

DEPARTMENT OF TRANSPORTATION
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Be energy efficient!*

November 22, 2010

01-Lak-53-2.8/7.5
01-3986U4
Project ID 0100000151
NH-P053(024)E

Addendum No. 2

Dear Contractor:

This addendum is being issued to the contract for CONSTRUCTION ON STATE HIGHWAY IN LAKE COUNTY IN AND NEAR CLEARLAKE FROM 0.1 MILE SOUTH OF 40TH AVENUE/LAKESHORE DRIVE TO ROUTE 20/53 JUNCTION.

Submit bids for this work with the understanding and full consideration of this addendum. The revisions declared in this addendum are an essential part of the contract.

Bids for this work will be opened on Tuesday, December 7, 2010.

This addendum is being issued to revise the Project Plans, the Notice to Bidders and Special Provisions, the Bid book, the Federal Minimum Wages with Modification Number 6 dated 11/19/10, and the Information Handout.

Project Plan Sheets 2, 3, 5, 6, 10, 16, 19, 21, 22, 44, 45, 48, 79, 81, 95, 96, 106, 118, 119, 120, 121, 122, 123, 124, 125, 126, 127, 128, 129, 130 and 165 are revised. Copies of the revised sheets are attached for substitution for the like-numbered sheets.

Project Plan Sheet 48A is added. A copy of the added sheet is attached for addition to the project plans.

In the Notice to Bidders and Special Provisions, in the "STANDARD PLANS LIST," the following Standard Plans are added:

"D85 Box Culvert Wingwalls - Types D and E
B0-1 Bridge Details
B0-3 Bridge Details
B-11-47 Cable Railing"

In the Special Provisions, Section 5-1.12, "SUPPLEMENTAL PROJECT INFORMATION," the "SITE INVESTIGATION REPORT," is added into table as attached.

In the Special Provisions, Section 10-1.01, "ORDER OF WORK," the fourth paragraph is revised as follows:

"Vegetation removal shall be restricted to the period between September 2 and February 14, unless cleared by an approved biologist."

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In the Special Provisions, Section 10-1.03, "CONTRACTOR SUPPLIED BIOLOGIST," subsection "MEASUREMENT AND PAYMENT," the first paragraph is revised as follows:

"The contract unit price paid per day for Contractor supplied biologist includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in Contractor supplied Biologist as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer."

In the Special Provisions, Section 10-1.41, "CRACK TREATMENT," is revised as attached.

In the Special Provisions, Section 10-1.43, "RUBBERIZED HOT MIX ASPHALT (GAP GRADED)," is revised as attached.

In the Bid book, in the "Bid Item List," Items 24, 26, 28, 34, 37, 41, 49, 50, 56, 59, 60, 61, 69, 70, 73, 74, 98, 99, and 101 are revised, Items 130 and 131 are added and Item 129 is deleted as attached.

To Bid book holders:

Replace pages 4, 5, 6, 7, 8 and 9 of the "Bid Item List" in the Bid book with the attached revised pages 4, 5, 6, 7, 8 and 9 of the Bid Item List. The revised Bid Item List is to be used in the bid.

Attached is a copy of the Information Handout (Site Investigation Report).

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.

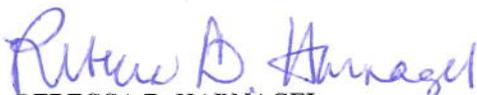
Inform subcontractors and suppliers as necessary.

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

http://www.dot.ca.gov/hq/esc/oe/project_ads_addenda/01/01-3986U4

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

10-1.41 CRACK TREATMENT

GENERAL

Summary

This work includes treating cracks in asphalt concrete pavement.
Crack treatment material must be for hot application.

Submittals

If your selected crack treatment material is on the Department's Pre-Qualified Products List, submit a Certificate of Compliance for crack treatment material under Section 6-1.07, "Certificates of Compliance," of the Standard Specifications. With the Certificate of Compliance, submit:

1. Manufacturer's name
2. Production location
3. Product brand or trade name
4. Product designation
5. Batch or lot number
6. Crack treatment material type
7. Contractor or subcontractor name
8. Contract number
9. Lot size
10. Shipment date
11. Manufacturer's signature

If your selected crack treatment material is not on the Department's Pre-Qualified Products List, submit a sample from each batch or lot to be used and test results for each sample 20 days before use. The test results must be from an independent testing laboratory and show compliance with the specifications and include the information specified for the Certificate of Compliance submittal. For hot-applied crack treatment material, submit a minimum 3-pound sample in a silicone release container.

