07 -



SM No. CSTP7314010061

# PROPOSAL AND CONTRACT DOCUMENTS

### FOR THE CONSTRUCTION OF

07

Striping & Pavement Markers on US 80 from Shaw Road to Terry Road, known as State Project No. STP-7314-01(006) / 109452301 in Hinds County.

Project Completion: 35 Working Days

(STATE DELEGATED)

#### NOTICE

BIDDERS MUST COMPLETE AN ONLINE REQUEST FOR PERMISSION TO BID THIS PROJECT.

Electronic addendum updates will be posted on www.gomdot.com

# **SECTION 900**

OF THE CURRENT 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

**JACKSON, MISSISSIPPI** 

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#### **SECTION 901 - ADVERTISEMENT**

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Tuesday, July 22, 2025, from the Bid Express Service and shortly thereafter publicly read on the Sixth Floor for:

Striping & Pavement Markers on US 80 from Shaw Road to Terry Road, known as State Project No. STP-7314-01(006) / 109452301 in Hinds County.

The attention of bidders is directed to the predetermined minimum wage rate set by the U. S. Department of Labor under the Fair Labor Standards Act.

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 specifications are on file in the offices of the Mississippi Department of Transportation.

Contractors may request permission to bid online at <a href="http://shop.mdot.ms.gov">http://shop.mdot.ms.gov</a> at no cost. Upon approval, Contractors shall be eligible to submit a bid using Bid Express at <a href="http://bidx.com">http://bidx.com</a>. Specimen proposals may be viewed and downloaded online at no cost at <a href="http://mdot.ms.gov">http://mdot.ms.gov</a> or purchased online at <a href="http://shop.mdot.ms.gov">http://shop.mdot.ms.gov</a> at a cost of Ten Dollars (\$10.00) per proposal plus a small convenience fee. <a href="Cash or checks will not be accepted as payment">Cash or checks will not be accepted as payment</a>.

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.

BRAD WHITE EXECUTIVE DIRECTOR

#### SUPPLEMENT TO NOTICE TO BIDDERS NO. 1

**DATE:** 06/08/2021

**SUBJECT:** Governing Specifications

Change the web address at the end of the first paragraph to the following.

 $\underline{https://shop.mdot.ms.gov/default.aspx?StoreIndex{=}1}$ 

SECTION 904 - NOTICE TO BIDDERS NO. 1 CODE: (IS)

**DATE:** 03/01/2017

**SUBJECT:** Governing Specifications

The current (2017) Edition of the Standard Specifications for Road and Bridge Construction adopted by the Mississippi Transportation Commission is made a part hereof fully and completely as if it were attached hereto, except where superseded by special provisions, or amended by revisions of the Specifications contained within this proposal. Copies of the specification book may be purchased from the MDOT Construction Division, or online at <a href="mailto:shopmdot/default.aspx?StoreIndex=1.">shopmdot/default.aspx?StoreIndex=1.</a>

A reference in any contract document to controlling requirements in another portion of the contract documents shall be understood to apply equally to any revision or amendment thereof included in the contract.

In the event the plans or proposal contain references to the 2004 Edition of the Standard Specifications for Road and Bridge Construction, it is to be understood that such references shall mean the comparable provisions of the 2017 Edition of the Standard Specifications.

CODE: (SP)

#### SECTION 904 - NOTICE TO BIDDERS NO. 3

**DATE:** 01/17/2017

**SUBJECT:** Final Clean-Up

Immediately prior to final inspection for release of maintenance, the Contractor shall pick up, load, transport and properly dispose of all litter from the entire highway right-of-way that is within the termini of the project.

Litter shall include, but not be limited to, solid wastes such a glass, paper products, tires, wood products, metal, synthetic materials and other miscellaneous debris.

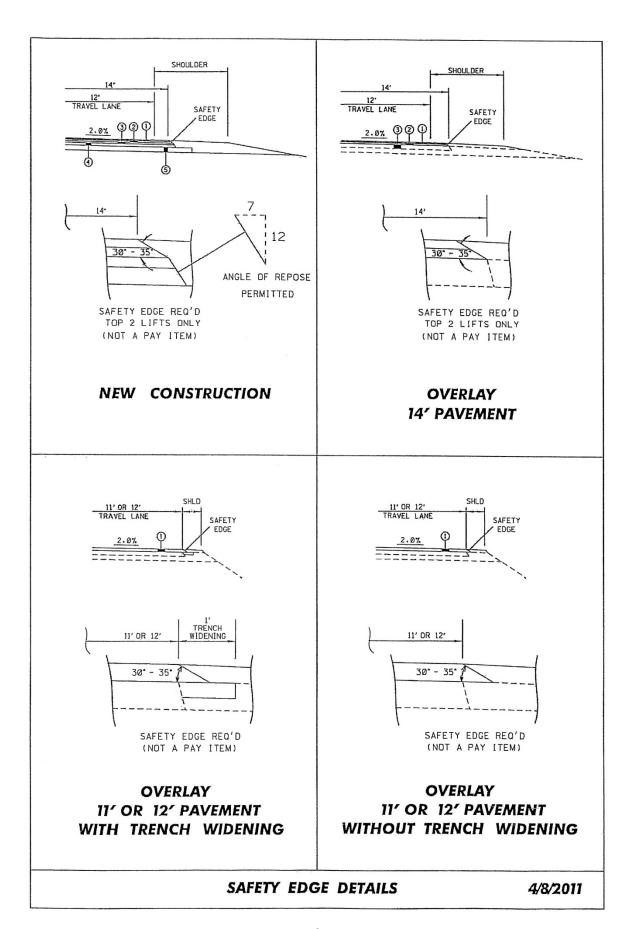
Litter removal is considered incidental to other items of work and will not be measured for separate payment.

SECTION 904 - NOTICE TO BIDDERS NO. 13 CODE: (IS)

**DATE:** 03/01/2017

**SUBJECT:** Safety Edge

Bidders are hereby advised that the Shoulder Wedge (Safety Edge) specified in Section 401, Asphalt Pavements, shall only apply to the top two (2) lifts of asphalt. Open Graded Friction Courses (OGFC) are not to be considered a lift as it pertains to safety edge. Attached is a drawing showing the safety edge. Note that the shoulder dimensions in the bottom two drawings will be less than three feet (3').



SECTION 904 - NOTICE TO BIDDERS NO. 296 CODE: (SP)

**DATE:** 07/25/2017

**SUBJECT:** Reduced Speed Limit Signs

Bidders are advised that when the plans or contract documents require the speed limit on a project to be reduced, the Contractor shall begin work within 48 hours of installing the reduced speed limit signs. Should the Contractor not start work or have no plans to start work within 48 hours of installing the signs, the reduced speed limit signs shall be covered and existing speed limit signs uncovered.

SECTION 904 - NOTICE TO BIDDERS NO. 445 CODE: (SP)

**DATE:** 10/10/2017

SUBJECT: Mississippi Agent or Qualified Nonresident Agent

Bidders are hereby advised of the requirements of Subsections 102.08, 103.05.2, and 107.14.2.1 of the 2017 Standard Specifications for Road and Bridge Construction as it refers to bonding agents. Proposal guaranties, bonds, and liability insurance policies must be signed by a **Mississippi Agent or Qualified Nonresident Agent.** 

SECTION 904 - NOTICE TO BIDDERS NO. 516 CODE: (IS)

**DATE:** 11/28/2017

#### **SUBJECT:** Errata and Modifications to the 2017 Standard Specifications

<u>Page</u>	Subsection	<u>Change</u>
16	102.06	In the seventh full paragraph, change "Engineer" to "Director."
33	105.05.1	In the sixth sentence, change "Contract Administration Engineer" to "Contract Administration Director."
34	105.05.2.1	In subparagraph 2, change "SWPPP, ECP" to "SWPPP and the ECP"
35	105.05.2.2	In subparagraphs 2, add "and" to the end of the sentence. In subparagraph 3, remove ", and" and add ".".
90	109.04.2	In the last paragraph of subparagraph (a), place a period "." at the end of the sentence.
93	109.04.2	In the last paragraph of subparagraph (g), place a period "." at the end of the sentence. Also, in the first paragraph of subparagraph (h), place a period "." at the end of the sentence.
97	109.07	Under ADJUSTMENT CODE, subparagraph (A1), change "HMA mixture" to "Asphalt mixtures."
98	109.11	In the third sentence, change "Engineer" to "Director."
219	308.04	In the last sentence of the last paragraph, change "Contractor's decision" to "Engineer's decision."
300	405.02.5.9	In the first sentence of the second paragraph, change "Hot Mix Asphalt" to "Asphalt Mixtures."
502	630.01.1	In the first paragraph, change "AASHTO" to "AASHTO's LRFD".
636	646.05	Change "each" to "per each" for the pay item units of payment.
640	656.02.6.2	In item 7), change "down stream" to "downstream".
688	630.03.2	Change the subsection number from "630.03.2" to "680.03.2."

725	702.08.3	In the second sentence of the first paragraph, change "hot-mix" to "asphalt."
954	804.02.13.1.6	In the definition for "M" in the % Reduction formulas, change "paragraph 7.3" to "paragraph 5.3."

#### SECTION 904 - NOTICE TO BIDDERS NO. 1225 CODE: (SP)

**DATE:** 11/13/2018

**SUBJECT:** Early Notice to Proceed

Bidders are advised that if an early notice to proceed is allowed by the Department and the Contractor experiences problems or delays between the early notice to proceed date and the original notice to proceed date, this shall not be justification for any monetary compensation or an extension of contract time.

SECTION 904 - NOTICE TO BIDDERS NO. 1226

CODE: (IS)

**DATE:** 11/16/2018

**SUBJECT:** Material Storage Under Bridges

Bidders are advised that Subsection 106.08 of the Standard Specifications allows the Contractor to store materials and equipment on portions of the right-of-way. However, the Contractor will not be allowed to store or stockpile materials under bridges without written permission from the Project Engineer. The Contractor shall submit a detailed request of all proposed materials to be stored under bridges to the Engineer a minimum of 14 calendar days prior to anticipated storage. This detail shall include, but not limited to, bridge location, material type, material quantity, and duration of storage. The Project Engineer and any other needed Division will review this information and determine whether to grant approval. The Contractor shall not store any material under any bridge without written approval from the Project Engineer.

SECTION 904 - NOTICE TO BIDDERS NO. 1241 CODE: (IS)

**DATE:** 11/27/2018

**SUBJECT:** Fuel and Material Adjustments

Bidder's attention is brought to the last paragraph of Subsection 109.07 of the Standard Specifications which states that no fuel or material adjustment will be made after the completion of contract time. Any fuels consumed or materials incorporated into the work during the monthly estimate period falling wholly after the expiration of contract time will not be subject a fuel or material adjustment.

CODE: (IS)

SECTION 904 - NOTICE TO BIDDERS NO. 2206

**DATE:** 01/14/2020

**SUBJECT: MASH Compliant Devices** 

Bidders are hereby advised that compliance associated with the requirements of meeting either the National Cooperative Highway Research Program (NCHRP) Report 350 or the Manual for Assessing Safety Hardware (MASH) for installations of certain traffic control devices and permanent safety hardware devices (guardrails, guardrail terminals, permanent portable barriers, cast-in-place barriers, all other permanent longitudinal barriers, crash cushions, cable barriers, cable barrier terminals, bridge rails, bridge rail transitions, all other terminals, sign supports, and all other breakaway hardware) as listed throughout the Standard Specifications and/or the Standard Drawings, or both, is now replaced with the requirements of meeting the 2016 version of MASH after December 31, 2019. This change applies to new permanent installations and to full replacements of existing installations.

At the preconstruction conference or prior to starting any work on the project, the Contractor shall submit a letter stating that the traffic control devices and permanent safety hardware devices as outlined within the paragraph above that are to be used on the project are certified to meet MASH 2016.

When a MASH 2016-compliant device does not exist for the new permanent installations and/or full replacement installations of permanent safety hardware devices, as listed above, a MASH 2009-compliant or a NCHRP 350-compliant device may be proposed by the Contractor for the project. A written request for such instances must be submitted by the Contractor either at the preconstruction conference or prior to starting any work on the project. The Contractor shall submit the following items to the Project Engineer: (1) a detailed list of the proposed devices and locations thereof; and (2) certification letters indicating that the proposed devices are compliant with either MASH 2009 or NCHRP 350.

When a MASH 2016-compliant device does not exist for the temporary work zone traffic control devices (Category 1, Category 2, and Category 3 devices), a MASH 2009-compliant or a NCHRP 350-compliant device may be proposed by the Contractor for the project. Temporary work zone traffic control devices (Category 1, Category 2, and Category 3 devices) that are MASH 2009-compliant or NCHRP 350-compliant that have been in use prior to December 31, 2019, and that have a remaining service life may be proposed for use throughout their normal service life on the project by the Contractor. For either of these scenarios for temporary work zone traffic control devices, a written request must be submitted by the Contractor either at the preconstruction conference or prior to starting any work on the project. The Contractor shall submit the following items to the Project Engineer: (1) a detailed list of the proposed devices and locations thereof; and (2) certification letters indicating that the proposed devices are compliant with either MASH 2009 or NCHRP 350.

Work will only be allowed to proceed after the Department has granted written concurrence(s) with the proposed request(s) as listed above.

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 2273

**DATE:** 02/12/2020

**SUBJECT:** Mississippi Special Fuel Tax Law

Bidder's attention is brought to the second paragraph of Subsection 107.02 of the Standard Specifications which states that all Contractors and Subcontractors must comply with all requirements contained in the Mississippi Special Fuel Tax Law, Section 27-55-501, et seq. Attached are two Fact Sheets provided by the Mississippi Department of Revenue (MDOR) with additional information.



# **Gasoline and Dyed Diesel Used for Non-Highway Purposes**

Mississippi provides a reduced rate for gasoline and dyed diesel used for non-highway purposes. The reduced rates are 6.44 cents per gallon and 5.75 cents per gallon of gasoline or dyed diesel. These fuels are generally taxed at 18 cents per gallon if for on road use.

#### **Gasoline Used for Non-Highway Purposes**

You may be entitled to a refund of 11.56 cents per gallon (making this an equivalent to a tax rate of 6.44 cents per gallon) if you desire to purchase gasoline to be used off road. The gasoline must be used for agricultural, maritime, industrial, manufacturing, domestic or non-highway purposes only.

Examples of non-highway include gasoline used in boats, golf carts, machinery used for manufacturing or farm equipment used exclusively in plowing, planting or harvesting farm products.

#### **Refund Gasoline User**

The refund is based on the amount of gallons used. Before a refund is issued, you are required to...

- 1. Obtain a refund gasoline user's permit and a certificate for refund booklet from the Department of Revenue;
- 2. Have a storage tank marked "REFUND GASOLINE"; and,
- 3. Purchase the gasoline from someone who holds a refund gasoline dealer's permit.

No refund will be allowed for gasoline used in motor vehicles owned or operated by a government entity or used in Mississippi government contracts.

#### **Refund Gasoline Dealer**

You must obtain a refund gasoline dealer's permit from the Department of Revenue before selling refund gasoline. At no time should the gasoline be delivered to a tank that is not properly marked. The gasoline must be dyed a distinctive mahogany color at the time of delivery.

The Department of Revenue may waive the dye requirement if the dye may cause damage to the equipment. The refund gasoline user is required to obtain the waiver from the Department of Revenue.

#### **Dyed Diesel Used for Non-Highway Purposes**

Unlike gasoline, you are not required to apply for a refund if you desire to purchase dyed diesel to be used off road. Mississippi provides a reduced rate of 5.75 cents per gallon on dyed diesel used off road. Diesel used on road is subjected to 18 cents per gallon. Dyed diesel used in motor vehicles owned or operated by a government entity or used in Mississippi government contracts will be subjected to 18 cents per gallon.

#### **Dyed Diesel Used on the Highway**

Any person who purchases, receives, acquires or uses dyed diesel for highway use will be liable to pay 18 cents per gallon <u>and</u> subject to a penalty in the amount of \$1000.

#### **Identifying Dyed Diesel**

Storage facilities for dyed diesel must be plainly marked "NONHIGHWAY DIESEL FUEL" or "NONHIGHWAY KEROSENE". Retailers are also required to mark all pumps or dispensing equipment.



Page 1 of 1



# **Special Fuel Used on Government Contracts**

#### State and Local Government Contracts

Special fuel purchased, acquired or used in performing contracts with the State of Mississippi, counties, municipalities or any political subdivision is taxed at a rate of 18 cents per gallon. Special fuel includes but is not limited to the following:

- Dyed diesel fuel;
- Kerosene;
- Undyed diesel fuel; and,
- Fuel oil.

State and local government contracts include construction, reconstruction and maintenance or repairs of projects such as roads, bridges, water systems, sewer systems, buildings, drainage canals and recreational facilities. The Department of Revenue may require contractors to remit the excise tax directly to the state in lieu of paying the tax to a distributor.

#### **Special Fuel Direct Pay Permit**

Contractors that remit the excise tax to the state will be issued a Special Fuel Direct Pay Permit. This permit relieves the distributor from collecting the tax and requires the contractor to file a monthly special fuel return. The distributor should include the contractor's permit number on all invoices that are related to tax-free sales.

The contractor is required to furnish a surety or cash bond guaranteeing the payment of the excise tax prior to receiving the Special Fuel Direct Pay Permit. The Department of Revenue may accept a contractors tax bond if the bond covers the excise tax levied on special fuel.

#### **Special Fuel Distributors**

If the contractor does not have a Special Fuel Direct Pay Permit, distributors are required to collect the 18 cents excise tax and remit the tax to the Department of Revenue. The additional 12.25 cents levied on special fuel (excluding undyed diesel) should be reported on schedules 5F and 5G of the special fuel return.

#### **Environmental Protection Fee**

Special fuel distributors are required to collect the environmental protection fee even if the contractor has a Special Fuel Direct Pay Permit. The fee is levied at 4/10<sup>ths</sup> of a cent per gallon. The fee is suspended or reinstated when the trust fund has exceeded or fallen below the obligatory balance.

#### **Penalties**

Any person who knowingly and willfully purchases untaxed fuel for use in equipment utilized on a road or highway construction site in this state is guilty of a misdemeanor and, upon conviction, shall be fined not less than \$1,000 or more than \$100,000, or imprisoned in the county jail for not more than one year, or both.

#### SECTION 904 - NOTICE TO BIDDERS NO. 2954

CODE: (IS)

**DATE:** 12/01/2020

**SUBJECT:** Reflective Sheeting for Signs

Bidders are hereby advised that the retroreflective sign sheeting used for signs on this project shall be as listed below and shall meet the requirements of Subsection 721.06.

#### **Temporary Construction Signs**

Temporary traffic control (orange) sign sheeting shall be a minimum Type IX Fluorescent Orange sheeting as shown in Special Provision 907-721.

#### **Permanent Signs**

Permanent signs, except signs on traffic signal poles/mast arms, shall be as follows:

- Brown background sheeting on guide signs shall be a minimum Type VIII sheeting,
- Green and blue background sheeting on guide signs shall be a minimum Type IX sheeting, and
- All white, yellow, red, fluorescent yellow, and fluorescent yellow/green sheeting shall be Type XI sheeting.

#### SECTION 904 – NOTICE TO BIDDERS NO. 3599 CODE: (SP)

**DATE:** 08/11/2021

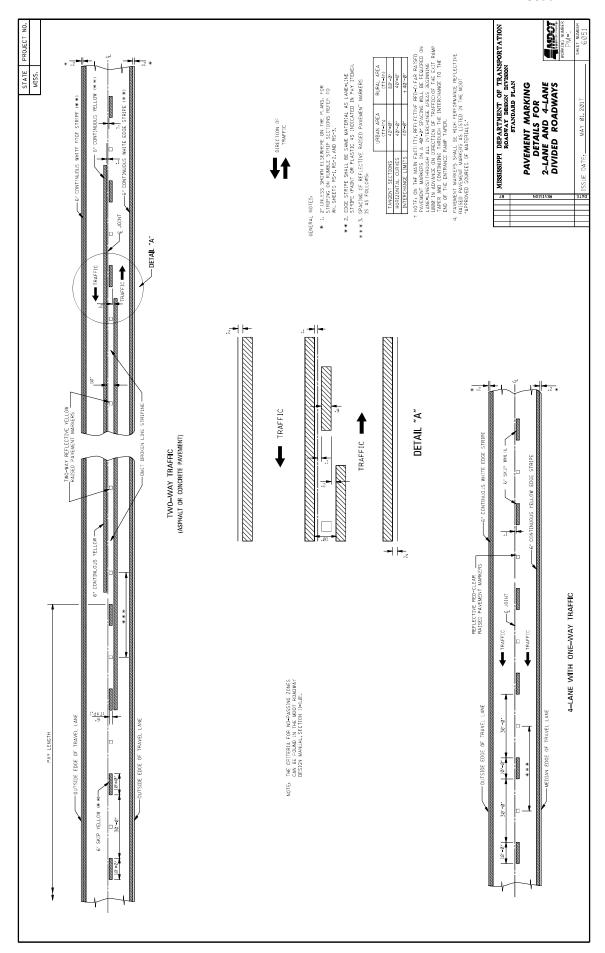
**SUBJECT:** Standard Drawings

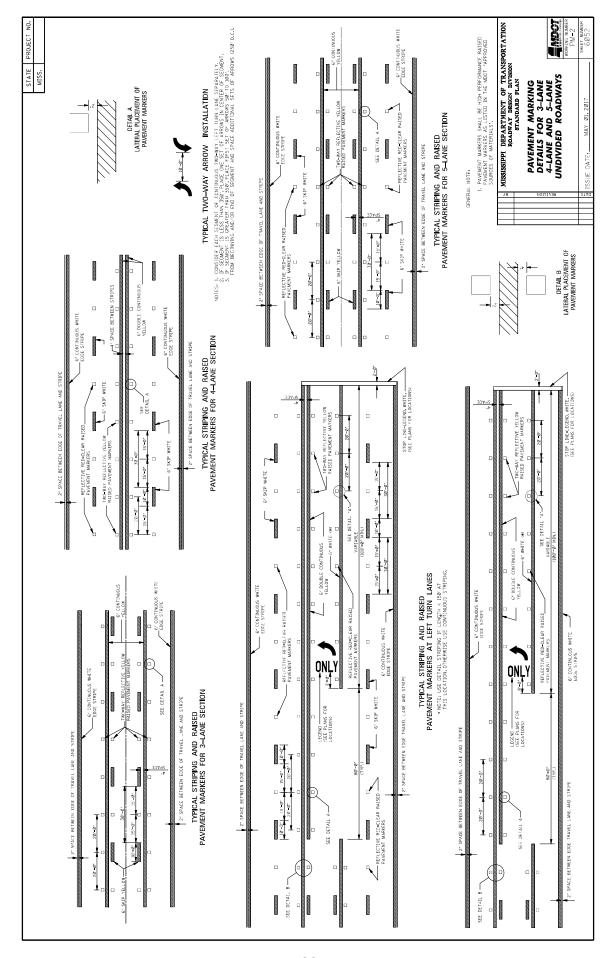
Standard Drawings attached hereto shall govern appropriate items of required work.

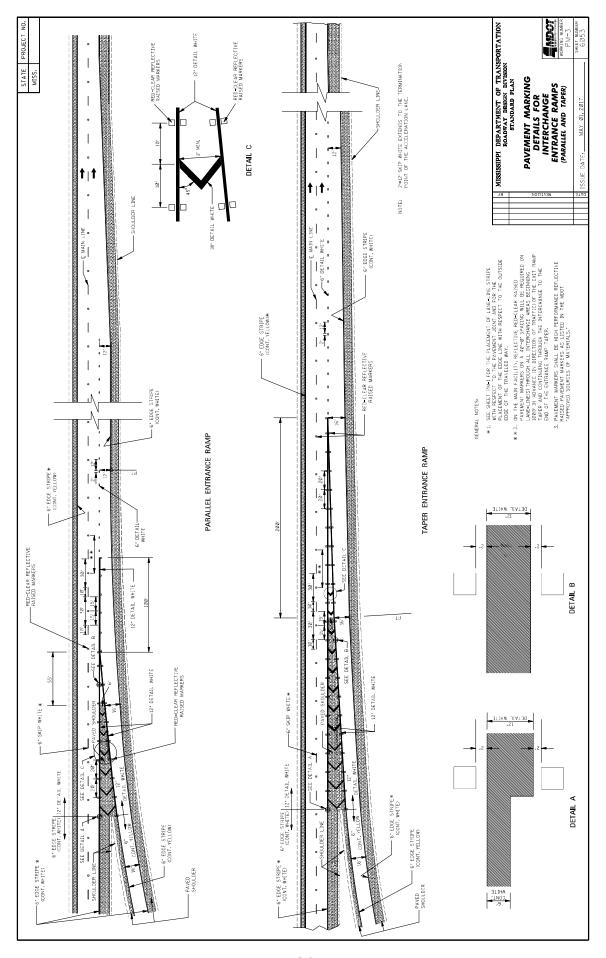
Larger copies of Standard Drawings may be purchased from:

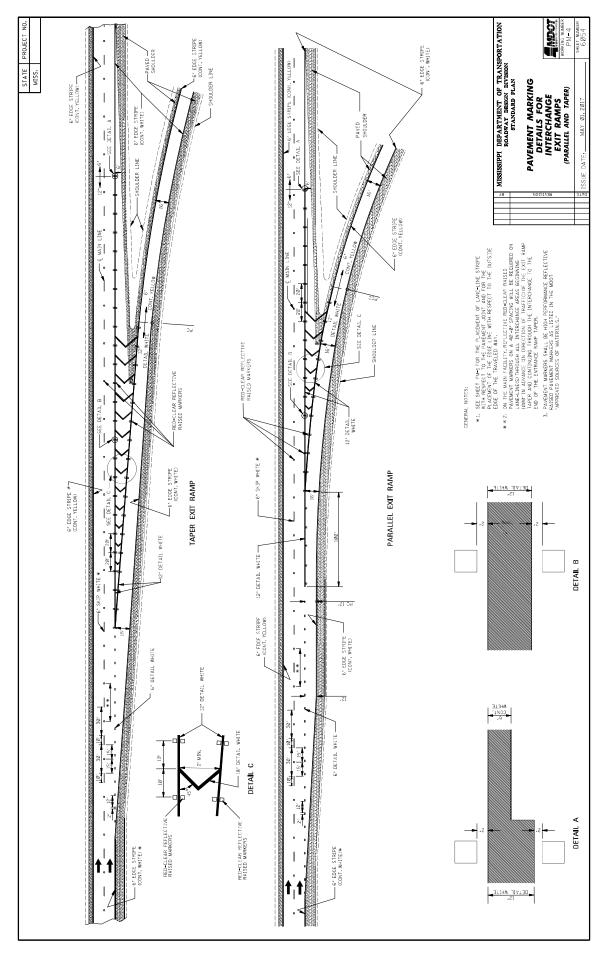
MDOT Plans Print Shop MDOT Shop Complex, Building C, Room 114 2567 North West Street P.O. Box 1850 Jackson, MS 39215-1850 Telephone: (601) 359-7460 or FAX: (601) 359-7461

