01 -



SM No. CSTBG0024010351

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

01

Bridge Repair on SR 22 (Bridge No. 0.1) over I-20, known as State Project No. STBG-0024-01(035) / 109985301 in Hinds County.

Project Completion: 11/28/2025

(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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION TABLE OF CONTENTS

PROJECT: STBG-0024-01(035)/109985301 - Hinds

Section 901 - Advertisement

Section 904 - Notice to	Ridders
#1	Governing Specifications, w/ Supplements
#3	Final Cleanup
#296	Reduced Speed Limit Signs
#445	Mississippi Agent or Qualified Nonresident Agent
#516	Errata and Modifications to the 2017 Standard Specifications
#1226	Material Storage Under Bridges
#1241	Fuel and Material Adjustments
#2206	MASH Compliant Devices
#2273	Mississippi Special Fuel Tax Law
#2954	Reflective Sheeting for Signs
#3599	Standard Drawings
#4702	App for Traffic Control Report
#5551	Federal Bridge Formula
#5750	Manual on Uniform Traffic Control Devices (MUTCD)
#7296	Contract Time
#7298	Scope of Work
#7299	Temporary Construction Signs
#7300	Lane Closure Restrictions
#7301	Additional Construction Requirements
#7370	Underground Utilities
Section 907 - Special I	
907-101-1	Definitions and Terms
907-102-2	Bidding Requirements and Conditions
907-103-2	Award and Execution of Contract
907-104-2	Minor Alterations to the Contract
907-105-2	Control of Work
907-108-4	Subletting of Contract
907-108-6	Default and Termination of Contract
907-109-5	Measurement and Payment
907-618-11	Work Zone Law Enforcement
907-618-12	Traffic Control Management
907-619-5	Traffic Control for Construction Zones
907-701-4	Hydraulic Cement, w/ Supplement
907-702-4	Bituminous Materials
907-703-2	Gradation
907-705-1	Stone Riprap
907-707-3	Joint Materials
907-711-2	Plain Steel Wire
907-712-1	Fence and Guardrail
907-714-4	Miscellaneous Materials
907-718-1	Timber and Dimension Lumber

PROJECT: STBG-0024-01(035)/109985301 - Hinds

907-720-4 Pavement Marking Materials 907-721-4 Materials for Signing 907-824-4 Routine Bridge Repair

Section 905 - Proposal, Proposal Bid Items, Combination Bid Proposal

State Board of Contractors Requirement

State Certification Regarding Non-Collusion, Debarment and Suspensions

Section 902 - Contract Form

Section 903 - Contract Bond Forms

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

09/15/2025 01:57 PM

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Wednesday, September 24, 2025, from Bid Express Service and shortly thereafter publicly read in the Construction Division for:

Emergency Bridge Repair on SR 22 (Bridge No. 0.1) over I-20, known as State Project No. STBG-0024-01(035) / 109985301 in Hinds County.

In accordance with authority granted under Section 65-1-85 Mississippi Code of 1972, Annotated, the work to be accomplished under this contract has been declared by the Executive Director to be an emergency, and it is desired that you submit a bid for performing the needed and necessary work for alleviating the situation that exists at this site.

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

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

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

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 shopmdot/default.aspx?StoreIndex=1.

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. 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	Change
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."

CODE: (IS)

SECTION 904 - NOTICE TO BIDDERS NO. 1226

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^{ths} 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.

CODE: (SP)

SECTION 904 – NOTICE TO BIDDERS NO. 3599

DATE: 08/11/2021

SUBJECT: Standard Drawings

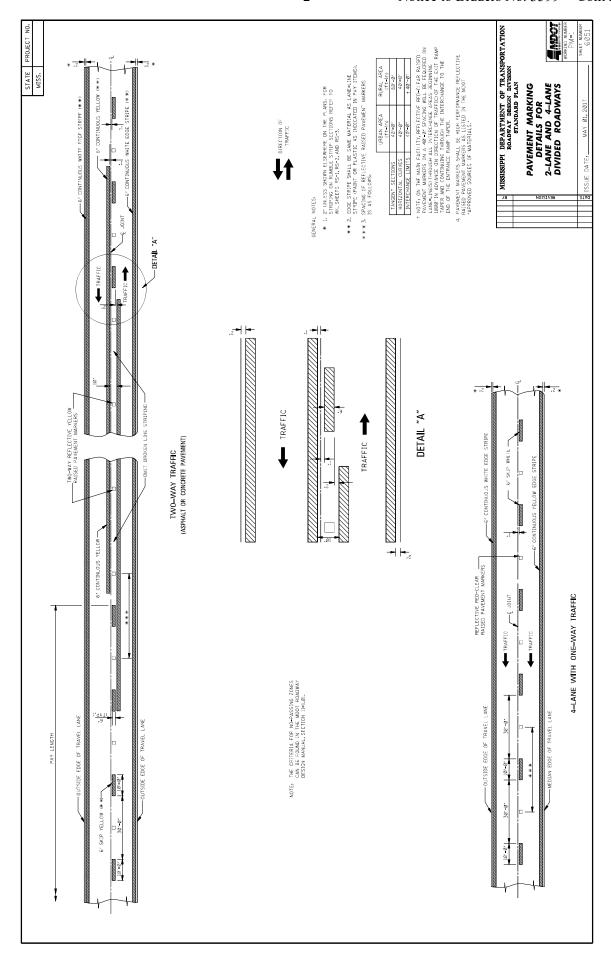
Standard Drawings attached hereto shall govern appropriate items of required work.

