

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by execution of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO. <u> 1 </u>	DATED <u> 5/19/2016 </u>	ADDENDUM NO. <u> 3 </u>	DATED <u> 5/23/2016 </u>
ADDENDUM NO. <u> 2 </u>	DATED <u> 5/19/2016 </u>	ADDENDUM NO. <u> 4 </u>	DATED <u> 5/24/2016 </u>

- | Number | Description |
|--------|---|
| 1 | Revised Table of Contents; Revised NTB Nos. 6283, 6285, 6287, 6288, 6289, 6290, & 6294; Add NTB Nos. 6377, 6378, 6379, 6380, & 6381; Remove SP 907-107-14; Add SP Nos. 907-618-18 & 907-804-13; Revised BidItems; Revised or Added Plan Sheet Nos. 2, 3, 6, 10, 12, 14, 17-19, 5001, 5004-5007, 8001, 8070, & 9007-9038; Amendment EBS Download Required. |
| 2 | Revised NTB No. 6283; Amendment EBS Download Required. |
| 3 | Postponed, Amendment EBS Download Required. |
| 4 | Revised Table of Contents; Revised Advertisement; Revised NTB Nos. 6283, 6284, 6288, 6290, & 6381; SP 907-410-12, replaces SP 907-410-11; Revised BidItems; Amendment EBS Download Required. |

TOTAL ADDENDA: 4
 (Must agree with total addenda issued prior to opening of bids)

Respectfully Submitted,

DATE _____

_____ Contractor

BY _____ Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

_____	President	_____	Address
_____	Secretary	_____	Address
_____	Treasurer	_____	Address

The following is my (our) itemized proposal.

Revised 07/2015

STP/EXB-2920-00(014) / 105335301 & 302 Tate & Desoto County(ies)

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION
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(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET
OF SECTION 905 AS ADDENDA)

05/19/2016 10:37 AM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Wednesday, June 1, 2016, from Bid Express Service and shortly thereafter publicly opened in the Construction Division on the First Floor for:

Bridge Replacement on US 51 (#278.3) & Bridge Repair on I-55 (#272.9A & #272.9B), known as Federal Aid Project Nos. STP/EXB-2920-00(014) / 105335301 & 302 in Tate and Desoto Counties.

The attention of bidders is directed to the Contract Provisions governing selection and employment of labor. Minimum wage rates have been predetermined by the Secretary of Labor and are subject to Public Law 87-581, Work Hours Act of 1962, as set forth in the Contract Provisions.

The Mississippi Department of Transportation hereby notifies all bidders that it will affirmatively insure that in any contract entered into pursuant to this advertisement, disadvantaged business enterprises will be afforded full opportunity to submit bids in response to this invitation and will not be discriminated against on the grounds of race, color, sex, age, disability, religion or national origin in consideration for an award.

The award of this contract will be contingent upon the Contractor satisfying the DBE requirements.

Bid proposals must be purchased online at <https://shopmdot.ms.gov>. Specimen proposals may be viewed and downloaded online at no cost at <http://mdot.ms.gov> or purchased online. Proposals are available at a cost of Ten Dollars (\$10.00) per proposal plus a small convenience fee. Cash or checks will not be accepted as payment.

Plans must be purchased online at <https://shopmdot.ms.gov>. Costs of plans will be on a per sheet basis plus a small convenience fee. If you have any questions, you can contact the MDOT Plans Print Shop at (601) 359-7460, or e-mail at plans@mdot.state.ms.us. Plans will be shipped upon receipt of payment. Cash or checks will not be accepted as payment.

Bid bond, signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent, with Power of Attorney attached, a Cashier's check or Certified Check for five (5%) percent of bid, payable to STATE OF MISSISSIPPI, must accompany each proposal.

The attention of bidders is directed to the provisions of Subsection 102.07 pertaining to irregular proposals and rejection of bids.

MELINDA L. MCGRATH
EXECUTIVE DIRECTOR

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6283

CODE: (SP)

DATE: 05/23/2016

SUBJECT: Contract Time

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

The date for completion of the work to be performed under this contract will not be a predetermined date but will be the date calculated by adding the number of days specified by the Contractor on the Expedite Bid Sheets to the effective date of the Notice to Proceed / Beginning of Contract Time. This date will be known as the Specified Completion Date, which date or extended date as provided in the contract shall be the end of contract time.

The Notice of Award will not take place until the Bidder submits all DBE forms showing proof of compliance with the DBE requirements set forth in the contract. The effective date of the Notice to Proceed / Beginning of Contract Time will be **July 12, 2016**.

It is anticipated that the Contractor will prosecute all phases of work using multiple crews simultaneously. The Contractor will be allowed to work 24 hours and 7 days a week on the project. No work will be allowed requiring the presence of the Project Engineer or his representative(s) on the following days: Thanksgiving day, Christmas Day, and New Years Day.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6284

DATE: 05/24/2016

SUBJECT: Specialty Items

PROJECT: STP/EXB-2920-00(014)/105335301 & STP/EXB-2920-00(014)/105335302 - TATE

Pursuant to the provisions of Section 108, the following work items are hereby designated as "Specialty Items" for this contract. Bidders are reminded that these items must be subcontracted in order to be considered as specialty items.