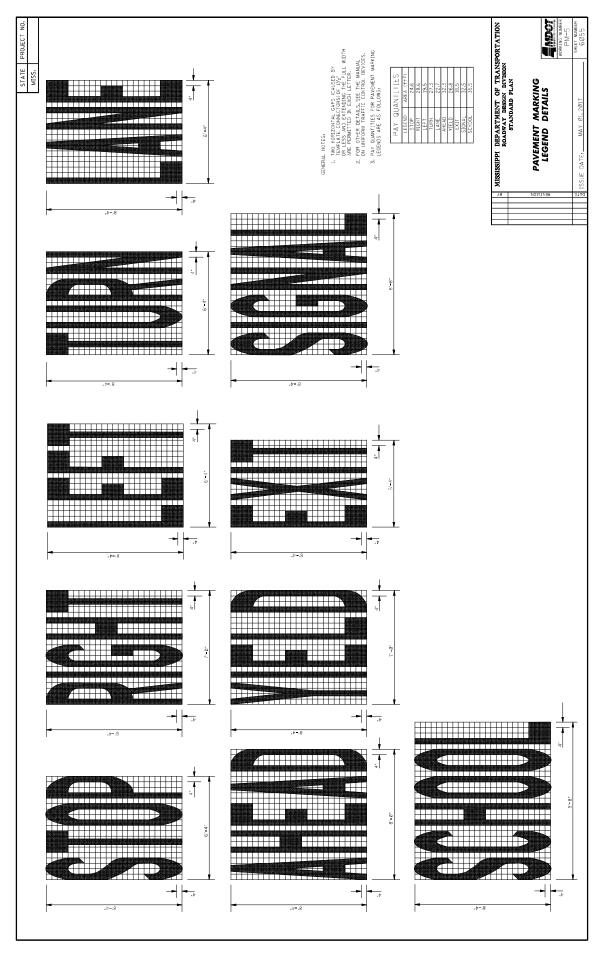
or e-mail: plans@mdot.state.ms.us

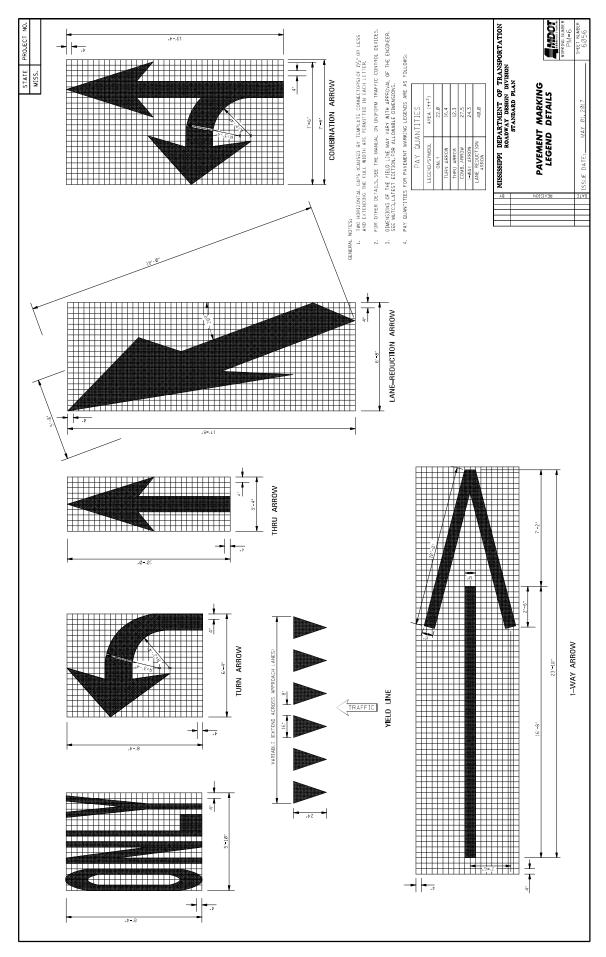


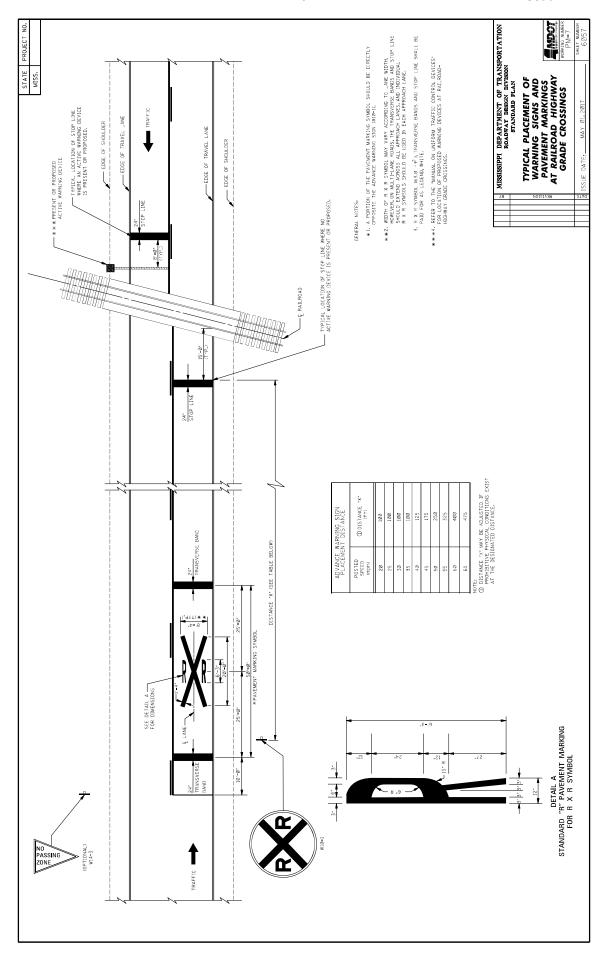


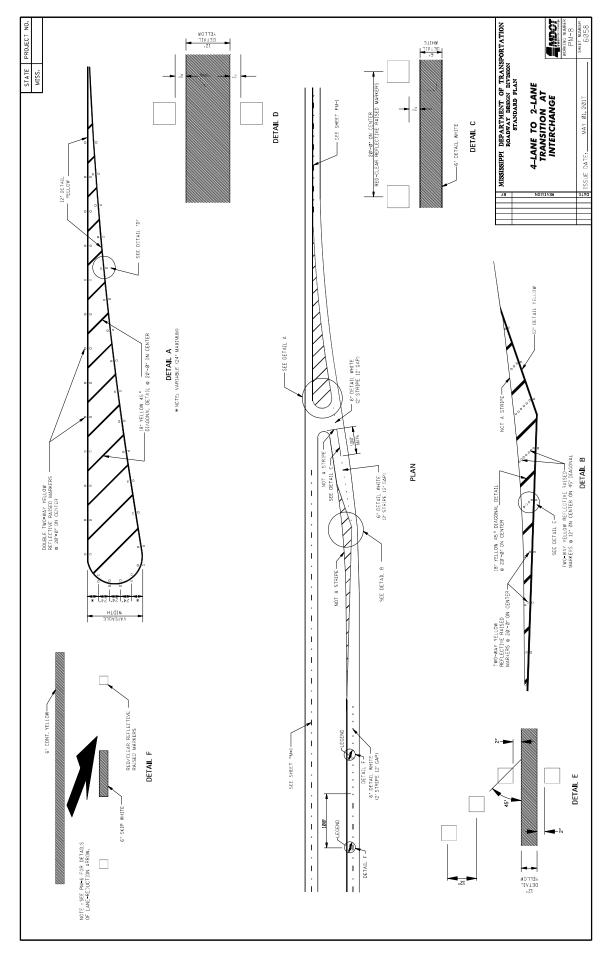


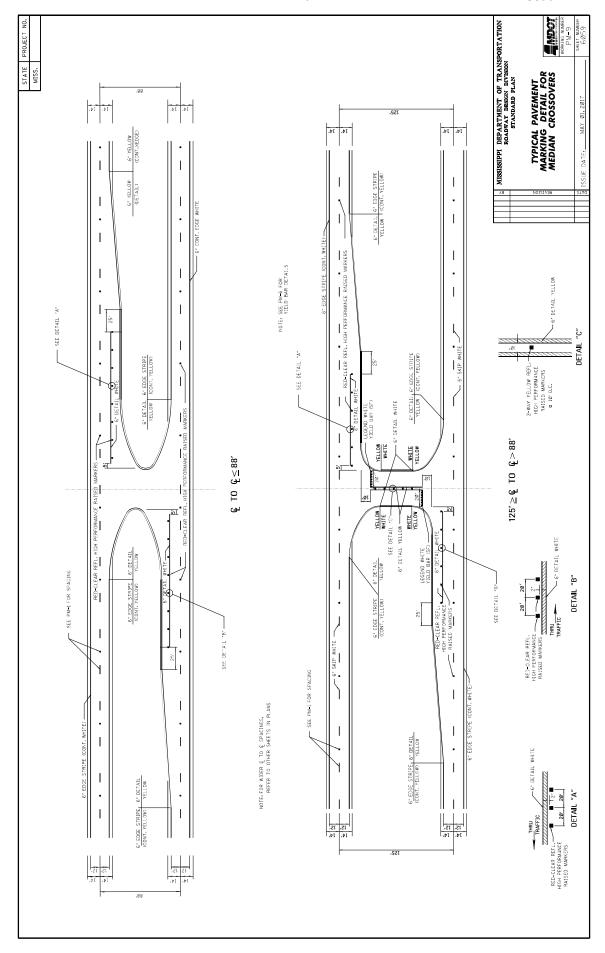


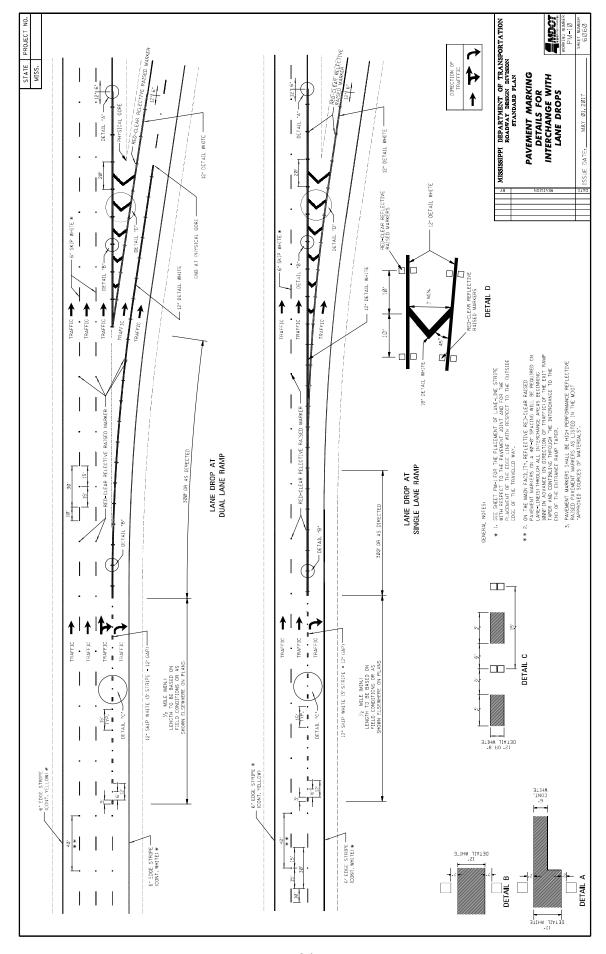


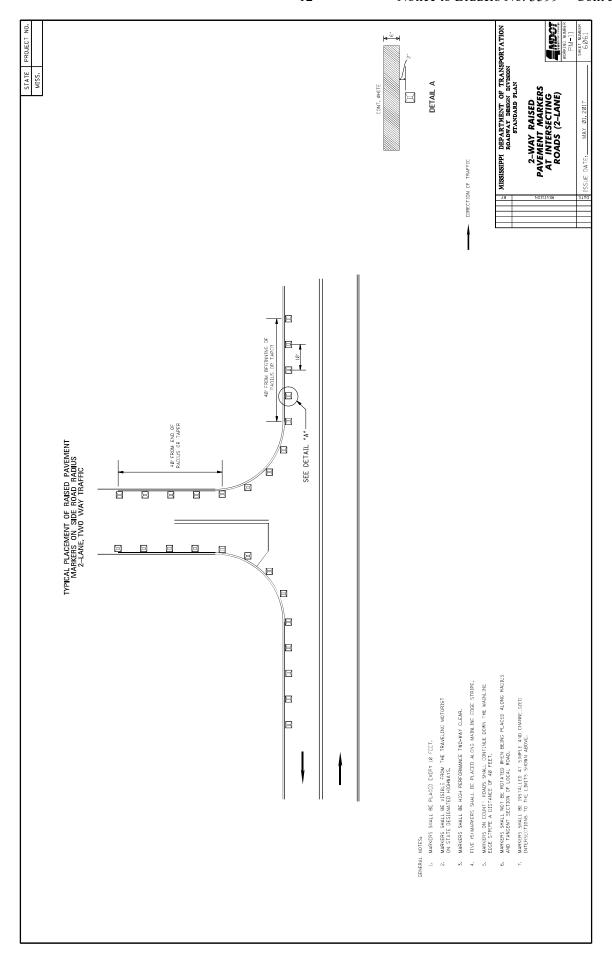


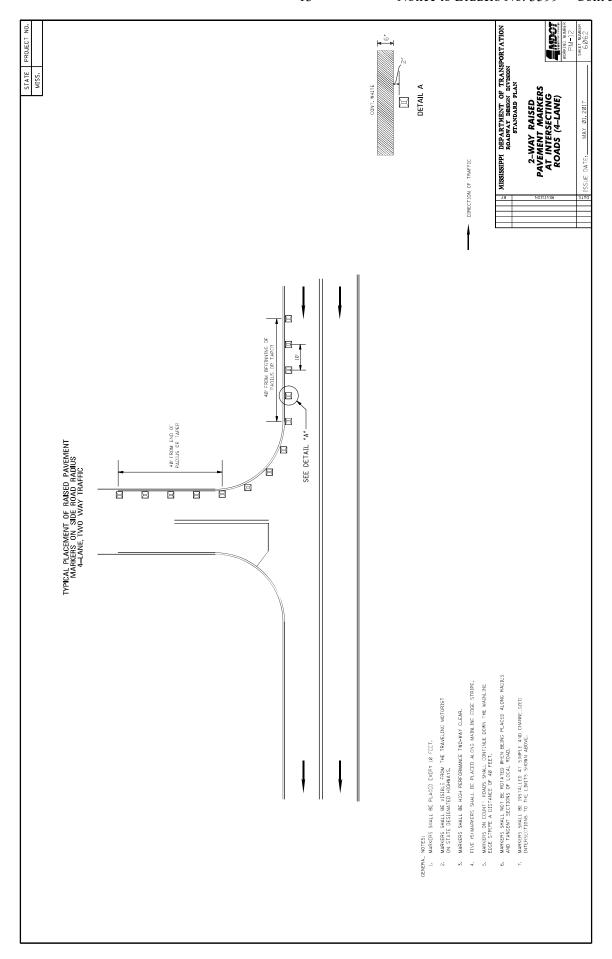


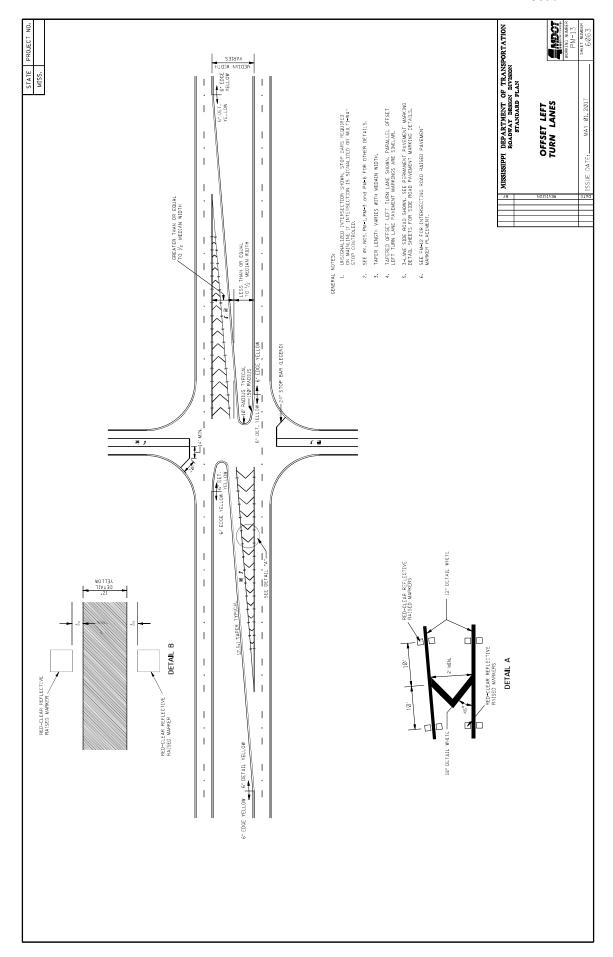


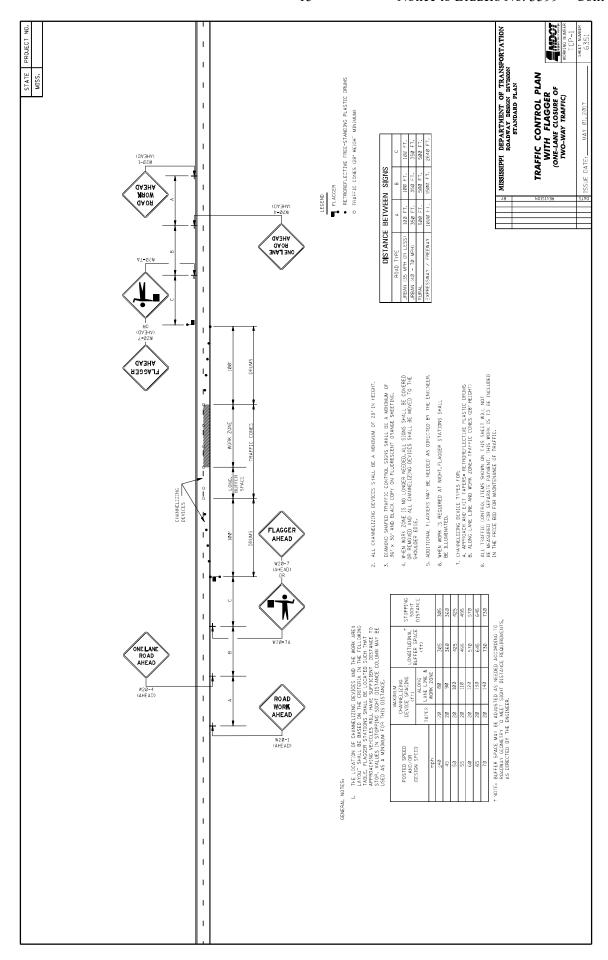


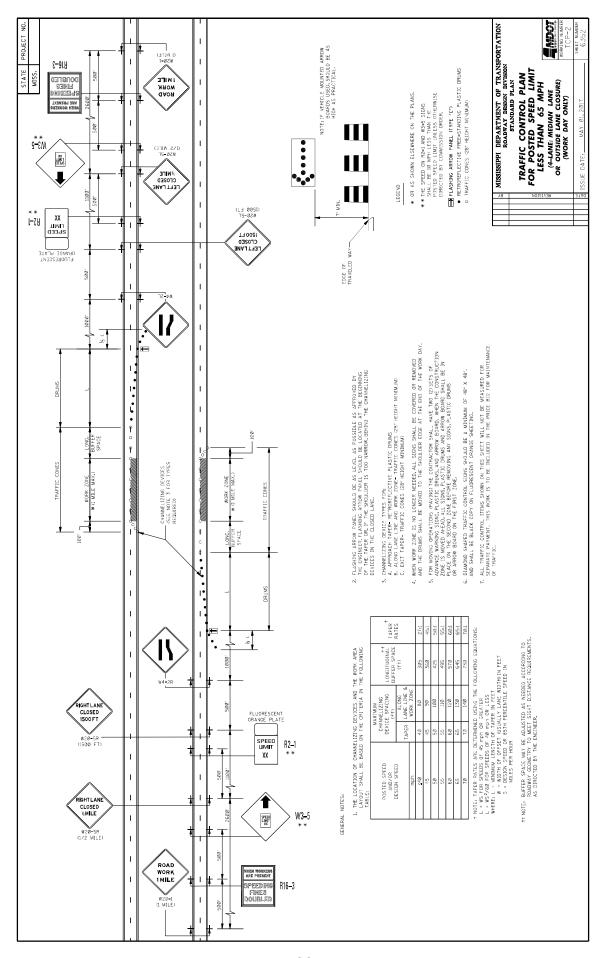


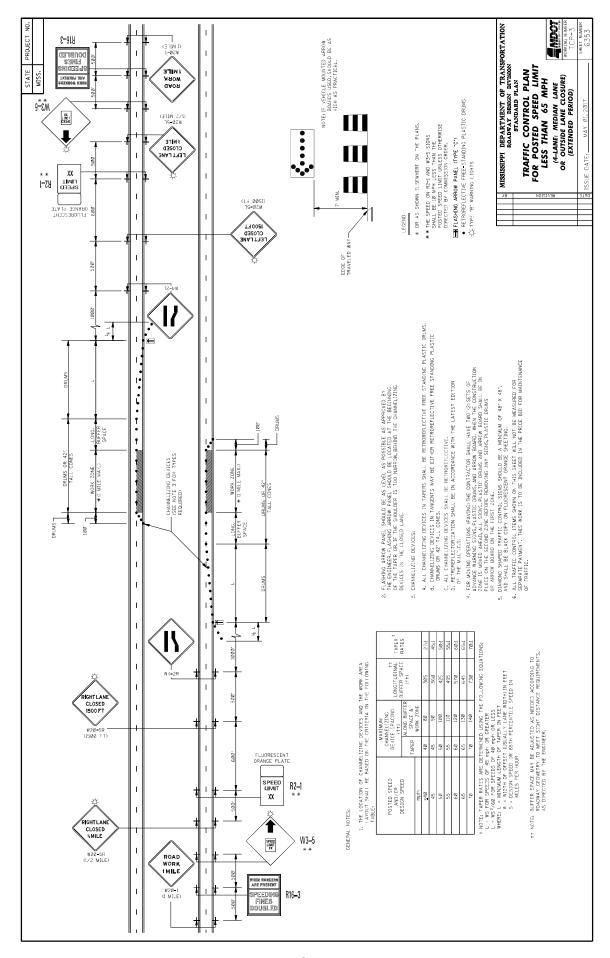


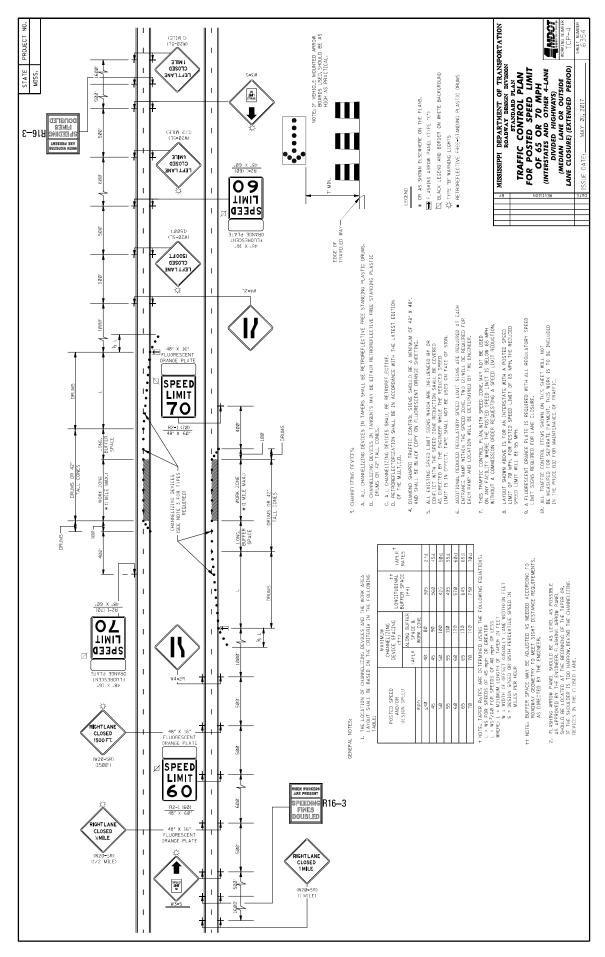


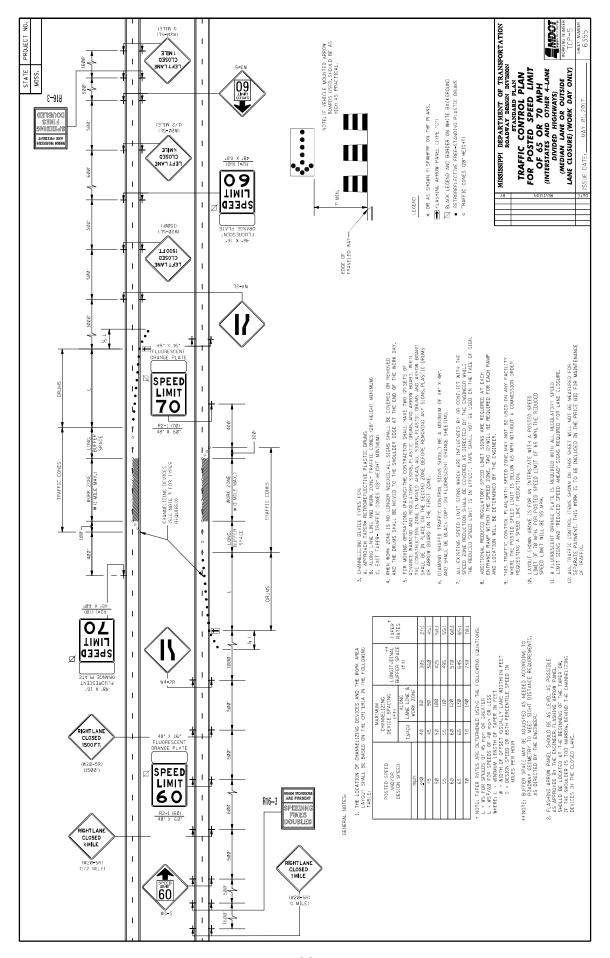


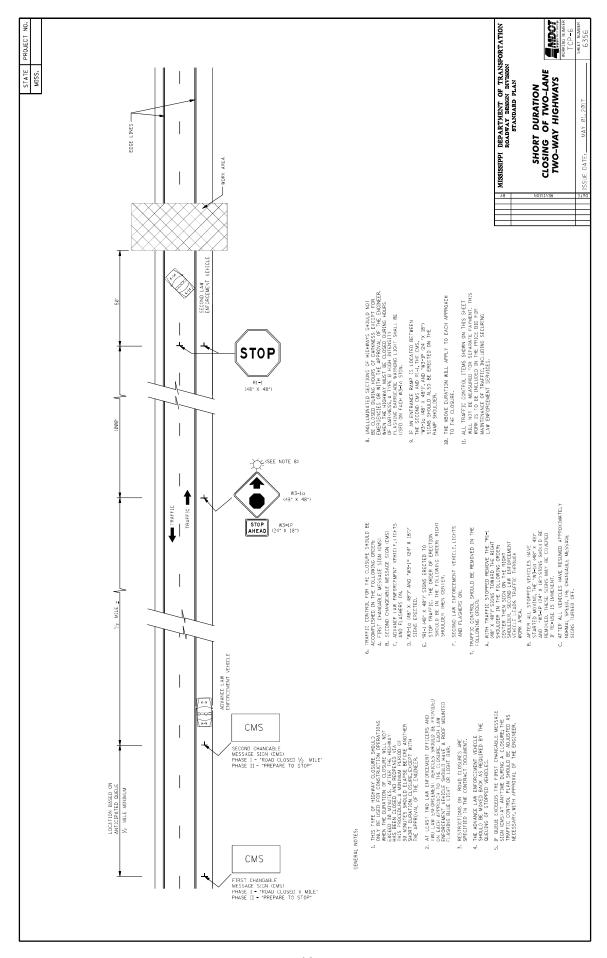


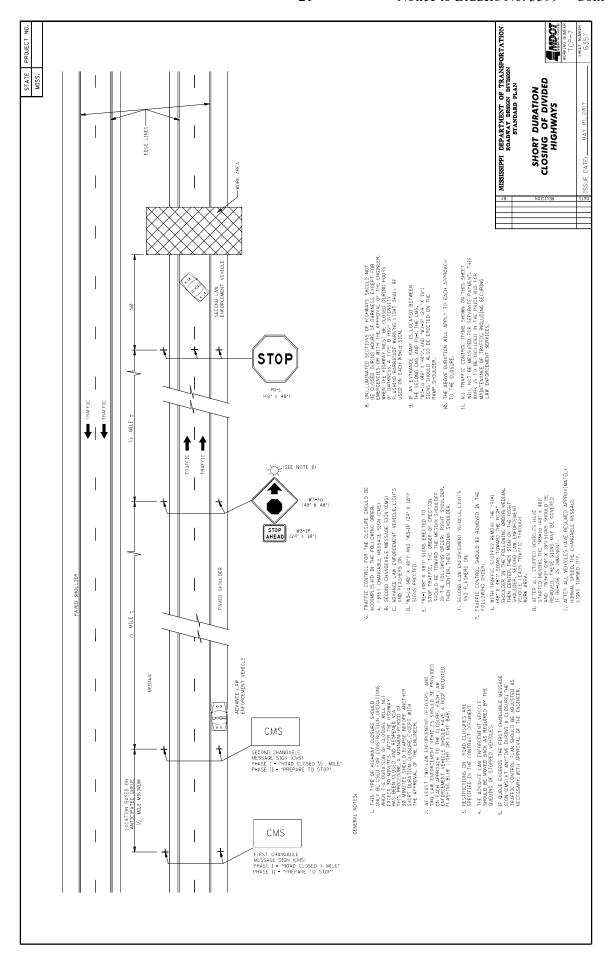


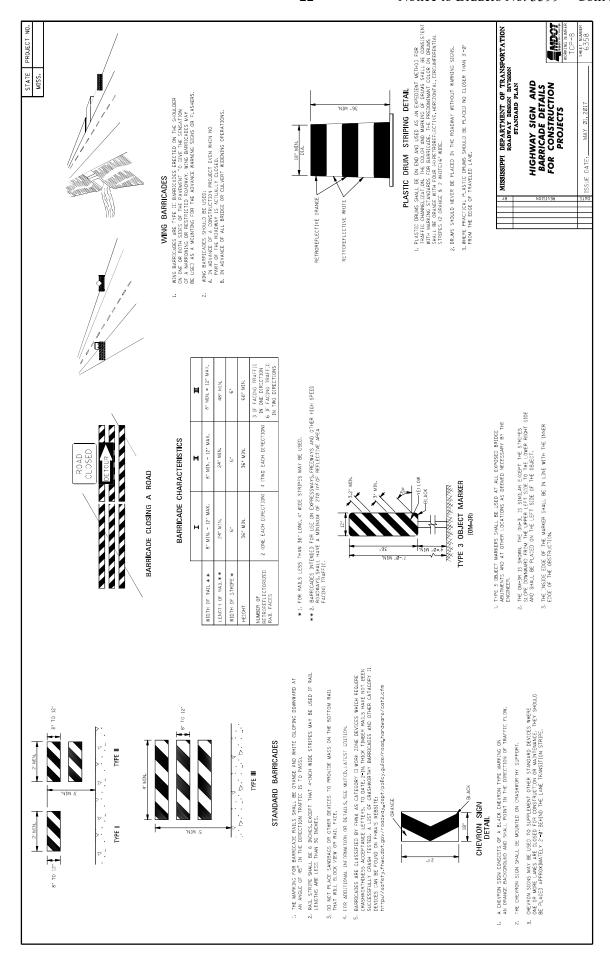


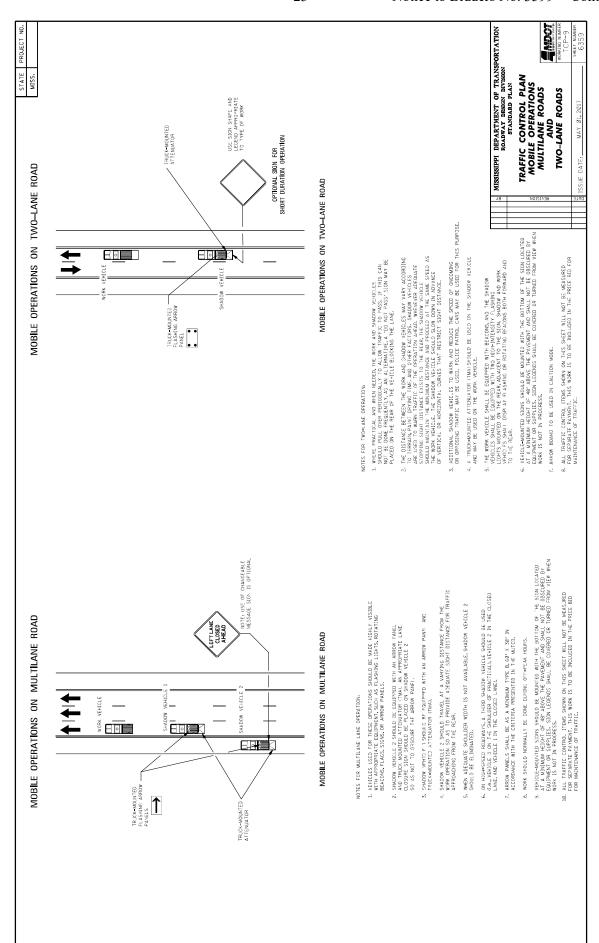


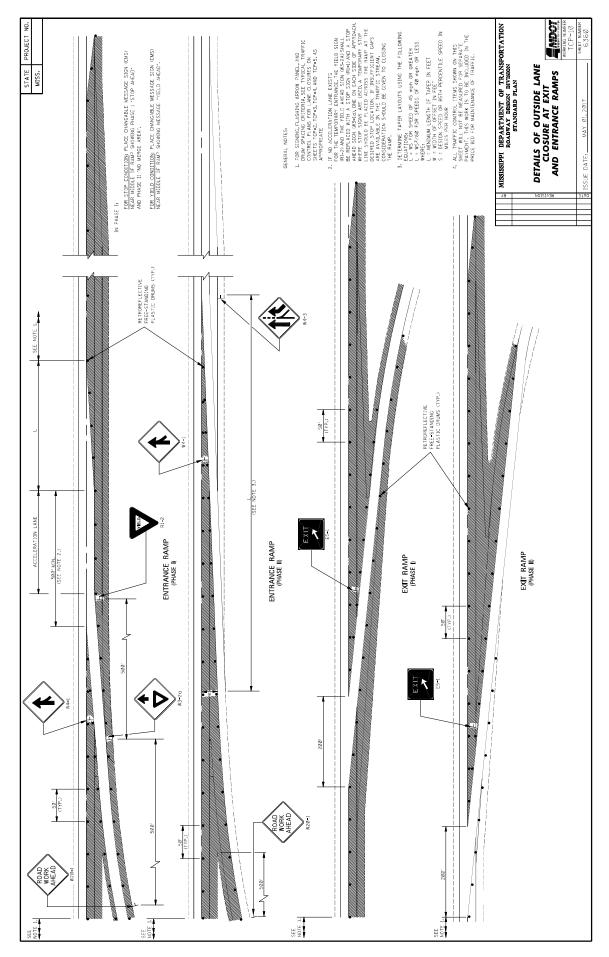


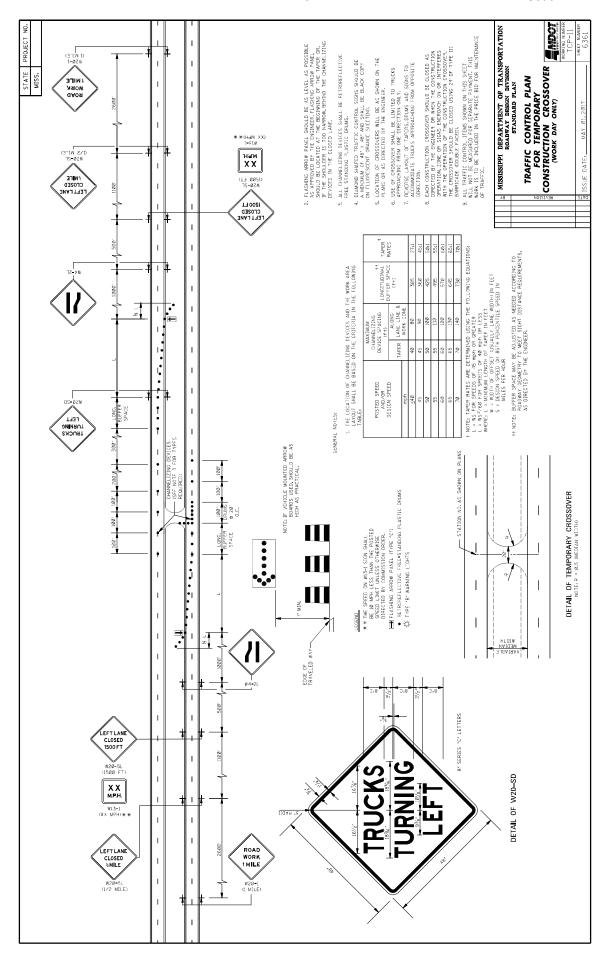


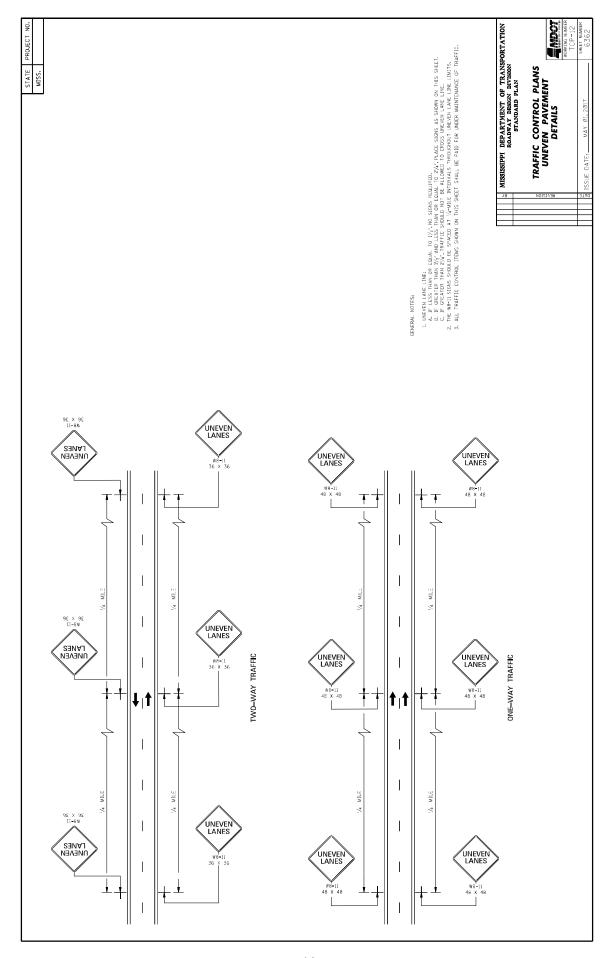


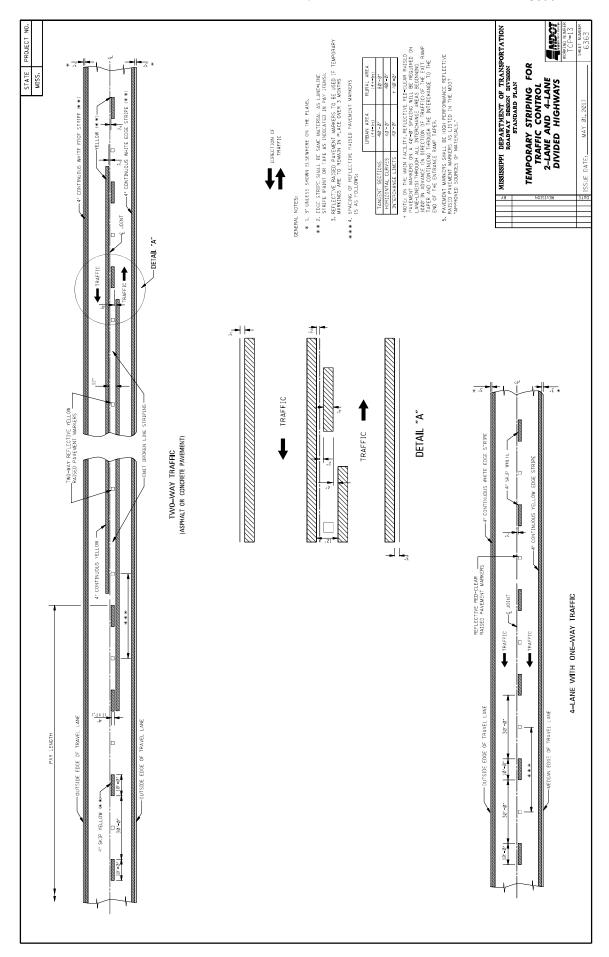


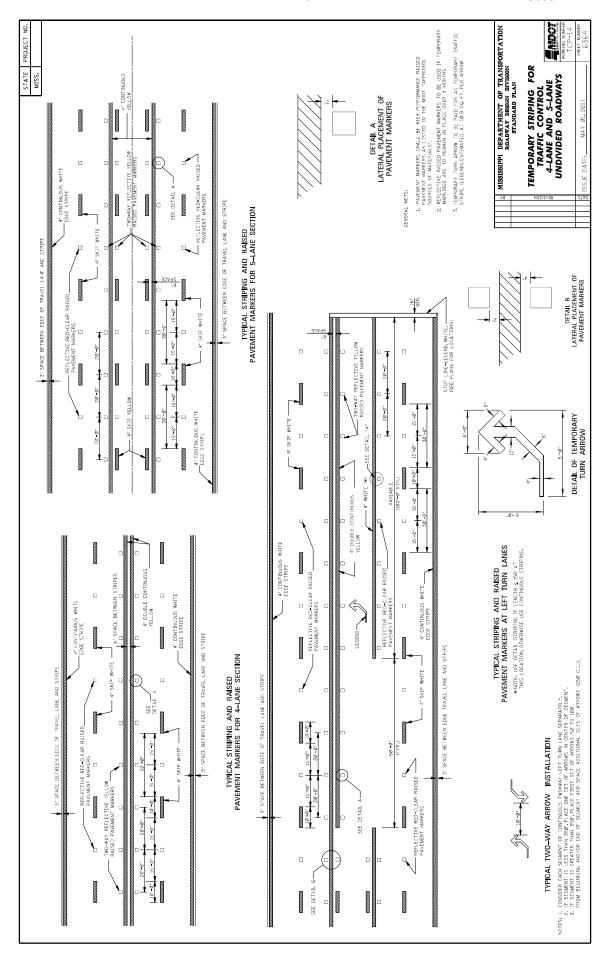


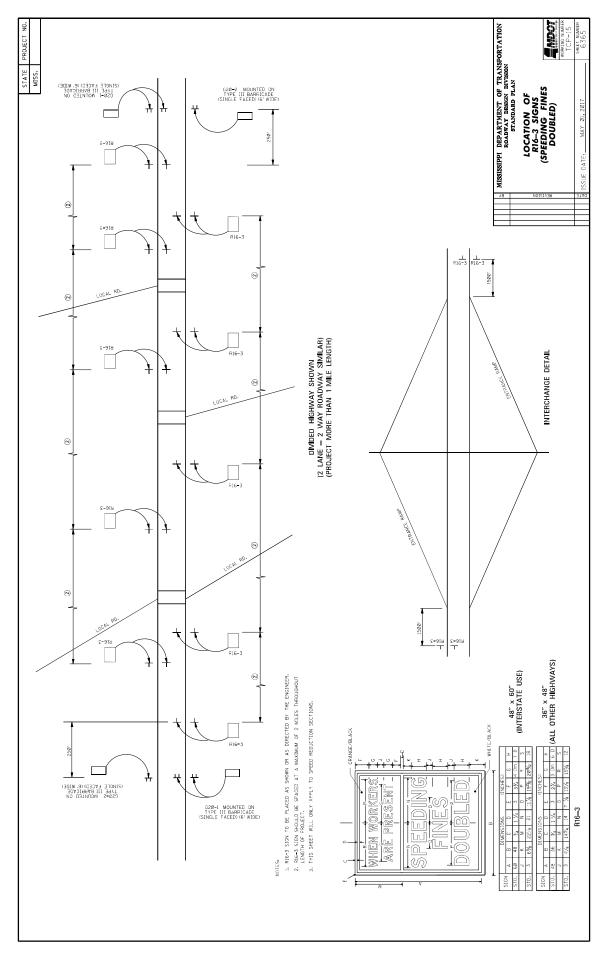


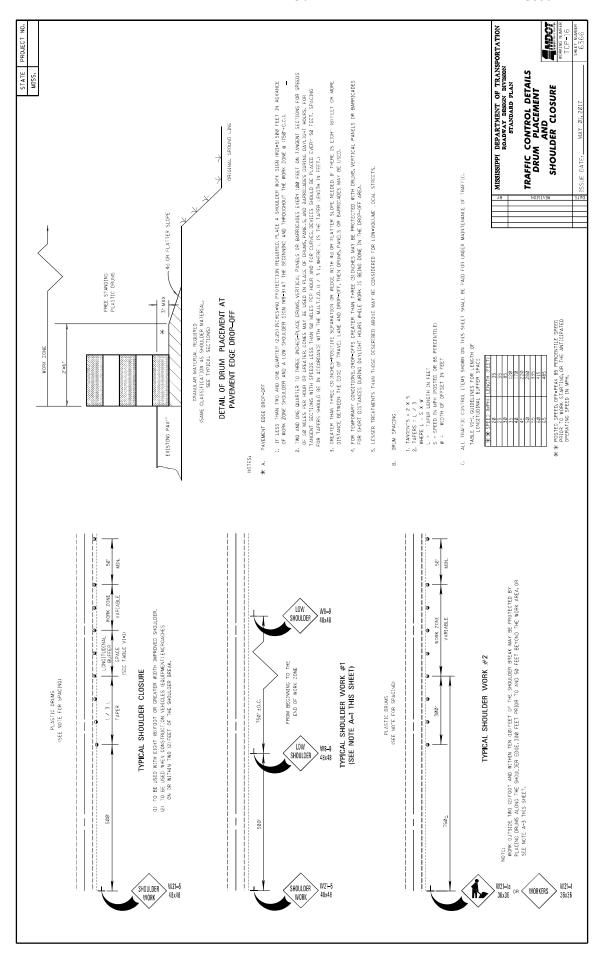


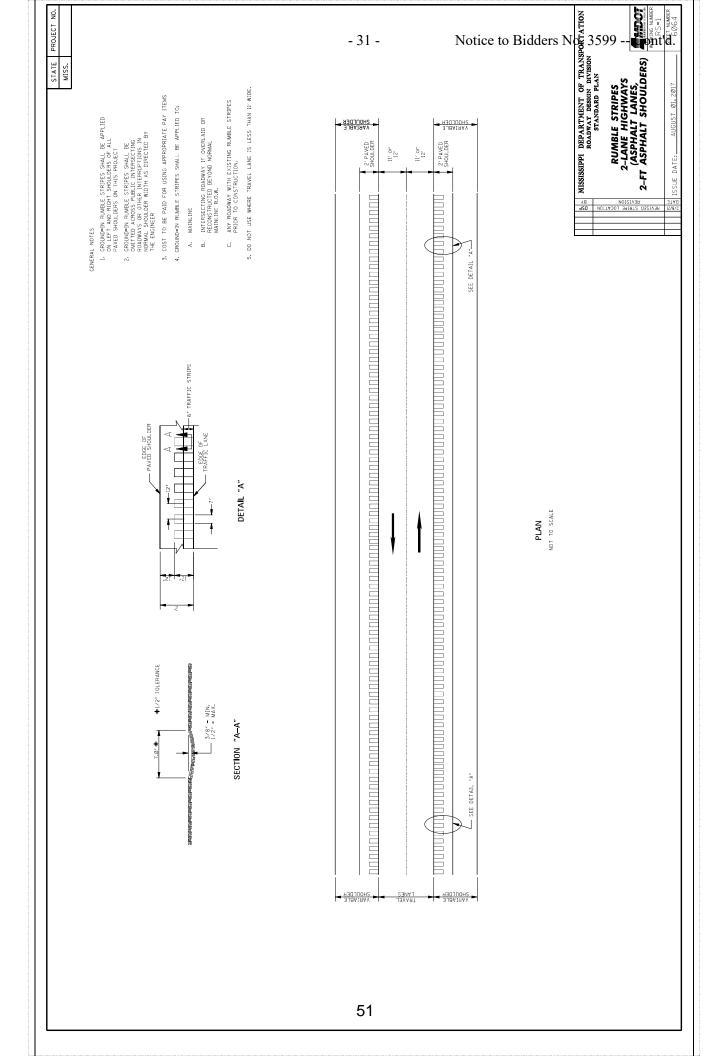


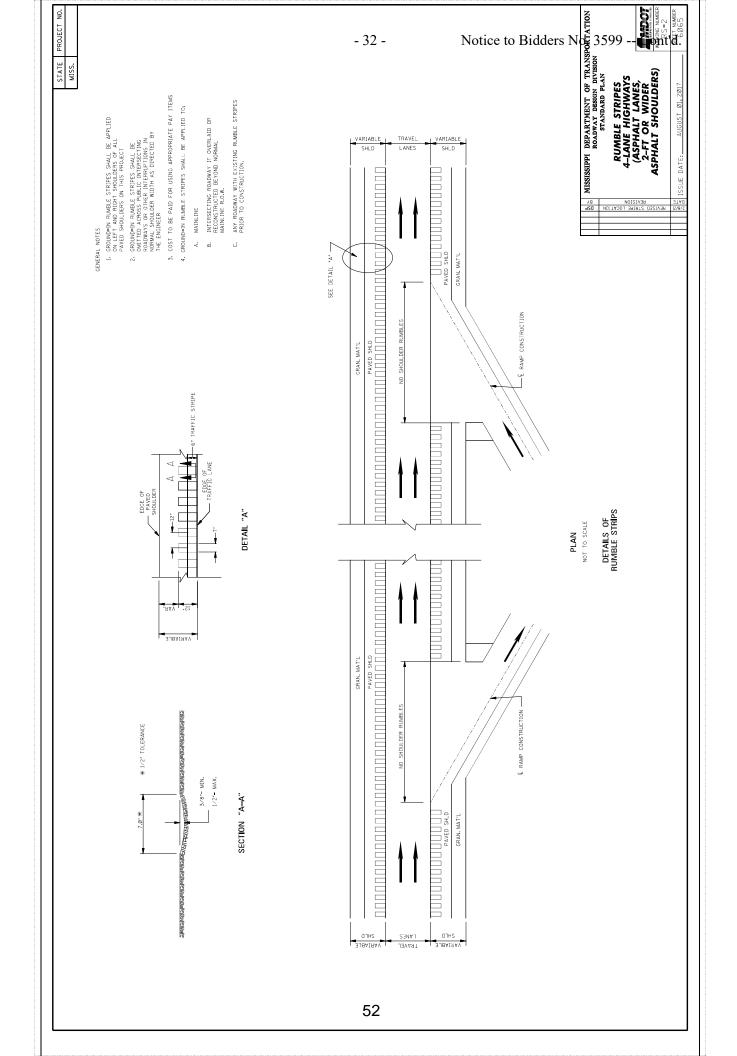


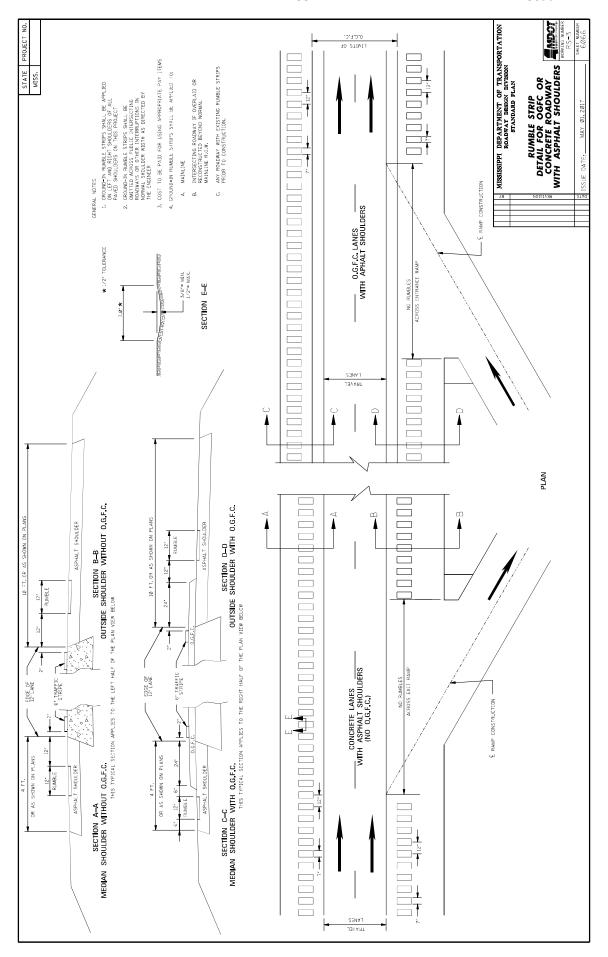












SECTION 904 - NOTICE TO BIDDERS NO. 3676 CODE: (SP)

**DATE:** 09/21/2021

**SUBJECT:** Asphalt Gyratory Compactor Internal Angle Calibration

Bidders are advised that by March 1, 2022, all asphalt gyratory compactors shall be calibrated to an internal angle of  $1.16^{\circ} \pm 0.02^{\circ}$ . This requirement will be reflected in updates made to MT-78, MT-80, and MT-83. This calibration requirement also extends to all QC/QA testing.