With each delivery of crack treatment material to the job site, submit:

1. Manufacturer's heating and application instructions
2. Manufacturer's Materials Safety Data Sheet (MSDS)
3. Name of the manufacturer's recommended detackifier

Quality Control and Assurance

For hot-applied crack treatment material, at least once per project at a time chosen by the Engineer and in the Engineer's presence, collect two 3-pound minimum samples of crack treatment from the wand into silicone release boxes. Submit 1 sample to the Engineer.

MATERIALS

Crack treatment material must be Type 4 in compliance with:

Crack Treatment Material

| Quality Characteristic ^a | ASTM Test Method ^b | Type 1 Material | Type 2 Material | Type 3 Material | Type 4 Material | Type 5 Material |
|-------------------------------------|-------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Softening point (min.) | D 36 | 102 °C | 96 °C | 90 °C | 84 °C | 84 °C |
| Cone penetration at 77° F (max.) | D 5329 | 35 | 40 | 50 | 70 | 90 |
| Resilience at 77° F, unaged, % | D 5329 | 20-60 | 25-65 | 30-70 | 35-75 | 40-80 |
| Flexibility ^c | D 3111 | 0 °C | 0 °C | 0 °C | -11 °C | -28 °C |
| Tensile adhesion %, (min.) | D 5329 | 300 | 400 | 400 | 500 | 500 |
| Specific gravity (max.) | D 70 | 1.25 | 1.25 | 1.25 | 1.25 | 1.25 |
| Asphalt compatibility | D 5329 | Pass | Pass | Pass | Pass | Pass |
| Sieve test (percent passing) | See note d | 100 | 100 | 100 | 100 | 100 |

Notes:

^a Cold-applied crack treatment material residue collected under ASTM D 6943, Method B and sampled under ASTM D 140 must comply with the grade specifications.

^b Except for viscosity, cure each specimen at a temperature of 23 °C ± 2 °C and relative humidity of 50 ± 10 percent for 24 ± 2 hours before testing.

^c For flexibility test, the specimen size must be 6.4 ± 0.2 mm thick x 25 ± 0.2 mm wide x 150 ± 0.5 mm long. Test mandrel diameter must be 6.4 ± 0.2 mm. Bend arc must be 180 degrees. Bend rate must be 2 ± 1 seconds. At least 4 of 5 test specimens must pass at the specified test temperature without fracture, crazing, or cracking.

^d For hot-applied crack treatment, dilute with toluene and sieve through a No. 8 sieve. For cold-applied crack treatment, sieve the product as-received through a No. 8 sieve. If the manufacturer provides a statement that added components passed the No. 16 sieve before blending, this requirement is void.

If crack treatment material is delivered to the job site in containers, each container must be marked with the following information. If crack treatment material is not delivered in containers, the following information must accompany the delivery:

1. Manufacturer's name
2. Production location
3. Product brand or trade name
4. Product designation
5. Crack treatment trade name
6. Batch or lot number
7. Maximum heating temperature
8. Expiration date for cold application only

Hot-applied crack treatment must be delivered to the job site premixed in cardboard containers with meltable inclusion liners or in a fully meltable package.

Sand applied to tacky crack treatment material must be clean, free of clay, and comply with:

| Sieve Size | Percent Passing |
|------------|-----------------|
| No. 4 | 100 |
| No. 50 | 0 - 30 |
| No. 200 | 0 - 5 |

CONSTRUCTION

Treat cracks from 1/4 to 1 inch in width for the entire length of the crack. Fill or repair cracks wider than 1 inch as ordered.

Rout cracks or cut with a saw to form a reservoir. Construct the reservoir to the width and depth as shown on the plans.

Cracks must be clean and dry before treating. Before treating, blast cracks with oil-free compressed air at a pressure of at least 90 psi.

If the pavement temperature is below 40 °F or if there is evidence of moisture in the crack, use a hot air lance immediately before applying crack treatment. The hot air lance must not apply flame directly on the pavement.

Heat hot-applied crack treatment material in compliance with the manufacturer's instructions. Comply with the manufacturer's application instructions.

Insert crack treatment with a nozzle inserted into the crack. Fill the crack recessed less than 1/4 inch. If after 2 days the crack treatment is more than 1/4 inch below the specified level, or the sealant fails or the crack re-opens, re-treat the crack.

