SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express 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.	**1**	DATED	**3/22/2017**	ADDENDUM NO.		DATED	
ADDENDUM NO		DATED		ADDENDUM NO.		DATED	

Number	Description
1	Revised Table of Contents; Revised NTB No. 6933; Added NTB Nos. 6970, & 6971; SP 907-687-17 replaces SP 907-687-16; Revised Bid Items; Revised or Added Plan Sheet Nos. 2-3, 5, & 9.0; Amendment EBS Download Required.

TOTAL ADDENDA: **1**
(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.

IM-0020-01(206)/ 106393301000

Rankin County(ies)

Revised 01/26/2016

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
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PROJECT: IM-0020-01(206)/106393301 - Rankin

Certification Regarding Non-Collusion, Debarment and Suspension
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(REVISIONS TO THE ABOVE WILL BE INDICATED ON THE SECOND SHEET
OF SECTION 905 AS ADDENDA)

03/21/2017 03:59 PM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6933 **CODE: (SP)**

DATE: 3/21/2017

SUBJECT: Sunday Work

PROJECT: IM-0020-01(206) / 106393301 -- Rankin County

Bidders are hereby advised that as per section 108.04.1 of the 2004 Mississippi Standard Specifications for Road and Bridge Construction, Sunday work will not be allowed. However, the Sunday restriction will be waived for work associated with the pipe jacking operation required at approximately Station 659+50, all concrete punchout work, and all clearing operations.

For the purposes of this Contract Sunday work shall be defined as 6:00 AM Sunday to 6:00 AM Monday.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6970 **CODE: (SP)**

DATE: 03/21/2017

SUBJECT: Joint Sealant

PROJECT: IM-0020-01(206) / 106393301 -- Rankin County

Bidders are hereby advised of the following regarding the Joint Sealant item of work:

Joint Sealant will be required on the top lift of SMA throughout the project as specified in section 907-401.03.12.

The Summary of Quantities sheets in the Plans do not include a quantity for 907-403-S004, Joint Sealant. This is in error. The quantity for 907-403-S004, Joint Sealant, shall be 21 miles which has been corrected in the bid sheets.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 6971 **CODE: (SP)**

DATE: 03/21/2017

SUBJECT: Traffic on Milled Surface

PROJECT: IM-0020-01(206) / 106393301 -- Rankin County

Bidders are hereby advised of the following change to the plans:

Bidders shall disregard the General Note #12 on sheet GN-1 and the following note shall take its place:

Traffic will be allowed to run on a milled surface for up to five (5) calendar days. The Contractor will be assessed a penalty of **$5,000 per calendar day** afterwards until the roadway is back in compliance. It shall be the Contractor's responsibility to be sure that milling operations do not commence until such time that forecasted weather conditions are suitable enough to allow the placement of the asphalt pavement after the milling operations.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-687-17 **CODE: (SP)**

DATE: 03/08/2017

SUBJECT: Traffic Recorder Classification System

Section 907-687, Traffic Recorder Classification System, is hereby added to and made a part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-687 - TRAFFIC RECORDER CLASSIFICATION SYSTEM

907-687.01--Description. This work consists of furnishing Traffic Recorder Classification Systems of the types specified which includes assembling, constructing, erecting, and installing a new complete system in conformity with these specifications to insure properly operating units in accordance with the designs and at the locations shown on the plans, or as directed. This axle detector system should classify vehicles in all lanes of traffic. Submittals shall be sent directly to the Planning Analysis Section of the Planning Division with a copy of the cover letter sent to the Project Engineer. The submittals will be returned within a seven (7) business day period from when they are received.

The Contractor shall include all hardware and software necessary to operate the field station unattended. The station is to operate continuously without human intervention.

The system may be a Traffic Recorder Classification Permanent System (907-687-A) or a Traffic Recorder Classification Short Term Permanent System (907-687-B). The type of system shall be defined in the plans or contract documents.

The Traffic Recorder Classification Permanent System shall require an AC power source and communication source via a data communication phone line as referenced in the plans.

The Traffic Recorder Classification Short Term Permanent System shall not require an AC power source and communication source via a data communication phone line.

Both systems shall utilize two (2) Class 1 Brass Linguini (BL) Piezo strips as utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT and one (1) loop per lane in all lanes as recommended by the manufacturer.

The person(s) performing the installation of the Mikros RAKTEL Piezo Classification System must be certified by Mikros or an authorized Mikros representative in the installation procedures of the Mikros RAKTEL Piezo Classification System and must be on the job site at each installation when the Mikros RAKTEL Systems are being installed. Certification can be acquired from Mikros or an authorized Mikros representative as long as a certified Mikros representative is on site to assist during the installation. Details regarding Mikros certification can be acquired through direct communication with Mikros or an authorized Mikros representative. Any delays in the

construction due to the certification process will not be grounds for an extension of the completion date.

A multiplexer shall be required for sites utilizing two (2) Mikros RAKTEL Systems in order for both systems to have access to one phone line.

