

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

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*Flex your power!  
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July 26, 2013

08-Riv-62-0.0/R6.7

08-491804

Project ID 0800020104

ACNH-P062(036)E

Addendum No. 3

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN RIVERSIDE COUNTY NEAR DESERT HOT SPRINGS FROM ROUTE 10/62 SEPARATION TO NORTH INDIAN CANYON DRIVE.

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, August 1, 2013.

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 9 dated 7/19/2013.

Project plan sheets 5 - 8, 11, 15 - 17, 21, 22, 25, 26, 28, 85, 86, and 88 are replaced and attached for substitution for the like numbered sheets.

Project plan sheets 31A and 88A are added and attached for addition to the project plans.

In the Special Provisions, Section 12-2, "CONSTRUCTION PROJECT FUNDING SIGNS," is replaced as attached.

In the Special Provisions, Section 39-1.23, "HOT MIX ASPHALT TYPE C," is replaced as attached.

In the Special Provisions, Section 39-1.41, "HOT MIX ASPHALT TYPE A BOND BREAKER," is added as attached.

In the Special Provisions, Section 83-1.02C(4), "TYPE CAT TERMINAL SYSTEM," is added as attached.

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In the *Bid* book, in the "Bid Item List," Item 27 is replaced, Items 74 and 75 are added and Items 12, 48, and 73 are deleted as attached.

To *Bid* book holders:

In the *Bid* book, pages 3, 4, 5, and 6 of the "Bid Item List" are replaced as attached. The attached 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 wage rates are available for the Contractors' download on the Web site:

**[http://www.dot.ca.gov/hq/esc/oe/project\\_ads\\_addenda/08/08-491804](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/08/08-491804)**

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,



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

Attachments

**Replace section 12-2 with:  
12-2 CONSTRUCTION PROJECT FUNDING SIGNS**

**12-2.01 GENERAL**

Section 12-2 includes specifications for installing construction project funding signs.

Details for construction project funding signs are shown.

Construction project funding signs must comply with the details shown on the Department's Traffic Operations Web site.

Keep construction project funding signs clean and in good repair at all times.

**12-2.02 MATERIALS**

Construction project funding signs must be wood post signs complying with section 56-4.

Sign panels for construction project funding signs must be framed, single sheet aluminum panels complying with section 56-2.

The background on construction project funding signs must be Type II retroreflective sheeting on the Authorized Material List for signing and delineation materials.

The legend must be retroreflective, except for nonreflective black letters and numerals. The colors blue and orange must comply with PR Color no. 3 and no. 6, respectively, as specified in the Federal Highway Administration's *Color Tolerance Chart*.

The legend for the type of project on construction project funding signs must read as follows:

TYPE OF PROJECT

The legend for the types of funding on construction project funding signs must read as follows and in the following order:

FEDERAL HIGHWAY TRUST FUNDS

STATE HIGHWAY FUNDS

The Engineer will provide the year of completion for the legend on construction project funding signs. Furnish and install a sign overlay for the year of completion within 10 working days of notification.

The legend for the year of completion on construction project funding signs must read as follows:

YEAR OF COMPLETION 2014

The size of the legend on construction project funding signs must be as described. Do not add any additional information unless authorized.

**12-2.03 CONSTRUCTION**

Install 2 construction project funding signs at the locations designated by the Engineer before starting major work activities visible to highway users.

When authorized, remove and dispose of construction project funding signs upon completion of the project.

**12-2.04 PAYMENT**

Not Used

Replace section 39-1.23 with:

**39-1.23 HOT MIX ASPHALT TYPE C**

**39-1.23A General**

**39-1.23A(1) Summary**

Except if specified for Type C, the specifications for HMA Type A apply to HMA Type C.

Produce and place HMA Type C under the QC/QA construction process.

**39-1.23A(2) Submittals**

Submit with the JMF submittal:

1. California Test 204 plasticity index results
2. California Test 371 tensile strength ratio results for untreated HMA Type C
3. California Test 371 tensile strength ratio results for treated HMA Type C if untreated HMA Type C tensile strength ratio is below 70

At JMF submittal, production start-up, and every 5,000 tons, submit the California Test 371 test results to the Engineer and to:

Moisture\_Tests@dot.ca.gov

At production start-up and once during production, submit samples split from your HMA Type C production sample for California Test 371 to the Engineer and METS, Attention: Moisture Test.