Immediately remove crack treatment material spilled or deposited on the pavement surface.

Before opening to traffic, apply sand or the manufacturer's recommended detackifying agent to tacky crack treatment material on the traveled way. Sweep excess sand before opening to traffic.

MEASUREMENT AND PAYMENT

Crack treatment is measured by the lane-mile. A lane-mile consists of a paved lane. The Engineer determines the quantity paid from actual measurements along the edge of each paved lane parallel with the pavement centerline.

The contract price paid per lane-mile for crack treatment includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in treating cracks, complete in place, including applying sand and sweeping excess sand, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

Filling cracks wider than 1 inch will be paid for as extra work as specified in Section 4-1.03D, "Extra Work," of the Standard Specifications.

10-1.43 RUBBERIZED HOT MIX ASPHALT (GAP GRADED)

GENERAL

Summary

This work includes producing and placing rubberized hot mix asphalt (gap graded) (RHMA-G) using the standard process.

Comply with Section 39, "Hot Mix Asphalt," of the Standard Specifications.

As an option in producing rubberized hot mix asphalt (Type G), may use one of the following warm mix asphalt technologies:

| | |
|---------------------------|----------------|
| Technology Name: | Advera |
| Technology Producer Name: | PQ Corporation |
| Contact: | Annette Smith |
| Phone Number: | (610) 651-4469 |

| | |
|---------------------------|--------------------------|
| Technology Name: | Evotherm |
| Technology Producer Name: | MeadWestvaco Corporation |
| Contact: | Scott Dmytrow |
| Phone Number: | (916) 825-9415 |

| | |
|---------------------------|----------------------------------|
| Technology Name: | Sasobit |
| Technology Producer Name: | Sasol Wax Americas, Inc. |
| Contact: | Larry Michael or John Shaw |
| Phone Number: | (301) 745-3334 or (203) 925-4316 |

Before producing rubberized hot mix asphalt (Type G) mixed with a warm mix asphalt technology, submit in writing to the Engineer the name and information for the warm mix asphalt technology to be used.

Pre-Operation Conference

Meet with the Engineer at a pre-operation conference, at a mutually agreed time, to discuss methods of accomplishing all phases of the production, placement, contingency planning, and standards of workmanship for the completed item of work.

Provide the facility for the pre-operation conference. The project manager and superintendent, warm mix technical representative, paving subcontractor, asphalt binder supplier, plant manager and operator involved with the rubberized hot mix asphalt (Type G) mixed with the warm mix asphalt technology will attend the pre-operation conference. Submit a list of participants to the Engineer for approval. The complete listing will identify each participant's name, employer, title and role in construction of the warm mix asphalt.

Warm mix Asphalt Production and Placement

The warm mix asphalt technology supplier must have a technical representative present during production and placement of the rubberized hot mix asphalt (Type G) mixed with the warm mix asphalt technology. The technical representative will provide advice to the Engineer, Contractor and asphalt producer, and will be responsible for directing the mix operation as it relates to the warm mix asphalt technology.

When you submit the Job Mix formula, also submit information regarding the technology to be used and the method of addition and location of addition of any additives.

The technical representative will advise the producer regarding plant and controller modifications necessary for technology delivery and proper mixing. Modifications to the plant must be in conformance with weights and measures requirements of California Test 109. Proportioning of any warm mix asphalt technology additives will be by weight.

You must have a review of the plant to assure conformance with weights and measures requirements of California Test 109 no more than 30 days prior to production of the rubberized hot mix asphalt (Type G) with the warm mix asphalt technology.

Temperatures for mixing rubberized hot mix asphalt (Type G) mixes with the warm mix asphalt technology will be approved by the Engineer in consultation with the Contractor and the technical representatives of the warm mix asphalt technology. During placement, complete first coverage using 2 rollers before the pavement surface temperature drops below 260° F. Complete all compaction before the pavement surface temperature drops below 180° F.

During production, make loose warm asphalt mix available at the plant for sampling in the quantity and at a time designated by the Engineer.