The Contractor shall provide three (3) copies of all manuals on Installation, Operating, Schematics, and Maintenance for the entire System.

The BL Piezo sensors, equipment cabinet, inductive loops, cables, leads and electronic hardware and software will be furnished, installed, tested, calibrated and made operational by the Contractor. The Contractor shall provide all services required for construction, tests, the satisfactory performance period(s), and miscellaneous usage on this project until the site inspection of the project. Deposits, customer charges, connection cost, etc., associated with the System up to and including the date of the site inspection (Subsection 907-687.03.18.1--Site Inspection) of the System shall be the responsibility of the Contractor. At least five (5) business days prior to starting work, the Contractor shall provide notice to the MDOT Planning Division and the MDOT Project Office so that a representative of the Planning Division can be on site while the work is being performed.

907-687.02--Materials. The materials used in the traffic recorder classification system shall conform with the requirements of these specifications as set out herein. Prior to the scheduled start of work, the Contractor shall provide the Engineer with submittals on the following items and shall obtain the Engineer's approval before starting affected work. The Contractor shall use new materials and equipment. Any existing traffic counting equipment at the site is the sole property of the MDOT and shall not be removed by the Contractor.

907-687.02.1--Sensors. Vehicle axle detectors shall utilize piezoelectric cable in a sensor assembly and be of a type that has been shown to be successful for vehicle classification in both asphaltic and portland cement concrete pavements. BL Piezo sensor length shall be eleven (11) feet minimum. Sensors as delivered from manufacturer shall include a shielded transmission cable of sufficient length for a continuous run to the equipment cabinet without splicing.

907-687.02.1.1--Automatic Traffic Recorder Station. Piezoelectric Cable/Sensors shall be as those utilized by Mikros RAKTEL 8010 System or latest system as approved by MDOT. Sensitivity dispersion shall be Class 1, ±5%.

907-687-02.2--Shielded Transmission Cable. Coaxial cable type RG58 C/U shall conform to IMSA 50-2 for polyethylene insulated, polyethylene jacketed cable, AWG #14. Cable shall meet the requirements of Section 636 for the Standard Specifications.

907-687.02.3--Conduit and Pull Boxes. Conduit and pull boxes shall meet the requirements of Sections 647 & 668 of the Standard Specifications.

907-687.02.3.1--Under Roadways. Conduits under the roadway shall be Schedule 80 PVC or coated rigid galvanized steel.

907-687.02.3.2--Other Conduit. Other conduit shall be Schedule 40 PVC direct buried conduit unless noted otherwise.

907-687.02.3.3--Pull Boxes. Pull boxes shall be size Type 2 and the cover does not require words inscribed on the top.

907-687.02.4--Loop Wire. Loop wire, IMSA 51-3, AWG #14 stranded copper, shall meet the requirements of Subsection 722.03 of the Standard Specifications.

907-687.02.5--Loop Sealant. Loop sealant shall be "Traffic Loop Sealant" as manufactured by 3M Corporation, or approved equal.

907-687.02.6--Sensor Cement. The sensor assembly shall be cemented into the pavement with an epoxy resin of a type recommended by the sensor manufacturer.

907-687.02.7--Equipment Cabinet. The installation and setup of the equipment cabinet and all its applications must comply with all requirements of the plans. The Contractor will install the equipment cabinet along the highway right of way at a location approved by the Engineer. The equipment cabinet shall utilize a locking door. The housing shall be positioned so that the data collector will be approximately four (4) feet above the ground and mounted on a timber pole meeting the requirements of Subsection 723.08.6 unless an equivalent pole is specified and depicted in the plans. Lightning protection shall be provided for each installation. A 5/8-inch by 12-foot ground rod shall be used with AWG #6 copper conductors. Class B concrete shall be used for equipment cabinet footings and 4' x 6' x 4" concrete work pad.

907-687.03--Construction Requirements. The general layout of the work shall conform to the details shown on the typical installation plans and shall be verified at each location with the Project Engineer. No hazards, such as open holes on site during construction, shall be left overnight.

All traffic control shall meet the requirements as defined in the most updated Manual on Uniform Traffic Control Devices.

907-687.03.1--Manufacturer's Recommendations. Sensors must be installed in accordance with the approved procedures and specifications provided by the sensor manufacturer. All sensors and connecting cables, shall be positioned and installed to assure compatibility with the inductive loops to provide electrical signals for vehicle classification.

907-687.03.2--Conflicts. Conflicts between any piece of equipment, which if installed as shown in relation to any previously installed equipment that may impair the proper operation of that equipment, shall be resolved by the Contractor as approved by the Engineer.

907-687.03.3--Conduit Runs. The number of conductors, conduits and fittings necessary to produce an operative system as specified herein shall be provided by the Contractor. All joints, connections, etc. shall be completely water and moisture tight. Shielded transmission cable and wire leads shall be installed in conduit from paved shoulders to pull boxes.