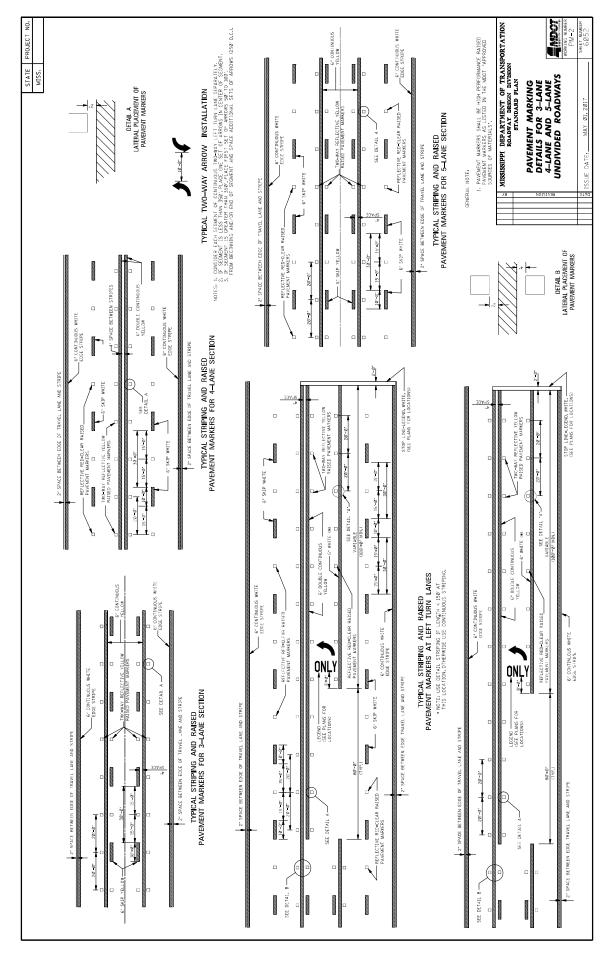
Larger copies of Standard Drawings may be purchased from:

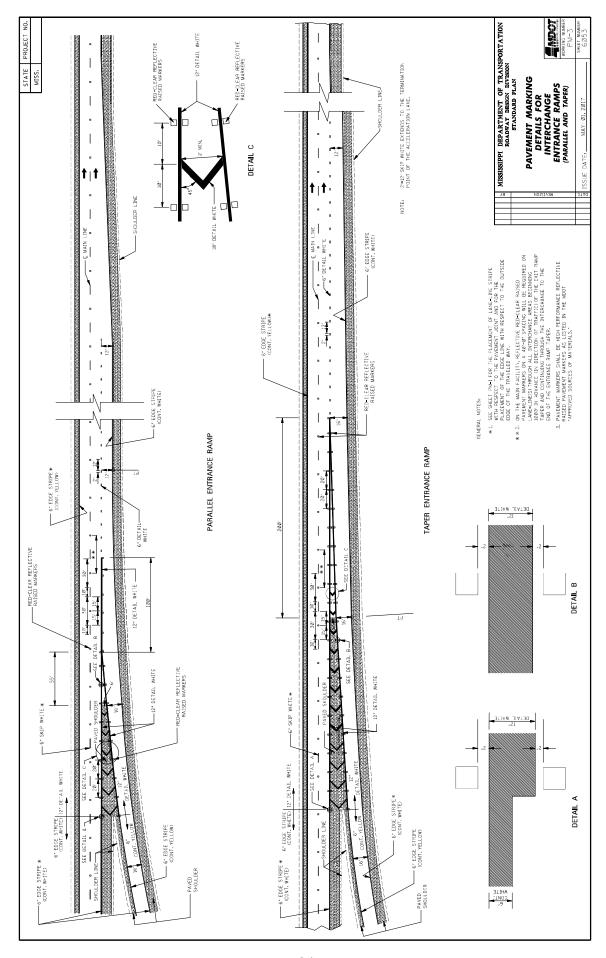
MDOT Plans Print Shop MDOT Shop Complex, Building C, Room 114 2567 North West Street P.O. Box 1850 Jackson, MS 39215-1850 Telephone: (601) 359-7460