CATEGORY: DISPOSAL OF BUILDINGS, RIGHT OF WAY CLEA

Line No	Pay Item	Description
0060	202-B070	Removal of Sign Including Post & Footing
0070	202-B102	Removal of Guard Rail
0080	202-B138	Removal of Riprap

CATEGORY: EROSION CONTROL

Line No	Pay Item	Description
0120	211-B001	Topsoil for Slope Treatment, Contractor Furnished
0130	213-C001	Superphosphate
0140	217-A001	Ditch Liner
0150	219-A001	Watering
0160	220-A001	Insect Pest Control
0180	223-A001	Mowing
0190	234-A001	Temporary Silt Fence
0200	239-A001	Temporary Slope Drains
0410	815-A006	Loose Riprap, Size 100
0420	815-A009	Loose Riprap, Size 300
0430	815-E001	Geotextile under Riprap
0440	907-216-A001	Solid Sodding
0450	907-225-A001	Grassing
0460	907-225-B001	Agricultural Limestone
0470	907-225-C001	Mulch, Vegetative Mulch
0480	907-225-D001	Mulch, Hydromulch
0490	907-226-A001	Temporary Grassing
0500	907-234-C002	Super Silt Fence
0510	907-234-F001	Turbidity Barrier
0520	907-237-A003	Wattles, 20"
0530	907-249-A001	Riprap for Erosion Control
0540	907-249-B001	Remove and Reset Riprap

CATEGORY: GUARDRAIL, GUIDERAIL

Line No	Pay Item	Description
0240	606-B001	Guard Rail, Class A, Type 1

CATEGORY: GUARDRAIL, GUIDERAIL

Line No	Pay Item	Description
0250	606-D012	Guard Rail, Bridge End Section, Type I
0260	606-E002	Guard Rail, Terminal End Section, Flared

CATEGORY: MISCELLANEOUS/ SPECIALTY WORK ITEMS

Line No	Pay Item	Description
0220	423-A001	Rumble Strips, Ground In

CATEGORY: PAVEMENT STRIPING AND MARKING

Line No	Pay Item	Description
0340	627-D001	Two-Way Yellow Reflective Raised Markers
0345	627-K001	Red-Clear Reflective High Performance Raised Markers
0715	907-626-A006	6" Thermoplastic Double Drop Traffic Stripe, Skip White
0720	907-626-C003	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0725	907-626-C007	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0730	907-626-D006	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0740	907-626-E005	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0745	907-626-F005	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow
0750	907-626-G006	Thermoplastic Double Drop Detail Stripe, White
0760	907-626-H009	Thermoplastic Double Drop Legend, White

CATEGORY: RIPRAP, MAILBOXES

Line No	Pay Item	Description
0705	907-618-G001	Construction and Removal of Haul Road

CATEGORY: SURVEY AND STAKING

Line No	Pay Item	Description
0800	907-699-A002	Roadway Construction Stakes

CATEGORY: TRAFFIC CONTROL - PERMANENT

Line No	Pay Item	Description
0350	630-A001	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0360	630-A002	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0370	630-C003	Steel U-Section Posts, 3.0 lb/ft
0380	630-F001	Delineators, Guard Rail, White
0390	630-G006	Type 3 Object Markers, OM-3R or OM-3L
0770	907-630-O001	Remove and Reset Signs, Ground Mounted on Round Post(s)
0780	907-630-O006	Remove and Reset Signs, Post Mounted
0790	907-630-PP008	Roadside Directional Signs, Sheet Aluminum, 0.080" Thickness, Ground Mounted

CATEGORY: TRAFFIC CONTROL - TEMPORARY

Line No	Pay Item	Description
0280	619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet
0290	619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More
0300	619-G4001	Barricades, Type III, Single Faced
0310	619-G7001	Warning Lights, Type "B"
0710	907-619-E3001	Changeable Message Sign

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6288

CODE: (SP)

DATE: 5/23/2016

SUBJECT: Milestone Construction

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Bidders are hereby advised that a project milestone will be required in order to minimize impacts on the traveling public and shall consist of the following:

The Milestone Construction is defined as work associated with High friction surface treatment on the I-55 Coldwater River Bridges. This work shall be the initial phase of construction for the project, and this work can be completed prior to concurrence of the Contractor's Erosion Control Plan.

The project milestone will not be considered complete until all bridge repairs are complete, all items of work associated with the High Friction Surface Course has been completed, and normal traffic volume has resumed on both bridges. This includes placement of all permanent traffic markings. There will be no required waiting period for placement of permanent stripe.

The Completion Date for the Milestone Construction is **September 16, 2016**.

The contractor will be assessed a fee of **\$10,000.00** each Calendar Day beyond **September 16, 2016** until the contractor has completed the project milestone to the satisfaction of the Engineer.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6290

CODE: (SP)

DATE: 05/23/2016

SUBJECT: Repair for the I-55 Coldwater River Bridges

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

The contract documents do not include an official set of construction plans for this work, but may by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings". All other references to plans in the contract documents and Standard Specifications for Road and Bridge Construction are to be disregarded.

Bidders are advised that this work **will take place during the initial phase** of construction for this project. Bidders are also advised that this work will be allowed to take place prior to approval of the Contractor's Erosion Control Plan. For each bridge, the limits of construction shall be two (2) miles in advance of each bridge and two (2) miles beyond each bridge.