907-687.03.4--Slots in Pavement. All slots required in pavement and paved shoulders shall be saw cut with diamond blade power saw. Edges shall be straight, smooth and true. Depth shall be uniform.

907-687.03.4.1--Loop Slots. Slots for loop wire shall be ¼-inch minimum width. Slot depth shall be 2½ inches in asphalt and 1½ inches in concrete. Diagonal slots shall be cut at corners by overlapping cuts so that the entire slot intended for wire has full depth. There shall be no jagged edges or protrusions which may damage wire. When the top lift of asphalt is an Open Graded Friction Course, the loops shall be cut in the top immediate lift beneath the open graded friction course.

907-687.03.4.2--Cable Slots. Slots for cable shall be 3/8-inch width (±1/16") and 2¼-inch depth. To ensure that the slots are full depth, all turns and overlay cuts shall not exceed 45 degrees. There shall be no jagged edges or protrusions which may damage cable. Cable leads from each sensor shall be run in individual saw cut slots at a minimum spacing of 12 inches.

907-687.03.4.3--Sensors Slots. Slots for sensors shall be of the width and depth specified by the sensor manufacturer. Cavity of sensor slots may be made with chisel between saw cut sides, but the bottom shall be smooth and level without protrusions. At the base of the side of the sensor slot, a ½-inch diameter hole shall be drilled at a 45 degree angle every 10 inches. In overlays of four inches (4") or less, the slot shall extend to the top of the course below the overlay. Before placing sensor, the slot shall be cleaned with compressed air.

907-687.03.5--Loop Assemblies. Inductive loop assemblies shall meet the requirements of Section 635 of the Standard Specifications.

907-687.03.6--Inspection. Pavement slots shall be inspected at time of sensor and cable installation. Surfaces shall be clean and dry, free of all dust, grit, moisture and other contaminants that might affect sealant or cement bond.

907-687.03.6.1--Sensor Check. Prior to final installation, sensor assembly shall be placed in position in slot and inspected for compliance with manufacturer's requirements as to clearance, surface alignment, etc. Sensor output shall be checked using an oscilloscope or other test equipment recommended by the sensor manufacturer.

907-687.03.6.2--Cable Inspection. The cable shall not have any cuts, nicks, abrasions or breaks in the insulation at the time of filling slot with sealant. Any sensor having defects in the shielded transmission cable shall be replaced.

907-687.03.6.3--Loop Inspection. The loop wire shall not have any cuts, nicks, abrasions or breaks in the insulation before or after installation in the slot. Loop inductance shall be 124 microhenries.

907-687.03.7--Sensor Installation. Approved epoxy cement shall completely fill the cavity spaces and surround all four sides of the sensor assembly. All excess encapsulant shall be removed from pavement surface and sensor to conduit to prevent damage during installation. Sensor installation shall be protected from traffic until epoxy cement is sufficiently cured.

907-687.03.8--Sleeves. Flexible sleeve or other protection shall be provided for shielded cable at sensor ends to prevent damage. The Contractor shall take care to insure that the sleeve is not filled with epoxy cement. In addition, the Contractor shall provide flexible sleeve, approximately 12 inches long, at pavement construction joints including joints between lanes and between pavement and paved shoulder.

907-687.03.9--Cable and Wire Installation. The cable or lead wires shall be placed in the bottom of the slot so that there are no kinks, curls, straining or stretching of the insulation. The two loop lead wires shall be twisted two to five turns per foot before placement in the slot. The loop wire must be protected from water at all times. In the event that the loop wire is going to be spliced, the wire must be sealed with a 3M 82-A Series Power Cable Splice Kit, or approved equal. Loop wires may not lay in the pull boxes exposed to water and moisture during the construction and installation of the traffic recorder classification system. There shall be no splicing the sensor cables. The sensor cables must be a continuous run from the sensor to the equipment cabinet. Special care shall be taken in seating the cable and wire so that the insulation will not be broken or abraded. No sharp tools such as screwdriver or metal object shall be used for this operation.

907-687.03.9.1--Conditions. The Contractor shall install the sealant in strict adherence to the manufacturer's recommendation and these specifications. No sealant shall be installed during inclement weather or under any condition, which might introduce moisture into the pavement slots.

907-687.03.9.2--Sealant. The viscosity of the sealant shall be such that it can be readily placed in the slot, completely surround the wires, displace all air and fill the slot so that the sealant is flush with the roadway surface. The finished installation shall be waterproof and present a neat workmanlike appearance. Minimum required clearance shall be maintained to cable and wire.

907-687.03.9.3--Protection. The sealant shall be sufficiently hardened before opening to traffic.

907-687.03.10--Cleaning. All excess encapsulate and sealant shall be removed from pavement surface, inductive loop, and sensor after installation. A hand grinder shall be used, if necessary, to smooth out rough or high areas that might affect sensor operation.

907-687.03.11--Tags. Each shielded transmission cable and pair of lead wires shall be uniquely identified by an insulated, waterproof tag in every pull box.