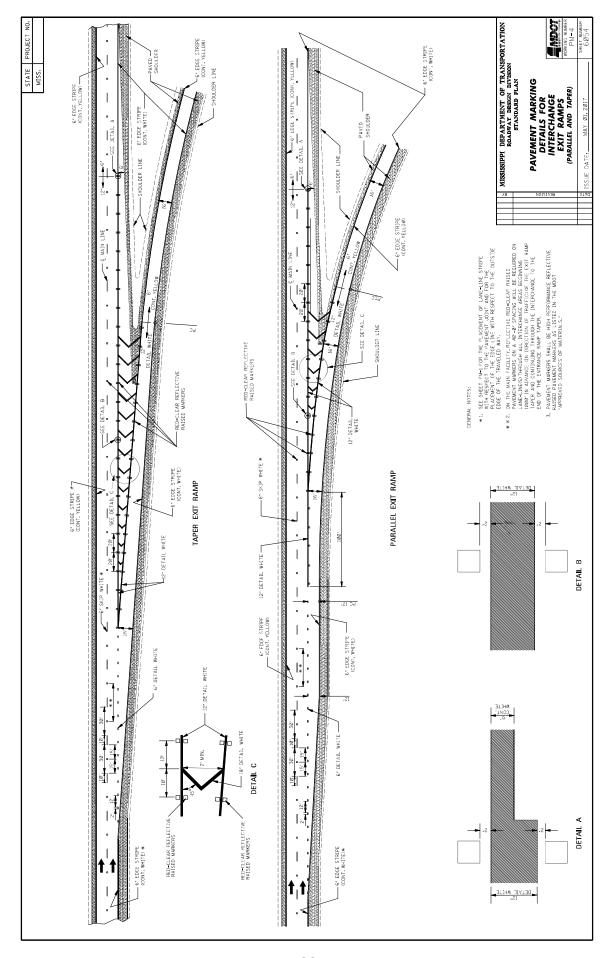
or FAX: (601) 359-7461

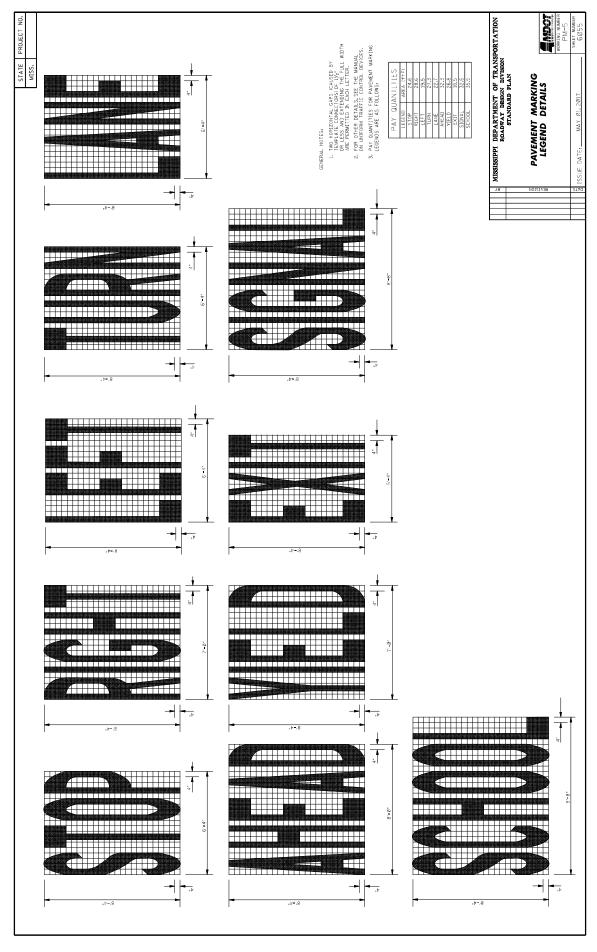
or e-mail: plans@mdot.state.ms.us

