

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

OFFICE ENGINEER

1727 30<sup>th</sup> Street MS-43

P.O. BOX 168041

SACRAMENTO, CA 95816-8041

FAX (916) 227-6214

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



*Serious Drought.  
Help save water!*

August 27, 2014

07-LA-210-R16.1/R25.8

07-2881U4

Project ID 0714000085

ACNHPI-210-1(823)E

Addendum No. 1

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN LOS ANGELES COUNTY IN LA CANADA FLINTRIDGE, GLENDALE AND PASADENA FROM DUNSMORE AVENUE UNDERCROSSING TO NORTH LOS ROBLES 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 Thursday, September 11, 2014.

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 16 dated August 22, 2014.

Project plan sheets 12, 20, 21, 22, 23, 29, 30, 34, 35, 37, 38, 39, 40, 42, 43, 44, 45, 46, 47, 55, 87, 89, 90, 232, 233, 234, 235, 236, 237, 238, 239, 240, 241, 242, 243, 244, 245, 247, 248, 249, 250, 251, 252, 253, 254, 256, 259, 260, 261, 262, 263, 264, 265, 266, 267, 268, 269, 270, 271, 474, 475, 476, 477, 478, 479, 480, 481, 482, 483, 484, 547, 591, 595, 596, 597, 598, 601, 602, 603, 605, 607, 611, 612, 613, 614, 615, 616, 617, 618, 619, 624, 847, 849, 850, and 851 are replaced and attached for substitution for the like-numbered sheets.

Project plan sheets 499A, 499B, 499C, 757A, 757B, 757C, 757D, 757E, 757F, 757G, 757H, and 806A are added and attached for addition to the project plans.

Project plan sheet 757 is deleted.

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

"ES-9B."

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

"Complete the work, excluding plant establishment work, within 640 working days.

Complete the work, including plant establishment work, within 890 working days.

Complete the plant establishment work within 250 working days."

Addendum No. 01  
Page 2  
August 27, 2014

07-LA-210-R16.1/R25.8  
07-2881U4  
Project ID 0714000085  
ACNHPI-210-1(823)E

In the Special Provisions, Section 1, "GENERAL," the 25th bid item description is replaced as follows:

"TEMPORARY MICROWAVE VEHICLE DETECTION SYSTEM."

In the Special Provisions, Section 9, "PAYMENT," is replaced as attached.

In the Special Provisions, DIVISION 2 "GENERAL CONSTRUCTION," Section 14-11.07, "REMOVE YELLOW TRAFFIC STRIPE AND PAVEMENT MARKING WITH HAZARDOUS WASTE RESIDUE," is deleted.

In the Special Provisions, Section 14-11.03, "MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF ARERIALY DEPOSITED LEAD," is replaced as attached.

in the Special Provisions, Section 37-6, "HIGH FRICTION SURFACE TREATMENT," is replaced as attached.

In the Special Provisions, Section 86, "ELECTRICAL SYSTEMS," the first paragraph is replaced as follows:

"This work is shown on the plan sheets labeled E and SES. The work involved in each bid item is shown on a sheet with a title matching the bid item description except for the following bid items:"

In the *Bid* book, in the "Bid Item List," Items 6, 7, 11, 12, 28, 34, 36, 37, 39, 42, 55, 61, 88, 113, 115, 116, 117, 118, 123, 127, 129, 152, 171, 175, 192, 194, 199, 200, 205, 214, 216, 219 and 220 are replaced.

In the *Bid* book, in the "Bid Item List," Items 226, 227 and 228 are added.

In the *Bid* book, in the "Bid Item List," Items 10, 213 and 225 are 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.

Addendum No. 01  
Page 3  
August 27, 2014

07-LA-210-R16.1/R25.8  
07-2881U4  
Project ID 0714000085  
ACNHPI-210-1(823)E

This addendum, EBS addendum file, 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/07/07-2881U4](http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/07/07-2881U4)

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*  
  
CARRIE BOWEN  
District Director

Attachments

**Add to section 9-1.16C:**

The following items are eligible for progress payment even if they are not incorporated into the work:

1. Drill and bond (dowel bar)
2. Joint seal (MR 1")
3. Joint seal (MR 1 1/2")
4. Pipe (Irrigation Systems)
5. Valves
6. Joint seal (MR 2")
7. Type B joint seal
8. Bar reinforcing steel
9. Reinforced concrete pipe
10. Slotted corrugated steel pipe
11. Perforated plastic pipe underdrain
12. Non-perforated plastic pipe underdrain
13. Rock slope protection fabric (class 8)
14. Miscellaneous iron and steel
15. Chain link fence and gate
16. Midwest guardrail system
17. Double Midwest guardrail system
18. Transition railing (Type WB-31)
19. Crash cushion (Type SCI SMART 100GM)
20. Pavement marker
21. Luminaires

**Replace section 14-11.03 with:**

**14-11.03 MATERIAL CONTAINING HAZARDOUS WASTE CONCENTRATIONS OF AERIALY DEPOSITED LEAD**

**14-11.03A General**

**14-11.03A(1) Summary**

Section 14-11.03 includes specifications for hazardous waste management while excavating, stockpiling, transporting, placing, and disposing of material containing hazardous waste concentrations of aerially deposited lead (ADL).

ADL is present within the project limits.