907-687.03.12--Trenching and Backfilling. All trenching shall be done by mechanical means and all sides shall be straight and vertical. Width of trenches shall not exceed eight (8) inches on either side of placed conduits. All backfill shall be made with a friable material, which has been approved by the Engineer. Material shall be placed in compacted lifts as approved by the Engineer. The site, including shoulders and grassing, shall be returned to its original condition.

907-687.03.13--Jacking or Boring. Approved jacking or boring methods shall be used where a conduit must be placed under an existing roadway. Jacking/boring pits shall be kept a minimum of five (5) feet from the edge of shoulder, and care shall be taken not to disturb existing pavement. Excessive use of water or other methods, which could undermine pavements, shall not be permitted. The jacking/boring site must be returned to its undisturbed state upon completion of

the operation. Only experienced labor shall be used for jacking/boring work. Conduit shall be not less than 36 inches below pavement surface.

907-687.03.14--Pull Boxes. The location of the pull boxes must be approved by the Project Engineer. Pull boxes shall be set on 12-inch minimum thickness washed gravel. Holes for drainage shall be provided in bottom of pull box. Conduit entering pull box shall be located so as to leave the major portion of the box clear.

907-687.03.15--Conduit. Conduit shall be laid to a depth of not less than 36 inches below the finished grade, except at conduit ends. All conduits shall be run at least 10 feet outside shoulder unless otherwise approved. One size of conduit shall be used for each run; no reducing couplings will be permitted.

907-687.03.16--Conductor Installation. Before placing shielded cable or wire leads in conduit, the conduit shall be cleaned with compressed air and rigid metal conduit shall be cleaned with a mandrel. Only approved lubricants which will not injure conductor insulation while pulling cables shall be used.

Loop splices shall be made in pull boxes only, soldered, and sealed in an approved power cable splice kit. An insulation equal in rating and thickness to the conductor insulation shall be provided.

907-687.03.17--System Acceptance. The Contractor shall be required to demonstrate to the Engineer the satisfactory operation of each device installed on this project.

907-687.03.18--Material Warranty. The following warranty stipulations are in addition to those covered by Subsection 106.01 of the Standard Specifications.

907-687.03.18.1--Site Inspection. After meeting the consecutive polling requirement, a site inspection may be made upon completion of an individual site but must be made before the final inspection of the project.

The Contractor, with MDOT's representatives present to verify that the site is working properly, shall test all Traffic Recorder Classification Systems.

Sensors, loops and related components at all sites shall be operational at the final inspection of the project.

907-687.03.18.1.1--Consecutive Polling. All Traffic Recorder Classification Permanent Systems shall have polled without any problems for at least 10 consecutive days and data for each day must pass quality control and quality assurance checks prior to the site inspection.

907-687.03.18.1.2--Data Collection. The Contractor shall provide 48 hours of data (IMG files) to the Planning Division for all Traffic Recorder Classification Short Term Permanent Systems prior to the site inspection.

907-687.03.18.2--Guarantee. At each location, the Contractor shall warrant and guarantee all sensors, loops and related components for a period of 12 months, beginning at the date of release from maintenance, or partial release from maintenance, of the project.

907-687.03.18.3--Responsibility. It is the intent of the preceding paragraph to provide for equipment that performs as intended by the manufacturer. It is the further intent to obtain from the Contractor a level of workmanship that will assure the Department of an operation system devoid of Contractor laxities. Failure to perform as indicated shall require the Contractor to replace in kind or repair, at the Contractor's option, the equipment or workmanship in question. All material and labor cost resulting from the replacement or repair of equipment or correction of poor workmanship shall be at no additional costs to the Department.

907-687.03.18.4--Repairs. The Department shall report any failures and outages to the Contractor. The Contractor will be required to make the necessary repairs within 10 business days of the report. The Contractor shall not be responsible for outages occurring during the 12-month warranty period due to vandalism, traffic accidents, or any problems not related to materials or workmanship. The Contractor will be required to make the necessary repairs for such outages and a reasonable cost for such repair(s) will be borne by the Department.

907-687.03.18.5--Manufacturer's Guarantees. All manufacturer's standard warranties or guarantees for all electrical and mechanical equipment which are provided as customary trade practice shall be made out to the Department and shall begin simultaneously with the commencement of the 12-month warranty period.

907-687.03.18.6--Guarantee of Repairs. This warrantee and guarantee on the fixed or replaced items shall be identical in scope to the warrantee and guarantee in Subsections 907-687.03.18.1 through 907-687.03.18.5.

907-687.04--Method of Measurement. Traffic Recorder Classification system of the type specified, complete in place and accepted, will be measured per each location.

907-687.05--Basis of Payment. Traffic Recorder Classification system, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing, installing, testing and guaranteeing all equipment, and for all materials, labor, equipment, operation, and other incidentals necessary to complete the work.