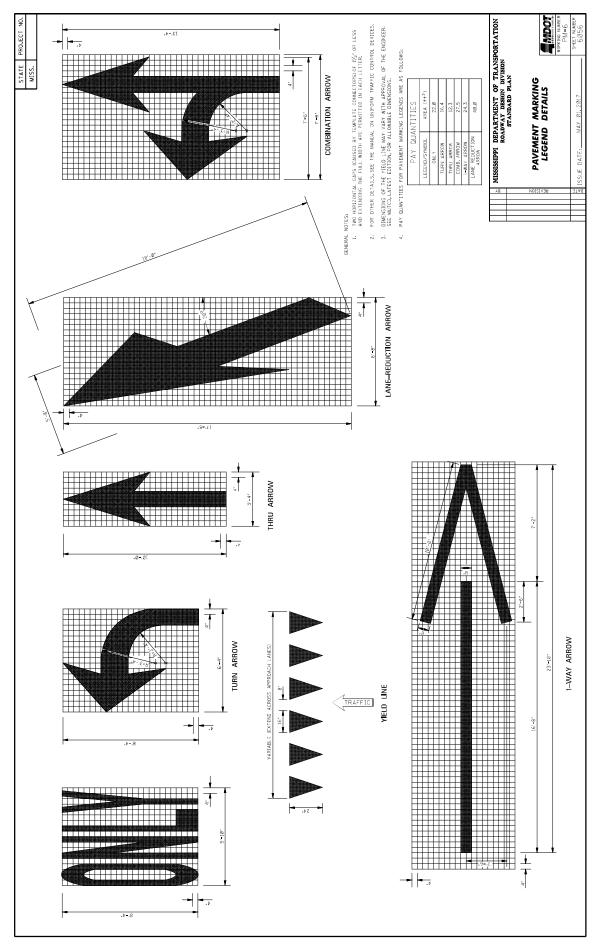


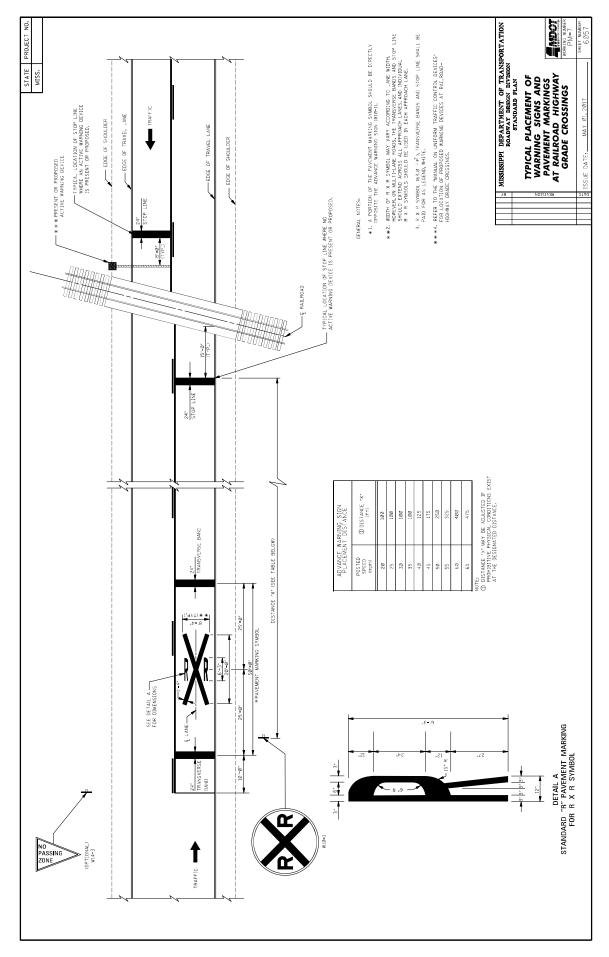


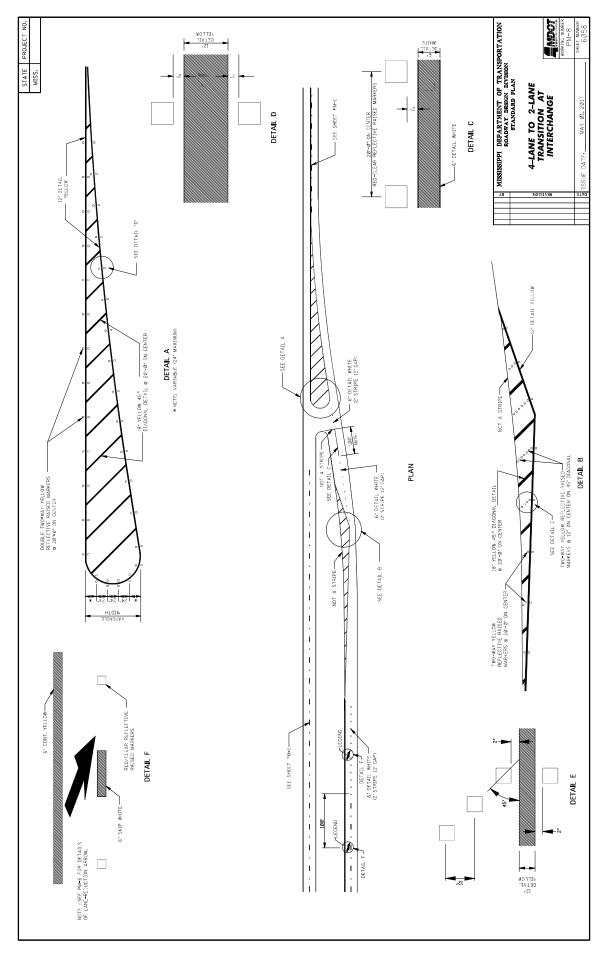


