If the RoadQuake 2 is used, securely connect the 3 sections under the manufacturer's instructions before placing them in the traffic lane.

Install the Rumble Strips warning sign half way between the W20-1 (Road Work Ahead) sign and the W20-4 (One Lane Road Ahead) sign under section 12-3.06.

Remove all portable transverse rumble strips and warning signs at the end of lane closure and flagging operations.

If the Engineer determines that the rumble strips no longer provide the audible and vibratory alerts necessary, replace the portable transverse rumble strips.

**12-3.19D Payment**

Not Used

**Replace section 15-2.03A(2)(b) with:**

**15-2.03A(2)(b) Department Salvage Location**

A minimum of 2 business days before hauling salvaged material to the Department salvage storage location, notify:

1. Engineer
2. Caltrans Electrical Supervisor, at telephone number (619) 596-0937

For electrical material, the Department salvage storage location is:

Caltrans Santee Maintenance Station  
8502 Railroad Avenue, Santee, CA 92071

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## DIVISION IV SUBBASES AND BASES

### 28 CONCRETE BASES

Replace "Reserved" in section 28-4 of the RSS for section 28 with:

#### 28-4.01 GENERAL

##### 28-4.01A Summary

Section 28-4 includes specifications for constructing lean concrete base rapid setting (LCBRS).

##### 28-4.01B Definitions

**final set time:** Elapsed time after initial contact of cement and water required for the mortar sieved from the concrete to develop a penetration resistance of 4,000 psi under ASTM C 403.

**opening age:** Age when the LCBRS achieves the specified strength for opening to traffic including construction traffic.

##### 28-4.01C Submittals

###### 28-4.01C(1) General

At least 25 days before field qualification, submit the name of your proposed testing laboratory.

Submit quality control test results within 24 hours of test completion.

###### 28-4.01C(2) Mix Design

Determine the mix proportions for LCBRS and submit mix designs.

At least 10 days before placing LCBRS, submit a mix design for LCBRS and include:

1. Opening age
2. Proposed aggregate gradation
3. Mix design, including
  - 3.1. Proportions
  - 3.2. Types and amounts of chemical admixtures
4. Maximum time allowed between batching and placing
5. Range of ambient temperatures over which the mix design is applicable
6. Final-set-time
7. Aggregate qualification test results if required

Submit 1 mix design for each ambient temperature variation anticipated during LCBRS placement. Each mix design must have a maximum ambient temperature range of 18 degrees F.

Submit compressive strength development data for each mix design. You may use strength development data from laboratory-prepared samples. The testing ages for strength development data must include 1 hour before opening age, opening age, 1 hour after opening age, 24 hours, and 7 days.

###### 28-4.01C(3) Field Qualification

Submit field qualification data and test reports including:

1. Mixing date
2. Mixing equipment and procedures used
3. Batch volume in cubic yards, minimum 5 cu yd
4. Type and source of ingredients used
5. Age and strength at time of cylinder testing

Field qualification test reports must be certified with a signature by an official in responsible charge of the laboratory performing the tests.

#### **28-4.01D Quality Control and Assurance**

##### **28-4.01D(1) General**

Stop LCBRS activities and immediately notify the Engineer if:

1. Any quality control or acceptance test result does not comply with the specifications
2. Visual inspection shows noncompliant LCBRS

If LCBRS activities are stopped, before resuming activities:

1. Inform the Engineer of the adjustments you will make
2. Remedy or replace the noncompliant LCBRS until it complies with specifications
3. Field qualify the LCBRS demonstrating ability to comply with the specifications
4. Obtain authorization

For compressive strength testing, prepare 6 cylinders under California Test 540. Test specimens must be 6 by 12 inches. As an alternative to rodding, a vibrator may be used under California Test 524. Test cylinders under California Test 521 and perform 3 tests with each test consisting of 2 cylinders. The test result is the average from the 2 cylinders.

##### **28-4.01D(2) Field Qualification**

Proposed mix proportions must be field qualified before you place LCBRS. The technician performing the field test must hold current American Concrete Institute (ACI) certification as a Concrete Field Testing Technician-Grade I.

Field qualification must comply with the following:

1. Test for compressive strength at opening age and 7 days of age
2. At opening age, the compressive strength for each test must be at least 180 psi and the average strength for the 3 tests must be at least 200 psi
3. At 7 days age, the compressive strength for each test must be at least 600 psi and the average strength for the 3 tests must be at least 725 psi

##### **28-4.01D(3) Quality Control Testing**

Perform sampling under California Test 125.