Payment will be made under:

907-687-A: Traffic Recorder Classification Permanent System, _*_ - per each

907-687-B: Traffic Recorder Classification Short Term Permanent System, _*_ - per each

* Site No. or Location may be specified

Mill & Overlay approximately 5 miles on I-20 from Crossgates to East Brandon, known as Federal Aid Project No. IM-0020-01(206) / 106393301 in Rankin County.

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
			Roadway Items		
0010	201-D002		15	Acre	Random Clearing
0020	202-B005		441	Square Yard	Removal of Asphalt Pavement, All Depths
0030	202-B013		298	Square Yard	Removal of Cement Treated Base, All Depths
0040	202-B025		201	Square Yard	Removal of Concrete Paved Ditch
0050	202-B041		364	Linear Feet	Removal of Fence, All Types
0060	202-B042		1	Each	Removal of Flared End Section, All Sizes
0070	202-B057		1	Each	Removal of Inlets, All Sizes
0080	202-B068		297	Square Yard	Removal of Reinforced Concrete Pavement, All Depths
0090	202-B076		3,179	Linear Feet	Removal of Traffic Stripe
0100	202-B086		10	Each	Removal of Guard Post
0110	202-B087		2,738	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0120	202-B116		10	Each	Removal of Trees Greater Than 20"
0130	202-B149		1	Mile	Removal of Traffic Stripe
0140	203-EX029	(E)	519	Cubic Yard	Borrow Excavation, AH, FME, Class B15
0150	206-A001	(S)	3	Cubic Yard	Structure Excavation
0160	217-A001		100	Square Yard	Ditch Liner
0170	219-A001		8	Thousand Gallon	Watering [$20.00]
0180	221-A001	(S)	24	Cubic Yard	Portland Cement Concrete Paved Ditch
0190	223-A001		226	Acre	Mowing [$50.00]
0200	234-A001		400	Linear Feet	Temporary Silt Fence
0210	423-A001		18	Mile	Rumble Strips, Ground In
0220	503-B001		217	Linear Feet	Saw Cut, Longitudinal Joints
0230	503-C002		648	Linear Feet	Saw Cut, 3-inch
0240	503-C007		648	Linear Feet	Saw Cut, Full Depth
0250	503-D001		10	Cubic Yard	Concrete for Base Repair
0260	503-E002		109	Each	Tie Bars, No. 5 Deformed Drilled and Epoxied or Grouted
0270	512-A001		1,338	Each	Holes
0280	603-CA126	(S)	184	Linear Feet	18" Reinforced Concrete Pipe, Class V, Jacked or Bored
0290	603-CB001	(S)	1	Each	18" Reinforced Concrete End Section
0300	604-B001		250	Pounds	Gratings
0310	606-B007		1,900	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0320	606-C003		4	Each	Guard Rail, Cable Anchor, Type 1

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0330	606-D002		4	Each	Guard Rail, Bridge End Section, Type C
0340	606-E002		23	Each	Guard Rail, Terminal End Section, Flared
0350	606-E003		10	Each	Guard Rail, Terminal End Section, Non-Flared
0360	606-F001		4	Each	Special Sections, Bridge Connector
0370	607-B001		364	Linear Feet	60" Type I Chain Link Fence, Class I
0380	607-G038		1	Each	Gate, 12' x 60" Chain Link
0390	607-P1007		32	Each	Line Post, 7' x 1 1/2" Galvanized Steel
0400	607-P2008		26	Each	Brace Post, 7 1/2' x 2" Galvanized Steel
0410	607-P3003		1	Each	Gate Post, 8' x 2 1/2" Galvanized Steel
0420	607-Z001		27	Each	Concrete Anchors
0430	619-A1004		9	Mile	Temporary Traffic Stripe, Continuous White, Paint
0440	619-A2004		10	Mile	Temporary Traffic Stripe, Continuous Yellow, Paint
0450	619-A3007		10	Mile	Temporary Traffic Stripe, Skip White, Paint
0460	619-A5001		34,122	Linear Feet	Temporary Traffic Stripe, Detail
0470	619-C6001		1,700	Each	Red-Clear Reflective High Performance Raised Marker
0480	619-D1001		80	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0490	619-D2001		896	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0500	619-F1001		740	Linear Feet	Concrete Median Barrier, Precast
0510	619-G4001		48	Linear Feet	Barricades, Type III, Single Faced
0520	619-G7001		2	Each	Warning Lights, Type "B"
0530	619-J1003		2	Unit	Impact Attenuator, 60 MPH
0540	619-J2002		2	Unit	Impact Attenuator, 60 MPH, Replacement Package
0550	620-A001		1	Lump Sum	Mobilization
0560	627-K001		1,700	Each	Red-Clear Reflective High Performance Raised Markers
0570	630-F001		160	Each	Delineators, Guard Rail, White
0580	630-F002		83	Each	Delineators, Guard Rail, Yellow
0590	630-F006		80	Each	Delineators, Post Mounted, Single White
0600	630-F007		23	Each	Delineators, Post Mounted, Single Yellow
0610	630-F008		117	Each	Delineators, Post Mounted, Double White
0620	630-F009		21	Each	Delineators, Post Mounted, Double Yellow
0630	907-216-A001		111	Square Yard	Solid Sodding
0640	907-225-A001		1	Acre	Grassing
0650	907-225-B001		1	Ton	Agricultural Limestone
0660	907-225-C001		2	Ton	Mulch, Vegetative Mulch