Data Cores

Three business days before starting coring, submit proposed methods and materials for backfilling data core holes. Submit to the Engineer and electronically to Coring@dot.ca.gov:

1. A summary of data cores taken
2. A photograph of each data core

For each data core, the summary must include:

1. Project identification number
2. Date cored
3. Core identification number
4. Type of materials recovered
5. Type and approximate thickness of unstabilized material not recovered
6. Total core thickness
7. Thickness of each individual material to within:
 - 7.1 For recovered material, 1/2 inch
 - 7.2 For unstabilized material, 1.0 inch
8. Location including:
 - 8.1. County
 - 8.2. Route
 - 8.3. Post mile
 - 8.4. Lane number
 - 8.5. Lane direction
 - 8.6. Station

Each data core digital photograph must include a ruler laid next to the data core. Each photograph must include:

1. The core
2. Project identification number
3. Core identification number
4. Date cored
5. County
6. Route
7. Post mile
8. Lane number
9. Lane direction

After data core summary and photograph submittal, dispose of cores under Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications.

MATERIALS

Asphalt Binder

Asphalt binder mixed with asphalt modifier and crumb rubber modifier (CRM) for asphalt rubber binder must be PG 64-16.

Aggregate

The aggregate for RHMA-G must comply with the 1/2-inch grading.

Asphalt Rubber Binder Content

Determine the amount of asphalt rubber binder to be mixed with the aggregate for RHMA-G under California Test 367 except:

1. Determine the specific gravity used in California Test 367, Section B, "Void Content of Specimen," using California Test 308, Method A.
2. California Test 367, Section C, "Optimum Bitumen Content," is revised as follows:
 - 2.1. Base the calculations on the average of 3 briquettes produced at each asphalt rubber binder content.
 - 2.2. Use California Test 309 to determine theoretical maximum specific gravity and density of the RHMA-G.
 - 2.3. Plot asphalt rubber binder content versus average air voids content based on California Test 309 for each set of three specimens on Form TL-306 (Figure 3), and connect adjacent points with a best-fit curve.
 - 2.4. Plot asphalt rubber binder content versus average Hveem stability for each set of three specimens and connect adjacent points with a best-fit curve.
 - 2.5. Calculate voids in mineral aggregate (VMA) and voids filled with asphalt (VFA) for each specimen, average each set, and plot the average versus asphalt rubber binder content.
 - 2.6. Calculate the dust proportion and plot versus asphalt rubber binder content.
 - 2.7. From the curve plotted in Step 2.3, select the theoretical asphalt rubber binder content that has 4.0 percent air voids.
 - 2.8. At the selected asphalt rubber binder content, evaluate corresponding voids in mineral aggregate, voids filled with asphalt, and dust proportion to verify compliance with requirements. If necessary, develop an alternate composite aggregate gradation to conform to the RHMA-G requirements.
 - 2.9. Record the asphalt rubber binder content in Step 2.7 as the Optimum Bitumen Content (OBC).
 - 2.10. The target binder content of the proposed JMF must be equal to or greater than 7.0 percent.
3. Laboratory mixing and compaction must comply with California Test 304, except the mixing temperature of the aggregate must be between 300 °F and 325 °F. The mixing temperature of the asphalt-rubber binder must be between 375 °F and 425 °F. The compaction temperature of the combined mixture must be between 290 °F and 300 °F.

Tack Coat

For tack coat, use CRS2, CSS-1, or asphalt binder based on atmospheric temperature:

| Tack Coat Atmospheric Temperature Requirements | |
|--|----------------|
| Atmospheric Temperature | Tack Coat |
| Less than 60 F | Asphalt Binder |
| 60 F to 75 F | CRS2 |
| Greater than 75 F | CRS2, CSS-1 |

CONSTRUCTION

Material Transfer Vehicle

When the atmospheric temperature during paving is below 70 °F or when the time from discharge to truck at the HMA plant until transfer to the paver's hopper is 90 minutes or greater, use a material transfer vehicle (MTV). The MTV must:

1. Receive HMA directly from the truck without depositing the HMA on the roadway surface
2. Transfer HMA directly into the paver's receiving hopper or feed system
3. Remix the HMA, with augers, before loading the paver
4. Have a minimum capacity of 20 tons

Vertical Joints

Before opening the lane to public traffic, pave shoulders and median borders adjacent to a lane being paved. Do not leave a vertical joint more than 0.15 foot high between adjacent lanes open to public traffic.

Data Cores

Take data cores that include the completed HMA pavement, underlying base, and subbase material. Protect data cores and surrounding pavement from damage.