SECTION 904 - NOTICE TO BIDDERS NO. 4113 CODE: (SP)

**DATE:** 03/23/2022

**SUBJECT:** Unique Entity ID (SAM) Requirement for Federal Funded Projects

Bidders are advised that the Prime Contractor must register and maintain a current registration in the System for Award Management (<a href="http://sam.gov">http://sam.gov</a>) at all times during this project. Upon registration, the Contractor will be assigned a SAM Unique Entity ID.

Bidders are also advised that prior to the award of this contract, they <u>MUST</u> be registered, active, and have no active exclusions in the System for Award Management.

SECTION 904 - NOTICE TO BIDDERS NO. 4702 CODE: (SP)

**DATE:** 11/22/2022

**SUBJECT:** App for Traffic Control Reports

Bidders are advised that the Department has created a smart phone App for completing and submitting traffic control reports (Form CSD-762) required on this project. The Contractor who monitors traffic control activities and completes traffic control reports will be required to download and use this App when completing and submitting traffic control reports. The reports will then be readily available to all persons who need access to the forms. The App is free and is available for downloading at the following location.

https://extacctmgmt.mdot.state.ms.us/

**SECTION 904 - NOTICE TO BIDDERS NO. 5551** 

CODE: (IS)

**DATE:** 12/06/2023

**SUBJECT:** Federal Bridge Formula

Bidders are hereby advised that the latest revision of Federal Highway Administration Publication No. FHWA-HOP-06-105, **BRIDGE FORMULA WEIGHTS**, dated August 2006, is made a part of this contract when applicable.