Line No.	Item Code	Adj Code	Quantity	Units	Description [Fixed Unit Price]
0670	907-237-A003		200	Linear Feet	Wattles, 20"
0680	907-246-B002		100	Each	Rockbags
0690	907-304-A010	(GY)	984	Cubic Yard	Granular Material, LVM, Class 5, Group E
0700	907-402-A004	(BA1)	10,808	Ton	Open Graded Friction Course, 9.5-mm Mixture
0710	907-402-B001	(A3)	19,794	Gallon	Bituminous Tack Coat
0720	907-403-A018	(BA1)	7,781	Ton	12.5-mm, ST, Asphalt Pavement
0730	907-403-A029	(BA1)	2,247	Ton	19-mm, HT, Asphalt Pavement
0740	907-403-AA002	(BA1)	20,335	Ton	Stone Matrix Asphalt, 12.5 mm Mixture
0750	907-403-D011	(BA1)	1,482	Ton	12.5-mm, HT, Asphalt Pavement, Polymer Modified
0760	907-403-S004		21	Mile	Joint Sealant
0770	907-406-A001		5,143	Square Yard	Cold Milling of Bituminous Pavement, All Depths
0780	907-406-B001		3,733	Square Yard	Cold Milling of Concrete Pavement, All Depths
0790	907-406-D001		252,748	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0800	907-407-A001	(A2)	188,454	Gallon	Asphalt for Tack Coat
0810	907-413-D001		1,088	Linear Feet	Cleaning and Filling Joints in PCC Pavement
0820	907-503-A004	(C)	297	Square Yard	8" and Variable Continuously Reinforced Concrete Pavement, Broom Finish
0830	907-512-B006		24,534	Pounds	Portland Cement Pressure Grout Slurry, Type 6
0840	907-601-B003	(S)	1	Cubic Yard	Class "B" Structural Concrete, Minor Structures
0850	907-618-A001		1	Lump Sum	Maintenance of Traffic
0860	907-619-E3001		3	Each	Changeable Message Sign
0870	907-626-A005		10	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip White
0880	907-626-C003		9	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White
0890	907-626-F003		10	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow
0900	907-626-G006		28,210	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0910	907-626-G007		5,912	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0920	907-631-B001		14	Cubic Yard	Flowable Fill, Non-Excavatable
0930	907-687-A018		1	Each	Traffic Recorder Classification Permanent System
			Bridge Items		
0940	805-A001	(S)	48	Pounds	Reinforcement
0950	808-A001	(S)	1,344	Linear Feet	Joint Preparation
0960	815-B001	(S)	56	Square Yard	Grouted Riprap
0970	907-823-A001		672	Linear Feet	Preformed Joint Seal, Type I
0980	907-823-B001		1,344	Linear Feet	Saw Cut, Type I

FMS CON: 106393/301000

STATE	PROJECT NO.
MISS.	IM-0020-02(206)

ADDENDUM

TABLE OF CONTENTS ENGLISH VERSION

PS & E PLANS- 10/31/2016

FMS CON. # 106393301000

REVISIONS		
DATE	SHEET NO.	BY
12/07/2016	2,35-44,63,78,80	YDJ
01/18/2017	2,4,8,9,25,26,35-44,48,52	YDJ
01/18/2017	55,60,63,76,78 & 80	YDJ
02/21/2017	2-4,8,9.0,9.1,23,29,38,56,	YDJ
02/21/2017	69,74,82,83	YDJ

	DATE	REVISION	BY
1	12/07/2016	revised WK NO. TRCPS-1	YDJ
1	12/07/2016	added revisons sheet no.	YDJ
1	01/18/2017	added 1ST 0.REV NOTE	YDJ
1	01/18/2017	added specialdesign sheets	YDJ
2	02/21/2017	increase quantities, added pay items&added specialdesign sheets	YDJ
2	02/21/2017	added standard drawings	YDJ

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL INDEX
Interstate 20

COUNTY: RANKIN

PROJ. NUM.: IM-0020-01(206)/106393

FILENAME: DETAIL_INDEX-1-REVISED.DGN

DESIGN TEAM ____ CHECKED ____ DATE ____

WORKING NUMBER DI-1

SHEET NUMBER 2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION PLAN

3/14/2017 9:39 AM DETAIL_INDEX-1-REVISED.DGN

FMS CON: 106393/301000

ADDENDUM

STATE	PROJECT NO.
MISS.	IM-0020-01(206)