**14-11.03A(2) Definitions**

**Type Y-1:** Material that contains ADL in average concentrations (using the 90 percent Upper Confidence Limit) of 1.5 mg/L or less extractable lead (based on a modified waste extraction test using deionized water as the extractant) and 1,411 mg/kg or less total lead. This material is a California hazardous waste that may be reused as permitted under the variance of the DTSC provided that the lead contaminated soil is placed a minimum of 5 feet above the maximum historic water table elevation and covered with at least 1 foot of non-hazardous soil.

**Type Y-2:** Material that contains ADL in average concentrations (using the 90 percent Upper Confidence Limit) that exceed either 1.5 mg/L extractable lead (based on a modified waste extraction test using deionized water as the extractant) or 1,411 mg/kg total lead but are less than 150 mg/L extractable lead (based on a modified waste extraction test using deionized water as the extractant) and less than 3,397 mg/kg of total lead. This material is a California hazardous waste that may be reused as permitted under the variance of DTSC provided that the lead contaminated soil is placed a minimum of 5 feet above the maximum historic water table elevation and protected from infiltration by a pavement structure which will be maintained by the Department.

**Type Z-2:** Material that contains ADL in average concentrations (using the 95 percent Upper Confidence Limit) greater than or equal to 1,000 mg/kg total lead, greater than or equal to 5.0 mg/L soluble lead (as tested using the California Waste Extraction Test), and the material is surplus; or material that contains ADL in average concentrations greater than 150 mg/L extractable lead (based on a modified waste extraction test using deionized water as the extractant) or greater than 3,397 mg/kg total lead. This material is a Department-generated California hazardous waste and must be transported to and disposed of at a California Class I disposal site.

**Type Z-3:** Material that contains ADL in average concentrations (using the 95 percent Upper Confidence Limit) greater than 5.0 mg/L soluble lead, (as tested using the Toxicity Characteristic Leaching Procedure). This material is a Department-generated federal hazardous waste and must be transported to and disposed of at a California Class I disposal site.

**14-11.03A(3) Site Conditions**

ADL concentration data and sample locations maps are included in the *Information Handout*.

Type Z-2 material exists as shown.

**14-11.03A(4) Submittals**

**14-11.03A(4)(a) Lead Compliance Plan**

Submit a lead compliance plan under section 7-1.02K(6)(j)(ii).

#### **14-11.03A(4)(b) Excavation and Transportation Plan**

Within 15 days after approval of the Contract, submit 3 copies of an excavation and transportation plan. Allow 15 days for review. If revisions are required, as determined by the Engineer, submit the revised plan within 7 days of receipt of the Engineer's comments. For the revision, allow 7 days for the review. Minor changes to or clarifications of the initial submittal may be made and attached as amendments to the excavation and transportation plan. In order to allow construction to proceed, the Engineer may conditionally approve the plan while minor revisions or amendments are being completed.

Prepare the written, project specific excavation and transportation plan establishing the procedures you will use to comply with requirements for excavating, stockpiling, transporting, and placing or disposing of material containing ADL. The plan must comply with the regulations of the DTSC and Cal/OSHA and the requirements of the variance. The sampling and analysis portions of the excavation and transportation plan must meet the requirements for the design and development of the sampling plan, statistical analysis, and reporting of test results contained in US EPA, SW 846, "Test Methods for Evaluating Solid Waste," Volume II: Field Manual Physical/Chemical, Chapter Nine, Section 9.1. The plan must include the following elements:

1. Excavation schedule by location and date
2. Dust control measures
3. Air monitoring. Include the following information:
  - 3.1. Location and type of equipment
  - 3.2. Sampling frequency
  - 3.3. Name and address of the accredited laboratory where the analysis was performed
4. Transportation equipment and routes
5. Method for preventing spills and tracking material onto public roads
6. Truck waiting and staging areas
7. Site for disposal of hazardous waste
8. Spill Contingency Plan for material containing ADL

#### **14-11.03A(4)(c) Burial Location Report**

Not Used

#### **14-11.03A(4)(d) Bill of Lading**

Copies of the bills of lading must be submitted as an informational submittal upon placement of Type Y-1 or Y-2 material in its final location.

#### **14-11.03A(5) Quality Control and Assurance**

Excavation, reuse, and disposal of material with ADL must comply with rules and regulations of the following agencies:

1. US DOT
2. US EPA
3. California Environmental Protection Agency
4. CDPH
5. DTSC
6. Cal/OSHA
7. California Department of Resources Recycling and Recovery
8. RWQCB, Region 4, Los Angeles
9. California Air Resources Board
10. South Coast Air Quality Management District

Transport and dispose of material containing hazardous levels of lead under federal and state laws and regulations and county and municipal ordinances and regulations. Laws and regulations that govern this work include:

1. Health & Safety Code, Division 20, Chp 6.5 (California Hazardous Waste Control Act)
2. 22 CA Code of Regs, Div. 4.5 (Environmental Health Standards for the Management of Hazardous Waste)
3. 8 CA Code of Regs

**14-11.03B Materials**

Not Used

**14-11.03C Construction**

**14-11.03C(1) General**

Not Used

**14-11.03C(2) Material Management**

Transport excavated Type Z-2 material using:

1. Hazardous waste manifest
2. Hazardous waste transporter with a current DTSC registration certificate and CA Highway Patrol (CHP) Biennial Inspection of Terminals (BIT) Program compliance documentation.

**14-11.03C(3) Dust Control**

Excavation, transportation, placement, and handling of material containing ADL must result in no visible dust migration. A water truck or tank must be on the job site at all times while clearing and grubbing or performing earthwork operations in work areas containing ADL. Apply water to prevent visible dust.