The repair work for Bridge #272.9A, Bridge ID 14621, I-55 Southbound over Coldwater River & Bridge #272.9B, Bridge ID 14622, I-55 Northbound over Coldwater River will be as follows:

- 1.) Remove all bituminous patches, payment for this work will be paid as 202-B307, Removal of Bridge Deck. Remove all loose or delaminated deck patches and concrete from the top surface of the deck, payment for this work will be paid as 202-B307, Removal of Bridge Deck. Patch top surface of deck to provide bonding surface for High Friction Surface Treatment. Seal cracks in the top surface of the deck with a sealant compatible with the High Friction Surface Treatment, payment for the patching will be absorbed in other items of work. The High Friction Surface Treatment will consist of two layers placed in accordance with 907-410-12. Apply a leveling course of High Friction Surface Treatment to the entire bridge deck surface to provide a more uniform surface for the final application of a surface course. The leveling course may be hand applied in accordance with 907-410.03.1.2. Machine apply the surface course of High Friction Surface Treatment to the entire bridge deck surface in accordance with 907-410.03.1.1. Payment for the High Friction Surface Treatment will be paid for using pay item 907-410-D.

Repair of each Bridge Deck, following removal of any damaged deck material/asphalt patching, will be made using one of the three list materials below, or an approved equal.

- "HP-BINDER" shall be as manufactured by Hunt Process Corporation, P.O. Box 688, Ridgeland, MS 39158, Telephone No. (601) 856-8811.

- "Polymer Concrete" shall be as manufactured by Polymer Concrete, Inc. P.O. Box 610, Camden, AL 36726, Telephone No. (205) 682-4296.

- CeraTech Pavement VR" shall be as manufactured by CeraTech, Inc., 3037 Tuggle Ives Dr., Buford, GA 30519, Telephone No. (770) 831-0794.

General Notes

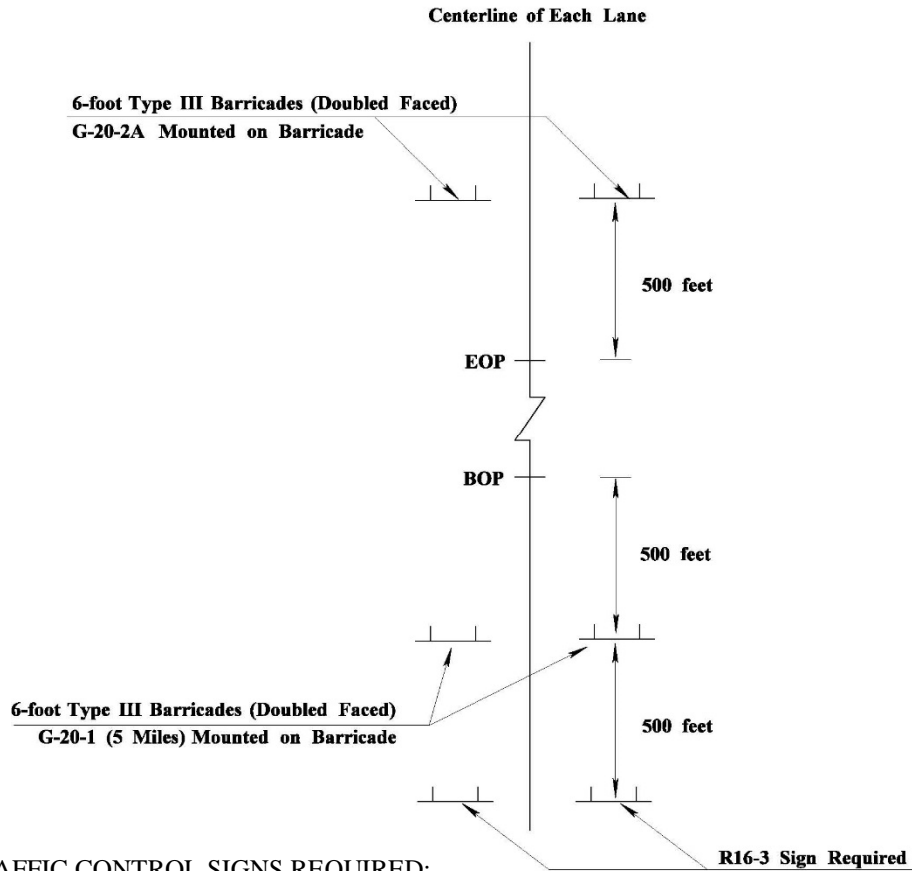
It shall be the responsibility of the Contractor to protect existing structures from damage which might occur during construction. The contractor shall replace or repair, as directed by the Engineer, any structures damaged during the life of the contract. No payment will be made for replacement or repair of damaged items.

The Contractor shall erect and maintain construction signing and provide all signs and traffic control devices necessary to safely maintain traffic around and through the work areas in accordance with the Traffic Control Plan and the MUTCD. The cost is to be included in the price bid for Pay Item No. 907-618-A001, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except those designated in the plans to be black legend and border on white background. Standard roadside construction signs and barricades will be paid for using the appropriate pay items.

Temporary striping shall conform to finished stripe specifications for alignment, neatness, and straightness. **Temporary striping associated with the repair to the I-55 bridges shall be absorbed into other items of work.**

Bidders are advised that there is an associated Milestone date of September 16, 2016 to complete this repair work.