**39-1.23A(3) Quality Control and Assurance**

For the mix design, determine the plasticity index of the aggregate blend under California Test 204. Choose an antistrip treatment and use the corresponding laboratory procedure for the mix design as shown in the following table:

**Antistrip Treatment Laboratory Procedures for Mix Design**

Antistrip treatment	Laboratory procedure
Plasticity index from 4 to 10 <sup>a</sup>	
Dry hydrated lime with marination	LP-6
Lime slurry with marination	LP-7
Plasticity index less than 4	
Liquid	LP-5
Dry hydrated lime without marination	LP-6
Dry hydrated lime with marination	LP-6
Lime slurry with marination	LP-7

<sup>a</sup> If the plasticity index is greater than 10, do not use that aggregate blend.

For the mix design, determine tensile strength ratio under California Test 371 on untreated HMA Type C. If the tensile strength ratio is less than 70:

1. Choose from the antistrip treatments specified based on plasticity index
2. Test treated HMA under California Test 371
3. Treat to a minimum tensile strength ratio of 70

On the 1st production day and every 5,000 tons, sample and test under California Test 371.

The Department does not use California Test 371 test results for JMF verification or to determine specification compliance.

For the mix design, determine the OBC at 5.0 percent air void content.

Determine the proposed JMF for HMA Type C from a mix design that has the values for the quality characteristics shown in the following table:

**HMA Type C Mix Design Requirements**

Quality characteristic	Test method	Value	
Design air void content (%)		4.0	5.0
Air void content (%) <sup>a</sup>	California Test 367	4.0	5.0
Voids in mineral aggregate (% min) <sup>b</sup>	California Test 367		
1/2" grading		14.0	15.0
3/4" grading		13.0	14.0
1" grading			
with NMAS = 1"		12.0	13.0
with NMAS = 3/4"		13.0	14.0
Voids filled with asphalt (%)	California Test 367		
1/2" grading		65.0–75.0	60.0–70.0
3/4" grading		65.0–75.0	60.0–70.0
1" grading		65.0–75.0	60.0–70.0
Dust proportion <sup>c</sup> (P200/Pbe)	California Test 367	0.6–1.2	0.6–1.2
Stabilometer value (min) <sup>d</sup>	California Test 366	37 <sup>e</sup> (Modified) 35 <sup>f</sup>	37 <sup>e</sup> (Modified) 35 <sup>f</sup>

<sup>a</sup> Calculate the air void content of each specimen using California Test 309 and 367. Modify California Test 367, Paragraph C5, to use the exact air void content specified in the selection of OBC.

<sup>b</sup> Minimum voids in the mineral aggregate (VMA) is dependent upon the nominal maximum aggregate size (NMAS) of JMF. NMAS is defined as 1 sieve size larger than the 1st sieve to retain more than 10 percent.

<sup>c</sup> Asphalt content based on total weight of mix.

<sup>d</sup> California Test 304, Part 2C.12.

<sup>e</sup> Comply with California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.

<sup>f</sup> Modify California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply additional 500 tamps at 500 psi; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.

With the minimum quality control testing for the specified construction process, perform sampling and testing at the specified minimum frequency for the quality characteristics shown in the following table:

**HMA Type C Minimum Quality Control**

Quality characteristic	Test method	Minimum sampling and testing frequency	Requirement	
Asphalt binder content (%)	California Test 379 or 382	1 per 750 tons and any remaining part	JMF ± 0.30	
Stabilometer Value(min) a, b	California Test 366	1 per 4,000 tons or 1 per 2 business days, whichever is more	37 <sup>c</sup> (Modified) 35 <sup>d</sup>	
Air void content (%) <sup>a, e</sup>	California Test 367		Design ± 2	
Percent of crushed particles <sup>f</sup> Coarse aggregate (% min) Two fractured faces Fine aggregate (Passing No. 4 sieve and retained on No. 8 sieve) (% min) One fractured face	California Test 205	1 per 5,000 tons or 1 per 5 business days, whichever is more	95	
			90	
			45	
Fine aggregate angularity (% min) <sup>f, g</sup>	California Test 234		45	
Los Angeles Rattler <sup>†</sup> Loss at 100 rev. (% max) Loss at 500 rev. (% max)	California Test 211	As necessary and designated in the QC plan. At least once per project	12	
			40	
Flat and elongated particles <sup>f</sup> (% max by weight @ 5:1)	California Test 235		10	
Design air void content			4.0	5.0
Field compaction (% of max. theoretical density) <sup>h, i, j</sup>	California Test 375	1 per 750 tons or any single location, whichever is less	92–97	91–96
Voids in mineral aggregate (% min) 1/2" gradation 3/4" gradation 1" gradation <sup>k</sup> with NMAS = 1" with NMAS = 3/4"	California Test 367	1 per 4,000 tons or 1 per 2 business days, whichever is more	14.0	15.0
			13.0	14.0
Voids filled with asphalt (%) 1/2" gradation 3/4" gradation 1" gradation	California Test 367	1 per 4,000 tons or 1 per 2 business days, whichever is more	12.0	13.0
			13.0	14.0
			65.0–	60.0–
			75.0	70.0
			65.0–	60.0–
75.0	70.0			
Dust proportion <sup>l</sup> (P200/Pbe)	California Test 367	1 per 4,000 tons or 1 per 2 business days, whichever is more (Report Only)	0.6–1.2	0.6–1.2

- <sup>a</sup> Report the average of 3 tests from a single split sample.
- <sup>b</sup> If the stability range is more than 8 points, prepare and test new briquettes.
- <sup>c</sup> Comply with California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.
- <sup>d</sup> Modify California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply additional 500 tamps at 500 psi tamping pressure and 140 °F compaction temperature; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.
- <sup>e</sup> Determine the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A. Determine theoretical maximum specific gravity under California Test 309. Calculate the air void content of each specimen using California Test 309 and 367. Modify California Test 367, Paragraph C5, to use the design air void content specified.
- <sup>f</sup> Aggregate must comply with the quality specifications before it is treated with lime. During lime treatment except for dry lime on damp aggregate treatment at continuous mixing plants, sample coarse and fine aggregate from individual stockpiles. Combine aggregate in the JMF proportions. Prepare and test 3 samples from a single split sample for aggregate quality at the frequency specified during lime treatment and report test results as the average of the 3 tests.
- <sup>g</sup> The Engineer waives this specification if HMA contains 10 percent or less of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock or gravel.
- <sup>h</sup> Determine field compaction for any of the following conditions:
1. 1/2-inch aggregate grading is used and the specified total paved thickness is at least 0.15 foot.
  2. 3/4-inch or 1-inch aggregate grading is used and the specified total paved thickness is at least 0.20 foot.
- <sup>i</sup> To determine field compaction use:
1. In-place density measurements using the method specified in your QC plan.
  2. California Test 309 to determine the maximum theoretical density at the frequency specified in California Test 375, Part 5C.
- <sup>j</sup> For Standard construction process, take and average 3 cores per 250 tons of HMA placed.
- <sup>k</sup> Minimum VMA dependent upon NMAS of JMF. NMAS is defined as 1 sieve size larger than the 1st sieve to retain more than 10 percent.
- <sup>l</sup> Asphalt content based on total weight of mix.

With the acceptance testing for the specified construction process, the Engineer samples and tests the quality characteristics for the values shown in the following table:

**HMA Type C Acceptance**

Quality characteristic	Test method	Value	
Asphalt binder content (%)	California Test 379 or 382	JMF ± 0.30	
Stabilometer Value (min) <sup>a, b</sup>	California Test 366	37 <sup>c</sup> (Modified) 35 <sup>d</sup>	
Air void content (%) <sup>a, e</sup>	California Test 367	Design ± 2	
Percent of crushed particles <sup>f</sup> Coarse aggregate (% min) Two fractured faces	California Test 205	95	
Fine aggregate (Passing No. 4 sieve and retained on No. 8 sieve) (% min) One fractured face		90	
Fine aggregate angularity (% min) <sup>f, g</sup>	California Test 234	45	
Los Angeles Rattler <sup>f</sup> Loss at 100 rev. (% max)	California Test 211	12	
Loss at 500 rev. (% max)		40	
Flat and elongated particles <sup>f</sup> (% max by weight @ 5:1)	California Test 235	10	
	Design air void content	4.0	5.0
Field compaction (% of max. theoretical density) <sup>h, i, j</sup>	California Test 375	92–97	91–96
Voids in mineral aggregate (% min) 1/2" gradation	California Test 367	14.0	15.0
3/4" gradation		13.0	14.0
1" gradation <sup>k</sup> with NMAS = 1"		12.0	13.0
with NMAS = 3/4"		13.0	14.0
Voids filled with asphalt (%) 1/2" gradation	California Test 367	65.0–75.0	60.0–70.0
3/4" gradation		65.0–75.0	60.0–70.0
1" gradation		65.0–75.0	60.0–70.0
Dust proportion <sup>l</sup> (P200/Pbe)	California Test 367	0.6–1.2 Report Only	

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<sup>a</sup> The Engineer reports the average of 3 tests from a single split sample.

<sup>b</sup> If the stability range is more than 8 points, the Engineer prepares and tests new briquettes.

<sup>c</sup> The Engineer follows California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.

<sup>d</sup> Modify California Test 366: 150 tamps at 500 psi tamping pressure and 230 °F compaction temperature; cool specimens to 140 °F; apply additional 500 tamps at 500 psi tamping pressure and 140 °F compaction temperature; apply 12,600 lb leveling load; and perform stabilometer test at 140 °F.

<sup>e</sup> The Engineer determines the bulk specific gravity of each lab-compacted briquette under California Test 308, Method A. The Engineer determines theoretical maximum specific gravity under California Test 309. The Engineer calculates the air void content of each specimen using California Test 309 and 367. The Engineer modifies California Test 367, Paragraph C5, to use the design air void content specified.

<sup>f</sup> Aggregate must comply with the quality specifications before it is treated with lime. During lime treatment, except for dry lime on damp aggregate treatment at continuous mixing plants; the Engineer samples coarse and fine aggregate from individual stockpiles, combines aggregate in the JMF proportions, and prepares and tests 3 samples from a single split sample for aggregate quality at the frequency specified during lime treatment and report test results as the average of the 3 tests.

<sup>g</sup> The Engineer waives this specification if HMA contains 10 percent or less of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock or gravel.

<sup>h</sup> The Engineer determines field compaction for any of the following conditions:

1. 1/2-inch aggregate grading is used and the specified total paved thickness is at least 0.15 foot.
2. 3/4-inch or 1-inch aggregate grading is used and the specified total paved thickness is at least 0.20 foot.

<sup>i</sup> To determine field compaction, the Engineer uses:

1. California Test 308, Method A, to determine in-place density of each density core.
2. California Test 309 to determine the maximum theoretical density at the frequency specified in California Test 375, Part 5C.

<sup>j</sup> For Standard construction process, take and average 3 cores per 250 tons of HMA placed.

<sup>k</sup> Minimum VMA dependent upon NMAS of JMF. NMAS is defined as 1 sieve size larger than the 1st sieve to retain more than 10 percent.

<sup>l</sup> Asphalt content based on total weight of mix.

The Department determines the percent of maximum theoretical density from density cores taken from the final layer measured the full depth of the total paved HMA thickness if any of the following applies:

1. 1/2-inch aggregate grading is used and the specified total paved thickness is at least 0.15 foot and any layer is less than 0.15.
2. 3/4-inch or 1-inch aggregate grading is specified and used and the specified total paved thickness is at least 0.20 foot and any layer is less than 0.20 foot.

### **39-1.23B Materials**

Asphalt binder used in HMA Type C must be PG 64-28 PM.

Aggregate used in HMA Type C must comply with the 1.0 inch HMA Type C gradation.