Prior to the preconstruction conference, the Contractor shall advise the Engineer, in writing, what materials, if any, will be delivered to the jobsite via Interstate route(s).

Copies of the **BRIDGE FORMULA WEIGHTS** publication may be obtained by contacting:

Federal Highway Administration 400 7<sup>th</sup> Street, SW Washington, DC 20590 (202) 366-2212

or

https://ops.fhwa.dot.gov/freight/publications/brdg frm wghts/

SECTION 904 - NOTICE TO BIDDERS NO. 5750 CODE: (SP)

**DATE:** 03/19/2024

**SUBJECT:** Manual on Uniform Traffic Control Devices (MUTCD)

Bidders are advised that any reference to the current edition of the MUTCD or the latest edition of the MUTCD within plans, proposal, or standard specifications means the <u>2009 Edition and the 3 Revisions thereto</u>.

# SECTION 904 - NOTICE TO BIDDERS NO. 6195 CODE: (SP)

**DATE:** 12/04/2024

**SUBJECT:** Retroreflectivity Requirements

The Bidder's attention is called to Subsection 907-626.03.3 – Reflectivity Requirements in Special Provision No. 907-626-11.

The value shown in Table 1, Minimum Dry Retroreflectivity for Yellow, 275 mcd/m $^2$ /lx is hereby revised to 225 mcd/m $^2$ /lx.

SECTION 904 - NOTICE TO BIDDERS NO. 7044 CODE: (SP)

**DATE:** 06/19/2025

**SUBJECT:** Contract Time

**PROJECT:** STP-7314-01(006) / 109452301 – Hinds County

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable working days are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award will be issued no later than <u>August 12, 2025</u> and the date for Notice to Proceed / Beginning of Contract Time will be <u>September 11, 2025</u>.

Should the Contractor request a Notice to Proceed earlier than <u>September 11, 2025</u> and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed date. Regardless of whether or not an early Notice to Proceed is granted, contract time will start at the original Notice to Proceed date.

All requests for an early Notice to Proceed shall be sent to the Project Engineer who will forward it to the Contract Administration Division.

35 Working Days have been allowed for the completion of work on this project.

SECTION 904 - NOTICE TO BIDDERS NO. 7045

CODE: (SP)

**DATE:** 06/04/2025

**SUBJECT:** Scope of Work

**PROJECT:** STP-7314-01(006) / 109452301 – Hinds County

The contract documents do not include an official set of construction plans but may, in reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, "Standard Drawings"

A general description of the work required on the project is as follows:

Application of thermoplastic pavement markings and raised pavement markers on approximately 6 miles of US 80 from Shaw Road (BOP Station 157+00) to Terry Road (EOP Station 467+41) in Hinds County. Details of specific work are mentioned in the following sections.

## **US 80 From Station 157+00 (BOP) to Station 467+41 (EOP):**

Work in this section shall consist of reestablishing and replacing the thermoplastic pavement markings and raised pavement markers on US 80 and frontage roads. Thermoplastic striping shall be applied over all existing markings on the asphalt pavement. All existing and missing pavement markers shall be replaced in kind throughout the project. Prior to permanent striping, the Contractor shall repair failed areas listed in the provided tables with full depth 12.5-mm, MT, Leveling asphalt. Similarly, the Contractor shall repair failed and faulted joints by milling and leveling areas listed in the provided tables. Failed joints shall be milled a minimum of 2 inches and inlaid with 12.5-mm, MT, Leveling asphalt. Faulted joints shall be surface milled if no potholes are present. If potholes are present, a minimum 2" depth of pavement, or as directed by the Engineer, shall be milled. Loose asphalt shall be removed and inlaid with 12.5-mm, MT, Leveling asphalt. Transverse joints in the asphalt pavement affected by failed area and joint repairs shall be located and replaced in their original positions. Undersealing shall be performed at the listed location.

# **Milling**

Milling/paving will not begin until an **approved** asphalt mix design has been received.

The reclaimed asphalt pavement (RAP) material removed by the milling operation shall become the property of the Contractor.

Where milling is required, the Contractor shall provide outlets in the existing shoulders at sufficient intervals to prevent pooling or standing water on the milled surface, the cost of which shall be absorbed in other items bid.

Milling and paving operations shall be performed such that a -2% slope from centerline is provided in normal crown roadway sections. Superelevation through curves shall be maintained as it currently exists or improved as directed.

Milling operations shall be performed in accordance with the Contract documents and the Standard Specifications. Variable width and length transitions may be required for ties at ramps, local roads, and project limits.

Traffic will **NOT** be allowed on the milled surface.

#### **Paving**

Per Subsection 401.02.3.2, the asphalt mix design shall be submitted to the Engineer at least 10 working days prior to its proposed use.

Prior to permanent pavement marking operations, failed areas and joints in the existing pavement shall be removed and backfilled with 12.5-mm, MT, Leveling asphalt as per the attached details. Asphalt shall be placed in multiple lifts with a maximum lift thickness of 3". Any granular/chemically treated/stone/etc. base or subgrade material deemed unsuitable by the Engineer shall be removed as directed and backfilled with 12.5-mm, MT, Leveling asphalt. Payment for the excavation of the granular base and subgrade will be made using the 203-G: Excess Excavation pay item. Lists of the failed areas and joints are shown in the attached tables. Pavement repairs shall be completed as a continuous operation in order to minimize traffic impacts. Traffic will not be allowed to travel across joints that have been milled two inches (2") or greater and not backfilled. Lane closures shall remain in place until the failed area has been completely repaired. Lane closures may not be left unattended.

The surface lift for failed area repair or concrete punchout repair shall have a maximum deviation of 1/8" as determined by a 10-foot straight edge. Any location that deviates more than this tolerance, as determined by the Engineer, shall be corrected at no additional cost to the State.

If traditional excavation methods are used, the removal area shall first be saw cut full depth including concrete, where applicable, to create a neat line and prevent damage to the adjacent pavement structure. Payment for saw cuts will be made using the appropriate items. If milling techniques are used, the area will not require saw cuts but care should be exercised to create a neat removal line and to prevent damage to the adjacent pavement structure. If saw cuts are used in conjunction with milling, payment will be made using the appropriate pay items. Payment will not be made for saw cuts that are not performed.

### **Temporary and Permanent Pavement Markings**

Temporary traffic stripe will be required immediately after the milling and/or required failed area repair and prior to opening area to traffic. Temporary stripe is to be placed in the same location and configuration as the permanent stripe.

Temporary striping shall conform to finished stripe specifications for alignment, neatness, and straightness.

The use of short strips of traffic tape will not be allowed unless approved by the Engineer.

The Contractor shall be responsible for ensuring a proper bond between the new thermoplastic pavement markings and the existing thermoplastic pavement markings is achieved. This shall include any necessary cleaning or preparation of the existing thermoplastic pavement markings prior to the application of the new thermoplastic pavement markings.

All permanent striping shall be double drop thermoplastic, 90-mil thickness unless otherwise specified in Subsection 907-626.03. Edge lines shall be placed to accommodate the lane widths shown on the attached applicable typical sections unless prevented by field conditions.

Payment for edge stripe on local roads shall be made under pay item 907-626-G: Thermoplastic Double Drop Detail Stripe, White when the length of said stripe is less than 150 feet when measured from the end of the radius. If the measured length is greater than 150 feet, then payment shall be made under pay item 907-626-B: 6" Thermoplastic Double Drop Traffic Stripe, Continuous White.

Payment for centerline stripe on local roads shall be made under pay item 907-626-G: Thermoplastic Double Drop Detail Stripe, Yellow when the length of said stripe is less than 150 feet when measured from the stop bar. If the measured length is greater than 150 feet, then payment shall be made under pay item 907-626-E: 6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow. Centerline stripe shall be omitted on local roads whose width is less than 20 feet.

Permanent raised pavement markers shall be installed on mainline and local public roads.

#### **Traffic Control**

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 shall be included in the price bid for pay item 907-618-A: 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.

Lane closures shall not be left unattended by the Contractor's personnel. Ramp closures will not be allowed without written approval from the Engineer.

Standard roadside construction signs, barricades, etc. shall be placed in accordance with the attached tables, drawings, and as directed by the Engineer. W20-1 signs shall be placed on all public road approaches as shown or as directed. Payment for standard roadside construction signs, barricades, etc. will be made using the appropriate pay items.

The Contractor shall on a daily basis, remove all debris from within the roadway and a 30-foot clear zone which, in the opinion of the Engineer, is a hazard to the traveling public. This activity shall begin with the beginning of work or the beginning of the contract time, whichever comes first. No direct payment will be made for the debris removal; the cost is to be included in the prices

of items bid. Failure of the Contractor to remove the debris as prescribed herein shall be just cause for withholding the monthly progress estimate payment or suspending active operations until the debris is satisfactorily removed by the Contractor.

Potholes that may exist or occur in the existing pavement shall be patched in a timely manner as required. Patching of potholes shall be considered an absorbed item.

#### **Miscellaneous Notes**

The locations listed in the Undersealing table shall be undersealed in order to correct any grade differential within the asphalt roadway. All costs associated with this operation shall be paid for under pay item 907-420-A: Undersealing.

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

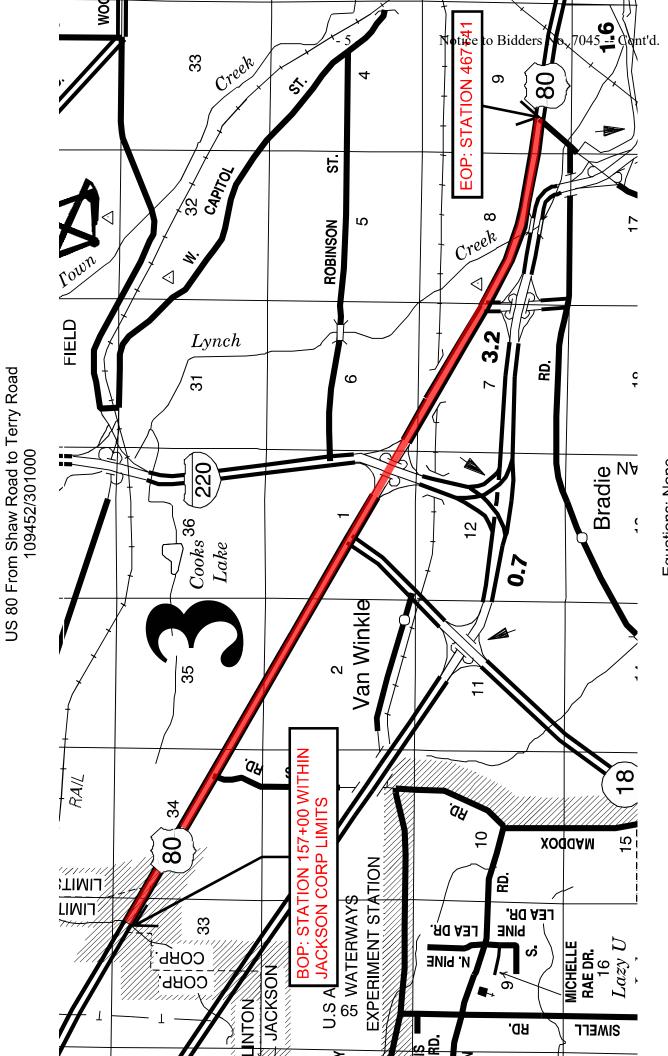
Any signs that are in conflict with construction of this project shall be removed and relocated by the Contractor as directed by the Engineer; the cost of which is to be absorbed in other items bid.

Removal of existing raised pavement markers shall be included in the prices for other items bid.

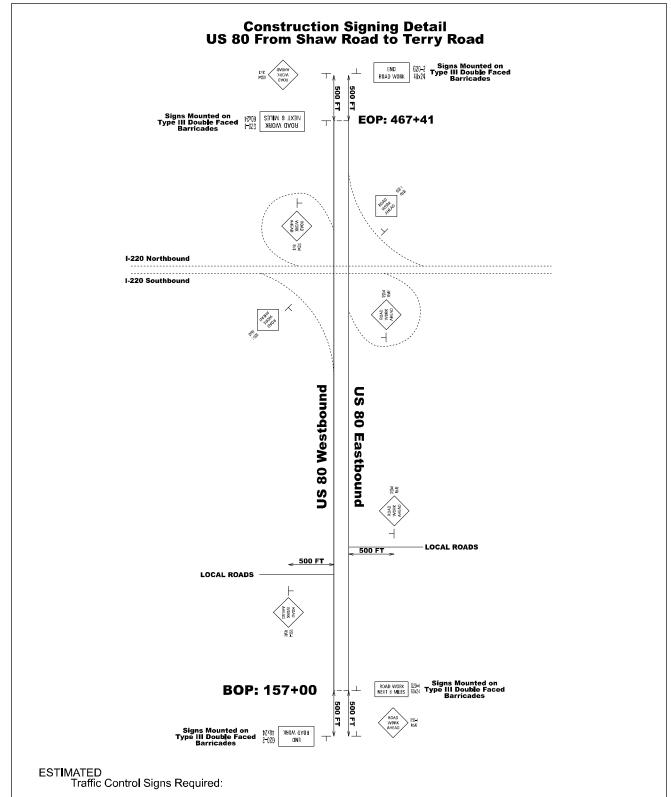
Incidental work such as removing vegetation, shaping and compacting shoulders, removing and resetting signs and/or mailboxes, removing excess asphalt material, project clean-up, and other items of incidental work necessary to complete the project will not be measured for separate payment and will be considered included in the prices of items bid.

Prior to the final inspection, bridges, islands, and areas with curb shall be swept/cleaned. Care should be taken to prevent milled asphalt, asphalt debris, vegetative/granular debris, etc. from entering drainage structures or clogging other drainage ways. Disposal of material will not be measured for separate payments.

Following the failed area repair operation the transverse joints in the asphalt pavement shall be sawed and sealed within seven (7) days. The details for sawing and sealing transverse joints for this section are in the Standard Specifications. The width of the sawing and sealing operation will be 12' on each side of centerline, unless otherwise directed by the Engineer, to prevent "sympathy cracking." It is the responsibility of the Contractor to locate and mark all existing joints that are to be sawed and sealed prior to the milling operation. The Contractor is to notify the Department when this is to take place so that they can oversee the work and determine the width that each joint will be sawed and sealed.



**Equations: None** 

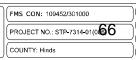


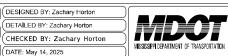
46 - W20-1 "ROAD WORK AHEAD"
2 - G20-1 "ROAD WORK NEXT 6 MILES"
2 - G20-2 "END ROAD WORK"
4 - TYPE III DBL. FACED BARRICADES (6LF)

NOTES: One (1) W20-1 "ROAD WORK AHEAD" Sign is Required at each Local Road, Street, or Highway Entering the Project. See Standard Roadside Construction Sign Table for Locations.



**Construction Signing Detail** 







			1	09452/3010	109452/301000 Full Depth Repair	pair			
Location	Station	Station	Length LF	Width LF	503-C010 Saw Cut, Full Depth LF	202-B009 Removal of Asphalt, Failed Areas, SY	203-G002 Excess Exc., LVM CY,	907-403-B002 12.5 mm MT, Leveling, Ton	407-A001 Asphalt for Tack Coat, Gal
US 80 Eastbound, RT Lane	195+00	195+40	40	12	104	53.33	11.11	38.13	5.33
US 80 Eastbound, RT Lane	206+50	207+50	100	12	224	133.33	27.78	95.33	13.33
North Frontage Rd, RT Lane	442+00	442+00 444+70	270	11	551	330.00	68.75	235.95	33.00
RAMP, NB 220 to WB 80	331+70	332+10	40	20	120	88.89	18.52	63.56	8.89
				Total	999.00	605.56	126.16	432.97	60.56

			109452/3010	000 US 80 FAILED JOIN	TS		
Location	Station	Width, LF	Length, LF	406-D001 Fine Milling of Bituminous Pvmt, All Depths, SY	907-403-B002 12.5 mm MT, Leveling, Ton	407-A001 Asphalt for Tack Coat, Gal	907-413-E001 Sawing and Sealing Transverse Joints, LF
WB							
LT Lane	188+00	12	10	13.333	1.467	1.333	12
LT Lane	195+10	12	10	13.333	1.467	1.333	12
LT Lane	203+50	12	10	13.333	1.467	1.333	12
LT Lane	209+00	12	10	13.333	1.467	1.333	12
LT Lane	212+00	12	10	13.333	1.467	1.333	12
RT Lane	292+90	12	10	13.333	1.467	1.333	12
EB							
RT Lane	292+90	12	10	13.333	1.467	1.333	12
RT Lane	311+30	12	10	13.333	1.467	1.333	12
LT Lane	314+20	12	10	13.333	1.467	1.333	12
RT Lane	314+20	12	10	13.333	1.467	1.333	12
LT Lane	347+25	12	10	13.333	1.467	1.333	12
RT Lane	347+25	12	10	13.333	1.467	1.333	12
LT Lane	389+00	12	10	13.333	1.467	1.333	12
RT Lane	389+00	12	10	13.333	1.467	1.333	12
RT Lane	455+80	12	10	13.333	1.467	1.333	12
			TOTAL	200.000	22.000	20.000	180

Pavement joints are approximate and shall be verified in the field by the Contractor.

Joints shall be surface milled if no potholes are present. If potholes are present, mill a minimum 2" depth of pavement, remove loose asphalt, and pave with 12.5 mm, MT, Leveling.

Milled areas shall be 5 linear feet on either side of joint or as directed by the Engineer.

Transverse pavement joints shall be located by the Contractor prior to milling operations.

	109452/301000 US 80 FAULTED JOINTS									
Location	Station	Width, LF	Length, LF	406-D001 Fine Milling of Bituminous Pvmt, All Depths, SY	907-403-B002 12.5 mm MT, Leveling, Ton	407-A001 Asphalt for Tack Coat, Gal	907-413-E001 Sawing and Sealing Transverse Joints, LF			
WB										
LT Lane	187+50	12	10	13.333	1.467	1.333	12			
LT Lane	193+40	12	10	13.333	1.467	1.333	12			
LT Lane	208+80	12	10	13.333	1.467	1.333	12			
LT Lane	217+30	12	10	13.333	1.467	1.333	12			
RT Lane	217+30	12	10	13.333	1.467	1.333	12			
LT Lane	236+70	12	10	13.333	1.467	1.333	12			
RT Lane	236+70	12	10	13.333	1.467	1.333	12			
EB										
RT Lane	273+50	12	10	13.333	1.467	1.333	12			
			TOTAL	106.667	11.733	10.667	96			

Pavement joints are approximate and shall be verified in the field by the Contractor.

Joints shall be surface milled if no potholes are present. If potholes are present, mill a minimum 2" depth of pavement, remove loose asphalt, and pave with 12.5 mm, MT, Leveling.

Milled areas shall be 5 linear feet on either side of joint or as directed by the Engineer.

Transverse pavement joints shall be located by the Contractor prior to milling operations.

		619-D2001 Standard Roadsid	e Construct	ion Signs :	10 SF or More
Station	Location	Description	Quantity	Unit	Remarks
152+00	RT	W20-1 (Road Work Ahead 500 FT)	16	SF	500' west of BOP
472+41	LT	W20-1 (Road Work Ahead 500 FT)	16	SF	500' east of BOP
157+00	RT	G20-1 (Road Work Next 6 MI)	10	SF	ВОР
467+41	LT	G20-1 (Road Work Next 6 MI)	10	SF	EOP
157+00	LT & RT	W20-1 (Road Work Ahead)	32	SF	Shaw Rd
173+00	RT	W20-1 (Road Work Ahead)	16	SF	Norman St
178+00	LT	W20-1 (Road Work Ahead)	16	SF	Zepher Rd
203+50	RT	W20-1 (Road Work Ahead)	16	SF	Wiggins Rd
209+50	LT	W20-1 (Road Work Ahead)	16	SF	South dr
214+00	LT	W20-1 (Road Work Ahead)	16	SF	Dewees Cir, West
217+65	LT	W20-1 (Road Work Ahead)	16	SF	Dewees Cir, East
222+70	LT	W20-1 (Road Work Ahead)	16	SF	Cabaniss Cir
242+20	RT	W20-1 (Road Work Ahead)	16	SF	Gault St
245+00	LT & RT	W20-1 (Road Work Ahead)	32	SF	Westhaven Blvd
255+00	RT	W20-1 (Road Work Ahead)	16	SF	Regina St
260+20	RT	W20-1 (Road Work Ahead)	16	SF	Whiting Rd
265+00	LT	W20-1 (Road Work Ahead)	16	SF	Summer Dr
275+00	LT & RT	W20-1 (Road Work Ahead)	32	SF	Morson Rd
290+40	LT	W20-1 (Road Work Ahead)	16	SF	Carter Cir
292+00	RT	W20-1 (Road Work Ahead)	16	SF	Jackson Hwy, South
296+00	LT	W20-1 (Road Work Ahead)	16	SF	Jackson Hwy, North
300+00	LT & RT	W20-1 (Road Work Ahead)	32	SF	Robinson Rd
312+00	LT & RT	W20-1 (Road Work Ahead)	32	SF	Loflin Dr
312+50	LT	W20-1 (Road Work Ahead)	16	SF	Barnett Dr
326+00	RT	W20-1 (Road Work Ahead)	16	SF	220 Loop to US 80 East
326+00	LT	W20-1 (Road Work Ahead)	16	SF	220 Ramp to US 80 West
332+00	LT	W20-1 (Road Work Ahead)	16	SF	220 Loop to US 80 West
335+00	RT	W20-1 (Road Work Ahead)	16	SF	220 Ramp to US 80 East
346+50	RT	W20-1 (Road Work Ahead)	16	SF	HBC Service Center
350+50	LT	W20-1 (Road Work Ahead)	16	SF	School Cir
353+00	LT	W20-1 (Road Work Ahead)	16	SF	Dewey St
356+50	LT & RT	W20-1 (Road Work Ahead)	32	SF	John R Lynch St
362+00	LT	W20-1 (Road Work Ahead)	16	SF	Utica Ave
380+00	RT LT & RT	W20-1 (Road Work Ahead) W20-1 (Road Work Ahead)	16 16	SF SF	Gibralter Dr
395+00 422+00	LT	W20-1 (Road Work Ahead)	16	SF	Bobby Rush Blvd (Ellis Ave)
438+00	LT & RT	W20-1 (Road Work Ahead)	32	SF	Hatiesburg St
448+30	RT	W20-1 (Road Work Ahead)	16	SF	Valley St Kerr Dr
463+00	LT	W20-1 (Road Work Ahead)	16	SF	Handy Ave
466+00	LT	W20-1 (Road Work Ahead)	16	SF	University Blvd
466+00	RT	W20-1 (Road Work Ahead)	16	SF	Terry Rd
400.00	111	WZO I (Hodd Work/Wodd)	10	OI .	Torry Na
			756	SF	
		619-D1001 Standard Roadside	Constructi	on Signs L	ess than 10 SF
Station	Location	Description	Quantity	Unit	Remarks
152+00	LT	G20-2 (End Road Work)	16	SF	500' west of BOP
472+41	RT	G20-2 (End Road Work)	16	SF	500' east of BOP
			32	SF	
		619-G4001 Barricad	ae Tyne III	Double Es	cad
Station	Location	Description	Quantity	Unit	Remarks
152+00	LT	Mounted on G20-2	Qualitity 6	LF	500' west of BOP
472+41	RT	Mounted on G20-2	6	LF	500 West of BOP
157+00	RT	Mounted on G20-1	6	LF	BOP
467+41	RT	Mounted on G20-1	6	LF	EOP
			-		
			24	LF	
					:

		1094	52/301000 U	Indersealin	3				
Location	Station	Station	Length LF	Width LF	907-420-A001 Undersealing, LBS	Remarks			
US 80 Eastbound, LT Lane	442+66	443+06	40	12	5000	Area over an underdrain			
US 80 Eastbound, RT Lane	258+00	260+00	200	12	5000				
US 80 Eastbound, RT Turn Lane	258+00	260+00	200	12	5000				
Note: Undersealing is to raise the elevation of the surface asphalt back into section.									
				Total	15,000				

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 7046

**DATE:** 6/4/2025

**SUBJECT:** Lane Closure Restrictions

**PROJECT:** STP-7314-01(006) / 109452301 – Hinds County

Bidders are hereby advised of the following lane closure restrictions on the above captioned project:

- Monday through Saturday No Lane Closures will be allowed from 6:00 AM to 6:00 PM
- No lane closures on Sunday. Sunday will be defined as 6:00 PM Saturday to 6:00 PM Sunday.

The Contractor will be charged a fee of \$500.00 for each full or partial 5 - minute period until the roadway is back in compliance with the requirements stated above.

Official time can be obtained by calling the following Jackson area phone number: 601-355-9311.

SECTION 904 - NOTICE TO BIDDERS NO. 7047 CODE: (SP)

DATE: 6/18/2025

**SUBJECT:** Temporary Construction Signs

**PROJECT:** STP-7314-01(006) / 109452301 – Hinds County

Bidders are hereby advised of the following regarding the Temporary Construction Signs required:

Should the Bidders elect to install Temporary Construction Signs by first driving short u-channel sections and then bolting the longer, correct height u-channel sections to them, the Bidders are advised that these short sections shall be a minimum of five (5) feet from the ground level when driven and the splice must consist of a minimum of eighteen (18) inches of overlap with a total of four (4) bolts. Bidders are also advised that it is mandatory that these short sections be removed at the completion of the project.

#### SECTION 904 - NOTICE TO BIDDERS NO. 7048

CODE: (SP)

DATE: 10/17/2023

**SUBJECT: Underground Utilities** 

**PROJECT:** STP-7314-01(006) / 109452301 – Hinds County

Bidders are hereby advised that utility lines owned and maintained by MDOT may be present within the project limits. These utilities are not located by Mississippi 811. It shall be the Contractor's responsibility to coordinate with MDOT to have the utility lines located and marked prior to beginning work. The Contractor shall give a minimum of three (3) working days of advance notice for locate requests. Also, the Contractor shall be responsible for contacting local public agencies that are not members of Mississippi 811.

Additionally, it shall be the Contractor's responsibility to maintain the utility markings and have the ability to survey the marked utilities and re-establish said utility markings as needed. The Department shall only be responsible for locating and marking the utilities once per Contract.

The contacts for MDOT utility lines are as follows:

## **Underground Power Lines:**

```
Michael Lee – 601-683-3341 – mlee@mdot.ms.gov
Billy Coward – 601-683-3341 – bcoward@mdot.ms.gov
```

# **Underground Communication Lines:**

```
Kerby McFarland -601-359-7450 - \underline{kmcfarland@mdot.ms.gov}
Steven Newell -601-359-7450 - \underline{snewell@mdot.ms.gov}
Henry Lewis -601-359-1454 - \underline{hlewis@mdot.ms.gov}
```

#### **Underground Signal Lines:**

```
Amrik Singh – 601-359-1454 – <u>asingh@mdot.ms.gov</u>
Kenneth Welch – 601-359-1454 – <u>kwelch@mdot.ms.gov</u>
```

CODE: (IS)

#### SPECIAL PROVISION NO. 907-101-1

**DATE:** 07/20/2023

**SUBJECT:** Definitions and Terms

Section 101, Definitions and Terms, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-101.01--Abbreviations</u>. After the abbreviation API on page 1, add the following.

APL Approved Products List

Replace the abbreviation for AWPA on page 1 with the following.

AWPA American Wood Protection Association

<u>907-101.02--Definitions</u>. Delete the sentence after the list of holidays in Subsection 101.02 on page 6 under **holidays**, **legal**, and substitute the following.