**14-11.03C(4) Surveying Type Y-1 or Y-2 Material Burial Locations**

Not Used

**14-11.03C(5) Material Transportation**

Before traveling on public roads, remove loose and extraneous material from surfaces outside the cargo areas of the transporting vehicles and cover the cargo with tarpaulins or other cover, as outlined in the approved excavation and transportation plan. You are responsible for costs due to spillage of material containing lead during transport. Transportation routes for Type Y-1 or Y-2 material must only include the highway.

**14-11.03C(6) Disposal**

Not Used

**14-11.03D Payment**

Payment for a lead compliance plan is not included in the payment for environmental stewardship work.

The Department does not pay for stockpiling of material containing ADL, unless the stockpiling is ordered. The Department does not pay for sampling and analysis unless it is ordered. The Department does not pay for additional sampling and analysis required by the receiving landfill.

**Add to Section 37-6:**  
**37-6 HIGH FRICTION SURFACE TREATMENT**

**37-6.01 General**

**37-6.01A Summary**

Section 37-6 includes specifications for placing high friction surface treatment (HFST) on either Asphalt Concrete or Portland Cement Concrete Surfaces.

The HFST consists of applying epoxy/polymer resin binder topped with calcined bauxite aggregate.

Use resin binder described

**37-6.01B Definitions**

Not Used

**37-6.01C Submittals**

Submit a HFST Quality Control Plan (QCP). The plan review time is five working days.

The HFST QCP must include detailed information about:

1. Schedule for the trial HFST work and the production HFST work
2. Description of surface preparation for proposed HFST placing
3. Description of equipment such as make and model of Automated Continuous Application Vehicle or The Mechanical Mixer and Aggregate Applicator and for measuring such weigh meter, positive flow meter, mixing, data recording, placing and finishing HFST.
4. Method of protecting areas not to receive HFST
5. Cure time estimates for HFST
6. Safe storage and handling of HFST components
7. Disposal of excess HFST and containers
8. Contingency plans for possible equipment failure and material issues during HFST placing
9. Name of the certified independent testing laboratory.

Have one quart of resin binder and 20 pounds of calcined bauxite aggregate tested at a certified independent testing laboratory and then furnish the test results to the engineer for verification that the materials meet all the requirements specified.

Submit the following two working days before use:

- 1 A MSDS for each shipment of HFST components
- 2 Certified independent testing laboratory test results for the resin binder and calcined bauxite aggregate

Do not begin trial HFST until authorized.

### 37-6.01D Quality Control and Assurance

Complete a trial of HFST application at an authorized location before starting HFST production work.

The trial HFST must:

1. Be at least 12 feet wide by 20 feet long
  2. Be constructed using the same equipment as the production work
  3. Replicate field conditions, including ambient and surface temperatures, anticipated for the production work
  4. Demonstrate surface preparation requirements as outlined in the QCP
  5. Remove pavement markers and delineation within the area to receive HFST, for the lane and length involved, prior to placing resin binder
  6. Document the settings on the applicator equipment, initial quantities of resin and aggregate topping, and unused quantities of resin binder and aggregate remaining in the applicator equipment after applying the HFST
  7. Determine the initial set time for the resin binder
  8. Test the coefficient of friction using ASTM E1911 on the trial HFST
- Do not begin production HFST until authorized after successful completion of the trial HFST.

Take a 1-quart sample of the resin binder from the trial HFST and once during production work. Test under ASTM D638 by a certified independent testing laboratory. Provide the test results within 5 days after taking the sample.

If the trial HFST coefficient of friction is below 0.75, correct or replace the trial HFST until the coefficient of friction is greater than or equal to 0.75.

### 37-6.02 MATERIALS

#### 37-6.02A General

Not Used

#### 37-6.02B Polymer Resin Binder

Use a two-part exothermic polymer resin binder which holds the aggregate topping firmly in place, and meets the requirements shown in the following table:

**Polymer Resin Binder Requirements**

Property	Requirement	Test Method
Ultimate Tensile Strength	2650 psi min.	ASTM D638
Elongation at break point	30% min.	ASTM D638
Compressive Strength	1600 psi min at 3 hrs.	ASTM D695
Water Absorption	1.0 % max.	ASTM D570
Shore D Hardness, min. 77°F	65-75	ASTM D2240
Viscosity	1000-3000 Pa	ASTM D2393
Flexural Yield Strength, min psi	2000	ASTM D790
Cure Rate	3 hrs. max.	ASTM D1640, 0.2" thickness
Mixing Ratio	As recommended by the manufacturer	N/A
Ambient temperature	45 degrees F min	N/A

### 37-6.02C Epoxy Resin Binder

Use a two-part exothermic epoxy resin binder that holds the aggregate firmly in place, and meets the requirements shown in the following table:

**Epoxy Resin Binder Requirements**

Property	Requirement	Test Method
Ultimate Tensile Strength	2650 psi min	ASTM D_638
Elongation at break point	30% min	ASTM D_638
Compressive Strength	1600 psi min at 3 hrs.	ASTM D_695
Water Absorption	1.0% max	ASTM D_570
Shore D Hardness, min 77°F	65-75	ASTM D_2240
Gel Time, minutes	15-45 min	ASTM C_881
Flexural Yield Strength, min psi	2000	ASTM D_790
Cure Rate	3 hrs. max	ASTM D_1640, 0.2" thickness
Mixing Ratio	As recommended by the manufacturer	N/A
Ambient temperature	50 degrees F min	N/A