Choose a sieve size target value (TV) within each target value limit shown in the following table:

**Aggregate Gradation  
(Percentage Passing)  
HMA Type C**

1-inch HMA Type C

Sieve sizes	Target value limits	Allowable tolerance
1"	100	--
3/4"	88-93	TV ± 5
1/2"	72-85	TV ± 6
3/8"	55-70	TV ± 6
No. 4	35-52	TV ± 7
No. 8	22-40	TV ± 5
No. 30	8-24	TV ± 4
No. 50	5-18	TV ± 4
No. 200	3.0-7.0	TV ± 2

3/4-inch HMA Type C

Sieve sizes	Target value limits	Allowable tolerance
1"	100	--
3/4"	90-95	TV ± 5
1/2"	60-75	TV ± 6
No. 4	35-52	TV ± 7
No. 8	22-36	TV ± 5
No. 30	8-18	TV ± 4
No. 200	3.0-7.0	TV ± 2

1/2-inch HMA Type C

Sieve sizes	Target value limits	Allowable tolerance
3/4"	100	--
1/2"	90-98	TV ± 6
3/8"	64-84	TV ± 6
No. 4	42-57	TV ± 7
No. 8	29-39	TV ± 5
No. 30	13-19	TV ± 4
No. 200	3.0-7.0	TV ± 2

Before the addition of asphalt binder and lime treatment, aggregate for HMA Type C must have the values for the quality characteristics shown in the following table:

**HMA Type C Aggregate Quality**

Quality characteristic	Test method	Value
Percent of crushed particles Coarse aggregate (% min) Two fractured faces	California Test 205	95
Fine aggregate (Passing No. 4 sieve and retained on No. 8 sieve.) (% min) One fractured face		
Los Angeles Rattler (% max) Loss at 100 rev. Loss at 500 rev.	California Test 211	12
		40
Sand equivalent <sup>a</sup> (min)	California Test 217	47
Fine aggregate angularity <sup>b</sup> (% min)	California Test 234	45
Flat and elongated particles (% max by weight @ 5:1)	California Test 235	10

<sup>a</sup> Reported value must be the average of 3 tests from a single sample.

<sup>b</sup> The Engineer waives this specification if HMA contains 10 percent or less of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock and gravel.

If lime treatment is required, sample coarse and fine aggregate from individual stockpiles during lime treatment except for dry lime on damp aggregate at continuous mixing plants. Combine aggregate in the JMF proportions.

**39-1.23C Construction**

The 15th and 16th paragraphs of section 39-1.11 do not apply to HMA Type C.

Pave HMA Type C in maximum 0.45-foot-thick compacted layers.

**Add to section 39-1.41**

**39-1.41 HOT MIX ASPHALT (TYPE A BOND BREAKER)**

**39-1.41A General**

**39-1.41A(1) Summary**

This work includes producing and placing Hot Mix Asphalt (Type A Bond Breaker) (HMAABB) using the Standard process.

HMAABB must comply with the requirements for HMA Type A of section 39.

**39-1.41B Materials**

**39-1.41B(1) Asphalt Binder**

The grade of asphalt binder mixed with aggregate for HMAABB must be PG 64-16.

Increase the amount of asphalt binder mixed with aggregate for HMAABB by 1.0 percent over the optimum binder content (OBC) determined for use in HMA Type A under California Test 367.

**39-1.41B(2) Aggregate**

Aggregate used in HMAABB must comply with the 3/8-inch gradation.

**39-1.41B(3) Curing Compound**

Apply white pigmented curing compound to the finished surface of the HMAABB within 2 days of placing the Portland cement concrete pavement. Pigmented curing compound must conform to the requirements of ASTM Designation C 309, Type 2, Class A. Curing compound must be applied in 2 separate applications to the area to be surfaced with Portland cement concrete pavement. Apply curing compound at the rate of 1 gallon per 150 square feet.

**39-1.41C Construction**

**39-1.41C(1) Quality Characteristics during Production**

After the addition of the 1 percent extra asphalt binder the following quality characteristics from Tables "Minimum Quality Control-Standard Construction Process" and "HMA Acceptance-Standard Construction Process" of section 39 are not required during production:

1. Percent of maximum theoretical density.
2. Stabilometer value (min).
3. Air void content.
4. Voids filled with asphalt (%).
5. Voids in mineral aggregate.
6. Dust proportion.
7. Smoothness.