Construction signs will be required as follows:

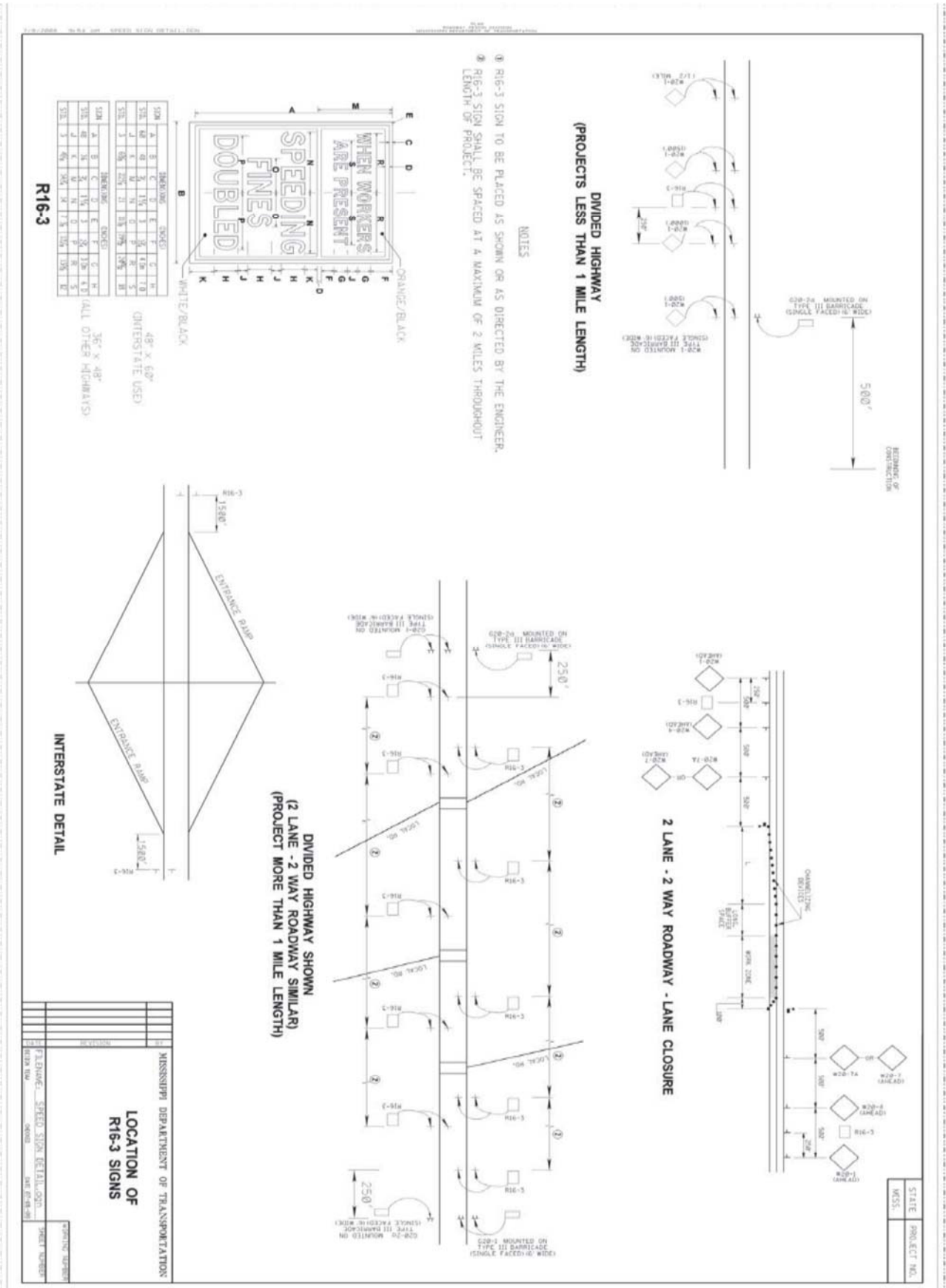


ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

6	G20-1 "ROAD WORK NEXT 5 MILES" mounted on 6' Double Faced Type III Barricade
4	G20-2A "END ROAD WORK" mounted on 6' Double Faced Type III Barricade
12	R-16-3 "SPEEDING FINES DOUBLED" signs required
36 LF	Single Faced Barricades
18 LF	Double Faced Barricades

When included in the contract, R16-3 signs shall be spaced in accordance with sheet titled "Location of R16-3 Signs".

All Construction signing is included in the bid for Pay Item 907-618-A, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except for R16-3 which shall be black legend and border on white background.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6381

CODE: (SP)

DATE: 05/23/2016

SUBJECT: Contract Modifications

PROJECT: STP/EXB-2920-00(014) 105335/301&302– Tate & Desoto Counties

Bidders are advised of the following changes regarding pay items:

- The Plan sheets do not reference pay item **202-B307**, Removal of Bridge Deck. This is in error. Payment for the Removal of the Deck material associated with the I-55 Bridge Deck Repairs shall be made using pay item 202-B307, Removal of Bridge Deck with a quantity of **140 S.Y.** The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item **907-410-D001**, High Friction Surface Treatment. This is in error. Payment for the Surface treatment work on the bridge decks associated with the I-55 Bridge Deck Repairs shall be made using pay item 907-410-D001, High Friction Surface Treatment with a quantity of **26,300 S.Y.** The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item **907-618-G001**, Construction and Removal of Haul Road. This is in error. Payment for the Temporary haul road allowing access to the construction area along the SR 51 Coldwater Bridge shall be made using pay item 907-618-G001, Construction and Removal of Haul Road with a quantity of **1 L.S.** The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item **907-626-A006**, 6” Thermoplastic Double Drop Traffic Stripe, Skip White. This is in error. Payment for the Striping work on the bridge decks associated with the I-55 Bridge Deck Repairs shall be made using pay item 907-626-A006, 6” Thermoplastic Double Drop Traffic Stripe, Skip White, with a quantity of **4040 L.F.** The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item **907-626-C007**, 6” Thermoplastic Double Drop Edge Stripe, Continuous White. This is in error. Payment for the Striping work on the bridge decks associated with the I-55 Bridge Deck Repairs shall be made using pay item 907-626-C007, 6” Thermoplastic Double Drop Edge Stripe, Continuous White with a quantity of **4040 L.F.** The bid items have been corrected to reflect this change.