TABLE OF CONTENTS ENGLISH VERSION

NO.	REVISION	BY	DATE
1	ADDED STANDARD DRAWINGS	YOJ	3/14/2017

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL INDEX
Interstate 20

COUNTY: RANKIN
PROJ. NUM.: IM-0020-01(206)/106393

FILENAME: DETAIL INDEX-1-REVISED.DGN
DESIGN TEAM _____ CHECKED _____ DATE _____

WORKING NUMBER: **DI-2**

SHEET NUMBER: 3

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/14/2017 10:42:AM DETAIL INDEX-1-REVISED.DGN

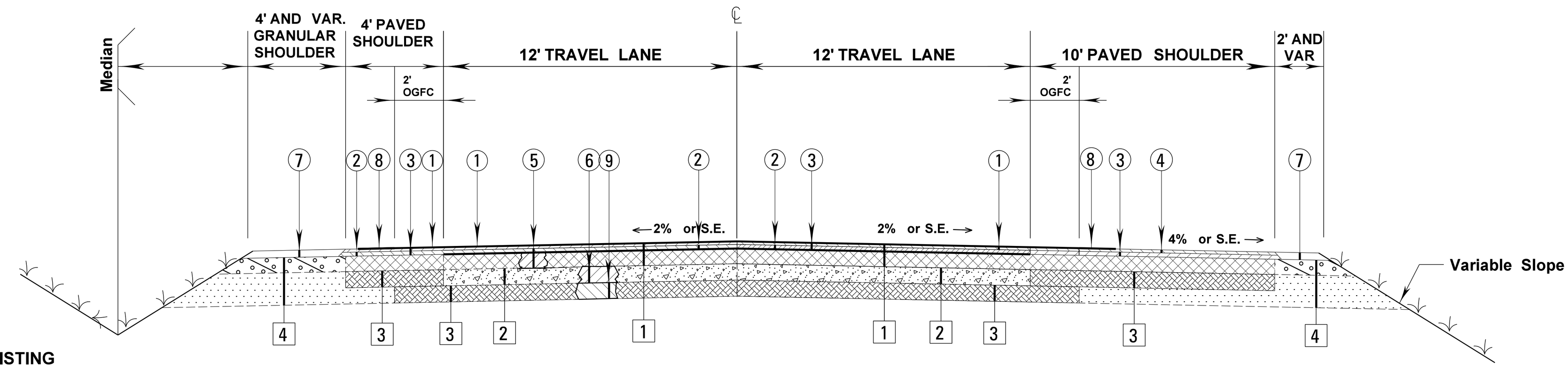
ADDENDUM

STATE	PROJECT NO.
MISS.	IM-0020-01(206)

TYPICAL SECTION #1
INTERSTATE 20 MAINLINE

⚠ **EASTBOUND Sta. 540+00 - Sta. 812+32**
Equations- 634+87 BK - Sta. 635+71 AH
652+38 BK - Sta. 651+77 AH
696+51 BK - Sta. 695+43 AH

WESTBOUND Sta. 540+00 - Sta. 814+80
Equations- 635+83 BK - Sta. 636+21 AH
650+72 BK - Sta. 651+24 AH
697+15 BK - Sta. 695+31 AH



EXISTING

1. 7-1/2" & Variable Bituminous Asphalt Pavement
2. 8" of Continuously Reinforced Concrete Pavement
3. 6" of Cement Treated Base
4. Variable Depth Granular Material

Note 1: Pavement repairs must be completed as a continuous operation in order to minimize the traffic impact. All signs for overnight lane closures shall remain in place until pavement is fully repaired. The overnight closures shall be maintained by the contractor's personnel an in accordance with a lighting plan approved by the Engineer. Lane closures shall be in place until the failed area has been completely repaired.

Note 2: At overhead bridges at Greenfield Road/Crossgates Boulevard, SR471 and Trickham Bridge Road, mill top 3" and variable of existing mainline and shoulders to maintain overhead clearance at these locations.

Note 3: Eastbound lane is similar to typical section above (mirror the section)

PROPOSED

1. Overlay with 1" Open Graded Friction Course (OGFC), 9.5mm Mix.
2. Overlay with 2" and variable Stone Matrix Asphalt, 12.5mm Mix.
3. **Fine Mill existing Asphalt Pavement at a depth of 2" and variable. See note number (#) two (2) for bridge locations.
4. Overlay with 2" and variable Asphalt Pavement, 12.5mm Mix, ST.
5. Remove(mill) any failed areas in existing Asphalt Pavement to the top of the underlying Concrete Pavement and replace with full depth Asphalt Pavement, 19 mm Mix, HT.
6. Repair any failed areas in underlying concrete pavement in accordance with sheets PR-1A and PR-1B. (Attached)
7. Variable depth Granular Material, Class 5, Group E. (As Req'd)
8. Ground In Rumble Strips.
9. Removal of cement treated base (as required). Replace with 503-D001 Concrete for Base Repair.