### 37-6.02D Calcined Bauxite Aggregate

Use a blend of calcined bauxite aggregate. The aggregate must be clean, dry, free from clay and any other deleterious matter. The aggregate must meet the requirements shown in the following table:

**Calcined Bauxite Aggregate Requirements**

Property	Requirement	Test Method
Aggregate Grading	No. 6 Percentage Passing 95% min No.16 Percentage Passing 5% max	CTM 202
Aggregate Abrasion Value Loss at 100 rev.	10% max.	CTM 211
Polish Stone Value	>70	ASTM D-3319
Aggregate Acid Insolubility	Greater than 90%	ASTM D_3042
Aggregate Magnesium Soundness	30% max	ASTM C_88

## 37-6.03 CONSTRUCTION

### 37-6.03A Pre-construction conference

Schedule a pre-construction conference with the engineer at a mutually agreed time and place. Make the arrangements for conference facility. Be prepared to discuss trial HFST requirements and hand mixing application areas and application rates.

Attendance at the preconstruction activities is mandatory for:

1. HFST Supplier
2. HFST Foreman
3. Project Superintendent

### **37-6.03B General**

Attendance during construction activities is mandatory for:

1. HFST Supplier
2. HFST Foreman
3. Project Superintendent

### **37-6.03C Surface Preparation**

Surfaces must be clean, dry and free of any dust, oil, debris, organic matter or any material that may interfere with the bond between resin binder and existing surfaces.

Remove pavement markers and delineators to a maximum depth of 0.01 foot from the area receiving HFST. Perform street sweeping before resin binder application.

Steel shot used for abrasive blast must comply with SSPC-AB3 and recycled steel shot must comply with SSPC-AB2.

Before applying HFST treatment on concrete surfaces, perform following activities in the order listed;

1. Abrasive blast the concrete surface with steel shot
2. Sweep the concrete surface clean
3. Blow the concrete surface clean with pressurized air

The concrete pavement surface must be dry when abrasive blasting is performed. All laitance, surface contaminants, paint, markers foreign material etc., must be removed from the concrete surface.

If the concrete pavement surface becomes contaminated before placing the HFST treatment, abrasive blast clean the contaminated area and sweep the concrete pavement clean.

The concrete pavement surface must be greater than 30 days old for HFST application.

#### **Joint Insert Materials**

Joint inserts must be corrugated cardboard with a 0.15-mm polyethylene covering or expanded polystyrene material.

#### **Joint Insert Installation**

Place joint inserts full depth along the joint and extend 1" beyond the ends of the patch. Joint insert must be the same width as the existing joint.

#### **Protect Existing Joints**

Protect existing transverse and longitudinal joints; and working cracks by taping or other approved method to prevent intrusion of HFST resin and aggregate into the joints and working cracks.

#### **Re-establish Existing Joints**

Before applying HFST resin and aggregate, isolate transverse and longitudinal joints and working cracks. Re-establish them by sawing them the full depth of the HFST overlay 4 hours of placing the HFST overlay. Determine the exact time of sawing. Match the width and location of the existing joints and working cracks in the concrete pavement within a tolerance of  $\pm 1/16^{\text{th}}$  of an inch.

Protect utilities, drainage structures, curbs and other structures within or adjacent to treatment location from HFST materials using methods outlined in the QCP.

### **37-6.03D HFST Application**

Apply resin binder to a clean dry surface above the required minimum ambient temperature and when anticipated weather conditions allow proper application of HFST.

Apply HFST under resin manufacturer's recommendations

Spread resin binder at a minimum rate of 0.32 gal/sq. yd.

Spread aggregate at a minimum rate of 18 lb./sq. yd.

Cure HFST for a minimum period recommended by the supplier. During curing close the HFST application area to all vehicles and construction equipment.

Resin binder material that has not completely cured on pavement surface within 2 hours of application is considered non performing and must be removed and replaced before opening to traffic.

The surface texture of HFST must be uniform in appearance. Any areas free of HFST must be covered by HFST and cured before opening the area to traffic.

Test the HFST at an interval of 500 ft alternately in both wheel paths such that a minimum of 5 tests are performed per lane under ASTM E 1911. The average coefficient of friction must be 70. Areas failing to meet coefficient of friction requirements must be corrected before opening HFST to traffic.

### **37-6.03E Mixing & Application Methods**

#### **37-6.03E(1) General**

Use one of the following methods to apply resin binder and aggregate wearing course under manufacturer's recommendations:

1. Automated application
2. Mechanical Mixing and aggregate application
3. Hand mixing and application

Do not use the 2<sup>nd</sup> application method on areas with a slope greater than 2.5 percent in any direction.

Do not use the 3<sup>rd</sup> application method on areas greater than 200 square yards and is restricted to areas where automated application is not possible.

#### **37-6.03E(2) Automated Continuous Application**

Automated continuous application must be performed by an applicator vehicle with a minimum capacity of 30,000 lbs and a minimum of 1200 gallons of the resin binder. The applicator must continuously mix, meter, monitor and apply the resin binder and aggregate in 1 continuous pass as 1 layer up to a width of 12 feet. Apply additional layers as specified within 4 hours of the previous cured layer.

The applicator vehicle must be equipped with a built in data management unit which is capable of producing real time data flow showing:

1. The volume of resin binder
2. The resin binder thickness in mils on average throughout the application width
3. The weight of aggregate applied throughout the application width.

The automated continuous applicator vehicle must have continuous pumping and proportioning device that blend the binder within a controlled system. The binder must be blended and mixed to the ratio under manufacturer's recommendations ( $\pm 2\%$  by volume). The binder must be continuously applied once blended. The applicator vehicle must be capable of applying the minimum binder spread rate. Clean the mix head and delivery lines if application of the mixed resin binder is stopped for more than 30 minutes.