**39-1.41C(2) Tack Coat**

Apply tack coat for the HMAABB to the Lean Concrete Base at the same rate as the HMA over existing PCC pavement per section 39-1.09.

**39-1.41C(3) Lean Concrete Base Finished Surface**

Prior to apply tack coat, Lean Concrete Base (LCB) finished surface must comply with specifications of LCB to be paved with HMA, specified in the second paragraph of section 28-2.03E.

**39-1.41C(4) Antistrip Treatment**

Treat HMAABB with the same antistrip treatment used for HMA Type C.

**39-1.41D Payment**

HMAABB will be paid for in the same manner specified for HMA in conformance with the requirements of section 39-6.

Full compensation for the additional 1 percent of asphalt binder used in HMAABB and for furnishing and applying white pigmented curing compound to the surface of the HMAABB is included in the contract price per ton for HMAABB as designated in the Engineer's Estimate and no separate payment will be made therefor.

**Replace section 83-1.02C(4) with:**

**83-1.02C(4) Type CAT Terminal System**

Type CAT terminal system and Type CAT terminal system backup must be furnished and installed as shown on the plans and under these special provisions.

Type CAT terminal system must be a CAT-350 crash cushion attenuating terminal as manufactured by Trinity Highway Products, LLC, and must include items detailed for Type CAT terminal system shown on the plans.

Type CAT terminal system backup must consist of items detailed for Type CAT terminal system backup shown on the plans, and must comply with the specifications in section 83-1.02B.

Excluding the Type CAT terminal system backup, arrangements have been made to ensure that any successful bidder can obtain the CAT-350 crash cushion attenuating terminal from the manufacturer, Trinity Highway Products, LLC, P.O. Box 99, Centerville, UT 84012, telephone (800) 772-7976. The price quoted by the manufacturer for the CAT-350 crash cushion attenuating terminal, FOB Centerville, Utah is \$4,000, not including sales tax.

The above price will be firm for orders placed on or before August 5, 2013, provided delivery is accepted within 90 days after the order is placed.

Submit a certificate of compliance for Type CAT terminal system.

The Type CAT terminal system must be installed under the manufacturer's installation instructions and these specifications. The steel foundation tubes with soil plates attached must be, at the Contractor's option, either driven, with or without pilot holes, or placed in drilled holes. Space around the steel foundation tubes must be backfilled with selected earth, free of rock, placed in layers approximately 4 inches thick and each layer must be moistened and thoroughly compacted. Wood posts must be inserted into the steel foundation tubes by hand. Before the wood posts are inserted, the inside surfaces of the steel foundation tubes to receive the wood posts must be coated with a grease that will not melt or run at a temperature of 149 degrees F or less. The edges of the wood posts may be slightly rounded to facilitate insertion of the post into the steel foundation tubes.

After installing the Type CAT terminal system and backup, dispose of surplus excavated material in a uniform manner along the adjacent roadway where designated by the Engineer.

**BID ITEM LIST**  
**08-491804**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
1	070030	LEAD COMPLIANCE PLAN	LS	LUMP SUM	LUMP SUM	
2	080050	PROGRESS SCHEDULE (CRITICAL PATH METHOD)	LS	LUMP SUM	LUMP SUM	
3	090100	TIME-RELATED OVERHEAD (WDAY)	WDAY	180		
4	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
5	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
6	128652	PORTABLE CHANGEABLE MESSAGE SIGN (LS)	LS	LUMP SUM	LUMP SUM	
7	129000	TEMPORARY RAILING (TYPE K)	LF	64,600		
8	129100	TEMPORARY CRASH CUSHION MODULE	EA	130		
9	130100	JOB SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
10	130300	PREPARE STORM WATER POLLUTION PREVENTIONPLAN	LS	LUMP SUM	LUMP SUM	
11	130330	STORM WATER ANNUAL REPORT	EA	1	2,000.00	2,000.00
12	BLANK					
13	130620	TEMPORARY DRAINAGE INLET PROTECTION	EA	41		
14	130640	TEMPORARY FIBER ROLL	LF	130,000		
15	130730	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
16	130900	TEMPORARY CONCRETE WASHOUT	LS	LUMP SUM	LUMP SUM	
17	141120	TREATED WOOD WASTE	LB	24,200		
18	150662	REMOVE METAL BEAM GUARD RAILING	LF	1,300		
19	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	131,000		
20	150712	REMOVE PAINTED PAVEMENT MARKING	SQFT	510		