Testing laboratories and testing equipment must comply with the Department's Independent Assurance Program.

Perform quality control sampling, testing, and inspection throughout LCBRS production and placement. For LCBRS, your quality control testing and results must comply with the following table:

**Quality Control Requirements**

Quality characteristic	Test method	Minimum testing frequency	Requirement
Sand equivalent (min)	ASTM D 2419	1 per 500 cu yd, minimum 1 per day of production	71 <sup>a</sup>
Aggregate gradation	ASTM C 136		Comply with section 28-2.02C
Air content (max, percent) <sup>b</sup>	ASTM C 231	1 per 4 hours of placement work, plus one in the last hour of placement work	4
Penetration <sup>c</sup> (inches)	ASTM C 360		0–2-1/2 nominal 3 maximum
Slump <sup>c</sup> (inches)	ASTM C 143		0–5 nominal 6 maximum
Compressive strength (min, psi at 7 days)	California Test 521		725
Compressive strength (min, psi at opening age)	California Test 521		200

<sup>a</sup> If aggregate is qualified under section 28-4.02D, subparagraph 2, the minimum is 18.

<sup>b</sup> If no single test in the first 5 air content tests exceeds 1-1/2 percent, no further air content tests are required.

<sup>c</sup> Test either penetration or slump

**28-4.01D(4) Acceptance Criteria**

LCBRS acceptance is based on compliance with the requirement for the quality characteristic shown in the following table:

**LCBRS Acceptance Criteria Testing**

Quality characteristic	Test method	Requirement
Compressive strength (min, psi at 7 days)	California Test 521 <sup>a</sup>	725

<sup>a</sup>Cylinders made under California Test 540

**28-4.02 MATERIALS**

**28-4.02A General**

Not Used

**28-4.02B Cement**

Cement must comply with the requirements for RSC.

**28-4.02C Chemical Admixtures**

Chemical admixtures must comply with chemical admixtures for concrete except you may use Type E chemical admixture. You may submit a request to use citric acid or borax. Your request must include a request from the cement manufacturer and a test sample.

#### **28-4.02D Aggregates**

Aggregate must comply with either of the following:

1. Section 90-1.02C except aggregate grading must comply with the aggregate grading table in section 28-2.02C
2. Section 28-2.02C and the following:
  - 2.1. Qualify the aggregate for each proposed aggregate source and gradation
  - 2.2. Qualification tests include (1) sand equivalent and (2) average 7-day compressive strength under ASTM C 39 on 3 specimens manufactured under ASTM C 192. The cement content for this test must be 300 lb/cu yd, and the 7-day compressive strength must be at least 610 psi. Cement must be Type II portland cement under section 90-1.02B(2) without SCM.

#### **28-4.03 CONSTRUCTION**

##### **28-4.03A General**

Construct LCBRS under section 28-2.03 except (1) section 28-2.03A does not apply and (2) the 4th through 6th paragraphs of section 28-2.03D do not apply.

Do not open the LCBRS to traffic before opening age.

Subsequent paving operations may begin only after final set time of LCBRS and it must have a compressive strength of at least 450 psi under California Test 521 before:

1. Placing HMA
2. Placing base
3. Operating equipment on the LCBRS

##### **28-4.03B Proportioning, Mixing, and Transporting**

For batches 1 cu yd or more, comply with one of the following methods:

1. Batch the ingredients at a central batch plant and charge them into a mixer truck for transportation to the pour site.
2. Batch the ingredients except the cement at a central batch plant and charge them into a mixer truck for transportation to a cement silo and weigh system, which must proportion cement for charging into the mixer truck.
3. Batch ingredients except the cement at a central batch plant and charge them into a mixer truck for transportation to a location where preweighed containerized cement is added to the mixer truck. The cement preweighing operation must utilize a platform scale. The platform scale must have a maximum capacity of 2.75 tons with a maximum graduation size of 1 lb. Preweigh cement into a fabric container. The minimum amount of cement to be proportioned into any single container must be 1/2 of the total amount required for the load of LCBRS being produced.
4. Proportion cement, water, and aggregate volumetrically under ASTM C 685 or section 90-3.02B.

##### **28-4.03C Spreading, Compacting and Shaping**

You may use metal or wood side forms. Wood side forms must be at least 1-1/2 inches thick.