The calcined bauxite aggregate must be applied by the same automated continuous application vehicle that applies the resin binder to the pavement surface. The automatic aggregate spreader must be capable of applying up to a continuous 12 foot width application.

Do not allow the mixed resin binder to do any of the following that may impair retention and bonding of aggregate:

1. Separate
2. Cure
3. Dry
4. Be exposed
5. Harden

Do not contaminate the exposed uncured mixed resin binder by any form of contact

1. Walking
2. Standing
3. Construction traffic

Replace contaminated areas of resin binder.

#### **37-6.03E(3) Mechanical Mixing and Application**

Mix resin binder with equipment capable of mixing, metering, monitoring and distributing while maintaining the designed proper stoichiometric mix ratio. Uniformly spread the resin binder onto the surface using a serrated edge squeegee. Mechanically apply the aggregate. Cover exposed areas of wet resin binder by hand immediately before the binder gels.

#### **37-6.03E(4) Hand Mixing and Application**

For authorized low volume areas and areas less than 200 square yards, hand mix the resin binder under manufacturer's recommendations. Uniformly spread the resin binder onto the surface using a serrated edge squeegee. Immediately apply the aggregate until refusal.

#### **37-6.03F Excess Aggregate Removal and Reuse**

The excess aggregate may be reused. The aggregate must be reclaimed by a mechanical sweeper. The recovered calcined bauxite aggregate must be clean, uncontaminated and dry.

Remove excess and loose aggregate from the traveled way and shoulders by sweeping.