Take 4-inch or 6-inch diameter data cores:

1. At the beginning, end, and every 1/2 mile within the paving limits of each route on the project
2. After all paving is complete
3. From the center of the specified lane

On a 2-lane roadway, take data cores from either lane. On a 4-lane roadway, take data cores from each direction in the outermost lane. On a roadway with more than 4 lanes, take data cores from the median lane and the outermost lane in each direction.

Each core must include the stabilized materials encountered. You may choose not to recover unstabilized material but you must identify the material. Unstabilized material includes:

1. Granular material
2. Crumbled or cracked stabilized material
3. Sandy or clayey soil

PAYMENT

The contract lump sum price paid for data core includes full compensation for furnishing all labor, materials, tools, equipment, and incidentals, and for doing all the work involved in data coring, complete in place, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

BID ITEM LIST
01-3986U4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|-------------------------------------|-----------------|--------------------|------------|------------|
| 21 | 120090 | CONSTRUCTION AREA SIGNS | LS | LUMP SUM | LUMP SUM | |
| 22 | 120100 | TRAFFIC CONTROL SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 23 | 128650 | PORTABLE CHANGEABLE MESSAGE SIGN | LS | LUMP SUM | LUMP SUM | |
| 24 | 146001 | CONTRACTOR SUPPLIED BIOLOGIST (DAY) | WDAY | 150 | | |
| 25 | 146003 | NATURAL RESOURCE PROTECTION PLAN | LS | LUMP SUM | LUMP SUM | |
| 26 | 150206 | ABANDON CULVERT | LF | 270 | | |
| 27 | 150608 | REMOVE CHAIN LINK FENCE | LF | 730 | | |
| 28 | 150662 | REMOVE METAL BEAM GUARD RAILING | LF | 660 | | |
| 29 | 150668 | REMOVE FLARED END SECTION | EA | 37 | | |
| 30 | 150742 | REMOVE ROADSIDE SIGN | EA | 23 | | |
| 31 | 150748 | REMOVE ROADSIDE SIGN PANEL | EA | 12 | | |
| 32 | 150760 | REMOVE SIGN STRUCTURE | EA | 1 | | |
| 33 | 018995 | REMOVE STREAM GAGE | EA | 1 | | |
| 34 | 150805 | REMOVE CULVERT | LF | 940 | | |
| 35 | 150820 | REMOVE INLET | EA | 12 | | |
| 36 | 150821 | REMOVE HEADWALL | EA | 8 | | |
| 37 | 018996 | REMOVE WINGWALL | EA | 12 | | |
| 38 | 018997 | RECONSTRUCT MAILBOX | EA | 1 | | |
| 39 | 152320 | RESET ROADSIDE SIGN | EA | 12 | | |
| 40 | 152430 | ADJUST INLET | EA | 4 | | |

BID ITEM LIST

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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 41 | 153103 | COLD PLANE ASPHALT CONCRETE PAVEMENT | SQYD | 109,000 | | |
| 42 | 155230 | CONCRETE INVERT PAVING | CY | 4.6 | | |
| 43 | 155530 | HDPE PLASTIC PIPELINER (16" OD SDR 32.5) | LF | 670 | | |
| 44 | 155533 | HDPE PLASTIC PIPELINER (22" OD SDR 32.5) | LF | 830 | | |
| 45 | 155536 | HDPE PLASTIC PIPELINER (28" OD SDR 32.5) | LF | 700 | | |
| 46 | 160101 | CLEARING AND GRUBBING | LS | LUMP SUM | LUMP SUM | |
| 47 | 190101 | ROADWAY EXCAVATION | CY | 107,000 | | |
| 48 | 190110 | LEAD COMPLIANCE PLAN | LS | LUMP SUM | LUMP SUM | |
| 49 | 193114 | SAND BACKFILL | CY | 73 | | |
| 50 | 194001 | DITCH EXCAVATION | CY | 340 | | |
| 51 | 203002 | EROSION CONTROL (COMPOST BLANKET) | CY | 3,300 | | |
| 52 | 203021 | FIBER ROLLS | LF | 66,200 | | |
| 53 | 203026 | MOVE-IN/MOVE-OUT (EROSION CONTROL) | EA | 6 | | |
| 54 | 203031 | EROSION CONTROL (HYDROSEED) (SQFT) | SQFT | 1,550,000 | | |
| 55 | 203033 | ROLLED EROSION CONTROL PRODUCT (BLANKET) | SQFT | 49,000 | | |
| 56 | 260201 | CLASS 2 AGGREGATE BASE | CY | 39,000 | | |
| 57 | 374207 | CRACK TREATMENT | LNMI | 8 | | |
| 58 | 390095 | REPLACE ASPHALT CONCRETE SURFACING | CY | 2,940 | | |
| 59 | 390131 | HOT MIX ASPHALT | TON | 27,000 | | |
| 60 | 390138 | RUBBERIZED HOT MIX ASPHALT (OPEN GRADED) | TON | 12,600 | | |