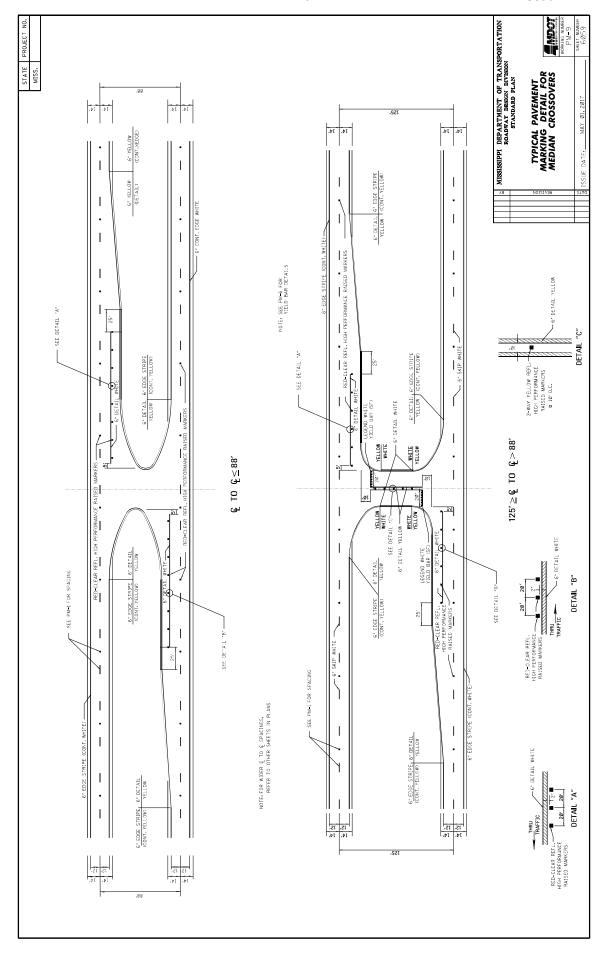


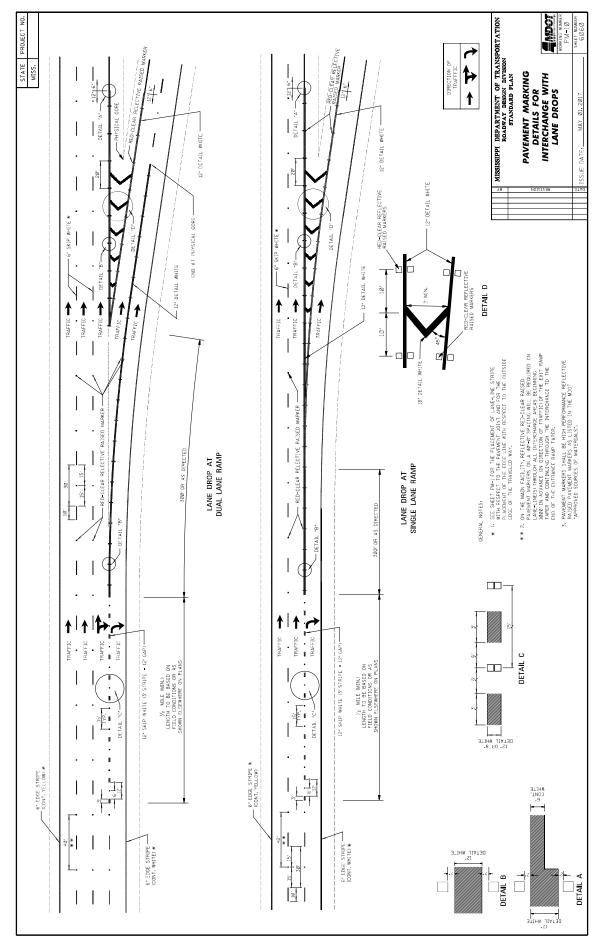