When a legal holiday falls on a Saturday or Sunday, the succeeding Monday, or as proclaimed by the Governor, will be observed as a legal holiday.

Delete the definition for Notice to Proceed in Subsection 101.02 on page 8, and substitute the following.

**Notice to Proceed** - Written notice to the Contractor to proceed with the contract work.

Delete the definition for "Plans" in Subsection 101.02 on page 8, and substitute the following.

**plans** - The approved plans, profiles, typical cross-sections, working drawings and supplemental drawings, or exact reproduction thereof, that show the location, character, dimensions, and details of the work to be done. The plans may also include electronic files, referred to on the plans as Electronic Files Identified as Plans, which may include engineering models, spreadsheets, CADD files or other electronic files used to convey design intent. When the contract does not have an official set of plans, reference to the plans shall mean the contract documents.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-102-2

**DATE:** 11/22/2017

**SUBJECT: Bidding Requirements and Conditions** 

Section 102, Bidding Requirements and Conditions, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-102.01--Prequalification of Bidders.</u> Delete the last sentence of the third paragraph of Subsection 102.01 on page 13, and substitute the following.

The Bidder's Certificate of Responsibility number must be on file with the Department's Contract Administration Division prior to request for permission to bid.

<u>907-102.02--Contents of Proposal Forms</u>. Delete the fourth paragraph in Subsection 102.02 on page 13, and substitute the following.

Prospective bidders must complete an online request for permission to be eligible to bid a project. Upon approval, the bidder will be authorized to submit a bid electronically using Bid Express at <a href="http://bidx.com">http://bidx.com</a>.

CODE: (SP)

### **SPECIAL PROVISION NO. 907-104-2**

DATE: 06/17/2025

**SUBJECT:** Minor Alteration to the Contract

Section 104, Scope of Work, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

# 907-104.02--Alterations of Plans or Character of Work.

<u>**907-104.02.3--Minor Alteration to the Contract.**</u> In the first paragraph of Subsection 104.02.3 on page 25, change \$10,000.00 to \$25,000.00.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-105-2

**DATE:** 07/20/2023

**SUBJECT:** Control of Work

Section 105, Control of Work, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-105.01--Authority of the Engineer.</u> Delete the first sentence of the second paragraph of Subsection 105.01 on page 31, and substitute the following.

The Engineer has the right to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to correct conditions unsafe for workmen or the general public, for failure to carry out provisions of the Contract, or for failure to carry out orders.

<u>907-105.02--Plans and Working Drawings</u>. Delete the first paragraph of Subsection 105.02 on page 31, and substitute the following.

After the contract is executed by the Executive Director, the Contractor will receive, free of charge, two bound copies of the proposal and contract documents (one executed and one blank) two full scale copies of the plans, five half-scale copies of the Plans, and Electronic Files Identified as Plans. The Contractor shall have one copy of the proposal and contract documents and one half-scale copy of the plans available at all times during work activity on the project.

#### SPECIAL PROVISION NO. 907-106-3

CODE: (IS)

**DATE:** 03/19/2025

**SUBJECT:** Control of Materials

Section 106, Control of Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

After Subsection 106.13 on page 47, add the following.

**907-106.14--Buy America Materials Sourcing Requirements for Federal-Aid Projects.** The "Infrastructure Investment and Jobs Act" (the "Act"), or Bipartisan Infrastructure Law (BIL), was enacted on November 15, 2021 (See Public Law No. 117-58, Sections 70901-70953). The Buy America provisions of the Act expand the previous Buy America requirements beyond what is currently required for steel and iron products.

Any iron or steel products per Subsection 700.01 or construction materials per Subsection 907-700.01.1, that are used for a Federal-Aid highway construction project, shall be domestically manufactured (as further described in Subsection 700.01) and compliant with current requirements of the Act, as implemented in 2 CFR 184, 2 CFR 200.322, and OMB 24-02 Memo and related requirements therein, and with the current requirements within 23 CFR 410.

As determined by the Department within the contract prior to award, all products and/or materials will only be classified under one of the following categories: Iron or Steel Products, Manufactured Products, and Construction Materials. It is the Prime Contractor's responsibility to ensure all submittals required for Buy America are submitted to the Project Engineer prior to the products and/or materials being incorporated into the work.

The following items require Buy America Certification on Federal-Aid projects:

- (a) Iron or Steel Products
- (b) Construction Materials

A list of items that require Buy America Certification may be viewed at <a href="www.goMDOT.com">www.goMDOT.com</a> under Business Center → Engineering Standards/Guides/Manuals → Construction Materials.

Items classified as a Manufactured Product that do not include iron or steel products do not require a Buy America Certification on a Federal-Aid project. Manufactured Products are currently exempted under the 1983 waiver from FHWA. Manufactured Products are determined by the Department's Materials Division.

To be considered a Manufactured Product, an item shall meet one of the following requirements:

- (a) The item consists of two or more of the listed construction materials that have been combined through a manufacturing process.
- (b) The item consists of at least one of the listed construction materials that has been combined through a manufacturing process with a material that is not listed as a construction material.

Buy America provisions do not apply to temporarily used items that (1) are specified to be removed at the end of the project per the contract provisions or (2) are specified to remain in place per the contract provisions and are also documented by the Department in the contract provisions to be removed in a subsequent imminent, near-term phased project.

CODE: (SP)

### **SPECIAL PROVISION NO. 907-108-4**

**DATE:** 10/07/2020

**SUBJECT:** Subletting of Contract

Section 108, Prosecution and Progress, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

# 907-108.01--Subletting of Contract.

<u>907-108.01.1--General.</u> Delete the third sentence of the tenth paragraph of Subsection 108.01.1 on the bottom of page 72.

CODE: (SP)

#### **SPECIAL PROVISION NO. 907-108-6**

**DATE:** 03/11/2025

**SUBJECT:** Default and Termination of Contract

Section 108, Prosecution and Progress, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-108.08--Default and Termination of Contract</u>. At the end of the Subsection 108.08 on page 85, add the following.

<u>907-108.08.1--Debarment of Contractor</u>. If the Contractor is declared to be in default under this Subsection and the Contract terminated for the reason(s) indicated in Subsections 108.08 (d), (f), or (g) above, the Commission may, in its discretion and in addition to default and termination, declare the Contractor to be debarred from bidding on any other projects for a period of one (1) year from the date of the termination letter. If the debarred Contractor has multiple on-going Contracts with the Commission and receives a one (1) year debarment, the on-going Contract(s) may continue; however, the Contractor will not be allowed to bid another project until one (1) year has passed from date of the termination letter.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-109-5

**DATE:** 11/14/2023

**SUBJECT:** Measurement and Payment

Section 109, Measurement and Payment, of the 2017 Edition of the Mississippi StandardSpecifications for Road and Bridge Construction is hereby amended as follows.

<u>907-109.01--Measurement of Quantities</u>. Delete the sixth full paragraph of Subsection 109.01on page 88, and substitute the following.

If appropriate based on the specific circumstances of the project, the Contractor may request that material specified to be measured by the cubic yard or ton be converted to the other measure. The Contractor must submit this request to the Engineer. The Engineer will provide an approval or denial in writing. The decision is in the sole discretion of the Engineer. If approved, factors for this conversion will be determined by the District Materials Engineer and agreed to by the Contractor. The conversion of the materials along with the conversion factor will be incorporated into the Contract by supplemental agreement. The supplemental agreement must be executed before such method of measurement is used.

#### 907-109.04--Extra Work.

<u>907-109.04.1--Supplemental Agreement</u>. Delete the second paragraph of Subsection 109.04.1 on page 90.

<u>907-109.04.2--Force Account Agreement.</u> Delete the last sentence of subparagraph (c) in Subsection 109.04.2 on page 91, and substitute the following.

An amount will be added equal to fifteen percent (15%) of the sum thereof, excluding sales tax.

Delete subparagraph (d) in Subsection 109.04.2 on pages 91 & 92, and substitute the following.

(d) **Equipment.** Equipment used for force account work shall be of sufficient size and type necessary to perform the required work in an economic and expeditious manner. The Contractor must provide the manufacturer, make, model, year, type of fuel and other necessary information to determine proper hourly payment rates. Subject to advance approval of the Engineer, actual transportation cost for a distance of not more than 200 miles will be reimbursed for equipment not already on the project.

For equipment authorized by the Engineer for use on the force account work, the Engineer will use the equipment rental rates from the "Rental Rate Blue Book" as published on the Equipment Watch website <a href="www.equipmentwatch.com">www.equipmentwatch.com</a> for the time period the force account work is authorized to determine payment to the Contractor. The maximum allowable rates

#### are determined as follows:

- 1. The hourly equipment rate will equal the FHWA total hourly rate. This rate takes into account adjustment factors for age and region.
- 2. The hourly estimated operating costs have been included in the FHWA total hourly rate.
- 3. The idle and standby rates shall be as listed in the "*Rental Rate Blue Book*" as reported by *Equipment Watch*.
- 4. These rates include the basic machine plus any necessary attachments.

Standby rates shall apply when equipment is not in operation and is approved by the Engineer to standby for later use to complete the work. Idle rates shall apply to equipment located on the project and the engine is burning fuel but no ground engaging or other components are actively engaged in meaningful work. In general, idle or standby rates shall apply when equipment is not in use, but will be needed again to complete the work and the cost of moving the equipment will exceed the accumulated standby cost. If the idle standby cost should exceed the equipment moving cost to or from the work site, the Contractor will be entitled to the moving cost only. Idle or standby rates will be used under the following conditions:

- 1. The equipment is totally dedicated to the force account work and not used intermittently on other work.
- 2. Idle or standby cost will be considered only after equipment has been operated on force account work.
- 3. The sum of idle or standby time and operating time shall not exceed eight (8) hours per day or 40 hours in a week.
- 4. Idle or standby payment will not apply to days not normally considered to be work days such as holidays, weekends, or days of inclement weather when no other work is taking place.

The Department will not pay for idle or standby time when equipment is inoperable, for time spent repairing equipment, or for the time elapsed after the Engineer has advised the Contractor that the equipment is no longer needed. The Department will determine if it will be more cost effective to pay standby time on approved equipment on site or for multiple mobilizations.

If equipment is needed, which is not included in the *Rental Rate Blue Book* as reported by *Equipment Watch*, the Department and Contractor will agree upon reasonable rental rates in writing before the equipment is used.

All equipment shall be subject to approval from day to day in accordance with the requirements of Subsection 108.05.

### 907-109.06--Partial Payment.

### 907-109.06.2--Advancement on Materials.

Delete the next to last paragraph of Subsection 109.06.2 on page 95, and substitute the following.

Materials for which an advanced payment has been allowed must be paid for by the Contractor within 30 days of the estimate on which the advanced payment was first allowed and proof of said payment must be verified by the supplier. If proof of payment is not furnished within the allowable 30 days, the advanced payment will be deducted on subsequent current estimates until such time that proof of payment is furnished.

<u>907-109.07--Changes in Material Costs.</u> After the fifth paragraph of Subsection 109.07 on page 96, change the web address to the following.

https://mdot.ms.gov/portal/current\_letting

SPECIAL PROVISION NO. 907-401-2

CODE: (SP)

**DATE:** 01/06/2025

**SUBJECT:** Asphalt Pavement - General

Section 401, Asphalt Pavement - General, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows..

907-401.02--Materials.

907-401.02.6--Standards of Acceptance.

<u>907-401.02.6.8--Acceptance Procedure for Pavement Smoothness Using Mean Roughness Index (MRI).</u> Delete the third sentence of the second paragraph of Subsection 401.02.6.8 on page 253, and substitute the following.

The surface shall be tested and corrected to a smoothness index as described herein except those locations or specific projects that are excluded from smoothness testing with an IPS.

Delete the third, fourth and fifth paragraphs of Subsection 401.02.6.8 on pages 253 & 254, and substitute the following.

The smoothness of the surface lift will be determined for traffic lanes, auxiliary lanes, climbing lane and two-way turn lanes. Areas excluded from a smoothness test with the IPS are acceleration and deceleration lanes, tapered sections, transition sections for width, shoulders, crossovers, ramps, side street returns, etc. The roadway pavement on bridge replacement projects having 1,000 feet or less of pavement on each side of the structure will be excluded from a smoothness test. Smoothness testing shall exclude 264 feet from each transverse joint that separates the pavement from a bridge deck, bridge approach slab or existing pavement not constructed under the contract. This can apply to any other exceptions including, but not limited to, railroad crossings and manholes. Segments containing a considerable number of encroachments such as intersections, manholes, curb and gutter sections, etc. may be excluded at the Engineer's discretion.

Once paving has concluded, one final smoothness measurement shall be performed for both pay adjustments and corrective action. Multiple smoothness measurements for pay adjustments and correction can still be performed at the Engineer's discretion. These measurements must be performed at the posted speed limit or 50 miles per hour (±5 miles per hour), whichever is lower. Measurements will be made in both wheel paths of exterior and interior lanes. The wheel paths shall be designated as being located three feet (3') and nine feet (9') from centerline or longitudinal joint, respectively. Testing will also be required on sections that have been surface corrected. No smoothness testing shall be performed when there is any residual moisture on the

pavement surface. Any additional testing shall meet the requirements of Subsection 907-403.03.2.

The surface lift will be accepted on a continuous interval basis for pavement smoothness. Continuous reporting is based upon all MRI values for a specified running interval. These values are averaged and presented at the midpoint of the specified running interval.

Delete the last sentence of the last paragraph of Subsection 401.02.6.8 on page 254, and substitute the following.

All tests and corrections shall be in accordance with AASHTO R 54, Accepting Pavement Ride Quality When Measured Using Inertial Profiling Systems.

Delete Subsection 401.02.6.9 on pages 254 & 255, and substitute the following.

#### 907-401.02.6.9--Inertial Profiling System.

<u>907-401.02.6.9.1--General.</u> The Inertial Profiling System (IPS), furnished and operated by the Contractor under the supervision of the Engineer or the Engineer's representative, shall be a dual-line laser on a high speed vehicle meeting the requirements of AASHTO M 328, Standard Specification for Inertial Profiler. Additionally, each IPS should be equipped with a GPS to ensure distance measurement accuracy. The profiler system and operator shall be certified at an MDOT approved regional calibration facility in accordance with AASHTO R 56, Standard Practice for Certification of Inertial Profiler Systems and AASHTO R 57, Operating Inertial Profiler Systems.

907-401.02.6.9.2--Computer Requirements. The computer measurement program must be menu driven, Windows compatible, and able to produce unfiltered profiler runs in the Pavement Profile (\*.ppf) file format. The computer shall have the ability to display and print data on site for verification and shall have the ability to save and transfer data via Universal Serial Bus (USB) flash drive, which shall be provided by the Contractor.

All runs must be stored in a directory named in the following format for acceptance by the Project Engineer:

Project\_County\_Route

All profiler runs must be named in the following format for acceptance by the Project Engineer: Direction\_Lane\_BeginStation\_EndStation

In addition to manufacturers' software; the latest version of FHWA's ProVAL software shall be installed on the IPS computer.

### 907-401.03--Construction Requirements.

### 907-401.03.1--Specific Requirements.

<u>907-401.03.1.2--Tack Coat.</u> After the first sentence in Subsection 401.03.1.2 on page 256, add the following.

In addition to the products listed on the Department's APL, the Contractor may use one of the following as a tack coat.

- CSS-1
- CSS-1h
- SS-1
- SS-1h

<u>907-401.03.1.4--Density.</u> In the first sentence of the first paragraph of Subsection 401.03.1.4 on page 256, change "preleveling" to "pre-leveling".

<u>907-401.03.9--Material Transfer Equipment</u>. In the third sentence of Subsection 401.03.9 on page 261, change "include:" to "include".

<u>907-401.03.14--Shoulder Wedge</u>. In the second sentence of the first paragraph of Subsection 401.03.14 on page 263, change "cross roads" to "crossroads".

#### **SPECIAL PROVISION NO. 907-403-4**

CODE: (SP)

**DATE:** 03/19/2025

**SUBJECT:** Asphalt Pavements

Section 403, Asphalt Pavements, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

### 907-403.03--Construction Requirements.

<u>907-403.03.2--Smoothness Tolerances.</u> In the tenth paragraph of Subsection 403.03.2 on page 283, change "Sections(s)" to "Segment(s)".

<u>907-403.03.2.1--Smoothness Tolerances for Mean Roughness Index (MRI)</u>. After the second paragraph of Subsection 403.03.2.1 on page 283, add the following.

For all projects, smoothness data shall be reported by two MRI methods:

- 1. A continuous long interval MRI report
- 2. A continuous 25-foot short interval MRI report

At the bottom of page 283 and top of 284 in Subsection 403.03.2.1, delete the paragraphs for Category, A, Category B, and Category C, and substitute the following.

Category A projects shall have a long interval surface MRI of not more than 60 inches per mile.

Category B projects shall have a long interval surface MRI of not more than 70 inches per mile.

Category C projects shall have the existing surface profiled at no additional cost to the State. These projects shall be measured by a long fixed interval (528-foot) surface MRI and meet the following requirements:

A 50% improvement in MRI from the existing surface or

80 inches per mile (whichever value is higher)

Delete the first, second, and third full paragraphs on page 284, and substitute the following.

For all projects, areas of the surface lift with localized roughness greater than 160 inches per mile as determined by the continuous short interval (25') report will be identified for correction by the Contractor.

When a project has multiple lifts, the intermediate lift shall meet the short interval requirement of 200 inches per mile. Corrective action must be taken on those segments that do not meet this requirement. No unit price adjustment will be applied on the underlying lift.

Delete the table at the bottom of page 284, and substitute the following.

Mean Roughness Index	Contract Price Adjustment	
(inches / mile)	Percent of Asphalt Unit Bid Price	
Above 20.0 Over	REMOVE AND REPLACE *	
15.1 to 20.0 Over	80	
10.1 to 15.0 Over	85	
5.1 to 10.0 Over	90	
0.1 to 5.0 Over	95	
Required Surface MRI	100	

<sup>\*</sup> In lieu of removal and replacement, segments may be brought into compliance through corrective action at the discretion of the Project Engineer.

Delete the table and footnote at the top of page 285, and substitute the following.

Mean Roughness Index (inches/mile)	Contract Price Adjustment
Percent Improvement	Percent of Asphalt Unit Bid Price
Below 30.1 Percent	80 **
30.1 to 35.0 Percent	80
35.1 to 40.0 Percent	85
40.1 to 45.0 Percent	90
45.1 to 50.0 Percent	95
Above 50%	100

<sup>\*\*</sup> Segments that show less than 30 percent improvement as well as a final surface MRI greater than 100 inches/mile will be subject to removal.

Before the last paragraph on Subsection 403.03.2.1 on page 285, add the following.

Corrective action for all categories must be taken on those segments that exceed the localized roughness or the 'Remove and Replace' threshold. All locations must be located and marked by the Contractor and approved by the Project Engineer before corrective action shall take place. The minimum remove and replace length will be 528 feet (0.1 mile). Additional smoothness testing shall be required on segments following corrective action and/or replacement and will be required to meet *at least* the maximum surface MRI short of 'Remove and Replace' tolerance.

### 907-403.05--Basis of Payment.

**907-403.05.2--Pay Items.** Add the "907" prefix to the list of pay items on page 291.

#### **SPECIAL PROVISION NO. 907-413-2**

CODE: (SP)

**DATE:** 05/09/2023

**SUBJECT:** Cleaning and Sealing Joints and Cracks

Section 413, Cleaning and Sealing Joints and Cracks, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

## 907-413.03--Construction Requirements.

# 907-413.03.3--Sawing and Sealing Transverse Joints in Asphalt Pavement.

<u>907-413.03.3.4--Sealing.</u> Delete the last sentence of the last paragraph of Subsection 413.03.3.4 on page 333, and substitute the following.

Poured joint sealing material shall only be placed when the air temperature is within the limits specified by the manufacturer.

<u>907-413.05--Basis of Payment</u>. Delete the last pay item listed on page 336, and substitute the following.

907-413-E: Sawing and Sealing Transverse Joints in Asphalt Pavement - per linear foot

CODE: (SP)

#### SPECIAL PROVISION NO. 907-420-1

**DATE:** 01/17/2017

**SUBJECT:** Undersealing

Section 907-420, Undersealing, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

### **SECTION 907-420 -- UNDERSEALING**

<u>907-420.01--Description.</u> This work shall consist of raising, filling voids, undersealing, or densification of base soils under concrete pavement or other locations by furnishing, hauling and injecting polyurethane material through tubes placed at the horizontal and vertical locations determined by the Contractor and approved by the Project Engineer into the base soils, which most effectively and efficiently complete the desired repairs. All work will be monitored at the surface to insure that the pavement is raised to the desired elevations or soils are at the desired degree of densification. This work shall be performed using The URETEK Method<sup>TM</sup> and The URETEK Deep Injection Process<sup>TM</sup> by URETEK USA, Inc., Tomball, Texas, or an approved equal.

## 907-420.02--Material.

<u>907-420.02.1--General.</u> The material for raising and undersealing shall be a water blown, closed cell, high density polyurethane system with the following physical characteristics and properties:

<b>Technical Property</b>	Requirement	Test Method
Density, minimum	$3.69  \text{lbs} /  \text{ft}^3$	ASTM D1622 (air rise)
Compressive strength, minimum	53 psi	ASTMD 1621
Density, maximum	$4.2 \text{ lbs / } \text{ft}^3$	ASTM D1622 (air rise)
Volume Change, maximum shrinkage (10 years)	5.0 %	
Curing Rate	90 percent of compressive strength within 15 minutes after injection	

The material used for raising and/or undersealing shall be a high-density polyurethane material, such as URETEK 486 Star or equivalent, as approved by the Engineer. The material shall be a polyurethane-forming mixture, having a water insoluble diluent, that permits the formation of polyurethanes in excess water. The presence of these water insoluble diluents provides polyurethane foam with improved dimensional stability properties. This formula and these

characteristics must be certified by the manufacturer.

The material shall have a warranty against shrinkage and deterioration for a period of ten years. During the warranty period, the manufacturer shall replace by injection any failed material at the manufacturer's expense.

Acceptance of the polyurethane material will be based on certification and results from tests required by the Engineer.

The Contractor shall provide to the Engineer certification from the manufacturer stating that the material provided is in accordance with this special provision. The MSDS for all pertinent production material shall be included with the certification.

When requested by the Engineer, pumping units in service shall perform a product density test by injecting a sample of the unit's polyurethane material into a test cylinder of known volume. The sample's density shall be in accordance with this special provision.

When requested by the Engineer, the Contractor, in the presence of the Engineer, shall inject the ambient temperature (70° - 90° F) polyurethane material into a container holding 40 gallons of ambient temperature water at 70° F. The resulting product shall demonstrate consistent, closed cell polyurethane material.

All stored polyurethane material shall be sealed and protected from contamination of dust or any foreign material.

<u>907-420.02.2--Contractor Pre-Qualification Requirements</u>. The Contractor shall have a minimum of three years of experience in performing this type of work and a minimum of 20 projects on which the Contractor has successfully done this type of work. Prior to beginning work, the Contractor shall submit certification to the Engineer that the Contractor meets the minimum required experience. The certification shall include a listing of previous clients with contact names and phone numbers.

Prior to being approved for performing this type of work, the following documents shall be supplied by the Contractor to the Engineer and found to be acceptable:

- (a) A report from an industrial hygienist who has conducted a personnel, production vehicle and typical jobsite safety review of the Contractor's implementation procedures involving the polyurethane material.
- (b) A copy of the Contractor's Employee Safety Manual specific to polyurethane pavement raising and undersealing work.

<u>907-420.02.3--Equipment Requirements</u>. The Contractor shall provide at minimum, the following equipment:

(a) A truck-mounted pumping unit capable of injecting the high density polyurethane material beneath the pavement. The pumping unit shall be equipped with a dial gauge in increments of 0.10 pound and shall be capable of controlling the rate of flow of material

- as well as the rate of rise of the pavement.
- (b) Pressure and temperature control devices capable of maintaining proper temperature and proportionate mixing of the polyurethane component materials.
- (c) Pneumatic or electric drills capable of efficiently drilling 9/16 to 3/4-inch diameter injection holes through the pavement without damaging the structural integrity of the existing pavement.
- (d) Laser levels or dial indicator devices capable of monitoring and verifying that the pavement is raised to an even plane and to the required elevation.
- (e) All necessary electric generators, compressors, heaters, hoses, containers, valves and gauges to efficiently conduct and control the work.

<u>907-420.03--Construction Requirements</u>. The Contractor shall provide a profile from laser level readings or string lines of each area that needs to be raised or undersealed. Each profile shall be accepted by the Engineer prior to performing the work at the profile location.

At locations where pavement is to be raised or undersealed, a series of 9/16-inch to 3/4-inch diameter holes shall be drilled through the pavement and underlying base at the appropriate locations and depths as determined by the Contractor. The pavement surrounding each hole shall not be damaged.

The polyurethane material shall be injected through the drilled holes until all known or encountered voids under the pavement are filled. The rate and amount of material injection shall be determined by the Contractor.

The pumping unit shall be calibrated daily or as directed by the Engineer. If calibration results show inconsistencies from calibration to calibration, the work shall be stopped until the cause for the inconsistencies are corrected to the satisfaction of the Engineer.

Injection nozzles shall prevent leakage during injection and shall be removed at completion of the injection or driven into the injection hole to a minimum of 1½ inches below the surface. Any excessive material on the surface shall be removed from the area and the holes shall be sealed with polyurethane material or a non-expansive cementitious grout approved by the Engineer.

<u>907-420.03.1--Raising or Undersealing Roadway Pavements</u>. All drill tailings, excess polyurethane material and other debris shall be cleaned up at the end of each working day or before the lane is opened to traffic. When adjacent lanes are open to traffic, provisions shall be made to prevent material from encroaching onto the open lane or squirting onto passing vehicles. Polyurethane material shall not enter into gutters or closed drainage systems. Suitable means to restrict the infiltration of the residue into a closed drainage system shall be provided. Polyurethane material shall be removed from the pavement surface before any residue is blown by traffic action or wind. All removed material shall be disposed of in an environmentally acceptable manner in accordance with all federal, state and local regulations.

Corrections to the grade of adjacent slabs, if necessary, or as determined by the Engineer, shall be made in accordance with this special provision. All raised pavement shall match the existing grade of adjacent slabs to provide positive drainage. Final elevations of raised pavement areas shall be within 1/4 inch of the required elevations as determined by the profile or the Engineer.

The Contractor will be responsible for any pavement blowouts, excessive pavement lifting or pavement damage that may occur as a result of the Contractor's work. The Contractor shall repair any subject areas to the satisfaction of the Engineer at the Contractor's expense.

The roadway may be open to traffic when the polyurethane material has reached 90 percent of the material's designed compressive strength.

The Contractor shall transfer all warranties on the polyurethane material to the client upon acceptance of the work by the Engineer.

<u>907-420.03.2--Undersealing Bases.</u> For soil densification and compaction of unconsolidated base soils, a series of 9/16-inch to 1 3/8-inch diameter holes (as required for tube placement) shall be drilled at approximately 3 to 4-foot intervals through the pavement above the area requiring soil remediation. The exact location, spacing, hole size and depth shall be determined by the Contractor and approved by the Engineer.

The polyurethane material shall be injected through injection tubes inserted into the drilled holes to the proper depth or depths as determined by on-site soils analysis, or dynamic cone penetrometer testing. The rate and amount of material injected shall be determined by the Contractor.

Continuous laser level or dial indicator micrometer readings shall be in place and monitored by the Contractor during injection to determine sufficient material usage and soils densification as indicated by pavement movement of 1/16 of an inch.