BY	REVISION	DATE
YDJ	REVISED STATION NUMBERS	02-22-2017

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION
INTERSTATE 20

COUNTY: Rankin
PROJ. NUM.: IM-0020-01(206)/106393

FILENAME: TS-1.DGN
DESIGN TEAM yjackson CHECKED DATE

WORKING NUMBER: TS-1
SHEET NUMBER: 5

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

3/15/2017 8:23 AM TS-1

FMS: 106393-301000

STATE	PROJECT NO.
MISS	IM-0020-01(206)

ADDENDUM

SUMMARY OF QUANTITIES (SHEET 2)

PAY ITEM NO.	PAY ITEM	UNIT	RANKIN : 106393-301000		
			Prelim	Final	
503-E002	Tie Bars, No. 5 Deformed Drilled and Epoxied or Grouted	EA	109		
512-A001	Holes	EA	1,338		
907-512-B006	Portland Cement Pressure Grout Slurry, Type 6	LBS	24,534		1
907-601-B003	Class "B" Structural Concrete, Minor Structures	CY	1		(1) 2
603-CA126	18" Reinforced Concrete Pipe, Class V, Jacked or Bored	LF	184		(1) 2
603-CB001	18" Reinforced Concrete End Section	EA	1		(1) 2
604-B001	Gratings	LBS	250		(1) 2
606-B007	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post	LF	1,900		1
606-C003	Guard Rail, Cable Anchor, Type 1	EA	4		1
606-D002	Guard Rail, Bridge End Section, Type C	EA	4		
606-E002	Guard Rail, Terminal End Section, Flared	EA	23		
606-E003	Guard Rail, Terminal End Section, Non-Flared	EA	10		
606-F001	Special Sections, Bridge Connector	EA	4		
607-B001	60" Type I Chain Link Fence, Class I	LF	364		
607-G038	Gate, 12' x 60" Chain Link	EA	1		
607-P1007	Line Post, 7' x 1 1/2" Galvanized Steel	EA	32		
607-P2008	Brace Post, 7 1/2' x 2" Galvanized Steel	EA	26		
607-P3003	Gate Post, 8' x 2 1/2" Galvanized Steel	EA	1		
607-Z001	Concrete Anchors	EA	27		2
907-618-A001	Maintenance of Traffic	LS	1		2
619-A1004	Temporary Traffic Stripe, Continuous White, Paint	MI	9		
619-A2004	Temporary Traffic Stripe, Continuous Yellow, Paint	MI	10		
619-A3007	Temporary Traffic Stripe, Skip White, Paint	MI	10		
619-A5001	Temporary Traffic Stripe, Detail	LF	34,122		1
619-C6001	Red-Clear Reflective High Performance Raised Marker	EA	1,700		
619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet	SF	80		
619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More	SF	896		
907-619-E3001	Changeable Message Sign	EA	3		
619-F1001	Concrete Median Barrier, Precast	LF	740		2 3
619-G4001	Barricades, Type III, Single Faced	LF	48		
619-G7001	Warning Lights, Type "B"	EA	2		1
619-J1003	Impact Attenuator, 60 MPH	UNIT	2		2
619-J2002	Impact Attenuator, 60 MPH, Replacement Package	UNIT	2		2
620-A001	Mobilization	LS	1		
907-626-A005	6" Thermoplastic Double Drop Traffic Stripe, Skip White	MI	10		
907-626-C003	6" Thermoplastic Double Drop Edge Stripe, Continuous White	MI	9		
907-626-F003	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow	MI	10		
907-626-G006	Thermoplastic Double Drop Detail Stripe, White	LF	28,210		
907-626-G007	Thermoplastic Double Drop Detail Stripe, Yellow	LF	5,912		
627-K001	Red-Clear Reflective High Performance Raised Markers	EA	1,700		
630-F001	Delineators, Guard Rail, White	EA	160		
630-F002	Delineators, Guard Rail, Yellow	EA	83		
630-F006	Delineators, Post Mounted, Single White	EA	80		
630-F007	Delineators, Post Mounted, Single Yellow	EA	23		

(1) See working number WK-6 plan profile sheet for details.

Date	Revision	By
01/27/2017	Pay Item 907-503-A002 is obsolete and pay item was changed to 907-503-A004	YJ
01/27/2017	Increased quantities on pay item 202-B087, 907-403-A018, 606-B007 and 606-C003	YJ
01/27/2017	Added note #7 to 907-405-A001	YJ
02/22/2017	Increased quantities on pay item 202-B087, 202-B092, 214-A001, 221-A001, 234-A001, 606-B007 and 606-C003, 907-216-A001, 907-403-A018	YJ
02/22/2017	Added pay item.	YJ
03/14/2017	Changed quantity.	YJ

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

Proj No: IM-0020-01(206)
County: RANKIN

Working Number SQ-2

FILENAME : SQS_2010_GOV-2016

Design Team Yolanda Jackson Checked Robb Date 02/22/2

Sheet Number 9.0