- The Plan sheets do not reference pay item **907-626-F005**, 6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow. This is in error. Payment for the Striping work on the bridge decks associated with the I-55 Bridge Deck Repairs shall be made using pay item 907-626-F005, 6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow, with a quantity of **4040 L.F.** The bid items have been corrected to reflect this change.
- The Plan sheets do not reference pay item **627-K001**, Red-Clear Reflective High Performance Raised Markers. This is in error. Payment for the placement of the Red-Clear Reflective High Performance Raised Markers on the bridge decks associated with the I-55 Bridge Deck Repairs shall be made using pay item 627-K001, Red-Clear Reflective High Performance Raised Markers, with a quantity of **116 EA.** The bid items have been corrected to reflect this change.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-410-12

CODE: (SP)

DATE: 05/23/2016

SUBJECT: High Friction Surface Treatment

PROJECT: STP/EXB-2920-00(014) / 105335301 & 302 – Tate & Desoto Counties

Section 410, Bituminous Surface Treatment, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby deleted in total and replaced as follows:

SECTION 907-410 -- HIGH FRICTION SURFACE TREATMENT

907-410.01--Description. This work consists of installing a textured, high friction surface treatment in areas designated and detailed on the plans, or in the contract documents. The color of the high friction surface treatment shall be similar to the surface of which it will be applied. The high friction surface treatment shall consist of two layers, the first being a leveling course to fill and level the irregular surface of the existing bridge deck and the second being the surface course.

907-410.02--Materials. The materials used for the high friction surface treatment shall consist of a two-part binder and aggregate meeting the following requirements:

907-410.02.1--Binder. The binder shall be a two-part cold applied modified exothermic polymer resin binder. The binder shall consist of a thermosetting compound which holds the aggregate firmly in position. The binder shall also meet the following requirements:

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Tensile Strength @ 7 days, psi, minimum	2400	ASTM D 638
Elongation at break point, %, minimum	30	ASTM D 638
Hardness, Shore D, minimum	70	ASTM D 2240
Compressive Strength, psi, minimum	1600	ASTM D 695
Gel Time, minutes, minimum	15	ASTM C 881
Cure Rate, hours (dry through time), @ 75°F, maximum	3	ASTM D 1640
Water Absorption, %, maximum	1.0	ASTM D 570
Adhesion Strength, psi, minimum	200	ASTM D4541

907-410.02.2--Aggregate. The aggregate for the leveling course shall be crushed calcined bauxite or flint aggregate with a Moh's scale hardness of 6 or greater, meeting the requirements of Table 1 or Table 2 based on the aggregate type selected. The aggregate for the surface course shall be crushed calcined bauxite meeting the requirements of Table 2. The aggregate will be delivered to the construction site in clearly labeled bags or sacks. The aggregate shall be clean, dry and free from foreign matter. The aggregate shall meet the following requirements:

Table 1 – Flint Aggregate Properties (for Leveling Course Only)

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Aggregate Grading,		AASHTO T 27
No 4 Sieve Size, passing, %	100	
No 8 Sieve Size, passing, %	30 – 75	
No 16 Sieve Size, passing, %	0 - 5	

Table 2 – Calcined Bauxite Aggregate Properties

<u>Property</u>	<u>Value</u>	<u>Test Method</u>
Aggregate Abrasion Value, ‘C’ Grading, maximum, %	20	AASHTO T 96
Aggregate Grading,		AASHTO T 27
No 4 Sieve Size, passing, %	95 - 100	
No 16 Sieve Size, passing, %	0 - 5	

907-410.02.3--Material Acceptance. The Contractor shall furnish to the Engineer three copies of the manufacturer’s test report(s) showing results of all required tests and certification that the material meets the specifications. Certified test report(s) and certification shall be furnished for each shipment of component materials.

907-410.03--Construction Requirements. For applications on new asphalt pavements, a mandatory 30-day cure period shall take place prior to the installation of the high friction surface treatment.

907-410.03.1--Application of Binder and Aggregate.

907-410.03.1.1--Equipment for Mechanical Application. Unless otherwise specified by the plans or the contract, the equipment used to place the high friction surface treatment shall be capable of placing the binder and aggregate in a continuous operation. The contractor shall be able to periodically monitor the volume of binder and aggregate placed on the roadway as a verification of the proper application of both the mil thickness of the binder and the spread rate of the aggregate. The equipment shall be capable of placing the binder and aggregate in the same pass and at a minimum width of 12 feet.

The equipment for mechanical application shall produce a finished product meeting the requirement of this specification with no visible wet spots in which the binder is visible once the aggregate is installed. Hand work of the finished high friction surface treatment will not be allowed unless approved by the Engineer.