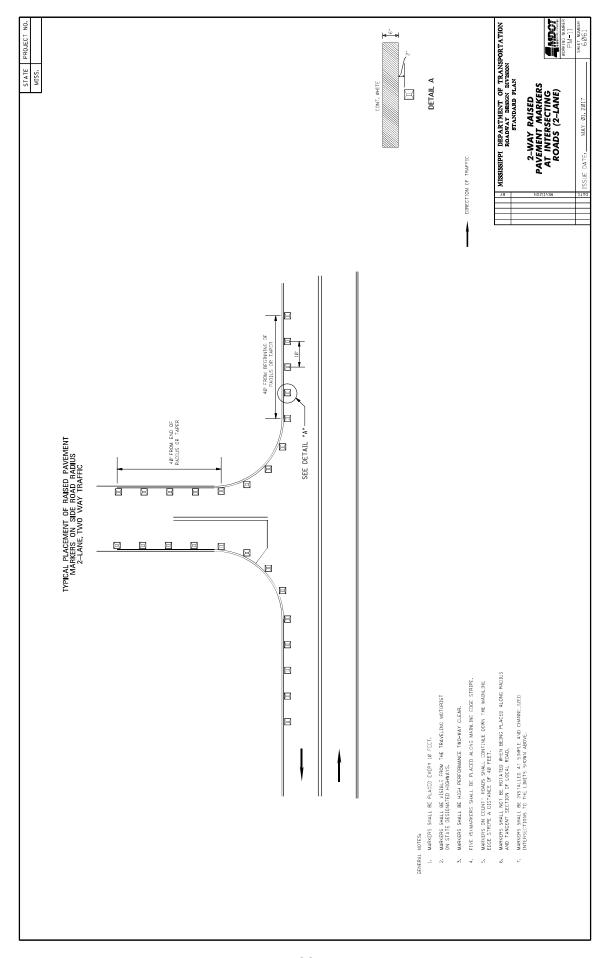


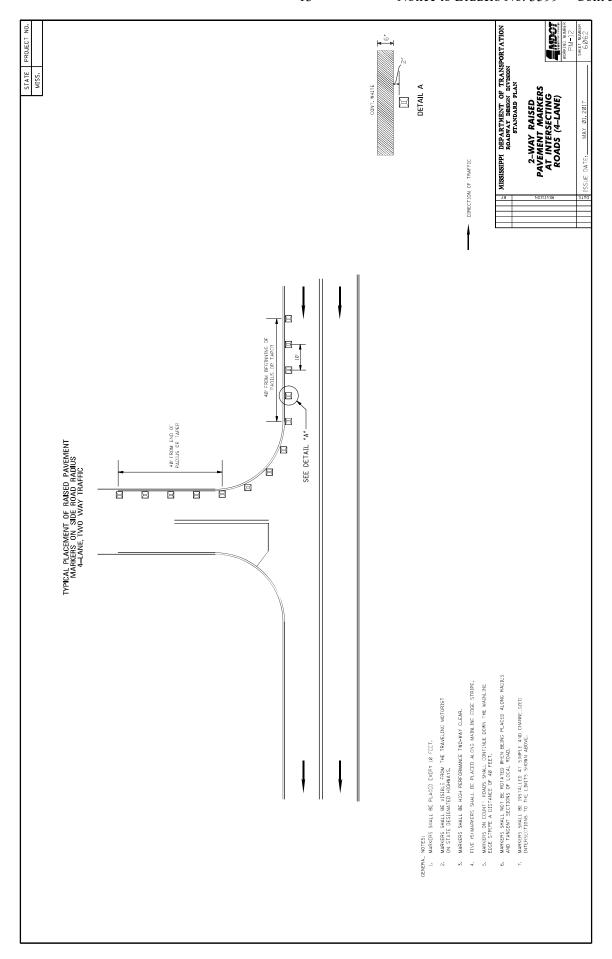


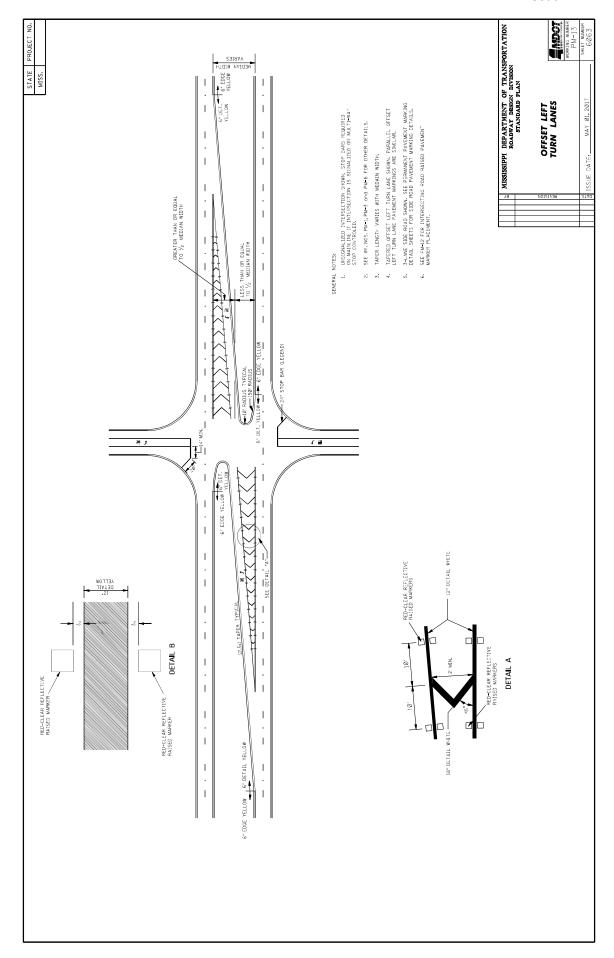