BID ITEM LIST

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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 61 | 390140 | RUBBERIZED HOT MIX ASPHALT (GAP GRADED) | TON | 8,110 | | |
| 62 | 018998 | CENTERLINE RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS) | STA | 260 | | |
| 63 | 394053 | SHOULDER RUMBLE STRIP (HMA, GROUND-IN INDENTATIONS) | STA | 460 | | |
| 64 | 394060 | DATA CORE | LS | LUMP SUM | LUMP SUM | |
| 65 | 394073 | PLACE HOT MIX ASPHALT DIKE (TYPE A) | LF | 17,900 | | |
| 66 | 394076 | PLACE HOT MIX ASPHALT DIKE (TYPE E) | LF | 6,320 | | |
| 67 | 394077 | PLACE HOT MIX ASPHALT DIKE (TYPE F) | LF | 870 | | |
| 68 | 394090 | PLACE HOT MIX ASPHALT (MISCELLANEOUS AREA) | SQYD | 110 | | |
| 69 | 397005 | TACK COAT | TON | 32 | | |
| 70 | 510090 | STRUCTURAL CONCRETE, BOX CULVERT | CY | 110 | | |
| 71 | 018999 | PRECAST CONCRETE BOX CULVERT (6'X4') | LF | 120 | | |
| 72 | 019000 | PRECAST CONCRETE BOX CULVERT (10'X10') | LF | 86 | | |
| 73 (F) | 510502 | MINOR CONCRETE (MINOR STRUCTURE) | CY | 167 | | |
| 74 (F) | 520101 | BAR REINFORCING STEEL | LB | 11,960 | | |
| 75 (F) | 560218 | FURNISH SIGN STRUCTURE (TRUSS) | LB | 9,617 | | |
| 76 (F) | 560219 | INSTALL SIGN STRUCTURE (TRUSS) | LB | 9,617 | | |
| 77 | 560248 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-UNFRAMED) | SQFT | 243 | | |
| 78 | 560249 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-UNFRAMED) | SQFT | 91 | | |
| 79 | 560251 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.063"-FRAMED) | SQFT | 67 | | |
| 80 | 560252 | FURNISH SINGLE SHEET ALUMINUM SIGN (0.080"-FRAMED) | SQFT | 39 | | |

BID ITEM LIST

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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 81 | 561011 | 48" CAST-IN-DRILLED-HOLE CONCRETE PILE (SIGN FOUNDATION) | LF | 20 | | |
| 82 | 566011 | ROADSIDE SIGN - ONE POST | EA | 26 | | |
| 83 | 566012 | ROADSIDE SIGN - TWO POST | EA | 10 | | |
| 84 | 568001 | INSTALL SIGN (STRAP AND SADDLE BRACKET METHOD) | EA | 6 | | |
| 85 | 620100 | 18" ALTERNATIVE PIPE CULVERT | LF | 160 | | |
| 86 | 620140 | 24" ALTERNATIVE PIPE CULVERT | LF | 1,040 | | |
| 87 | 620220 | 36" ALTERNATIVE PIPE CULVERT | LF | 210 | | |
| 88 | 620260 | 42" ALTERNATIVE PIPE CULVERT | LF | 31 | | |
| 89 | 650038 | 54" REINFORCED CONCRETE PIPE | LF | 180 | | |
| 90 | 665012 | 12" CORRUGATED STEEL PIPE (.079" THICK) | LF | 10 | | |
| 91 | 019001 | 30" CORRUGATED STEEL PIPE INLET (.109" THICK) | LF | 14 | | |
| 92 | 705311 | 18" ALTERNATIVE FLARED END SECTION | EA | 13 | | |
| 93 | 705315 | 24" ALTERNATIVE FLARED END SECTION | EA | 20 | | |
| 94 | 705319 | 30" ALTERNATIVE FLARED END SECTION | EA | 4 | | |
| 95 | 705321 | 36" ALTERNATIVE FLARED END SECTION | EA | 3 | | |
| 96 | 705323 | 42" ALTERNATIVE FLARED END SECTION | EA | 2 | | |
| 97 | 719589 | MINOR CONCRETE (BACKFILL) | CY | 1,180 | | |
| 98 | 721007 | ROCK SLOPE PROTECTION (1/4 TON, METHOD B) | CY | 2,400 | | |
| 99 | 721010 | ROCK SLOPE PROTECTION (BACKING NO. 1, METHOD B) | CY | 240 | | |
| 100 | 721011 | ROCK SLOPE PROTECTION (BACKING NO. 2, METHOD B) | CY | 520 | | |