907-410.03.1.2--Hand Mixing and Application. Hand mixing of the binder and application of the aggregate may be allowed for small or irregular areas. These areas will be specified in the contract or directed by the Engineer. Areas considered for hand mixing and application will be areas in which the use of automated equipment is impractical.

The binder shall be spread onto the surface using a serrated edge squeegee to the specified thickness. Immediately following the application of the binder, the aggregate should be broadcast at slightly more than the specified rate such that the finished product contains no visible wet spots in which the binder is visible.

907-410.03.2--Construction Methods. The application of the surface treatment shall be in accordance with the manufacturer’s recommendations.

The two-part polymer binder material shall not be applied on a wet surface, when the existing pavement surface temperature is below 50°F or above 105°F, or when the anticipated weather conditions would prevent the proper application of the surface treatment as determined by the manufacturer. The Contractor shall demonstrate that the polymer binder meets the specified cure rate dry through time of less than three (3) hours when cured at temperatures representative of the anticipated ambient placement temperature. Additionally, prior to placement of the high friction surface treatment, the Contractor shall demonstrate that there is not excessive moisture in the existing pavement by conducting ASTM D 4263

with the exception that a minimum 2-hour test duration will be allowed. In the event of rain at the job site, the Contractor will allow the pavement to dry a minimum of 24 hours prior to performing ASTM D 4263.

Receiving surfaces must be clean, dry and free of all dust, oil, debris and any other material that might interfere with the bond between the polymer binder material and existing surfaces. For asphalt pavements, the existing surfaces shall be cleaned by use of mechanical sweepers, high pressure air or other methods approved by the Engineer prior to the installation. For concrete surfaces, the surface shall first be shot blasted and then cleaned by use of mechanical sweepers, high pressure air or other methods approved by the Engineer. Shot blasting shall be performed no more than seven days prior to the application of the polymer binder.

Any existing pavement markings, as deemed necessary by the Engineer and/or manufacturer's representative, shall be removed. Adequate cleaning of all surfaces will be determined by the Engineer and/or manufacturer's representative.

All existing pavement markings to remain, utilities, drainage structures, curb and any other structure within/adjacent to the treatment location shall be protected against the application of the surface treatment materials.

All inadequately sealed joints and cracks greater than ¼-inch shall be cleaned and filled with an approved crack sealant.

A manufacturer's representative shall be on site to provide technical assistance during the start up operations and as necessary during the surface preparation, material placement and during any necessary remedial work.

907-410.03.2.1--Application of the Binder. The polymer binder shall be placed in accordance with the manufacturer's recommended methods. The mixed polymer binder for the leveling course shall be placed at not less than 2.5 gallons per 100 square feet of bridge deck surface and should be adjusted as necessary to adequately accommodate the irregular surface of the existing bridge deck. The in-place thickness of the mixed polymer binder for the surface course shall be approximately 60 mils above the pavement surface. For irregular surfaces, the application rate must be adjusted to ensure that the aggregate is sufficiently embedded into the polymer binder to permanently bond the aggregate to the polymer binder. The two-part modified polymer binder components shall be proportioned to the correct ratio and, in the case of mechanical application, mixed within the automated machine. In the case of hand application, the binder shall be mixed using a low-speed, high-torque drill fitted with a helical stirrer at a rate recommended by the manufacturer.

The homogenously mixed polymer binder shall be uniformly distributed over the pavement section to be treated and within the temperature range specified. Operations shall proceed in such a manner that will not allow the polymer material to chill, set up, dry, or otherwise impair retention of the aggregate.

A certification from the two-part modified polymer resin manufacturer shall be supplied to the Engineer stating that the material meets the specifications.

907-410.03.2.2--Application of the Aggregate. The dry aggregate shall be immediately applied onto the polymer binder prior to the polymer binder reaching its gel time coverage. Do not use vibratory or impact type compaction on the aggregate after placement. Lightweight rollers shall be used to seat the aggregate topping. Complete coverage of the "wet" polymer binder with aggregate is necessary to achieve a uniform surface. No exposed wet spots shall be visible once the aggregate is placed. The application rate

of the aggregate for the leveling course shall be 10 pounds per square yard minimum. The application rate of the aggregate for the surface course shall be such that the retained aggregate will be at least 12 pounds per square yard.

Excess aggregate can be reused on the next day's installation. The excess aggregate shall be clean, uncontaminated and dry. If recovered aggregate from a previous day's installation is used, the recovered aggregate shall make up no more than 33% of the placed aggregate.

907-410.03.3--Curing And Opening to Traffic. The treatment shall be allowed to cure in accordance with manufacturer recommendations, but not less than three hours. Excess aggregate shall be removed by mechanical sweeping or suction sweeping before opening to traffic. The treated surfaces shall be protected from traffic and environmental effects until the area has cured.

An additional sweeping shall be performed 24 to 36 hours after placement of the high friction surface treatment. The coverage rate of the retained aggregate shall be at least 12 pounds per square yard. Any unused material shall be disposed of by the Contractor.

907-410.03.4--Friction Testing. Within 30 days after construction of the high friction surface treatment, the Department will measure the friction characteristics in accordance with AASHTO Designation: T 242 using a tire meeting the requirements of AASHTO Designation: M 261. The materials used in the high friction surface treatments shall produce a friction number of at least 65.

907-410.04—Method of Measurement. High friction surface treatment will be measured by the square yard, complete in place and accepted.

907-410.05—Basis of Payment. High friction surface treatment, measured as prescribed above, will be paid for at the contract unit price bid per square yard, which price shall be full compensation for furnishing all equipment, tools, labor, materials, and for all pertinent operations necessary to complete the work.