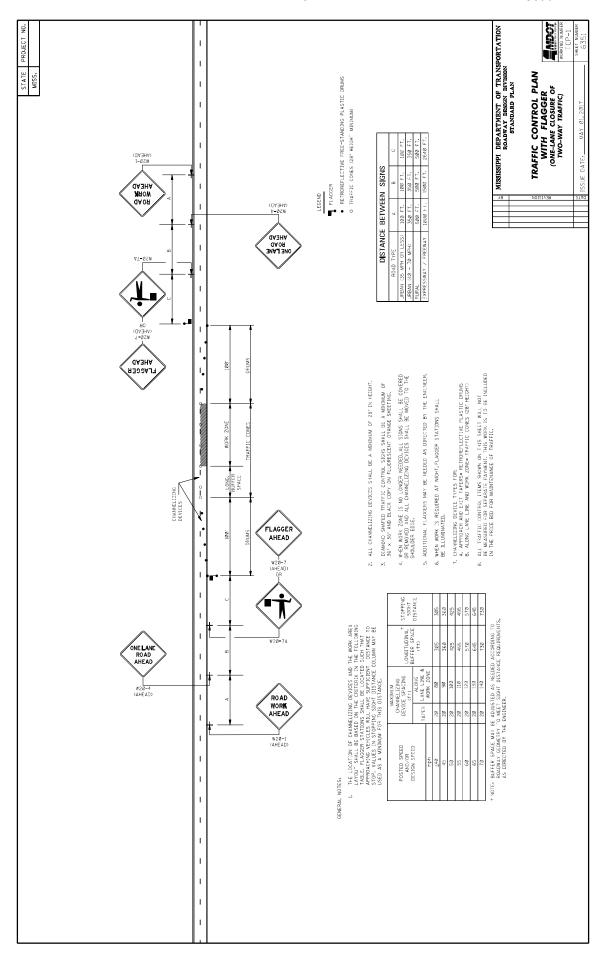


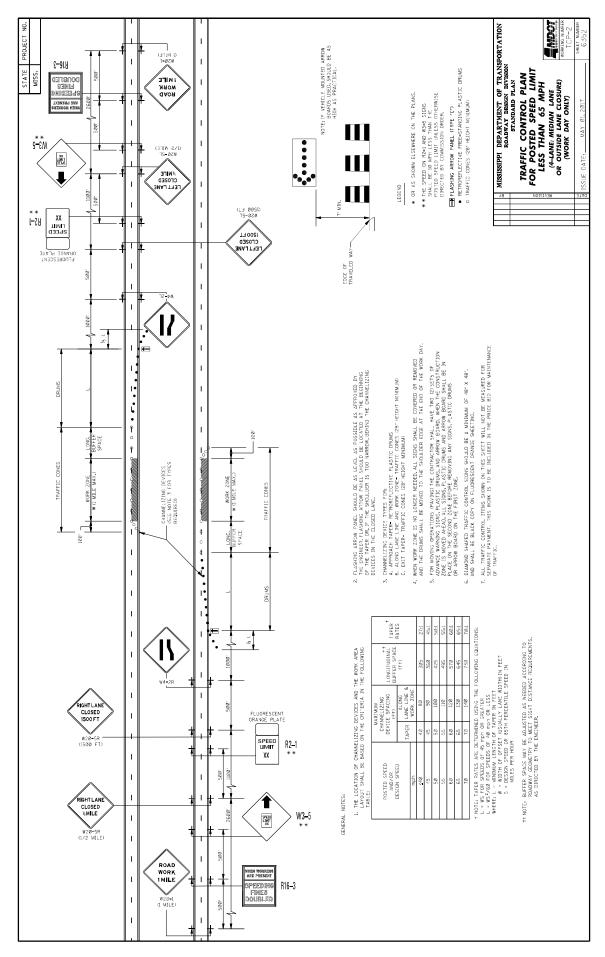


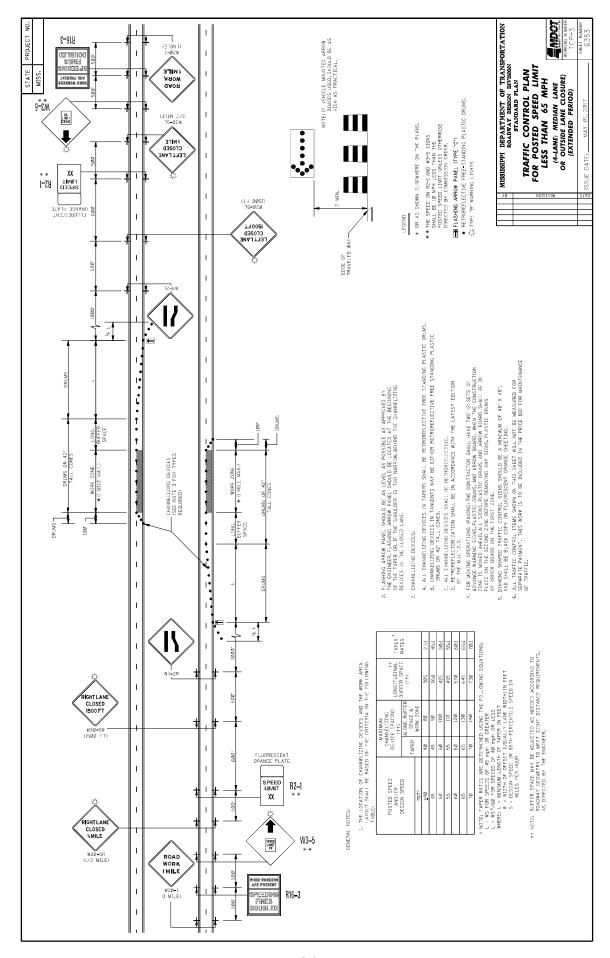