BID ITEM LIST
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| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|--|-----------------|--------------------|------------|------------|
| 101 | 729010 | ROCK SLOPE PROTECTION FABRIC | SQYD | 7,090 | | |
| 102 | 731502 | MINOR CONCRETE (MISCELLANEOUS CONSTRUCTION) | CY | 3.7 | | |
| 103 (F) | 750001 | MISCELLANEOUS IRON AND STEEL | LB | 4,403 | | |
| 104 | 800360 | CHAIN LINK FENCE (TYPE CL-6) | LF | 610 | | |
| 105 | 820107 | DELINEATOR (CLASS 1) | EA | 76 | | |
| 106 | 820110 | MILEPOST MARKER | EA | 18 | | |
| 107 | 820112 | MARKER (CULVERT) | EA | 66 | | |
| 108 | 820130 | OBJECT MARKER | EA | 10 | | |
| 109 | 832001 | METAL BEAM GUARD RAILING | LF | 760 | | |
| 110 | 832070 | VEGETATION CONTROL (MINOR CONCRETE) | SQYD | 330 | | |
| 111 | 839584 | ALTERNATIVE IN-LINE TERMINAL SYSTEM | EA | 1 | | |
| 112 | 839585 | ALTERNATIVE FLARED TERMINAL SYSTEM | EA | 7 | | |
| 113 | 840504 | 4" THERMOPLASTIC TRAFFIC STRIPE | LF | 96,600 | | |
| 114 | 840506 | 8" THERMOPLASTIC TRAFFIC STRIPE | LF | 3,960 | | |
| 115 | 840515 | THERMOPLASTIC PAVEMENT MARKING | SQFT | 3,770 | | |
| 116 | 840523 | 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 12-3) | LF | 380 | | |
| 117 | 840525 | 4" THERMOPLASTIC TRAFFIC STRIPE (BROKEN 36-12) | LF | 19,100 | | |
| 118 | 840580 | 4" THERMOPLASTIC TRAFFIC STRIPE (RECESSED) (BROKEN 17-7) | LF | 1,710 | | |
| 119 | 850121 | PAVEMENT MARKER (NON-REFLECTIVE- RECESSED) | EA | 410 | | |
| 120 | 850122 | PAVEMENT MARKER (RETROREFLECTIVE-RECESSED) | EA | 2,650 | | |

BID ITEM LIST
01-3986U4

| Item No. | Item Code | Item Description | Unit of Measure | Estimated Quantity | Unit Price | Item Total |
|----------|-----------|---|-----------------|--------------------|------------|------------|
| 121 | 860201 | SIGNAL AND LIGHTING | LS | LUMP SUM | LUMP SUM | |
| 122 | 860403 | HIGHWAY LIGHTING | LS | LUMP SUM | LUMP SUM | |
| 123 | 019002 | RELOCATE HIGHWAY ADVISORY RADIO SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 124 | 019003 | RELOCATE CHANGEABLE MESSAGE SIGN SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 125 | 860890 | MODIFY TRAFFIC MONITORING STATION (COUNT) | LS | LUMP SUM | LUMP SUM | |
| 126 | 019004 | RELOCATE CLOSED CIRCUIT TELEVISION SYSTEM | LS | LUMP SUM | LUMP SUM | |
| 127 | 861501 | MODIFY SIGNAL AND LIGHTING | LS | LUMP SUM | LUMP SUM | |
| 128 | 862031 | SALVAGE FLASHING BEACON | LS | LUMP SUM | LUMP SUM | |
| 129 | BLANK | | | | | |
| 130 | 129000 | TEMPORARY RAILING (TYPE K) | LF | 700 | | |
| 131 | 999990 | MOBILIZATION | LS | LUMP SUM | LUMP SUM | |

TOTAL BID: \$ _____