After you deposit the LCBRS on the subgrade, consolidate it with high-frequency internal vibrators. Consolidate adjacent to forms and across the full pavement width. Place LCBRS as nearly as possible to its final position.

Spread and shape LCBRS with powered finishing machines supplemented by hand finishing.

After you place LCBRS, do not add water to the surface to facilitate finishing. Use surface finishing additives as recommended by the manufacturer of the cement after their use is authorized.

##### **28-4.04 PAYMENT**

Lean concrete base rapid setting is measured from the dimensions shown.

If volumetric proportioning is used and calibration is performed more than 100 miles from the project limits, the Department deducts \$1,000 for each calibration session.

**BID ITEM LIST  
11-275504**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	7,340		
22	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	170		
23	150742	REMOVE ROADSIDE SIGN	EA	10		
24	150771	REMOVE ASPHALT CONCRETE DIKE	LF	32,900		
25	150821	REMOVE HEADWALL	EA	1		
26	152299	RESET MILEPOST MARKER	EA	1		
27	152320	RESET ROADSIDE SIGN	EA	2		
28	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	277,000		
29	153121	REMOVE CONCRETE (CY)	CY	230		
30	190101	ROADWAY EXCAVATION	CY	5,550		
31	190105	ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	CY	240		
32	198010	IMPORTED BORROW (CY)	CY	35		
33	260203	CLASS 2 AGGREGATE BASE (CY)	CY	110		
34	374002	ASPHALTIC EMULSION (FOG SEAL COAT)	TON	16		
35	390095	REPLACE ASPHALT CONCRETE SURFACING	CY	2,950		
36	390132	HOT MIX ASPHALT (TYPE A)	TON	12,100		
37	390136	MINOR HOT MIX ASPHALT	TON	890		
38	390137	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TON	40,700		
39	394053	SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS)	STA	1,760		
40	394060	DATA CORE	LS	LUMP SUM	LUMP SUM	

**BID ITEM LIST  
11-275504**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	394073	PLACE HOT MIX ASPHALT DIKE (TYPE A)	LF	7,510		
42	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	950		
43	394076	PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	24,400		
44	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	1,730		
45	394090	PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA)	SQYD	24		
46	397005	TACK COAT	TON	79		
47	401055	JOINTED PLAIN CONCRETE PAVEMENT (RSC)	CY	360		
48 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	82		
49	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	110		
50	560249	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED)	SQFT	190		
51	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	80		
52	566011	ROADSIDE SIGN - ONE POST	EA	12		
53	027859	SIGN POST SUPPORT SYSTEM	EA	10		
54	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	18		
55	568015	INSTALL SIGN (MAST-ARM HANGER METHOD)	EA	5		
56	568017	INSTALL ROADSIDE SIGN PANEL ON EXISTING POST	EA	2		
57	620100	18" ALTERNATIVE PIPE CULVERT	LF	150		
58	707117	36" PRECAST CONCRETE PIPE INLET	LF	5		
59	730070	DETECTABLE WARNING SURFACE	SQFT	230		
60	027860	MINOR CONCRETE (EXPOSED AGGREGATE)	CY	400		

**BID ITEM LIST  
11-275504**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81	846010	8" THERMOPLASTIC TRAFFIC STRIPE (ENHANCED WET NIGHT VISIBILITY) (BROKEN 12-3)	LF	6,410		
82	846012	THERMOPLASTIC CROSSWALK AND PAVEMENT MARKING (ENHANCED WET NIGHT VISIBILITY)	SQFT	5,770		
83	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	6,590		
84	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	4,770		
85	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
86	860251	SIGNAL AND LIGHTING (LOCATION 1)	LS	LUMP SUM	LUMP SUM	
87	860252	SIGNAL AND LIGHTING (LOCATION 2)	LS	LUMP SUM	LUMP SUM	
88	860253	SIGNAL AND LIGHTING (LOCATION 3)	LS	LUMP SUM	LUMP SUM	
89	860808	DETECTOR LOOP (EA)	EA	41		
90	861501	MODIFY SIGNAL AND LIGHTING	LS	LUMP SUM	LUMP SUM	
91	861503	MODIFY LIGHTING	LS	LUMP SUM	LUMP SUM	
92	BLANK					
93	280015	LEAN CONCRETE BASE RAPID SETTING	CY	360		
94	999990	MOBIILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID:**

**\$**

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