**BID ITEM LIST**  
**08-491804**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	150722	REMOVE PAVEMENT MARKER	EA	15,600		
22	150744	REMOVE ROADSIDE SIGN (WOOD POST)	EA	20		
23	150814	REMOVE DOWNDRAIN (EA)	EA	120		
24	150859	REMOVE ASPHALT CONCRETE OVERSIDE DRAIN	EA	8		
25	152386	RELOCATE ROADSIDE SIGN-ONE POST	EA	9		
26	152430	ADJUST INLET	EA	5		
27	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	251,000		
28	153225	PREPARE CONCRETE BRIDGE DECK SURFACE	SQFT	38,000		
29	153227	FURNISH POLYESTER CONCRETE OVERLAY	CF	7,601		
30 (F)	153228	PLACE POLYESTER CONCRETE OVERLAY	SQFT	38,000		
31	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	LUMP SUM	
32	170101	DEVELOP WATER SUPPLY	LS	LUMP SUM	LUMP SUM	
33	190101	ROADWAY EXCAVATION	CY	15,200		
34	198010	IMPORTED BORROW (CY)	CY	8,150		
35	210251	EROSION CONTROL (BONDED FIBER MATRIX) (ACRE)	ACRE	45		
36	260203	CLASS 2 AGGREGATE BASE (CY)	CY	12,500		
37	280000	LEAN CONCRETE BASE	CY	830		
38	390129	HOT MIX ASPHALT (TYPE C)	TON	49,300		
39	390132	HOT MIX ASPHALT (TYPE A)	TON	1,070		
40	025275	HOT MIX ASPHALT (TYPE A BOND BREAKER)	TON	380		

**BID ITEM LIST**  
**08-491804**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	390137	RUBBERIZED HOT MIX ASPHALT (GAP GRADED)	TON	18,900		
42	394050	RUMBLE STRIP	STA	1,300		
43	394076	PLACE HOT MIX ASPHALT DIKE (TYPE E)	LF	40,100		
44	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	700		
45	397005	TACK COAT	TON	130		
46	401050	JOINTED PLAIN CONCRETE PAVEMENT	CY	1,860		
47	404092	SEAL PAVEMENT JOINT	LF	7,560		
48	BLANK					
49	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	280		
50	566011	ROADSIDE SIGN - ONE POST	EA	40		
51	691900	FLUME DOWNDRAIN	LF	2,280		
52	692101	TAPERED INLET	EA	120		
53 (F)	721017	ROCK SLOPE PROTECTION (FACING, METHOD B) (CY)	CY	36		
54	832003	METAL BEAM GUARD RAILING (WOOD POST)	LF	150		
55	832070	VEGETATION CONTROL (MINOR CONCRETE)	CY	13		
56	839220	DOUBLE METAL BEAM GUARD RAILING (WOOD POST)	LF	1,560		
57	839541	TRANSITION RAILING (TYPE WB)	EA	16		
58	839585	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	8		
59	839601	CRASH CUSHION (TYPE CAT)	EA	8		
60	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	128,000		

**BID ITEM LIST**  
**08-491804**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	1,400		
62	840508	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	2,330		
63	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	1,650		
64	840525	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	61,400		
65	840526	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	130		
66	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	131,000		
67	840666	PAINT PAVEMENT MARKING (2-COAT)	SQFT	510		
68	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	10,200		
69	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	5,420		
70	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
71	860806	INDUCTIVE LOOP DETECTOR (EA)	EA	34		
72	025276	PIEZO-ELECTRIC AXLE SENSORS	LS	LUMP SUM	LUMP SUM	
73	BLANK					
74	150771	REMOVE ASPHALT CONCRETE DIKE	LF	56,000		
75	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID:**

**\$**

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