<u>907-420.04--Method of Measurement.</u> Undersealing, complete and accepted, will be measured by the pound. The quantity will be based on the supplier's packaging information for the material delivered and incorporated into the project.

<u>907-420.05--Basis of Payment.</u> Undersealing concrete payment, as measured above, will be paid for at the contract price per pound, which price shall include all mobilization, labor, equipment, materials, and incidentals necessary to complete the required work.

Payment will be made under:

907-420-A: Undersealing \*

- per pound

\* Type of Undersealing may be specified

CODE: (SP)

#### SPECIAL PROVISION NO. 907-618-11

**DATE:** 03/30/2022

**SUBJECT:** Work Zone Law Enforcement

Pursuant to House Bill No. 580, Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-618.01--Description. After Subsection 618.01.4 on page 443, add the following.

<u>907-618.01.6--Work Zone Law Enforcement</u>. On projects that the Commission determines are on high-volume roadways or are otherwise high risk projects, the Commission may include a pay item to provide for reimbursement to the Contractor for enhanced law enforcement safety operations in the work zone.

According to House Bill No. 580, the work zone safety operations, when required by the Commission, shall consist of utilizing a uniformed law enforcement officer equipped with a patrol vehicle with blue flashing lights to enforce traffic laws and provide for an enhanced law enforcement presence in order to facilitate the safe movement of traffic through the work zone and to protect workers within the work zone.

<u>907-618.03--Construction Requirements</u>. After Subsection 618.03.5 on page 447, add the following.

<u>907-618.03.7--Work Zone Law Enforcement</u>. The utilization of work zone law enforcement shall be done at such locations and time periods deemed necessary and appropriate by the Engineer, after discussion with the Contractor. The Contractor shall be responsible for the coordination with the work zone law enforcement agency.

The Contractor shall provide a daily work record of the actual hours of work performed by the law enforcement agency and shall be accompanied by signed invoices from the law enforcement agency, which must be verified by the Engineer.

<u>907-618.04--Method of Measurement</u>. After the last paragraph of Subsection 618.04 on page 449, add the following.

Work zone law enforcement will be measured per hour for every hour verified by the Engineer using an invoice or other acceptable record. Measurement for payment will not be made for work zone law enforcement after expiration of contract time.

<u>907-618.05--Basis of Payment</u>. After the third paragraph of Subsection 618.05 on page 449, add the following.

- 2 -

Work zone law enforcement, measured as prescribed above, will be paid for at the fixed contract unit price per hour, which price shall be full compensation for furnishing and reimbursing work zone law enforcement.

After the last pay item listed on page 450, add the following.

907-618-M2: Work Zone Law Enforcement

- per hour

CODE: (IS)

#### SPECIAL PROVISION NO. 907-626-11

DATE: 06/24/2024

**SUBJECT:** Thermoplastic Traffic Markings

Section 626, Thermoplastic Traffic Markings, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 626 on pages 492 thru 496, and substitute the following.

# **SECTION 626 - THERMOPLASTIC TRAFFIC MARKINGS**

<u>907-626.01--Description</u>. This work consists of furnishing materials and placing thermoplastic pavement markings of the type specified in conformity with these specifications and the details shown on the plans or established. All hot-applied thermoplastic pavement markings shall be coated with a double-drop combination of optics.

This work may also consist of placing an audible bump or puck style marking system on the edge line that provides an audible and vibratory warning when driven over. The marking system shall be a road marking system of the dimensions indicated at regular and predetermined intervals.

This work may also consist of placing a profile or raised shape marking system on centerline or edge line that provides audible and vibratory warning when driven over. The marking system shall be a road marking system of the dimensions indicated and at regular and predetermined intervals. When placed on centerline, the markings system shall consist of an extruded black transverse thermoplastic bar of the dimensions indicated at regular and predetermined intervals.

This work may also consist of placing high contrast thermoplastic markings. High contrast thermoplastic markings shall consist of placing thermoplastic pavement markings over a black thermoplastic pavement marking to enhance the marking's visibility.

All pavement marking material, excluding lines over rumble strips, shall be applied using the extrusion/ribbon method. Lines placed over rumble strips shall be applied using the atomization/spray method.

Permanent pavement marking tape (permanent cold plastic tape) may be used in lieu of hot applied thermoplastic markings. Substitution will only be allowed for pay items 907-626-A through H. Substituted pavement marking tape shall be of the same color and width as that required for the hot applied thermoplastic. Unless otherwise specified, the markings, whether hot applied or pavement marking tape, shall be of the same type of material for the entire project. Stop bars and crosswalks shall not be substituted with pavement marking tape and shall be alkyd hot-applied thermoplastic markings or heat-fused preformed pavement markings. Material and construction requirements for substituted pavement marking tape shall meet the requirements of Special

Provision 907-628. The layout and spacing for substituted pavement markings will remain as shown in the plans, or in the contract documents, for hot applied thermoplastic markings. Measurement of adhesive substituted pavement markings shall be made in accordance with Special Provision 907-628. Payment for adhesive substituted pavement markings shall be made at the unit price for the appropriate hot applied thermoplastic marking.

When thermoplastic pavement markings are used on bridge decks or concrete surfaces, the surface shall be sealed with an epoxy sealer prior to the application of thermoplastic.

<u>907-626.02--Materials</u>. All pavement marking materials shall meet the requirements of Special Provision 907-720-3.

Thermoplastic pavement marking material may be sampled in the field at the time of application by sampling from the marking equipment at the point of extrusion. Samples should be cooled until solid and then packaged into large re-closeable plastic bags and placed into a cardboard box for transport. Field samples will be tested at random or as determined necessary by the Department.

The Contractor shall supply the materials to be used for sampling and packaging. Department personnel shall witness the sampling and shall be responsible for transportation of the sample for testing.

<u>907-626.02.1--Audible Bumps</u>. Audible bumps shall have a profile such that the leading and trailing edges are sloped at a sufficient angle to create an audible and vibratory warning.

Audible bumps shall be at least 0.45 inches above the pavement surface at the highest point of the bump. The height shall be measured after the application of drop-on material. The bumps shall have a minimum dimension of two and one-half inches  $(2\frac{1}{2})$  in both transverse and longitudinal directions. The bumps may have a drainage channel. The width of each drainage channel shall not exceed one-quarter of an inch  $(\frac{1}{4})$  at the bottom of the channel.

<u>907-626.02.2--Audible Transverse Bars</u>. The length of transverse bars is the measurement lateral to the direction of travel, also known as transverse width. The width of transverse bars is the measurement parallel to the travel way.

Transverse bars on centerline shall have a length of 10 inches, a width of three inches (3"), and a height of 350 mils. Transverse bars on centerline shall be placed on 2-foot centers through nopassing zones and 5-foot centers through passing zones. Transverse bars on centerline shall be placed in advance of permanent thermoplastic markings.

Transverse bars on edge lines shall have a length of six inches (6"), a width of three inches (3"), and a height of 350 mils. Transverse bars on edge lines shall be placed on 2-foot centers. Tolerance for the longitudinal and transverse measurements shall be one quarter of an inch ( $\frac{1}{4}$ ") and the tolerance for height shall be 50 mils. The above dimensions are based on 6-inch strip application.

Thermoplastic material for edge line transverse bars shall be as specified on the Plans and meet

the requirements of Special Provision 907-720-3 or as specified on the plans. Thermoplastic material for centerline transverse bars shall be black and shall meet the requirements of Special Provision 907-720.

<u>907-626.02.3--High Contrast Markings</u>. High contrast markings shall be black with the pertinent marking color overlaid on top and shall meet the requirements of Special Provision 907-720-3.

## 907-626.03--Construction Requirements.

<u>907-626.03.1--Equipment.</u> Equipment for hot application shall be of sufficient size and stability to ensure smooth, uniform, properly aligned markings of the dimensions specified. The equipment shall be suitably equipped for heating and controlling the flow of the material. The equipment shall be constructed to provide continuous mixing and agitation of the material. The conveying parts of the equipment, between the main material reservoir and applicator, shall be so constructed as to prevent accumulation and clogging. The equipment shall be constructed so that all mixing and conveying parts, up to and including the applicator, maintain the material at the plastic temperature. The thermoplastic material shall be dispensed at a temperature recommended by the manufacturer. The applicator shall include a cutoff device remotely controlled to provide clean, square stripe ends and to provide a method for applying skip lines. The thermoplastic reservoir shall be insulated and equipped with an automatic thermostatic control to maintain the proper temperature of the material.

The application equipment shall be capable of automatic placement of intermittent and continuous line patterns in single or double line applications simultaneously. The intermittent timer mechanism shall provide a variable ratio of materials applied and variable cycle length such that accurate placement of new patterns, or replacement of existing patterns can be achieved.

When edge lines are placed over rumble strips, the equipment must be able to apply the marking material using the atomization/spray method instead of extrusion/ribbon method.

The equipment shall also be capable of applying the top dressing of optics (beads) in a manner that firmly embeds them into the surface of the thermoplastic material for at least one half of the diameter of the larger gradation sizes of the optics. The dispensing equipment shall be equipped with an automatic cut-off control for the application of the optics that is synchronized with the cut-off of the thermoplastic material.

Optics applied to the surface of the completed stripe shall be applied by an automatic dispenser attached to the pavement marking equipment in such a manner that the optics are immediately dispensed upon the completed line. The dispenser shall be equipped with an automatic cutoff control, synchronized with the cutoff of the pavement marking equipment. The double-drop optics as defined in 907-720-3 shall be automatically applied at a uniform rate to achieve the minimum retroreflectivity requirements of 907-626.03.3.

Upon request, the Engineer will establish the control points for markings at necessary intervals not to exceed 600 feet on tangents and more often on curves. All additional work necessary to establish intermediate control points shall be performed by the Contractor. On curves, unsightly variations

from the normal curvature will not be permitted unless specifically shown on the plans or ordered by the Engineer.

When edge lines are placed over rumble strips, the equipment must be able to apply the marking material using the atomization/spray method instead of extrusion/ribbon method. To ensure the proper alignment of the rumble stripes, the Contractor will be required to place a layout line to be followed during installation of the edge lines over the rumble strips.

<u>907-626.03.2--Construction Details</u>. The thermoplastic compound shall be screed or ribbon extruded to the pavement surface. Heat-fused, pre-formed pavement markings shall be fusible to asphalt surfaces by means of the normal heat of a propane weed-burner type of torch or other heating device as recommended by the manufacturer. Heat-fused, pre-formed pavement markings shall be instantly highly reflective without the application of additional optics.

Thermoplastic markings shall not be applied to the pavement surface when the pavement surface temperature is less than 55°F. The pavement surface shall be dry, to the satisfaction of the Engineer, before application will be permitted. Unless otherwise specified by the manufacturer, thermoplastic pavement marking material shall be applied to the surface between 400°F and 450°F with a recommended application temperature being 420°F.

Immediately before application, all areas to be marked shall be thoroughly cleaned. Cleaning may be done by rotary brooms, air blast, scrapers, or whatever combination of equipment is necessary to clean the pavement thoroughly without damage to the pavement surface. On areas of pavement cured with compound, the membrane shall be removed completely by shot blasting, sand blasting or other approved method. Before edge striping, particular care shall be taken to remove all vegetation, loose soil, and the like from the area to be marked. Should other methods fail, the surface shall be wetted with a water jet and scrubbed as necessary to dislodge all foreign material. After washing, the surface shall be allowed to dry thoroughly, and all films of dried mud apparent after surface drying shall be removed before application of markings. Marking shall follow as closely as practicable after the surface has been cleaned and dried, but no markings shall be applied until the surface has been inspected and permission given to proceed. The cost for preparing the surface shall be included in the contract unit prices for the marking items.

Unless otherwise directed by the Engineer, traffic stripes that are conflicting with the thermoplastic stripe shall be removed prior to placement of the thermoplastic material. Removal of pavement markings shall be done by a means that will not gouge the surface of the pavement in a manner that requires patching to ensure the integrity of the pavement. Temporary paint stripe may be left in place when satisfactorily placed in the proper location. Any temporary stripe not covered shall be removed. Payment for removal of stripe, except temporary stripe, will be made under Section 202.

On newly constructed asphalt pavements, any sand, grit, or other surface contaminants shall be removed using compressed air and/or sweeping. Water blasting may be necessary to remove surface contaminants which cannot be removed by the use of compressed air and/or sweeping. This work is considered surface preparation.

The finished lines shall have well defined edges and the thickness of thermoplastic markings above the roadway surface shall be no less than 90 mils for edge lines, center lines, lane lines, barrier lines, and detail stripe including gore markings, and no less than 120 mils for crosswalks, stop lines, and railroad, word and symbol markings. The minimum thickness, as required above, will be measured in the center of the line when gauged. The minimum thickness one-half inch (½") from the edges shall not be less than 75% of the thickness required in the center.

Any thermoplastic traffic marking less than the required thickness shall be corrected by recapping at no additional costs to the Department. Although a thickness tolerance of 25 percent from center to edge is allowed, a consistent underrun of any amount in thickness as determined by the Engineer will not be acceptable.

The length and width of lines shall be within a tolerance of  $\pm 3$  inches and  $\pm 1/8$  inch, respectively. For skip markings, the tolerance for intervals shall not exceed the line length tolerance. On curves, unsightly variations from the normal curvature will not be permitted unless specifically shown on the plans or ordered by the Engineer.

Heat-fused, pre-formed pavement markings shall be supplied with a minimum average thickness of 90 mils before application on the roadway surface.

All newly applied thermoplastic material shall be protected from traffic until the material is sufficiently dry so as not to sustain damage from vehicle tires. Any material so damaged by traffic shall be repaired, and the thermoplastic material tracked onto the pavement shall be removed and replaced.

<u>907-626.03.3--Reflectivity Requirements</u>. The longitudinal pavement markings shall meet the following retroreflectivity values when measured within 10 to 30 calendar days of placement, after removing loose beads.

**Table 1. Minimum Dry Retroreflectivity** 

Color	All Stripe without Rumble mcd/m²/lx	Rumble Stripe mcd/m²/lx
White	375	250
Yellow	275	150

<u>907-626.03.3.1--Measuring Devices</u>. Retroreflectivity measurements shall be taken using a vehicle mounted mobile retroreflectometer using 30-meter geometry with video and mapping capabilities as per AASHTO T-398. The retroreflectometer and operator shall be certified by the manufacturer, authorized representative of the manufacturer, or an MDOT approved program such as the Texas A&M Transportation Institute (TTI) Mobile Retroreflectometer Certification Program.

<u>907-626.03.3.2--Acceptance Procedure</u>. Averages of the mobile measurements shall be provided for every 0.1 miles unless otherwise specified or approved. Take measurements on each section of roadway for each series of markings (i.e., edge line, center skip line, each line of a double line, etc.) and for each direction of traffic flow. Measure each line in both directions for centerlines on two-way roadways (i.e., measure both double solid line in both directions and measure all center

skip lines in both directions). Furnish measurements in compliance with the below requirements. Use all equipment in accordance with the manufacturer's recommendations and directions. Inform the Engineer at least 24 hours before taking any measurements.

A marking meets the retroreflectivity requirements if:

- The combined average retroreflectivity measurement for a one-mile segment meets the minimum retroreflectivity values specified, and
- No more than 30% of all the retroreflectivity measurement values are below the minimum retroreflectivity requirements value within the one-mile segment.

The one-mile segment will start from the beginning of the data collection and end after a mile worth of measurements have been taken; each subsequent mile of measurements will be a new segment. Centerlines with two (2) stripes (either solid or broken) will result in two (2) miles of data for each mile segment. Each centerline stripe must be tested for compliance as a stand-alone stripe.

The Contractor may elect to restripe with a minimum of 0.060 in. (60 mils) at no cost to the Department each one-mile segment that failed to meet the minimum retroreflectivity requirements. Measurements shall be retaken within 10 to 30 calendar days after the second application for the mile segment for that series of markings. If the markings do not meet minimum retroreflectivity after the second application, the Engineer may require removal of all existing markings, a new application as initially specified, and a repeat of the application process until minimum retroreflectivity requirements are met.

907-626.03.3.3--Mobile Retroreflectivity Data Collection. Mobile Retroreflectivity Data Collection (MRDC) shall be conducted on dry pavement only and when the ambient air temperature is greater than 40°F. Data shall be submitted to the Engineer no later than 3 working days after the day the data is collected. Submit all raw data collected in addition to all other data submitted. Provide data files in Microsoft Excel format or a format approved by the Engineer. The data file and video must contain the following information.

### 907-626.03.3.3.1--Data File. Data files shall be provided with the following:

- Date:
- District;
- County;
- Name of mobile retroreflectometer operator;
- Route number with reference markers or other reference information provided by the Engineer to indicate the location of beginning and end data collection points on that roadway;
- Cardinal direction;
- Line type (single solid, single broken, double solid, etc.);
- Line color;
- File name corresponding to video;
- Data for each centerline listed separately;

- Average reading taken for each 0.1-mi. interval (or interval designated by the Engineer);
- Accurate GPS coordinates (within 20 ft.) for each interval;
- Color-coding for each interval indicating passing or failing, unless otherwise directed by the Engineer (passing and failing thresholds provided by the Engineer);
- Graphical representation of the MRDC (y-axis showing retroreflectivity and x-axis showing intervals) corresponding with each data file;
- Distance in miles driven while measuring the pavement markings;
- Event codes (pre-approved by the Engineer) indicating problems with measurement;
- Upper validation threshold (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

<u>907-626.03.3.3.2--Map</u>. A map shall be provided in an electronic format approved by the Engineer with each MRDC submission that includes the following information:

- Date:
- District number;
- County;
- Color-coded 1-mi. intervals (or interval length designated by the Engineer) for passing and failing retroreflectivity values or retroreflectivity threshold values provided by the Engineer; and
- Percentage of passing and failing intervals, if required by the Engineer.

<u>907-626.03.3.3.3--Video</u>. A high-quality video file shall be provided with the following information:

- Date and corresponding data file name on label;
- District number;
- County;
- Route number with reference markers or other designated reference information to indicate the location of beginning and end collection points on that roadway; and
- Retroreflectivity values presented on the same screen with the following information:
  - o Date;
  - o Location:
  - o Starting and ending mileage;
  - o Total miles;
  - o Retroreflectivity readings; and
  - o Upper validation thresholds (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

<u>907-626.03.4--Reflectivity Verification Testing</u>. The Engineer or a third party may perform retroreflectivity verification testing on any project. At a minimum, each Contractor performing work for the Department will be verified on an annual basis. The Contractor-submitted retroreflectivity data will be compared to the verification test data to determine acceptability of the Contractor's mobile retroreflectometer data. Comparison of the data will result in one of the two scenarios below:

- Contractor's Data is Validated If the difference between Contractor's and Engineer/third party data is 20% or less, then the Contractor's data is validated. The Contractor's data will be used for acceptance.
- Contractor's Data is not Validated If the difference between Contractor's and Engineer/third party data is more than 20%, then the Contractor's data is not validated. The Engineer/third party data will be used for acceptance and the Contractor will be required to take corrective action prior to additional Contractor data collection and may require re-certification of the mobile retroreflectometer.

<u>907-626.04--Method of Measurement</u>. Thermoplastic stripe completed in accordance with the plans and specifications will be measured by the mile or by the linear foot, as indicated, from end-to-end of individual stripes. In the case of skip lines the measurement will include skip intervals. The length used to measure centerline, lane lines, and edge stripes will be the horizontal length computed along the roadway.

Detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch stripe.

Hot-applied legend, which is to include railroad markings, pedestrian crosswalks, and stop lines, will be measured by the square foot or linear foot. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square foot. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch widths.

Pre-formed legend which is to include railroad markings and pedestrian crosswalks will be measured and paid for by each.

The length measured for thermoplastic audible bump edge stripe will not include the permanent thermoplastic edge stripe. Permanent thermoplastic edge stripe will be measured for payment under a separate pay item.

Thermoplastic audible bar centerline skip stripe will be measured by the linear foot or mile. Measurements will be made along the surface from end-to-end of the stripe and will include skip intervals. The length used to measure audible bar centerline stripe will be the horizontal length computed along the roadway. The length measured for thermoplastic audible bar centerline skip stripe will not include the permanent centerline continuous or skip stripe. Permanent centerline continuous and skip stripe will be measured for payment under separate pay items.

Thermoplastic audible bar edge stripe will be measured by the linear foot or mile. Measurements will be made along the surface from end-to-end of the stripe. The length used to measure thermoplastic audible bar edge stripe will be the horizontal length computed along the roadway. The length measured for thermoplastic audible bar edge stripe will not include the permanent thermoplastic edge stripe. Permanent thermoplastic edge stripe will be measured for payment

under a separate pay item.

<u>907-626.05--Basis of Payment.</u> Thermoplastic traffic markings will be paid for at the contract unit price per mile, linear foot, square foot or each as applicable. Any deductions for non-satisfactory material test results will be made after final testing has been performed.

# Payment will be made under:

907-626-A:	6" Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-B:	6" Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-C:	6" Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-D:	6" Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-E:	6" Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile
907-626-F:	6" Thermoplastic Edge Stripe, Continuous Yellow	- per linear foot or mile
907-626-G:	Thermoplastic Detail Stripe, Color *	- per linear foot
907-626-H:	Thermoplastic Legend, Color *	- per linear foot, square foot, or per each
907-626-Q:	Thermoplastic Audible Bump Edge Stripe	-per linear foot or mile
907-626-R:	Thermoplastic Detail Audible *** Stripe, Color **,	-per mile
907-626-AA:	6" High Contrast Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-BB:	6" High Contrast Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-CC:	6" High Contrast Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-DD:	6" High Contrast Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-EE:	6" High Contrast Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile
907-626-FF:	6" High Contrast Thermoplastic Edge Stripe, Continuous Yellow	- per linear foot or mile

907-626-GG: High Contrast Thermoplastic Detail Stripe, Color \* - per linear foot

907-626-HH: High Contrast Thermoplastic Legend, Color \* - per linear foot, square foot, or each

- \* Indicate Blue ADA if applicable
- \*\* Indicate White or Black
- \*\*\* Indicate Centerline Passing Zone, Centerline No-Passing Zone, or Edge Line

CODE: (IS)

#### SPECIAL PROVISION NO. 907-627-1

**DATE:** 06/24/2024

**SUBJECT:** Raised Pavement Markers

Section 627, Raised Pavement Markers, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 627.02 on page 496, and substitute the following.

<u>907-627.02--Materials</u>. Pavement and jiggle markers of the types specified shall conform to the applicable requirements of Subsection 907-720.06 and shall be listed on the Department's APL.

Type B through G High Performance reflective markers shall be listed on the Department's APL for high performance raised pavement markers.

The bituminous adhesive for pavement markers shall meet the requirements of Subsection 907-720.07.3.

907-627.05-Basis of Payment. Add the "907" prefix to the pay items listed on page 498.

CODE: (IS)

### SPECIAL PROVISION NO. 907-700-1

**DATE:** 10/25/2022

**SUBJECT:** Materials and Tests

Section 700, Materials and Tests, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

After Subsection 700.01 on page 713, add the following.

### 907-700.01.1--Buy America Materials Sourcing Requirements for Construction Materials.

As related to the requirements in Subsection 907-106.14, Construction Materials shall include an article or material that is or consists primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Construction Materials which are exempt from the requirements in Subsection 907-106.14 include the following: cement or cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

For Construction Materials, both the final manufacturing process and the manufacturing stage immediately preceding the final manufacturing process shall occur domestically.

<u>907-700.01.2--Compliance Requirements</u>. Prior to incorporation into the work, the Contractor shall furnish the Project Engineer with certificates of compliance documenting conformance to the requirements of Subsection 907-106.14.

The certificates shall be on the Supplier's/Manufacturer's letterhead, containing the following:

- Project number
- Name of manufacturer and address of manufacture location
- Material description
- Batch number / Heat number / Lot number
- Bill of lading number
- Date received
- "I certify each material listed on this certificate to be permanently incorporated in this project has been manufactured domestically."
- Signature of an authorized representative of the Supplier/Manufacturer

### **SUPPLEMENT TO SPECIAL PROVISION NO. 907-701-4**

**DATE:** 11/05/2024

**SUBJECT:** Hydraulic Cement

### 907-701.04--Blended Hydraulic Cement.

<u>907-701.04.1--Types of Blended Hydraulic Cement</u>. After the last paragraph of Subsection 907-701.04.1 on page 1, add the following.

Blended cement Types IL meeting the "HE" high early strength requirement listed in AASHTO M 240, Table 3 shall have the "(HE)" suffix added to the type designation.

### SPECIAL PROVISION NO. 907-701-4

CODE: (IS)

**DATE:** 11/21/2023

**SUBJECT:** Hydraulic Cement

Section 701, Hydraulic Cement, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-701.01--General</u>. In the first sentence of the second paragraph of Subsection 701.01 on page 718, change "mills" to "plants."

In the second sentence of the sixth paragraph of Subsection 701.01 on pages 718 and 719, change "shall" to "will."

### <u>907-701.02--Portland Cement.</u>

**907-701.02.1-General.** Delete Subsections 701.02.1.1, 701.02.1.2, 701.02.2, 701.02.2.1, and 701.02.2.2 on pages 719 and 720, and substitute the following.

**907-701.02.1.1--Types of Portland Cement**. Portland cement shall be either Type I, Type II, or Type III conforming to AASHTO M85 or Type III (MS). Type III (MS) is defined as a Type III cement conforming to AASHTO M85 having a maximum tricalcium aluminate (C<sub>3</sub>A) content of 8%.

### 907-701.02.2--Blank.

907-701.02.2.1--Blank.

907-701.02.2.2--Blank.

Delete Subsection 701.04 on pages 720 and 721, and substitute the following.

### 907-701.04--Blended Hydraulic Cement.

<u>907-701.04.1--Types of Blended Hydraulic Cement.</u> Blended hydraulic cements (blended cements) shall be of the following types and conform to AASHTO M 240:

Type IL – Portland-limestone cement

Type IP – Portland-pozzolan cement

Type IS – Portland blast-furnace slag cement

Blended cement Types IL, IP, and IS meeting the "MS" sulfate resistance requirement listed in AASHTO M 240, Table 3 shall have the "(MS)" suffix added to the type designation.

CODE: (IS)

### SPECIAL PROVISION NO. 907-702-4

**DATE:** 09/11/2018

**SUBJECT:** Bituminous Materials

Section 702, Bituminous Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-702.04--Sampling.</u> Delete the sentence in Subsection 702.04 on page 722, and substitute the following.

Sampling of bituminous materials shall be as set out in AASHTO R 66.

<u>907-702.07--Emulsified Asphalt.</u> Delete the last sentence in Subsection 702.07 on page 724, and substitute the following.

Asphalt for fog seal shall conform to the requirements of Subsection 907-702.12, Table V.

<u>907-702.12--Tables.</u> Delete Table V in Subsection 702.12 on page 729, and substitute the following.

TABLE V SPECIFICATION FOR FOG SEAL

	Ll	<b>D-7</b>	CH	PF-1	
Test Requirements	Min.	Max.	Min.	Max.	Test Method
Viscosity, Saybolt Furol, @ 25°C, Sec.	10	100	-	100	AASHTO T 72
Storage Stability Test, 24 hr, %	-	1	-	1	AASHTO T 59
Settlement, 5 day, %	-	5	-	-	AASHTO T 59
Oil Distillate, %	-	1	-	-	AASHTO T 59
Sieve Test, % *	-	0.3	-	0.1	AASHTO T 59
Residue by Distillation, %	40	-	40	-	AASHTO T 59
<b>Test on Residue from Distillation</b>					
Penetration @ 25°C, 100g, 5 sec	-	20	40	90	AASHTO T 49
Softening Point, °C	65	-	-	-	ASTM D 36
Solubility in trichloroethylene, %	97.5	-	-	-	AASHTO T 44
Elastic Recovery @ 25°C, %	-	-	40	-	AASHTO T 301
Original DSR @ 82° (G*/Sinδ, 10 rad/sec)	1	-	-	-	AASHTO T 111

<sup>\*</sup> The Sieve Test result is tested for reporting purposes only and may be waived if no application problems are present in the field.