#### **37-6.04 PAYMENT**

Not Used

**BID ITEM LIST  
07-2881U4**

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	640		
4	120090	CONSTRUCTION AREA SIGNS	LS	LUMP SUM	LUMP SUM	
5	120100	TRAFFIC CONTROL SYSTEM	LS	LUMP SUM	LUMP SUM	
6	120120	TYPE III BARRICADE	EA	200		
7	120165	CHANNELIZER (SURFACE MOUNTED)	EA	1,580		
8	120199	TRAFFIC PLASTIC DRUM	EA	430		
9	121161	TEMPORARY TERMINAL SECTION (TYPE K)	EA	5		
10	BLANK					
11	129000	TEMPORARY RAILING (TYPE K)	LF	287,000		
12	129110	TEMPORARY CRASH CUSHION	EA	890		
13	130100	JOB SITE MANAGEMENT	LS	LUMP SUM	LUMP SUM	
14	130300	PREPARE STORM WATER POLLUTION PREVENTION PLAN	LS	LUMP SUM	LUMP SUM	
15	130310	RAIN EVENT ACTION PLAN	EA	55	500.00	27,500.00
16	130320	STORM WATER SAMPLING AND ANALYSIS DAY	EA	16		
17	130330	STORM WATER ANNUAL REPORT	EA	3	2,000.00	6,000.00
18	130505	MOVE-IN/MOVE-OUT (TEMPORARY EROSION CONTROL)	EA	12		
19	130570	TEMPORARY COVER	SQYD	10,000		
20	130620	TEMPORARY DRAINAGE INLET PROTECTION	EA	200		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
21	130640	TEMPORARY FIBER ROLL	LF	26,000		
22	130650	TEMPORARY GRAVEL BAG BERM	LF	25,000		
23	130680	TEMPORARY SILT FENCE	LF	15,000		
24	130710	TEMPORARY CONSTRUCTION ENTRANCE	EA	48		
25	130730	STREET SWEEPING	LS	LUMP SUM	LUMP SUM	
26	130900	TEMPORARY CONCRETE WASHOUT	LS	LUMP SUM	LUMP SUM	
27	141110	WORK AREA MONITORING (BRIDGE)	LS	LUMP SUM	LUMP SUM	
28	141120	TREATED WOOD WASTE	LB	555,000		
29	150100	PUBLIC SAFETY PLAN	LS	LUMP SUM	LUMP SUM	
30	150312	REPAIR SPALLED SURFACE AREA	SQFT	2,268		
31	150608	REMOVE CHAIN LINK FENCE	LF	18		
32	150661	REMOVE GUARDRAIL	LF	28,100		
33	150685	REMOVE IRRIGATION FACILITY	LS	LUMP SUM	LUMP SUM	
34	150711	REMOVE PAINTED TRAFFIC STRIPE	LF	701,000		
35	150714	REMOVE THERMOPLASTIC TRAFFIC STRIPE	LF	340,000		
36	150715	REMOVE THERMOPLASTIC PAVEMENT MARKING	SQFT	1,840		
37	150722	REMOVE PAVEMENT MARKER	EA	21,700		
38	150730	REMOVE CHANNELIZERS	EA	170		
39	150742	REMOVE ROADSIDE SIGN	EA	82		
40	150748	REMOVE ROADSIDE SIGN PANEL	EA	4		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
41	150757	REMOVE SIGN STRUCTURE (EA)	EA	46		
42	150771	REMOVE ASPHALT CONCRETE DIKE	LF	149,000		
43	150812	REMOVE PIPE (LF)	LF	3,500		
44	150820	REMOVE INLET	EA	73		
45	150853	REMOVE CONCRETE PAVEMENT (SQYD)	SQYD	303,000		
46	150860	REMOVE BASE AND SURFACING	CY	750		
47	150870	REMOVE CONCRETE DECK SURFACE	SQFT	1,810		
48	027672	SALVAGE PRECAST CONCRETE SLABS	EA	84		
49	151251	SALVAGE IRRIGATION FACILITY	LS	LUMP SUM	LUMP SUM	
50	152390	RELOCATE ROADSIDE SIGN	EA	1		
51	152430	ADJUST INLET	EA	2		
52	152454	ADJUST PULL BOX	EA	40		
53	152604	MODIFY INLET	EA	14		
54	153103	COLD PLANE ASPHALT CONCRETE PAVEMENT	SQYD	71,600		
55	153221	REMOVE CONCRETE BARRIER	LF	32,100		
56	153225	PREPARE CONCRETE BRIDGE DECK SURFACE	SQFT	13,770		
57	153226	REFINISH BRIDGE DECK	SQFT	7,610		
58	153227	FURNISH POLYESTER CONCRETE OVERLAY	CF	1,550		
59 (F)	153228	PLACE POLYESTER CONCRETE OVERLAY	SQFT	13,770		
60	155003	CAP INLET	EA	1		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
61	156585	REMOVE CRASH CUSHION	EA	4		
62	157561	BRIDGE REMOVAL (PORTION), LOCATION A	LS	LUMP SUM	LUMP SUM	
63	157562	BRIDGE REMOVAL (PORTION), LOCATION B	LS	LUMP SUM	LUMP SUM	
64	157563	BRIDGE REMOVAL (PORTION), LOCATION C	LS	LUMP SUM	LUMP SUM	
65	157564	BRIDGE REMOVAL (PORTION), LOCATION D	LS	LUMP SUM	LUMP SUM	
66	157565	BRIDGE REMOVAL (PORTION), LOCATION E	LS	LUMP SUM	LUMP SUM	
67	157566	BRIDGE REMOVAL (PORTION), LOCATION F	LS	LUMP SUM	LUMP SUM	
68	157567	BRIDGE REMOVAL (PORTION), LOCATION G	LS	LUMP SUM	LUMP SUM	
69	157568	BRIDGE REMOVAL (PORTION), LOCATION H	LS	LUMP SUM	LUMP SUM	
70	157569	BRIDGE REMOVAL (PORTION), LOCATION I	LS	LUMP SUM	LUMP SUM	
71	157570	BRIDGE REMOVAL (PORTION), LOCATION J	LS	LUMP SUM	LUMP SUM	
72	157571	BRIDGE REMOVAL (PORTION), LOCATION K	LS	LUMP SUM	LUMP SUM	
73	157572	BRIDGE REMOVAL (PORTION), LOCATION L	LS	LUMP SUM	LUMP SUM	
74	157573	BRIDGE REMOVAL (PORTION), LOCATION M	LS	LUMP SUM	LUMP SUM	
75	044684	BRIDGE REMOVAL (PORTION), LOCATION N	LS	LUMP SUM	LUMP SUM	
76	044685	BRIDGE REMOVAL (PORTION), LOCATION O	LS	LUMP SUM	LUMP SUM	
77	044686	BRIDGE REMOVAL (PORTION), LOCATION P	LS	LUMP SUM	LUMP SUM	
78	160102	CLEARING AND GRUBBING (LS)	LS	LUMP SUM	LUMP SUM	
79	190101	ROADWAY EXCAVATION	CY	226,000		
80	190105	ROADWAY EXCAVATION (TYPE Z-2) (AERIALY DEPOSITED LEAD)	CY	1,230		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
81 (F)	192003	STRUCTURE EXCAVATION (BRIDGE)	CY	1,127		
82 (F)	192037	STRUCTURE EXCAVATION (RETAINING WALL)	CY	985		
83 (F)	193003	STRUCTURE BACKFILL (BRIDGE)	CY	1,127		
84 (F)	193013	STRUCTURE BACKFILL (RETAINING WALL)	CY	515		
85 (F)	193031	PERVIOUS BACKFILL MATERIAL (RETAINING WALL)	CY	110		
86	194001	DITCH EXCAVATION	CY	730		
87	200002	ROADSIDE CLEARING	LS	LUMP SUM	LUMP SUM	
88	202039	SLOW-RELEASE FERTILIZER	LB	70		
89	204099	PLANT ESTABLISHMENT WORK	LS	LUMP SUM	LUMP SUM	
90	206400	CHECK AND TEST EXISTING IRRIGATION FACILITIES	LS	LUMP SUM	LUMP SUM	
91	206402	OPERATE EXISTING IRRIGATION FACILITIES	LS	LUMP SUM	LUMP SUM	
92	206560	CONTROL AND NEUTRAL CONDUCTORS	LS	LUMP SUM	LUMP SUM	
93	206562	1" REMOTE CONTROL VALVE	EA	1		
94	206563	1 1/4" REMOTE CONTROL VALVE	EA	5		
95	206564	1 1/2" REMOTE CONTROL VALVE	EA	15		
96	208446	RISER SPRINKLER ASSEMBLY (GEAR DRIVEN)	EA	42		
97	208576	2 1/2" GATE VALVE	EA	1		
98 (F)	208594	3/4" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	380		
99 (F)	208595	1" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	455		
100 (F)	208596	1 1/4" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	630		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
101 (F)	208597	1 1/2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	250		