Payment will be made under:

907-410-D: High Friction Surface Treatment* - per square yard

*Additional information may be specified

Bridge Replacement on US 51 (#278.3) & Bridge Repair on I-55 (#272.9A & #272.9B), known as Federal Aid Project Nos. STP/EXB-2920-00(014) / 105335301 & 302 in Tate and Desoto Counties.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
Roadway Items					
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0020	202-A001		1	Lump Sum	Removal of Obstructions (bridge)
0030	202-B005		12,134	Square Yard	Removal of Asphalt Pavement, All Depths
0040	202-B017		640	Linear Feet	Removal of Concrete Combination Curb & Gutter
0050	202-B036		33,174	Square Yard	Removal of Concrete Slope Paving
0060	202-B070		15	Each	Removal of Sign Including Post & Footing
0070	202-B102		754	Linear Feet	Removal of Guard Rail
0080	202-B138		955	Square Yard	Removal of Riprap
0085	202-B307		140	Square Yard	Removal of Bridge Deck
0090	203-A003	(E)	2,611	Cubic Yard	Unclassified Excavation, FM, AH
0100	203-EX017	(E)	224,690	Cubic Yard	Borrow Excavation, AH, FME, Class B9
0110	203-G003	(E)	48,459	Cubic Yard	Excess Excavation, FM, AH
0120	211-B001	(E)	11,197	Cubic Yard	Topsoil for Slope Treatment, Contractor Furnished
0130	213-C001		10	Ton	Superphosphate
0140	217-A001		600	Square Yard	Ditch Liner
0150	219-A001		4	Thousand Gallon	Watering [\$20.00]
0160	220-A001		11	Acre	Insect Pest Control [\$30.00]
0170	221-A001	(S)	34	Cubic Yard	Portland Cement Concrete Paved Ditch
0180	223-A001		42	Acre	Mowing [\$50.00]
0190	234-A001		20,579	Linear Feet	Temporary Silt Fence
0200	239-A001		2,676	Linear Feet	Temporary Slope Drains
0210	413-D001		80	Linear Feet	Cleaning and Filling Joints
0220	423-A001		3	Mile	Rumble Strips, Ground In
0230	502-A001	(C)	204	Square Yard	Reinforced Cement Concrete Bridge End Pavement
0240	606-B001		1,238	Linear Feet	Guard Rail, Class A, Type 1
0250	606-D012		4	Each	Guard Rail, Bridge End Section, Type I
0260	606-E002		4	Each	Guard Rail, Terminal End Section, Flared
0270	615-A018	(S)	40	Linear Feet	Concrete Bridge End Barrier, 33.5"
0280	619-D1001		48	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0290	619-D2001		161	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0300	619-G4001		48	Linear Feet	Barricades, Type III, Single Faced

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0310	619-G7001		4	Each	Warning Lights, Type "B"
0320	620-A001		1	Lump Sum	Mobilization
0330	621-A001		1	Each	Field Laboratory
0340	627-D001		131	Each	Two-Way Yellow Reflective Raised Markers
0345	627-K001		116	Each	Red-Clear Reflective High Performance Raised Markers
0350	630-A001		18	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0360	630-A002		18	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.125" Thickness
0370	630-C003		115	Linear Feet	Steel U-Section Posts, 3.0 lb/ft
0380	630-F001		40	Each	Delineators, Guard Rail, White
0390	630-G006		4	Each	Type 3 Object Markers, OM-3R or OM-3L
0395	630-K002		14	Linear Feet	Welded & Seamless Steel Pipe Posts, 3 1/2"
0400	809-A003	(S)	3,360	Square Feet	Retaining Wall System
0410	815-A006	(S)	1,559	Ton	Loose Riprap, Size 100
0420	815-A009	(S)	29,240	Ton	Loose Riprap, Size 300
0430	815-E001	(S)	38,925	Square Yard	Geotextile under Riprap
0440	907-216-A001		169	Square Yard	Solid Sodding
0450	907-225-A001		21	Acre	Grassing
0460	907-225-B001		63	Ton	Agricultural Limestone
0470	907-225-C001		42	Ton	Mulch, Vegetative Mulch
0480	907-225-D001		42	Ton	Mulch, Hydromulch
0490	907-226-A001		42	Acre	Temporary Grassing
0500	907-234-C002		1,385	Linear Feet	Super Silt Fence
0510	907-234-F001		15,230	Linear Feet	Turbidity Barrier
0520	907-237-A003		300	Linear Feet	Wattles, 20"
0530	907-249-A001		120	Ton	Riprap for Erosion Control
0540	907-249-B001		700	Cubic Yard	Remove and Reset Riprap
0550	907-304-B009	(GT)	4,692	Ton	Granular Material, Class 3, Group D
0560	907-304-B011	(GT)	10,993	Ton	Granular Material, Class 9, Group B
0570	907-307-C003	(M)	17,289	Square Yard	6" Soil-Lime-Water Mixing, Class C
0580	907-307-D001		234	Ton	Lime
0590	907-307-S001	(A3)	4,323	Gallon	Bituminous Curing Seal
0600	907-403-A022	(BA1)	2,171	Ton	9.5-mm, MT, Asphalt Pavement
0610	907-403-A023	(BA1)	2,667	Ton	12.5-mm, MT, Asphalt Pavement
0620	907-403-A024	(BA1)	3,026	Ton	19-mm, MT, Asphalt Pavement