SPECIAL PROVISION NO. 907-703-2

CODE: (SP)

**DATE:** 11/29/2022

**SUBJECT:** Gradation

Section 703, Aggregates, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

### 907-703.03--Coarse Aggregates for Hydraulic Cement Concrete.

### 907-703.03.2--Detail Requirements.

<u>907-703.03.2.4--Gradation.</u> In the table in Subsection 703.03.2.4 on page 734, add 100 for the percent passing by weight on the 1½-inch sieve for Size No. 67 aggregates.

Delete Note 2 under the table in Subsection 703.03.2.4 on page 734, and substitute the following.

Note <sup>2</sup> – 100 percent shall pass the 1-inch sieve for Size 67 used in Class F and Class FX concrete.

CODE: (IS)

### SPECIAL PROVISION NO. 907-705-1

**DATE:** 06/13/2018

**SUBJECT:** Stone Riprap

Section 705, Stone Blanket Protection and Filter Blanket Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-705.04--Stone Riprap</u>. Delete the last sentence of the first paragraph of Subsection 705.04 on page 750, and substitute the following.

Quality requirements for rock to be furnished under these specifications will come from a preapproved source and be visually approved prior to use.

### SPECIAL PROVISION NO. 907-707-3

CODE: (IS)

DATE: 10/27/2021

**SUBJECT:** Joint Materials

Section 707, Joint Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

### 907-707.02--Joint Filler.

907-707.02.2--Preformed Sponge, Rubber, Cork and Closed-Cell Polypropylene Foam Joint Fillers for concrete Paving and Structural Constructions. Delete the two paragraphs of Subsection 707.02.2 on page 755, and substitute the following.

Preformed joint filler shall conform to AASHTO M 153 for sponge, rubber, and cork and tested according to ASTM D545. The type required will be indicated on the plans.

Closed-cell polypropylene foam shall conform to the requirements in ASTM D8139 and tested in accordance with ASTM D545.

907-707.02.3--Wood. Delete paragraph (b) of Subsection 707.02.3 on page 755, and substitute the following:

(b) Dimensions shall be as shown on the plans Dimensions shown on the plans are "dressed" sizes in accordance with Table 3 of the American Softwood Lumber Standard, SP-20. At the discretion of the Engineer, a 3/4-inch dressed board may be used in lieu of a 1-inch dressed board. A tolerance of plus or minus 1/16 inch thickness and plus or minus 1/8 inch width will be permitted. For slip-form paving a tolerance of minus 1/4 inch on each end in length will be permitted.

907-707.06--Flexible Plastic Gasket for Joining Conduit. Delete the third paragraph of Subsection 707.06 on page 756, and substitute the following.

The Department may require the performance test described in ASTM C 990.

### **SPECIAL PROVISION NO. 907-711-2**

CODE: (IS)

**DATE:** 09/11/2018

**SUBJECT:** Plain Steel Wire

Section 711, Reinforcement and Wire Rope, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-711.02--Deformed and Plain Carbon-Steel Bars for Concrete Reinforcing.

<u>907-711.02.3--Steel Welded and Non-Welded Wire Reinforcement, Plain and Deformed, for Concrete.</u>

<u>907-711.02.3.1--Plain Steel Wire.</u> Delete the sentence in Subsection 711.02.3.1 on pages 780 and 781, and substitute the following.

Plain steel wire and plain steel welded wire shall conform to the requirements of AASHTO M 336.

CODE: (SP)

### SPECIAL PROVISION NO. 907-712-1

**DATE:** 12/07/2021

**SUBJECT:** Fence and Guardrail

Section 712, Fence and Guardrail, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-712.01--General</u>. After the sentence in Subsection 712.01 on page 785, add the following.

All materials' inspection, testing, and certification will be performed in accordance with the requirements of the current version of the Department's *Materials Division Inspection, Testing, and Certification Manual*.

Delete Subsections 712.02 and 712.03 on page 785, and substitute the following.

<u>907-712.02--Barbed Wire.</u> Barbed wire shall conform to the requirements of AASHTO M 280. In the coastal counties of Hancock, Harrison, and Jackson, either Coating Type Z Class 3 or Coating Type A shall be furnished. In all other areas of the State, either Coating Type Z Class 1, Coating Type Z Class 3, Coating Type ZA Class 60, or Coating Type A shall be furnished.

<u>907-712.03--Metallic-Coated, Steel Woven Wire Fence Fabric</u>. Woven wire fencing (i.e., "hog wire") shall conform to the requirements of AASHTO M 279. In the coastal counties of Hancock, Harrison, and Jackson, either Coating Type Z Class 3 or Coating Type A shall be furnished. In all other areas of the State, either Coating Type Z Class 1, Coating Type Z Class 3, Coating Type ZA Class 60, or Coating Type A shall be furnished.

<u>907-712.04--Chain Link Fence.</u> Delete Subsections 712.04.1 thru 712.04.7 on pages 785 & 786, and substitute the following.

<u>907-712.04.1--Fabric.</u> In the coastal counties of Hancock, Harrison, and Jackson, either Type I Class D, Type II, Type III, or Type IV fabrics shall be furnished. In all other areas of the State, either Type I Class C, Type I Class D, Type II, Type III, or Type IV fabrics shall be furnished.

<u>907-712.04.2--Tie Wire</u>. Tie wire shall be of the same material as the fencing wire being used, shall be of good commercial quality, and shall meet the requirements of AASHTO M 181. Either Type I, Type II, Type III, or Type IV tie wire shall be furnished.

<u>907-712.04.3--Tension Wire.</u> Tension wire shall be of the same material as the fencing wire being used, shall be of good commercial quality, and shall meet the requirements of AASHTO M 181. In the coastal counties of Hancock, Harrison, and Jackson, either Type I Class 3, Type II, Type III, or Type IV tension shall be furnished. In all other areas of the State, either Type II, Type IV, or Type I Classes 1, 2, or 3 tension wires shall be furnished.

<u>907-712.04.4--Posts Rails, Gate Frames, and Expansion Sleeves.</u> Posts, rails, gate frames, and expansion sleeves shall conform to the requirements for posts in Subsection 712.05.2, unless otherwise designated in the contract.

<u>907-712.04.5--Miscellaneous Fittings and Hardware.</u> Miscellaneous fittings and hardware shall conform to the requirements of Subsection 712.16.

### 907-712.05--Fence Posts and Braces.

### 907-712.05.1--Treated Timber Posts and Braces.

<u>907-712.05.1.1--General.</u> Delete the third, fourth, fifth, and sixth paragraphs of Subsection 712.05.1.1 on page 787, and substitute the following.

All wood posts and braces shall be treated in accordance with Subsections 718.03 and 718.04.

<u>907-712.05.1.2--Round Posts.</u> Delete the last sentence of the last paragraph of Subsection 712.05.1.2 on page 788.

<u>907-712.05.1.3--Sawed Posts.</u> Delete the last sentence of the paragraph of Subsection 712.05.1.3 on page 788.

<u>907-712.05.1.4--Sawed Braces.</u> Delete the last sentence of the paragraph of Subsection 712.05.1.4 on page 788.

Delete Subsection 712.05.2 on page 788, and substitute the following.

### 907-712.05.2--Metal Posts.

<u>907-712.05.2.1--Round Steel Pipe.</u> Round steel pipe shall meet the requirements of AASHTO M 181, either Grade 1 (i.e., meeting the requirements in ASTM F 1083) or Grade 2 (i.e., meeting the requirements of ASTM F 1043).

Round steel pipe shall be sized in accordance with NPS (nominal pipe size) designations as shown on Plans, and not according to the outer or inner pipe diameter.

<u>907-712.05.2.2--Steel Fence Post and Assemblies, Hot-Wrought</u>. Steel posts with the following section shapes, Tee, channel or U, and Y-Bar shall meet the requirements of AASHTO M 281, galvanized in accordance with the requirements of AASHTO M 111, unless otherwise specified in the contract. Acceptance of these steel posts shall be by certification from the manufacturer, producer, supplier, or fabricator, as applicable.

### 907-712.05.2.3--Blank.

907-712.05.2.4--Steel H-Beam Posts. Steel H-Beam posts shall be produced from structural quality weldable steel having a minimum yield strength of 45,000 psi and shall be galvanized in accordance with ASTM A 123. Steel H-Beam line posts shall be 2.250 inches by 1.625 inches and shall weigh 3.43 pounds per foot. A tolerance of plus or minus 5.0 percent is allowed for

weight per foot. A tolerance of plus or minus 1.0 percent is allowed for dimensions.

<u>907-712.05.2.5--Aluminum-Alloy Posts and Assemblies.</u> Round aluminum-alloy posts shall meet the requirements of ASTM B 241, Alloy 6061, T6. Aluminum-Alloy H-Beam posts shall meet the requirements of ASTM B 221, Alloy 6061, T6.

<u>907-712.05.2.6--Formed Steel Section Posts.</u> Formed steel section posts, "C" sections, shall be formed from sheet steel conforming to ASTM A 1011, Grade 45, and shall be galvanized in accordance with ASTM A 123.

### 907-712.06--Guard and Guardrail Posts.

### 907-712.06.2--Treated Wood Posts.

<u>907-712.06.2.1--Square Posts.</u> Delete the paragraph in Subsection 712.06.2.1 on page 789, and substitute the following.

All square posts shall be inspected for conformance with Section 712.05, except that the posts may be rough and shall be within  $\pm 3/8$ " of the dimensions shown on the plans.

<u>907-712.06.2.2--Round Posts.</u> Delete the paragraph in Subsection 712.06.2.2 on page 789, and substitute the following.

All round posts shall be inspected for conformance with Section 712.05, except that the posts shall be of the shape and dimensions shown on the plans.

<u>907-712.06.5--Treated Wood Blocks for Use with Metal Guardrail Posts.</u> Delete the paragraphs of Subsection 712.06.5 on pages 789 & 790, and substitute the following.

Treated wood blocks for use with metal guardrail posts shall be within  $\pm 3/8$ " of the size and dimensions shown on the plans, except that a minus tolerance shall not be allowed for the slotted width in which the metal post must fit.

Delete Subsection 712.16 on page 791, and substitute the following.

<u>907-712.16--Hardware.</u> All ferrous metal hardware for fencing such as bolts, nuts, washers, and metal straps shall be as specified on the plans and galvanizing shall not be less than 1.0 ounce per square foot of uncoated area. Aluminum coated hardware shall be coated with aluminum meeting the requirements of AASHTO M 181 for aluminum coating and at the rate of not less than 0.4 ounces per square foot of uncoated area.

Aluminum alloy hardware shall conform to the requirements of ASTM B 221 for extruded aluminum alloy 6063, T6. The finished members shall be of uniform quality.

Aluminum-zinc coated hardware shall be coated with an aluminum-zinc alloy meeting the chemical requirements and weight of coating specified for aluminum-zinc alloy coated metal gates.

CODE: (SP)

### SPECIAL PROVISION NO. 907-714-3

**SUBJECT:** Miscellaneous Materials

08/31/2021

Section 714, Miscellaneous Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

### 907-714.01--Water.

DATE:

**907-714.01.1--General.** Delete the last sentence of the second paragraph in Subsection 714.01.1 on page 794.

<u>907-714.01.2--Water for Use in Concrete.</u> Delete Subsection 714.01.2 on page 794, and substitute the following:

Water from municipal sources is permitted be used as mixing water in concrete, mortar, and grout without Department testing. Water from non-municipal water sources used in mixing of concrete, mortar, and grout which does not meet the requirements in Subsection 714.01.1 shall be tested for conformance as required in AASHTO M157, Table 1 and Table 2.

<u>907-714.01.3--Water for Use in Chemically Stabilized Based.</u> Delete the first sentence of first paragraph in Subsection 714.01.3 on page 794, and substitute the following:

Water used in the construction of bases that contain cement, lime, or other chemical additive shall be as set out in Subsection 714.01.1. Water from municipal sources is permitted to be used without testing for conformance to the requirements below. If water is not from a municipal source, it shall not contain impurities in excess of the following limits:

Delete Subsection 714.01.6 on page 795, and substitute the following.

### 907-714.01.6--Blank.

907-714.05--Fly Ash.

<u>907-714.05.1--General.</u> Delete the first sentence of the fifth paragraph in Subsection 714.05.1 on page 797.

### 907-714.13--Geotextiles.

<u>907-714.13.11--Tables.</u> Delete Table 1 in Subsection 714.13.11 on page 813, and substitute the following.

	,	,		_	able I - Geotextiles	(tilles						
Type Designation	$\mathbf{I}_{1}$	п	Η	N	>	>	I	M		ΛIII	ΙX	
	Sedime	Sediment Control	Drainage	Paving	Separation & Drainage	Se	paration, Stabiliza Reinforcement	Separation, Stabilization & Reinforcement	ઝ	High Strength	rength	
Physical Property <sup>2</sup>						Woven	Non- Woven	Woven	Non- Woven			Test Method
Grab Strength (lb)	50	06	110	06	200	280	180	450	280			ASTM D 4632
Elongation (%)		50% max @ 45 lb	20% min	50% min @ break	50% min	50% max	50% Min	50% max	50% Min			ASTM D 4632
Seam Strength (lb)	-	-	70		180	240	160	400	240	ł		ASTM D 4632
Puncture Strength (1b)			40		80	110	75	180	115			ASTM D 6241
Trapezoidal Tear (lb)	-	-	40		80	100	70	150	100	ł		ASTM D 4533
Asphalt Retention (gal/yd²)		I	1	0.2	-							ASTM D 6140
Permittivity (sec <sup>-1</sup> ) min	0.05	0.05	0.5		0.2	0.2	0.2	0.2	0.2			ASTM D 4491
AOS Woven (mm) max	09.0	09.0	9.0		9.0	0.43		0.43				ASTM D 4751
AOS Non-Woven (mm) max	0.84	0.84	0.43	1	0.43		0.43	1	0.43	-		
Tensile Strength after UV (% Retained)	70% @ 500 hr	70% @ 500 hr	50% @ 500 hr		50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr			ASTM D 4355
Melting Point °(F)		-		325								ASTM D 276
Minimum Ultimate Tensile Strength <sup>3</sup> (Ib/in)										099	2000	ASTM D 4595

Values for AOS represent the maximum average roll values, 2 - Values not identified in this table should meet manufacturer certification for the use and application, 3- Machine direction Notes: 1 - All property values, with the exception of apparent opening size (AOS), represent minimum average roll values in the weakest principal direction.

Delete Subsection 714.15 on pages 816 and 817 and substitute the following.

### 907-714.15--Geogrids.

<u>907-714.15.1–General</u>. A geogrid is defined as a geosynthetic formed by a regular network of connected elements with apertures greater than 0.25 inch to allow interlocking with surrounding soil, rock, and other surrounding materials to function primarily as reinforcement.

Geogrid shall be manufactured from an expanded strain hardened monolithic polymer sheet composed of one or more synthetic polymers and shall be mildew resistant and inert to biological degradation and naturally encountered chemicals, alkalis and acids. The geogrid shall contain stabilizers and/or inhibitors, or a resistance finish or covering to make it resistant to deterioration from direct sunlight, ultraviolet rays, and heat.

Geogrid manufacturers shall participate in and be in compliance with the American Association of State Highway Transportation Officials (AASHTO) National Transportation Product Evaluation Program's (NTPEP) Geosynthetics audit program. Geogrid shall meet the requirements of Table II for the application and type shown on the plans and shall be selected from the Department's Approved Lists.

907-714.15.1.1--Geogrid for Retaining Walls and Reinforced Soil Slopes. Geogrid for retaining walls and reinforced soil slopes shall be creep tested in accordance with AASHTO R69 and meet Long Term Design Load, Minimum Ultimate Tensile Strength, and open area criteria listed in Table II. Manufacturers shall perform at least one long-term creep test for no less than 10,000 hours in accordance to ASTM D 5262 for each polymer or composition of polymers from which the geogrid is produced. The long-term design load that shall be reported for design use, shall be that load at which no more than 10% strain occurs over a 100-year design life of the geogrid, as calculated in accordance with AASHTO R69. Long-term design loads shall be reported unfactored, and the AASHTO strength reduction factors (Durability and Installation, and safety factors) will be considered by the Department's Geotechnical Branch on a site specific design basis.

<u>907-714.15.1.2--Geogrid for Subgrade Stabilization</u>. Geogrid for subgrade stabilization shall meet Minimum Ultimate Tensile Strength and open area criteria listed in Table II.

907-714.15.2--Marking, Shipment, and Storage. Each roll or container of geogrid shall be visibly labeled with the name of the manufacturer, trade name of the product, lot number, and quantity of material. In addition, each roll or container shall be clearly tagged to show the type designation that corresponds to that required by the plans. During shipment and storage the geogrid shall be protected from direct sunlight, and temperatures above 120°F or below 0°F. The geogrid shall either be wrapped and maintained in a heavy duty protective covering or stored in a safe enclosed area to protect from damage during prolonged storage.

<u>907-714.15.3--Manufacturer Certification</u>. The Contractor shall furnish the Engineer three copies of the manufacturer's certified test reports indicating that the geogrid furnished conforms to the requirements of the specifications and is of the same composition as the originally approved

by the Department.

<u>907-714.15.4--Acceptance Sampling and Testing</u>. Final acceptance of each shipment will be based upon results of tests performed by the Department on verification samples submitted from the project, as compared to the manufacturer's certified test reports. The Engineer will select one roll or container at random from each shipment for sampling. As sample extending full width of the randomly selected roll or container and being at least five (5) square yards in area will be obtained and submitted by the Engineer. All material samples shall be provided at no cost to the State.

TABLE II GEOGRIDS

Physical Properties			Type De	signation			Test Method
	I	II	III	IV	V	VI	
Long Term Design Load <sup>1</sup> , pounds per foot, Machine Direction	250	500	750	1500	2500	3500	AASHTO R69, ASTM D5262
Minimum Ultimate Tensile Strength <sup>2</sup> , pounds per foot, Machine Direction	500	1000	1500	3000	5000	7000	ASTM D6637
Open Area, percent	70	70	50	50	50	50	Direct Measurement

<sup>&</sup>lt;sup>1</sup> Minimum design criteria requirement.

<sup>&</sup>lt;sup>2</sup> Minimum Average Roll Value (MARV).

CODE: (SP)

### SPECIAL PROVISION NO. 907-718-1

**DATE:** 12/07/2021

**SUBJECT:** Timber and Dimension Lumber

Section 718, Timber and Dimension Lumber, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete the Subsections in Section 718 on pages 836 thru 838, and substitute the following.

<u>907-718.01--General.</u> All timber and dimension lumber shall be Southern pine and shall conform in all respects to applicable requirements of AASHTO M 168. The Department reserves the right to sample and to test all materials at any time; all inspection, testing, and certification of materials will be performed in accordance with the requirements of the current version of the Department's *Materials Division Inspection, Testing, and Certification Manual*.

Timber and dimension lumber shall be furnished in the sizes shown on the plans or as specified. Unless otherwise specified, timber and dimension lumber shall be No. 1, or better, graded according to the latest American Lumber Standards.

Only one type of preservative shall be used for the treatment of materials for any one class of construction on a project, unless otherwise specified.

Where treated timber and dimensional lumber is to be used in non-highway construction or use, such as decking, handrails in walking trails, or in any manner where general public exposure by touch is possible, the treatment requirements will be as per project plans and/or approved by the State Materials Engineer.

<u>907-718.02--Untreated Timber and Dimension Lumber</u>. Untreated timber and dimension lumber shall conform to the requirements of AASHTO M 168.

<u>907-718.03--Treated Timber and Dimension Lumber</u>. Timber and dimension lumber to be treated shall meet the requirements herein specified and shall be treated as specified. Treated timber or dimensional lumber will not be accepted for use unless it has been inspected by an authorized representative of the Department and found to be satisfactory after treatment.

### 907-718.03.1--Blank.

### 907-718.03.2--Treatment.

<u>907-718.03.2.1--General.</u> All materials shall be treated in accordance with AASHTO M 133 unless otherwise directed by the Environmental Protection Agency (EPA).

### 907-718.03.2.2--Blank.

<u>907-718.03.2.3--Inspection</u>. Treated timber and dimension lumber shall be inspected by an authorized representative of the Department before being incorporated into the work. Treatment reports shall be provided to the Department for each lot of material supplied.

### 907-718.03.3--Blank.

<u>907-718.03.4--Storage of Treated Material</u>. All material treated for stock shall be stacked as compactly as possible on a well-drained surface. Material shall be supported on sills spaced as necessary, not to exceed 10 foot intervals and shall have at least one foot of air space beneath the stacks.

All materials treated with preservatives for use in buildings and applications where painting is required shall be dried after treatment. The treated wood shall be dried in accordance with American Lumber Standards.

<u>907-718.04--Preservative</u>. Preservatives shall be as specified in AASHTO M 133 unless otherwise directed by the Environmental Protection Agency (EPA).

CODE: (IS)

### **SPECIAL PROVISION NO. 907-720-3**

DATE: 07/09/2024

**SUBJECT: Pavement Marking Materials** 

Section 720, Pavement Marking Materials, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete Section 720 on pages 840 thru 854, and substitute the following.

### **SECTION 720 - PAVEMENT MARKING MATERIALS**

<u>907-720.01--General</u>. The Department reserves the right to perform sampling and testing of any materials at any time. Upon request of the Engineer, samples of the material shall be furnished.

<u>907-720.02--Color Requirements.</u> All pavement markings except raised pavement markers are required to meet the color requirements of ASTM D6628.

<u>907-720.03--Optics</u>. Optics used in thermoplastic pavement markings shall consist of a double-drop system of glass beads or advanced optics.

<u>907-720.03.1--Glass Beads</u>. The manufacturer shall furnish the Engineer with a certified test report indicating that the glass beads meet AASHTO M 247. AASHTO Type 4 beads shall be applied to the newly placed stripe first, followed by the application of AASHTO Type 1 beads. Type 1 and 4 glass beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles. Type 1 and 4 glass beads shall be coated with a bead coating that is compatible with the traffic marking material to which the glass beads will be applied and will provide adequate moisture proofing, increased adhesion, and optimum embedment of the glass beads.

907-720.03.1.1--Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

<u>907-720.03.2--Advanced Optics</u>. Advanced optics are materials that do not meet the specific requirements of AASHTO M 247 but produce a final drop-on optics system that meets or exceeds

the reflectivity requirements in Special Provision 907-626. Advanced optics shall be a double-drop system that is pre-approved and listed on the Department's Approved Products List.

<u>907-720.03.2.1--Acceptance Procedure</u>. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing may be conducted at the request of the Engineer. Samples of the material shall be furnished and shall be provided at no cost to the State.

### 907-720.04--Thermoplastic Marking Material.

<u>907-720.04.1--General.</u> Thermoplastic marking material shall meet the color requirements of Subsection 907-720.02.

There shall be no obvious change in the color of the material if held at its plastic temperature for a period of four (4) hours nor by reason of four (4) re-heatings to its plastic temperature.

The pavement markings shall maintain its original dimension and placement. The material shall not be slippery when wet and it shall not lift from the pavement in freezing weather.

<u>907-720.04.2--Extruded Thermoplastic Material</u>. Extruded thermoplastic pavement marking material shall meet the requirements of AASHTO M 249, and shall meet the requirements of 907-720.04 with the following exceptions:

• Blue - ADA thermoplastic marking material shall meet the requirements of Subsection 907-720.04.2 with the exception that the color shall be Blue – ADA, and the Contractor may use hot applied thermoplastic materials meeting the satisfaction of the Engineer.

<u>907-720.04.3--Spray-Applied Thermoplastic Material</u>. Spray-applied thermoplastic pavement marking material shall meet the requirements of AASHTO M 249 and shall meet the requirements of 907-720.04.

<u>907-720.04.4--Pre-formed Thermoplastic Material</u>. Heat-fused, pre-formed thermoplastic pavement marking material shall meet the color requirements of 907-720.02.

<u>907-720.04.5--Acceptance Procedure</u>. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

### 907-720.05--Pavement Marking Tape.

<u>907-720.05.1--General.</u> Pavement marking tape shall be listed on the Department's Approved Lists.

<u>907-720.05.2--Cold Plastic Pavement Markings (Permanent Pavement Marking Tape).</u> Pavement marking tape for use in roadway applications shall be designated on the Department's Approved Lists as permanent.

The prefabricated markings described shall consist of white or yellow pigmented plastic films with reflective optics uniformly distributed throughout their entire cross-sectional area, and be capable of being affixed by either a pressure sensitive pre-coated adhesive or a liquid contact cement. The markings shall be provided complete in a form that will facilitate rapid application and protect the markings in shipment and storage. The manufacturer shall identify proper solvents and/or adhesives to be applied at the time of application, all equipment necessary for proper application, and recommendations for application that will assure an effective performance life.

Prefabricated legends and symbols shall conform to the applicable shapes and sizes as outlined in the current "Manual on Uniform Traffic Control Devices."

<u>907-720.05.2.1--Specific Requirements</u>. Unless otherwise indicated on the plans, the patterned material without adhesive shall have a minimum caliper of 0.065 inch at the thickest portion of the patterned cross-section and a minimum caliper of 0.020 inch at the thinnest portion of the cross-section. The material shall be a pliant polymer film with  $50\pm15\%$  of the surface are raised and presenting a near vertical face angle of  $0^{\circ}$  to  $60^{\circ}$  to traffic from any direction. The channels between the raised areas shall be substantially free of exposed optics or particles.

The size and quality of the optics will be such that performance requirements of Subsection 907-720.02 for the retroreflective pliant polymer film shall be met. The pigments shall be selected and blended to provide a marking film that is white or yellow conforming to the performance requirements of Subsection 907-720.02 through the expected life of the film.

<u>907-720.05.2.2--Conformability and Resealing.</u> The marking shall be capable of conforming to pavement contours, breaks, faults, etc. through the action of traffic at normal pavement temperatures.

The marking shall have resealing characteristics that allows it to be capable of fusing with itself and previously applied marking of the same composition under normal conditions of use. The marking shall be capable of use for patching worn areas of the same type in accordance with manufacturer's instructions.

<u>907-720.05.2.3--Tensile Strength and Elongation</u>. The material shall have a minimum tensile strength of 40 pounds per square inch of cross section when tested according to ASTM D 638. A 6-inch x 1-inch x 0.06-inch sample shall be tested at a temperature between 70°F and 80°F using a jaw speed of 12 inches per minute.

The material shall have a minimum elongation of 75% at break when tested according to ASTM D 638 using a jaw speed of 12 inches per minute.

<u>907-720.05.2.4--Skid Resistance</u>. The surface of the material shall provide a minimum skid resistance value of 45 BPN when tested according to ASTM E 303 except values will be taken at downweb and at a 45-degree angle from downweb. These two values will then be averaged to find the skid resistance of the patterned surface.

<u>907-720.05.2.5--Effective Performance Life and Warranty.</u> When applied according to the recommendations of the manufacturer the pavement marking tape shall provide a neat and durable marking that will not flow or distort due to temperature if the pavement surface remains stable. The film shall be weather resistant and through normal traffic wear shall show no appreciable fading, lifting, or shrinkage throughout the useful life of the marking, nor shall it show significant tearing, roll back, or other signs of poor adhesion.