10 (F)2	208598	2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	1,020		
103 (F)	208599	2 1/2" PLASTIC PIPE (SCHEDULE 40) (SUPPLY LINE)	LF	870		
104	208683	BALL VALVE	EA	4		
105	260303	CLASS 3 AGGREGATE BASE (CY)	CY	80,900		
106	027673	AGGREGATE BASE CEMENT SLURRY	CY	17,700		
107	027674	ALTERNATE TREATED BASE	CY	58,900		
108	280015	LEAN CONCRETE BASE RAPID SETTING	CY	4		
109	280200	REPLACE BASE	CY	360		
110	360200	BASE BOND BREAKER	SQYD	429,000		
111	027675	HIGH FRICTION SURFACE TREATMENT	SQYD	18,200		
112	390095	REPLACE ASPHALT CONCRETE SURFACING	CY	7,790		
113	390300	HOT MIX ASPHALT, SUPERPAVE (TYPE A)	TON	3,790		
114	390301	RUBBERIZED HOT MIX ASPHALT, SUPERPAVE (GAP GRADED)	TON	7,660		
115	394073	PLACE HOT MIX ASPHALT DIKE (TYPE A)	LF	127,000		
116	394074	PLACE HOT MIX ASPHALT DIKE (TYPE C)	LF	2,450		
117	394075	PLACE HOT MIX ASPHALT DIKE (TYPE D)	LF	760		
118	394077	PLACE HOT MIX ASPHALT DIKE (TYPE F)	LF	580		
119	400050	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT	CY	150		
120	027676	CONTINUOUSLY REINFORCED CONCRETE PAVEMENT - RAPID STRENGTH CONCRETE	CY	540		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
121	401050	JOINTED PLAIN CONCRETE PAVEMENT	CY	104,000		
122	401055	JOINTED PLAIN CONCRETE PAVEMENT (RSC)	CY	180		
123	027677	PRECAST JOINTED CONCRETE PAVEMENT (PJCP)	CY	34,300		
124	027678	SHOULDER CONCRETE PAVEMENT	CY	2,610		
125	027679	INDIVIDUAL PRECAST SLAB REPLACEMENT (IPSR)	CY	520		
126	420201	GRIND EXISTING CONCRETE PAVEMENT	SQYD	391,000		
127	498052	60" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION)	LF	1,090		
128 (F)	510053	STRUCTURAL CONCRETE, BRIDGE	CY	193		
129 (F)	510060	STRUCTURAL CONCRETE, RETAINING WALL	CY	420		
130	510081	AGGREGATE BASE (APPROACH SLAB)	CY	743		
131	510087	STRUCTURAL CONCRETE, APPROACH SLAB (TYPE R)	CY	7,445		
132 (F)	510502	MINOR CONCRETE (MINOR STRUCTURE)	CY	294		
133	510800	PAVING NOTCH EXTENSION	CF	4,225		
134	511106	DRILL AND BOND DOWEL	LF	545		
135	511118	CLEAN EXPANSION JOINT	LF	760		
136	519081	JOINT SEAL (MR 1/2")	LF	3,327		
137	519088	JOINT SEAL (MR 1")	LF	2,300		
138	519091	JOINT SEAL (MR 1 1/2")	LF	1,385		
139	519100	JOINT SEAL (MR 2")	LF	629		
140 (F)	520102	BAR REINFORCING STEEL (BRIDGE)	LB	25,500		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
141 (F)	520103	BAR REINFORCING STEEL (RETAINING WALL)	LB	78,410		
142 (F)	560218	FURNISH SIGN STRUCTURE (TRUSS)	LB	904,229		
143 (F)	560219	INSTALL SIGN STRUCTURE (TRUSS)	LB	904,229		
144	560233	FURNISH FORMED PANEL SIGN (OVERHEAD)	SQFT	11,500		
145	560244	FURNISH LAMINATED PANEL SIGN (1"-TYPE A)	SQFT	5,050		
146	560245	FURNISH LAMINATED PANEL SIGN (1"-TYPE B)	SQFT	750		
147	560248	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED)	SQFT	120		
148	560249	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED)	SQFT	640		
149	560251	FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED)	SQFT	88		
150	560252	FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED)	SQFT	770		
151	566011	ROADSIDE SIGN - ONE POST	EA	51		
152	566012	ROADSIDE SIGN - TWO POST	EA	29		
153	568001	INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD)	EA	24		
154	568016	INSTALL SIGN PANEL ON EXISTING FRAME	SQFT	5,050		
155	027680	INSTALL SIGN PANEL SOUND WALL/BARRIER MOUNTED	EA	2		
156	044687	PREPARE AND CLEAN CONCRETE SURFACES	SQFT	164,099		
157	590280	PAINT CONCRETE SURFACES	SQFT	164,099		
158 (F)	598001	ANTI-GRAFFITI COATING	SQFT	164,099		
159	650012	15" REINFORCED CONCRETE PIPE	LF	1,860		
160	650014	18" REINFORCED CONCRETE PIPE	LF	2,370		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
161	650018	24" REINFORCED CONCRETE PIPE	LF	8		
162	650026	36" REINFORCED CONCRETE PIPE	LF	6		
163	665712	12" SLOTTED CORRUGATED STEEL PIPE (.079" THICK)	LF	160		
164	665717	18" SLOTTED CORRUGATED STEEL PIPE (.079" THICK)	LF	4,380		
165	680902	6" PERFORATED PLASTIC PIPE UNDERDRAIN	LF	4,770		
166	680903	6" NON-PERFORATED PLASTIC PIPE UNDERDRAIN	LF	58		
167 (F)	682008	PERMEABLE MATERIAL (BLANKET)	CY	692		
168	703233	GRATED LINE DRAIN	LF	2,730		
169	708031	6" ALTERNATIVE PIPE RISER	LF	130		
170	721430	CONCRETE (CHANNEL LINING)	CY	400		
171	721810	SLOPE PAVING (CONCRETE)	CY	920		
172	729011	ROCK SLOPE PROTECTION FABRIC (CLASS 8)	SQYD	4,790		
173	730040	MINOR CONCRETE (GUTTER) (LF)	LF	520		
174	731516	MINOR CONCRETE (DRIVEWAY)	CY	60		
175	731519	MINOR CONCRETE (STAMPED CONCRETE)	SQFT	76,900		
176	731627	MINOR CONCRETE (CURB, SIDEWALK AND CURB RAMP)	CY	150		
177	733000	PRE/POST CONSTRUCTION SURVEYS	EA	62		
178 (F)	750001	MISCELLANEOUS IRON AND STEEL	LB	89,726		
179	800360	CHAIN LINK FENCE (TYPE CL-6)	LF	61		
180	802501	4' CHAIN LINK GATE (TYPE CL-6)	EA	25		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
181	820107	DELINEATOR (CLASS 1)	EA	250		
182	027681	INSTALL MEDIAN MILEAGE PANEL	EA	64		
183	832015	MIDWEST GUARDRAIL SYSTEM (7' WOOD POST)	LF	8,370		
184	832070	VEGETATION CONTROL (MINOR CONCRETE)	SQYD	5,230		
185	044688	CONCRETE BARRIER (TRANSITION)	LF	133		
186	839221	DOUBLE MIDWEST GUARDRAIL SYSTEM (WOOD POST)	LF	310		
187 (F)	839521	CABLE RAILING	LF	512		
188	839543	TRANSITION RAILING (TYPE WB-31)	EA	36		
189	839576	END CAP (TYPE A)	EA	5		
190	839581	END ANCHOR ASSEMBLY (TYPE SFT)	EA	32		
191	839584	ALTERNATIVE IN-LINE TERMINAL SYSTEM	EA	33		
192	839585	ALTERNATIVE FLARED TERMINAL SYSTEM	EA	24		
193	027682	CRASH CUSHION (TYPE SCI SMART 100 GM)	EA	5		
194 (F)	044689	RUSTIC ROCK BARRIER PATTERN	LF	75,726		
195 (F)	044690	CONCRETE BARRIER (TYPE 60A MODIFIED)	LF	4,339		
196 (F)	044691	CONCRETE BARRIER (TYPE 60A MODIFIED 1)	LF	656		
197	027683	CONCRETE ANCHOR BLOCK	CY	19		
198	027684	CONCRETE BARRIER (TYPE 60F MODIFIED)	LF	40		
199	839700	CONCRETE BARRIER (TYPE 60F)	LF	2,940		
200	839701	CONCRETE BARRIER (TYPE 60)	LF	13,700		