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0630	907-403-C011	(BA1)	137	Ton	19-mm, MT, Asphalt Pavement, Trench Widening
0640	907-406-A001		1,578	Square Yard	Cold Milling of Bituminous Pavement, All Depths
0650	907-407-A001	(A2)	2,457	Gallon	Asphalt for Tack Coat
0660	907-410-D001		26,300	Square Yard	High Friction Surface Treatment
0670	907-413-E001		94	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement
0680	907-601-B003	(S)	2	Cubic Yard	Class "B" Structural Concrete, Minor Structures
0690	907-603-ALT01	(S)	56	Linear Feet	18" Type A Alternate Pipe
0700	907-618-A001		1	Lump Sum	Maintenance of Traffic
0705	907-618-G001		1	Lump Sum	Construction and Removal of Haul Road
0710	907-619-E3001		3	Each	Changeable Message Sign
0715	907-626-A006		4,040	Linear Feet	6" Thermoplastic Double Drop Traffic Stripe, Skip White
0720	907-626-C003		4	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0725	907-626-C007		4,040	Linear Feet	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0730	907-626-D006		3	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0740	907-626-E005		158	Linear Feet	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0745	907-626-F005		4,040	Linear Feet	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow
0750	907-626-G006		534	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0760	907-626-H009		224	Linear Feet	Thermoplastic Double Drop Legend, White
0770	907-630-O001		1	Each	Remove and Reset Signs, Ground Mounted on Round Post(s)
0780	907-630-O006		1	Each	Remove and Reset Signs, Post Mounted
0790	907-630-PP008		47	Square Feet	Roadside Directional Signs, Sheet Aluminum, 0.080" Thickness, Ground Mounted
0800	907-699-A002		1	Lump Sum	Roadway Construction Stakes
0810	907-815-F001	(S)	24	Ton	Sediment Control Stone
0820	907-906001		1,040	Hours	Trainees [\$5.00]
			ALTERNATE GROUP AA NUMBER 1		
0830	907-304-F004	(GT)	352	Ton	Size 825B Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 2		
0840	907-304-F002	(GT)	352	Ton	Size 610 Crushed Stone Base
			ALTERNATE GROUP AA NUMBER 3		
0850	907-304-F003	(GT)	352	Ton	3/4" and Down Crushed Stone Base
			ALTERNATE GROUP BB NUMBER 1		
0860	907-308-A001		440	Ton	Portland Cement
0870	907-308-B001	(M)	25,148	Square Yard	Soil-Cement-Water Mixing, Optional Mixers, Base
0880	907-308-B002	(M)	17,289	Square Yard	Soil-Cement-Water Mixing, Optional Mixers, Design Soil

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0890	907-308-S001	(A3)	10,610	Gallon	Bituminous Curing Seal
ALTERNATE GROUP BB NUMBER 2					
0900	907-311-A003	(M)	42,437	Square Yard	Processing Lime and Fly Ash Treated Course, 6" Thick
0910	907-311-B001		311	Ton	Lime
0920	907-311-C001		1,241	Ton	Fly Ash, Class C
0930	907-311-S001	(A3)	10,610	Gallon	Bituminous Curing Seal
Bridge Items					
0940	501-K001		8,600	Square Yard	Transverse Grooving
0950	803-B002	(S)	1	Each	Conventional Static Pile Load Test [\$5,000.00]
0960	803-D007	(S)	2,210	Linear Feet	HP 14 x 89 Steel Piling
0970	803-I003	(S)	2	Each	PDA Test Pile, HP Steel Pile
0980	803-I004	(S)	5	Each	PDA Test Pile, Steel Pipe Pile
0990	803-J001	(S)	2	Each	Pile Restrike
1000	803-N001	(S)	240	Linear Feet	Exploration
1010	803-O018	(S)	960	Linear Feet	Permanent Casing, 72" Diameter
1020	805-A001	(S)	912,062	Pounds	Reinforcement
1030	813-A002	(S)	3,875	Linear Feet	Concrete Railing, 32"
1040	815-A009	(S)	8,493	Ton	Loose Riprap, Size 300
1050	815-E001	(S)	8,088	Square Yard	Geotextile under Riprap
1060	907-803-K010	(S)	1,680	Linear Feet	Drilled Shaft, 72" Diameter
1070	907-803-L006	(S)	1	Each	Test Shaft, 72" Diameter
1080	907-803-M008	(S)	144	Linear Feet	Trial Shaft, 72" Diameter
1090	907-803-PP003		5,500	Linear Feet	30" Steel Pipe Piling, Wall Thickness 0.750"
1100	907-804-A018	(S)	861	Cubic Yard	Bridge Concrete, Substructure, Class AA
1110	907-804-A019	(S)	2,594	Cubic Yard	Bridge Concrete, Superstructure, Class AA
1120	907-804-C271	(S)	7,878	Linear Feet	120' Prestressed Concrete Beam, Type BT-63
1130	907-810-A001	(S)	1,533,376	Pounds	Structural Steel, A 709, Grade 50W
1140	907-811-D001	(S)	20	Each	Disc Bearing Device
1150	907-822-B004		92	Linear Feet	2" Reinforced Elastomeric Molded Rubber Expansion Joint
1160	907-822-B008		92	Linear Feet	4" Reinforced Elastomeric Molded Rubber Expansion Joint