All manufacturer's standard warranties and guarantees on pavement marking tape, which are provided as customary trade practice, shall be delivered to the Engineer at the final inspection. All warranties and guarantees shall be made out to the Department.

<u>907-720.05.2.6--Acceptance Procedure</u>. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

<u>907-720.05.3--Preformed Pavement Markings for Construction Zones</u>. Preformed pavement markings for construction zones shall be designated Department's Approved Lists as temporary. Retroreflective preformed pavement markings for construction zones shall be as specified on the plans or in the contract documents.

The markings shall be provided in specified widths and shapes. Preformed words and symbols shall conform to the applicable shapes and sizes as outlined in the current "Manual on Uniform Traffic Control Devices for Streets and Highways," or as modified.

The materials shall be packaged in accordance with accepted commercial standards and when stored indoors in a cool dry place, shall be suitable for use one year after date of purchase.

<u>907-720.05.3.1--Specific Requirements.</u> Preformed markings shall consist of retroreflective materials on a conformable backing and shall meet the performance requirements of Subsection 907-720.02. The markings shall consist of a mixture of high-quality polymeric materials, pigments, and optics with a reflective layer of optics bonded to the top surface. The markings shall

be pre-coated with a pressure sensitive adhesive capable of adhering to pavement in accordance with the manufacturer's instructions without the use of heat, solvents, or other additional adhesives. The markings and/or adhesive shall not require any curing time after application. A coated non-metallic medium shall be incorporated with the pressure sensitive adhesive to facilitate removal.

907-720.05.3.2--Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

### 907-720.06--Raised Pavement Markers.

<u>907-720.06.1--General.</u> Pavement markers shall be listed on the Department's Approved Lists and shall conform to ASTM D 4280.

<u>907-720.06.2--Packaging</u>. Shipments shall be made in containers acceptable to common carriers and packaged in such a manner as to ensure delivery in perfect condition. All damaged shipments shall be replaced by the Contractor. Each package shall be clearly marked as to the name of the manufacturer, type, quantity enclosed, lot number, and date of manufacture.

<u>907-720.06.3--Non-Reflective Pavement Markers</u>. Non-reflective pavement markers are occasionally referred to as "jiggle markers". Non-reflective markers consisting of a heat-fired, vitreous, ceramic base, and a heat-fired, opaque, glazed surface are permitted for use; the bottom of the marker shall not be glazed. Ceramic markers shall be produced from any suitable combination of intimately mixed clays, shales, talcs, flints, feldspars, or other inorganic material. Ceramic markers shall be thoroughly and evenly matured, and all non-reflective pavement markers shall be free from defects which affect appearance or serviceability.

Ceramic non-reflective markers shall conform to the following finish and testing requirements in Table 2 below.

Table 2

Ceramic Non-Ref	flective Marker Requirements
Glaze Thickness	0.005 inch, minimum
Mohs Hardness	6, minimum
Autoclave	Glaze shall not spall, craze, or peel.
Compressive Strength	750 psi, minimum
Water Absorption	2.0%, maximum

<u>907-720.06.4--Acceptance Procedure</u>. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to

furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

### 907-720.07--Adhesive for Pavement Markers.

<u>907-720.07.1--General.</u> The adhesive shall be listed on the Department's Approved Lists and shall be an asphaltic material suitable for bonding pavement markers to surfaces when the road surface and marker temperatures are in the range of 50°F to 160°F. The composition of the adhesive must be such that its properties will not deteriorate when heated to and applied at temperatures up to 425°F. Samples may be submitted in the form of an adhesive testing package from each batch or material obtained from a package shipped to the project.

<u>907-720.07.2--Packaging and Labeling.</u> The adhesive shall be packaged in self-releasing cardboard containers that will stack properly. The label shall show the manufacturer, quantity, and lot or batch number. "Adhesive for Pavement Markers" or "Adhesive for Traffic Markers" shall be printed in bold lettering on the label.

907-720.07.3--Bituminous Adhesive. The asphaltic adhesive material shall be flexible type.

<u>907-720.07.3.1--Flexible Bituminous Adhesive</u>. Flexible bituminous adhesive shall be designated on the Department's Approved Lists as flexible and shall comply with requirements of Table 3 below.

**Flexible Bituminous Adhesive Properties** Min Max Test Method Penetration @ 77°F 25 ASTM D 5 Softening Point, °F 200 ASTM D 36 Brookfield Viscosity @ 400°F, cp. 10,000 **ASTM D 3236** Ductility @ 77°F, 5 cm/min 15 **ASTM D 113** Ductility @ 39.2°F, 1 cm/min 5 **ASTM D 113** Asphalt Compatibility Pass **ASTM D 5329** Flexibility @ 20°F Pass Per Subsection

Table 3

<u>907-720.07.4--Acceptance Procedure</u>. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual). Samples of the material shall be furnished and shall be provided at no cost to the State.

CODE: (IS)

### **SPECIAL PROVISION NO. 907-721-4**

DATE: 04/19/2022

**SUBJECT:** Materials for Signing

Section 721, Materials for Signing, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

### 907-721.06--Reflective Sheeting.

<u>907-721.06.2--Performance Requirements.</u> Delete Table 4 and Table 5 in Subsection 721.06.2 on pages 860 & 861, and substitute the following.

### MINIMUM COEFFICIENTS OF RETROREFLECTION Candela per foot candle per square foot (cd/fc/ft²) Per ASTM Designation D4956

TABLE 4
Type IX Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Fluorescent Yellow/Green	Fluorescent Yellow	Fluorescent Orange
0.2°	-4.0°	380	285	38	76	17	300	230	115
0.2°	+30.0°	215	162	22	43	10	170	130	65
0.5°	-4.0°	240	180	24	48	11	190	145	72
0.5°	+30.0°	135	100	14	27	6.0	110	81	41
1.0°	-4.0°	80	60	8.0	16	3.6	64	48	24
1.0°	+30.0°	45	34	4.5	9.0	2.0	36	27	14

TABLE 5
Type XI Sheeting

Observation Angle	Entrance Angle	White	Yellow	Green	Red	Blue	Brown	Fluorescent Yellow/Green	Fluorescent Yellow	Fluorescent Orange
0.2°	-4.0°	580	435	58	87	26	17	460	350	175
0.2°	+30.0°	220	165	22	33	10	7.0	180	130	66
0.5°	-4.0°	420	315	42	63	19	13	340	250	125
0.5°	+30.0°	150	110	15	23	7.0	5.0	120	90	45
1.0°	-4.0°	120	90	12	18	5.0	4.0	96	72	36
1.0°	+30.0°	45	34	5.0	7.0	2.0	1.0	36	27	14

After Subsection 721.10 on page 864, add the following.

<u>907-721.11--Digital Applied Printing</u>. The following addresses the requirements for digitally printed finished retroreflective traffic control signs on flat sheet aluminum and digitally printed traffic sign faces intended to be applied to a sign substrate.

<u>907-721.11.1--Digitally Printed Ink Systems</u>. Traffic signs must be produced using components, and processes that comply with the retroreflective sheeting manufacturer's recommendations.

Digital printed ink systems used to print traffic signs must meet and comply with daytime and nighttime chromaticity (color standards) as recognized in ASTM D4956 "Standard Specification for Retroreflective Sheeting for Traffic Control."

Digital printed ink systems must meet 70% of the initial retroreflectivity specifications of each respective reflective film color as found in ASTM D4956 "Standard Specification for Retroreflective Sheeting for Traffic Control."

Prior to fabrication and preferably at the preconstruction meeting, the Contractor shall advise the Project Engineer in writing as to which signs on the project will be digitally printed and which ones will be screen printed. The Contractor shall submit to the Project Engineer certifications for all digitally printed signs, which will be forwarded to the State Traffic Engineer for review.

<u>907-721.11.2--Protective Overlay Film.</u> Permanent traffic signs printed with digital ink systems will be fabricated with a full sign protective overlay film designed to provide a smooth surface needed for retroreflectivity, and to protect the sign from fading and UV degradation. The overlaminate shall comply with the retroreflective sheeting manufacturer's recommendations to ensure proper adhesion and transparency and will also meet the reflective film durability as identified in Table 1.

Table 1
Retroreflective Film Minimum Durability Requirements

ASTM D4956 Type	Full Sign Replacement Term (years)	Sheeting Replacement Term (years)
IV	7	10
VIII	7	10
IX	7	12
XI	7	12

Temporary signs used in work zones printed with black ink only will not require a protective overlay film as long as the finished sign is warranted for a minimum outdoor durability of three years by the sheeting manufacturer.

<u>907-721.11.3--Inspection</u>. During fabrication, the Contractor shall provide sufficient testing and quality control throughout fabrication to insure good workmanship. Once the material has been received, it may be subject to random testing to ensure compliance with all requirements. If any test samples do not conform to the requirements, the entire order may be returned at the vendor's expense.

<u>907-721.11.4--Traffic Sign Performance Warranty Provisions</u>. Based on the ASTM Type of sheeting specified, traffic control signs shall be warranted for the duration shown in Table 1. The Contractor shall supply a copy of the warranty document with complete details of terms and conditions upon request of the Department.

<u>907-721.11.5--Certified Digital Sign Fabricator</u>. Sign fabricators using digital imaging methods to produce regulated traffic signs must be certified by the reflective sheeting manufacturer whose materials are used to produce the delivered signs.

Certified sign fabricators must undergo an audit process by the sheeting manufacturer to ensure they have the proper equipment, manufacturing capabilities, manufacturing application processes and the materials required to fulfill the sheeting manufacturer's warranty obligations. Sign fabricators must recertify annually with reflective sheeting manufacturers or utilize a 3<sup>rd</sup> party certifier approved by the reflective sheeting manufacturer.

The Contractor shall submit proof of Sign Fabricator Certification as issued by the retroreflective sign sheeting manufacturer to the Project Engineer upon delivery of the signs, or with the Shop Drawings.

### SECTION 905 - PROPOSAL

	Date	
Mississippi Transportation Commission		
Jackson, Mississippi		
Sirs: The following proposal is made on behalf of		
of		

for constructing the following designated project(s) within the time(s) hereinafter specified.

The plans are composed of drawings and blue prints on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

The Specifications are the current Standard Specifications of the Mississippi Department of Transportation approved by the Federal Highway Administration, except where superseded or amended by the plans, Special Provisions and Notice(s) to Bidders attached hereto and made a part thereof.

I (We) certify that I (we) possess a copy of said Standard and any Supplemental Specifications.

Evidence of my (our) authority to submit the Proposal is hereby furnished. The proposal is made without collusion on the part of any person, firm or corporation. I (We) certify that I (we) have carefully examined the Plans, the Specifications, including the Special Provisions and Notice(s) to Bidders, herein, and have personally examined the site of the work. On the basis of the Specifications, Special Provisions, Notice(s) to Bidders, and Plans, I (we) propose to furnish all necessary machinery, tools, apparatus and other means of construction and do all the work and furnish all the materials in the manner specified. I (We) understand that the quantities mentioned herein are approximate only and are subject to either increase or decrease, and hereby propose to perform any increased or decreased quantities of work at the unit prices bid, in accordance with the above.

I (We) acknowledge that this proposal will be found irregular and/or non-responsive unless a certified check, cashier's check, or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law) is submitted electronically with the proposal or is delivered to the Contract Administration Engineer prior to the bid opening time specified in the advertisement.

INSTRUCTION TO BIDDERS: Alternate and Optional Items on Bid Schedule.

- Two or more items entered opposite a single unit quantity WITHOUT DEFINITE DESIGNATION AS
  "ALTERNATE ITEMS" are considered as "OPTIONAL ITEMS". Bidders may or may not indicate on bids the
  Optional Item proposed to be furnished or performed WITHOUT PREJUDICE IN REGARD TO
  IRREGULARITY OF BIDS.
- 2. Items classified on the bid schedule as "ALTERNATE ITEMS" and/or "ALTERNATE TYPES OF CONSTRUCTION" must be preselected and indicated on bids. However, "Alternate Types of Construction" may include Optional Items to be treated as set out in Paragraph 1, above.
- 3. Optional items not preselected and indicated on the bid schedule MUST be designated in accordance with Subsection 102.06 prior to or at the time of execution of the contract.
- 4. Optional and Alternate items designated must be used throughout the project.

I (We) further propose to perform all "force account or extra work" that may be required of me (us) on the basis provided in the Specifications and to give such work my (our) personal attention in order to see that it is economically performed.

I (We) further propose to execute the attached contract agreement (Section 902) as soon as the work is awarded to me (us), and to begin and complete the work within the time limit(s) provided for in the Specifications and Advertisement. I (We) also propose to execute the attached contract bond (Section 903) in an amount not less than one hundred (100) percent of the total of my (our) part, but also to guarantee the excellence of both workmanship and materials until the work is finally accepted.

I (We) shall submit electronically with our proposal or deliver prior to the bid opening time a certified check, cashier's check or bid bond for <u>five percent (5%) of total bid</u> and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

### 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.

	Respectfully Submitted,
	DATE
	Contractor
	BYSignature
	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 names, titles and business addresses of the executives are as	State of and the follows:
President	Address
Secretary	Address
Treasurer	Address

Revised 1/2016

The following is my (our) itemized proposal.

Hinds

Striping & Pavement Markers on US 80 from Shaw Road to Terry Road, known as State Project No. STP-7314-01(006) / 109452301 in Hinds County.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
				Roadway I	tems
0010	202-B009		606	Square Yard	Removal of Asphalt Pavement, Failed Areas
0020	203-G002	(E)	127	Cubic Yard	Excess Excavation, LVM, AH
0030	406-D001		307	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0040	407-A001	(A2)	92	Gallon	Asphalt for Tack Coat
0050	503-C010		999	Linear Feet	Saw Cut, Full Depth
0060	619-A1002		370	Linear Feet	Temporary Traffic Stripe, Continuous White
0070	619-A2002		540	Linear Feet	Temporary Traffic Stripe, Continuous Yellow
0080	619-D1001		16	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0090	619-D2001		756	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0100	619-G4001		24	Linear Feet	Barricades, Type III, Double Faced
0110	620-A001		1	Lump Sum	Mobilization
0120	907-403-B002	(BA1)	467	Ton	12.5-mm, MT, Asphalt Pavement, Leveling
0130	907-413-E001		276	Linear Feet	Sawing and Sealing Transverse Joints in Asphalt Pavement
0140	907-420-A001		15,000	Pounds	Undersealing
0150	907-618-A001		1	Lump Sum	Maintenance of Traffic
0160	907-618-M2001		320	Hours	Work Zone Law Enforcement (\$60.00)
0170	907-626-A007		13	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip White
0180	907-626-B004		20	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous White
0190	907-626-D003		7	Mile	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow
0200	907-626-E003		15	Mile	6" Thermoplastic Double Drop Traffic Stripe, Continuous Yellow
0210	907-626-G006		44,382	Linear Feet	Thermoplastic Double Drop Detail Stripe, White
0220	907-626-G007		9,669	Linear Feet	Thermoplastic Double Drop Detail Stripe, Yellow
0230	907-626-H006		7,287	Square Feet	Thermoplastic Double Drop Legend, White
0240	907-626-H007		9,400	Linear Feet	Thermoplastic Double Drop Legend, White
0250	907-627-K001		3,239	Each	Red-Clear Reflective High Performance Raised Markers
0260	907-627-L001		3,983	Each	Two-Way Yellow Reflective High Performance Raised Markers

## SECTION 905 - COMBINATION BID PROPOSAL (Continued)

### CONDITIONS FOR COMBINATION BID

If a bidder elects to submit a combined bid for two or more of the contracts listed for this month's letting, the bidder must complete and execute these sheets of the proposal in each of the individual proposals to constitute a combination bid. In addition to this requirement, each individual contract shall be completed, executed and submitted in the usual specified manner. Failure to execute this Combination Bid Proposal in each of the contracts combined will be just cause for each proposal to be received and evaluated as a separate bid. It is understood that the Mississippi Transportation Commission not only reserves the right to reject any and all proposals, but also the right to award contracts upon the basis of lowest separate bids or combination bids most advantageous to the State. It is further understood and agreed that the Combination Bid Proposal is for comparison of bids only and that each contract shall operate in every respect as a separate contract in accordance with its proposal and contract documents.

I (We) agree to complete each contract on or before its specified completion date.

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### COMBINATION BID PROPOSAL

\* of Subsection 102.11 on the following contracts: This proposal is tendered as one part of a Combination Bid Proposal utilizing option \* Option to be shown as either (a), (b), or (c).

County					
Project No.	6.	7.	8.	9.	10.
County					
Project No.	1.	2.	3.	4.	5.

- (a) If Combination A has been selected, your Combination Bid is complete.
- (b) If Combination B has been selected, then complete the following page.

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

## SECTION 905 - COMBINATION BID PROPOSAL (Continued)

(c) If Combination C has been selected, then initial and complete ONE of the following.

I (We) desire to be awarded work not to exceed a total monetary value of \$\_

number of contracts. \_ I (We) desire to be awarded work not to exceed \_\_\_

### TO: EXECUTIVE DIRECTOR, MISSISSIPPI DEPARTMENT OF TRANSPORTATION JACKSON, MISSISSIPPI

### **CERTIFICATE**

If awarded this contract, I (we) contemplate that portions of the contract will be sublet. I (we) certify that those subcontracts which are equal to or in excess of fifty thousand dollars (\$50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on September 8, 2011.

I (we) agree	that this notification of intent <u>DOES</u> <u>N</u>	OT constitute <u>APPROVAL</u> of the subcontracts.
	(Individual or Firm)	(Address)
sul acc	bcontracts, if any, equal to or in exces	OT preclude subsequent subcontracts. Subsequent s of fifty thousand dollars (\$50,000.00) will be in d and adopted by the Mississippi State Board of
	Contra	ctor

### **CERTIFICATION**

I,
(Name of person signing bid)
individually, and in my capacity as
(Title of person signing bid)
(Name of Firm, partnership, or Corporation)
do hereby certify under penalty of perjury under the laws of the United States and the State of Mississippi
that, Bidder
(Name of Firm, Partnership, or Corporation)
on Project No. STP-7314-01(006)/ 109452301000
in <b>Hinds</b> County(ies), Mississippi, has not either
directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.
Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility; nor have a debarment pending; nor been suspended, debarred, voluntarily excluded or determined ineligible within the past three years by the Mississippi Transportation Commission, the State of Mississippi, any other State or a federal agency; not been indicted, convicted or had a civil judgment rendered by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.
Do exceptions exist and are made a part thereof? Yes / No
Any exceptions shall address to whom it applies, initiating agency and dates of such action.
Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.
All of the foregoing is true and correct.
(1/2016 S)

### **SECTION 902**

CONTRACT FOR	
LOCATED IN THE COUNTY(IES) OF	

### STATE OF MISSISSIPPI COUNTY OF HINDS

This Contract is entered into by and between the Mississippi Transportation Commission (the "Commission") and the undersigned contractor (the "Contractor"), as follows:

As consideration for this Contract, the Commission agrees to pay the Contractor the amount(s) set out in the Proposal attached hereto. Said payment will be made in the manner and at the time(s) specified in the Specifications and/or Special Provisions, if any. In exchange for said consideration, the Contractor hereby agrees to accept the prices stated in the Proposal as full compensation for the furnishing of all labor, materials and equipment, and the execution of the scope of work identified for this referenced Project as contemplated in this Contract, and as more fully outlined in the Contract Documents (the "Work"). The Contract Documents consist of the Advertisement, the Notice to Bidders, the Proposal, the Specifications, the Special Provisions, and the approved Plans, all of which are hereby made a part of this Contract and incorporated herein by reference.

The Contractor shall be responsible for all loss or damage arising out of, or in any way in connection with the Work, or from any unforeseen obstructions or difficulties that may be encountered in the prosecution of the Work, and for all risks of every description connected with the Work, with the exception of any items specifically excluded in the Contract Documents. The Contractor shall fully and faithfully complete the Work in a good and workmanlike manner, according to the Contract Documents and any Supplemental Agreements thereto.

The Contractor further agrees that the Work shall be done under the direct supervision of, and to the complete satisfaction of, the Executive Director of the Mississippi Department of Transportation, or his authorized representative(s), and, when federal funds are involved, subject to the inspection and approval of the Federal Highway Administration, or its agents, and/or the agents of any other state or federal agency whose funds are involved. Further, the Work shall be done in accordance with any applicable state and federal laws, and any such rules and regulations issued by the Commission and/or any relevant Federal Agency.

The Contractor agrees that all labor as outlined in the Contract Documents may be secured from a list furnished by the Manager of the Win Job Center nearest the project location, or any successor thereto.

It is agreed and understood that each and every provision of law and clause required by law to be inserted into this Contract shall be deemed to be inserted herein, and this Contract shall be read and enforced as though it were included herein. If through mere mistake or otherwise, any such provision is not inserted, then upon the application of either party hereto, the Contract shall be physically amended to make such insertion.

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Witness our signatures, this the	day of	, 20	
Contractor			
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By:			
Title			
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Signed and sealed in the presence of: (name	ne and address of w	itness)	
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### SECTION 903 PERFORMANCE BOND

# PERFORMANCE BOND FOR THE FOLLOWING CONTRACT: Project No.: \_\_\_\_\_\_ For the construction of: \_\_\_\_\_\_ Contract date: \_\_\_\_\_\_ Contract Price: \_\_\_\_\_\_ FOR OWNER: MISSISSIPPI TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON, MISSISSIPPI 39201. CONTRACTOR (full legal name, contact person, phone number and address): \_\_\_\_\_\_\_ SURETY (legal name, phone number, principal place of business and address *for notice purposes*): \_\_\_\_\_\_\_ Second Surety (if applicable): \_\_\_\_\_\_\_

The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns, to the Owner for the performance of the Contract, which is incorporated herein by reference, and subject to the following terms:

- 1. If the Contractor fully and faithfully performs the Contract, the Surety and the Contractor shall have no obligation under this Bond.
- 2. The Surety's obligation under this Bond shall arise after:
  - (a) the Owner first provides notice to the Contractor and the Surety that termination is imminent, pursuant to the current edition of the Mississippi Standard Specifications for Road and Bridge Construction, which is a part of the Contract; and
  - (b) the Owner declares a Contractor Default, terminates the Contract, and notifies the Surety.
- 3. Within 20 calendar days as set forth in Section 108.08 of the current edition of the Mississippi Standard Specifications for Road and Bridge Construction, the Surety shall, after discussions with and consent from the Owner, and at the Surety's expense, elect to take one of the following actions:
  - (a) Arrange for the Contractor, with the consent of the Owner, to perform and complete the Contract;
  - (b) Undertake to perform and complete the Contract itself, through its agents or independent contractors:
  - (c) Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and after investigation, determine the amount for which it may be liable to the Owner (subject to the consent of the Owner) and as soon as practicable after the amount is determined, make payment to the Owner.

- 4. If the Surety does not proceed, within a reasonable time frame, to enact and carry out the election made in Paragraph 3, then the Surety shall be deemed to be in default on this Bond, and the Owner shall be entitled to enforce any remedy available to it under the Contract and applicable law.
- 5. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for
  - (a) the responsibilities of the Contractor for correction of defective work and completion of the Contract;
  - (b) additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 3; and
  - (c) liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the Contractor.
- 6. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
- 7. The penal sum of the Bond shall be equal to the Contract Price; however, the penal sum may be increased or decreased as the result of any subsequent Supplemental Agreements and/or final contract quantities.
- 8. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address listed for notice purposes on the first page of this Bond.

### CONTRACTOR AS PRINCIPAL Company: Signature: Name: Address: SURETY Company: Signature: \_\_\_\_\_ MS Insurance ID # \_\_\_\_\_ Name: Title: Address: **SURETY** (if applicable) Company: Signature: \_\_\_\_\_ MS Insurance ID # \_\_\_\_\_ Name: Title: Address: \_\_\_\_\_

### SECTION 903 PAYMENT BOND

### PAYMENT BOND FOR THE FOLLOWING CONTRACT: Project No.: \_\_\_\_\_\_ For the construction of: \_\_\_\_\_\_ Contract date: \_\_\_\_\_\_ Contract Price: \_\_\_\_\_\_ FOR OWNER: MISSISSIPPI TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON, MISSISSIPPI 39201. CONTRACTOR (full legal name, contact person, phone number and address): \_\_\_\_\_\_\_ SURETY (legal name, phone number, principal place of business and address *for notice purposes*): \_\_\_\_\_\_\_ Second Surety (if applicable): \_\_\_\_\_\_\_

The Contractor and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns, to the Owner for payment of labor, materials and equipment furnished for use in the performance of the Contract, which is incorporated herein by reference, subject to the following terms:

- 1. If the Contractor promptly makes payment of all sums due to any and all subcontractors, subsubcontractors, suppliers to the Contractor, suppliers to subcontractors and/or laborers who have performed work on the project site, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Contract, then the Surety and the Contractor shall have no obligation under this Bond.
- 2. The Owner shall provide notice to the Surety of any claims, demands, liens or suits against the Owner or the Owner's property that it receives from any person or entity ("Claimants") seeking payment for labor, materials or equipment furnished for use in the performance of the Contract.
- 3. Upon notice of any claims, demands, liens or suits provided by the Owner or Contractor or given to the Surety by a Claimant, the Surety shall promptly and at the Surety's expense, defend, indemnify and hold harmless the Owner against said claim, demand, lien or suit and shall take the following additional actions:
  - (a) Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
  - (b) Pay or arrange for payment of any undisputed amounts.

- 4. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond and shall have no obligation under this Bond to make payments to, or give notice on behalf of, Claimants, or otherwise have any obligations to Claimants under this Bond.
- 5. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.
- 6. The penal sum of the Bond shall be equal to the Contract Price; however, the penal sum may be increased or decreased as the result of any subsequent Supplemental Agreements and/or final contract quantities.

MS Insurance ID #
MS Insurance ID #



### **BID BOND**

KNOW ALL MEN BY THESE PRE	SENTS, that we		
		Contractor	
		Address	
		City, State ZIP	
As principal, hereinafter called the Pr	rincipal, and	Surety	
a corporation duly organized under the	ne laws of the state of		
as Surety, hereinafter called the Sure	ty, are held and firmly	bound unto State of Mississipp	i, Jackson, Mississippi
As Obligee, hereinafter called Oblige	ee, in the sum of Five	Per Cent (5%) of Amount Bid	
	Dollars(\$	)	
for the payment of which sum will executors, administrators, successors			
Terry Road, known as State Project NOW THEREFORE, the condition of said Principal will, within the time reperformance of the terms and conditivities will pay unto the Obligee the different which the Obligee legally contracts which the Obligee legally contracts which the Obligee legally contracts where the said liability hereunded to the said liabil	f this obligation is such quired, enter into a for ons of the contract, the nce in money between with another party to pe er exceed the penal sun	that if the aforesaid Principal shall rmal contract and give a good and on this obligation to be void; otherw the amount of the bid of the said berform the work if the latter amount in hereof.	be awarded the contract, the sufficient bond to secure the vise the Principal and Surety Principal and the amount for
Signed and sealed this	day of	, 20	
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	B:	y: (Title)	
(Witness)	(Name)	(Title)	
	(Surety)	(Seal)	
(Witness)	(Attorney-in-Fa	By:	
	(MS Agent)		
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NOTE: THE ANTICIPATED WORKING DAYS SHOWN ON THIS SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY. THE ACTUAL WORKING DAY TOTAL AS ASSESSED BY THE PROJECT ENGINEER ON FORM CSD-765 SHALL GOVERN.