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
201	839703	CONCRETE BARRIER (TYPE 60C)	LF	310		
202	839704	CONCRETE BARRIER (TYPE 60D)	LF	520		
203	027685	CONCRETE BARRIER (TYPE 60W)	LF	970		
204	027686	CONCRETE BARRIER (TYPE 60W MODIFIED)	LF	19,300		
205 (F)	027687	CONCRETE BARRIER (TYPE 736B MODIFIED)	LF	19,615		
206	840504	4" THERMOPLASTIC TRAFFIC STRIPE	LF	307,000		
207	840506	8" THERMOPLASTIC TRAFFIC STRIPE	LF	38,100		
208	840508	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3)	LF	25,800		
209	840515	THERMOPLASTIC PAVEMENT MARKING	SQFT	6,090		
210	840525	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	358,000		
211	840526	4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 17-7)	LF	9,590		
212	840550	8" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12)	LF	1,950		
213	BLANK					
214	840656	PAINT TRAFFIC STRIPE (2-COAT)	LF	1,060,000		
215	850101	PAVEMENT MARKER (NON-REFLECTIVE)	EA	29,900		
216	850111	PAVEMENT MARKER (RETROREFLECTIVE)	EA	21,700		
217	860090	MAINTAINING EXISTING TRAFFIC MANAGEMENT SYSTEM ELEMENTS DURING CONSTRUCTION	LS	LUMP SUM	LUMP SUM	
218	860400	LIGHTING (TEMPORARY)	LS	LUMP SUM	LUMP SUM	
219	027688	TEMPORARY MICROWAVE VEHICLE DETECTION SYSTEM (MVDS)	LS	LUMP SUM	LUMP SUM	
220	860807	INDUCTIVE LOOP DETECTOR	LS	LUMP SUM	LUMP SUM	

**BID ITEM LIST  
07-2881U4**

Item No.	Item Code	Item Description	Unit of Measure	Estimated Quantity	Unit Price	Item Total
221	861088	MODIFY RAMP METERING SYSTEM	LS	LUMP SUM	LUMP SUM	
222	027689	MODIFY AUTOMATIC VEHICLE CLASSIFICATION STATION	LS	LUMP SUM	LUMP SUM	
223	861504	MODIFY LIGHTING AND SIGN ILLUMINATION	LS	LUMP SUM	LUMP SUM	
224	044692	TUNNELS AND CONTROL BUILDING	LS	LUMP SUM	LUMP SUM	
225	BLANK					
226	204008	PLANT (GROUP H)	EA	36,300		
227	397005	TACK COAT	TON	55		
228	999990	MOBILIZATION	LS	LUMP SUM	LUMP SUM	

**TOTAL BID:**

**\$**

---