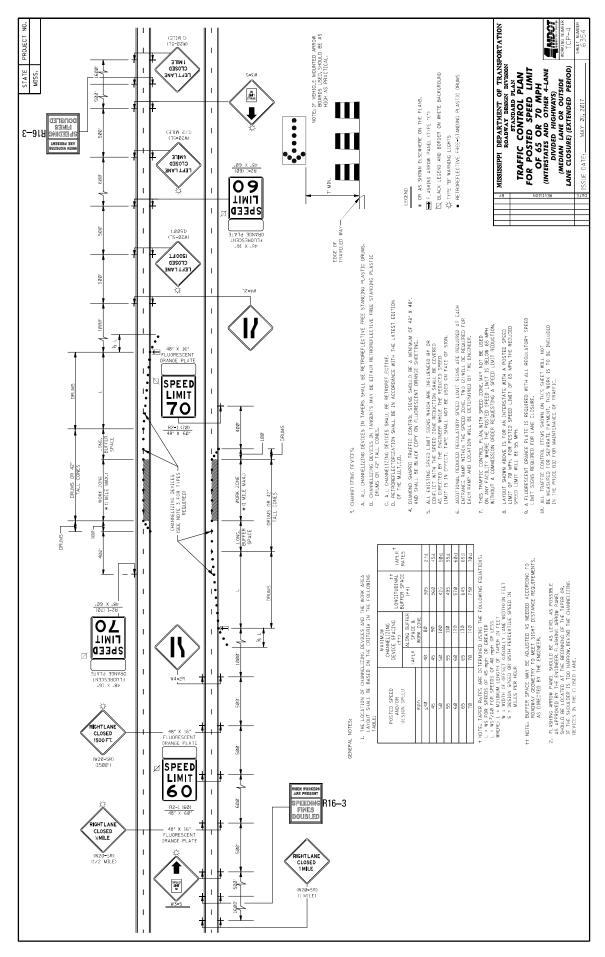


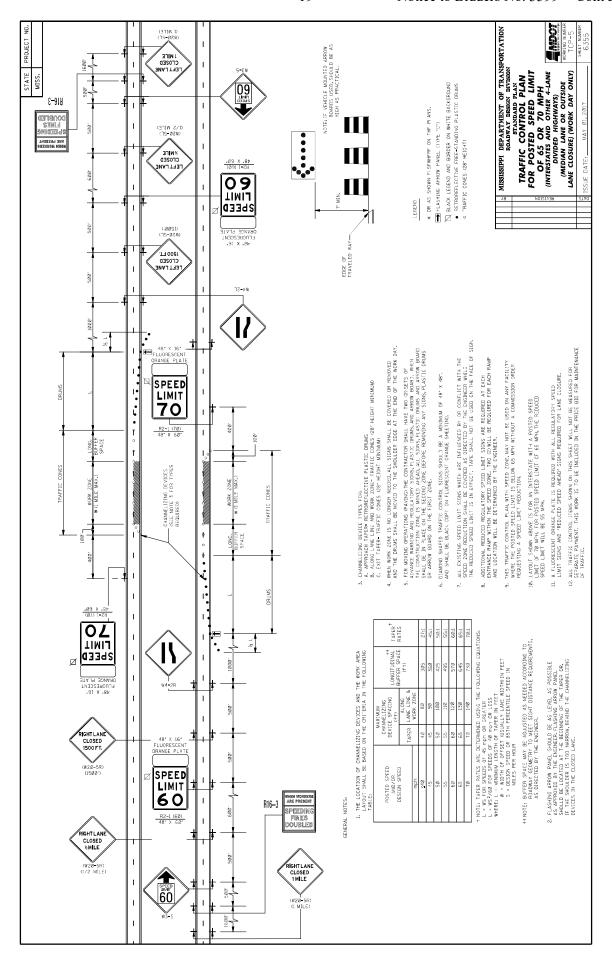


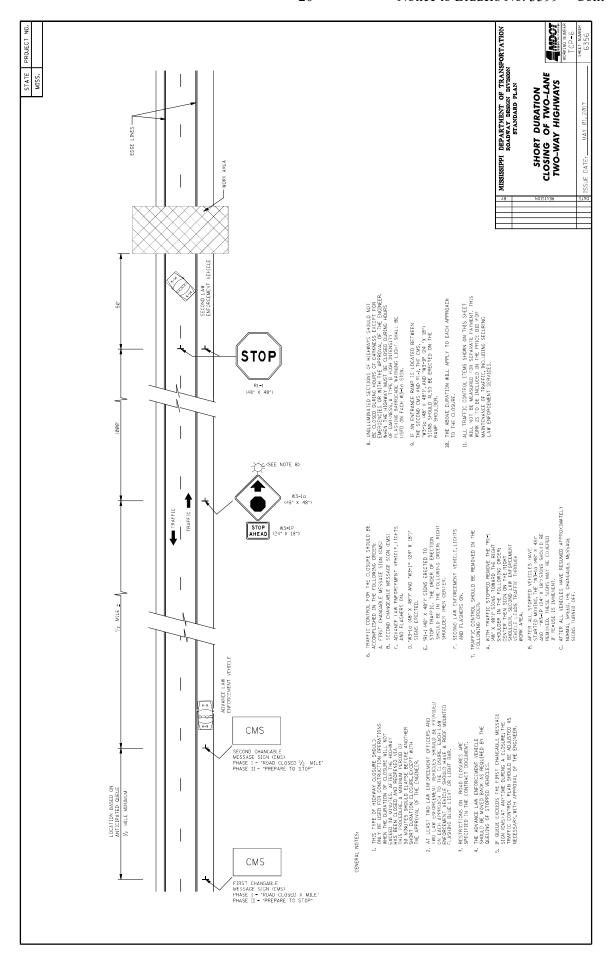


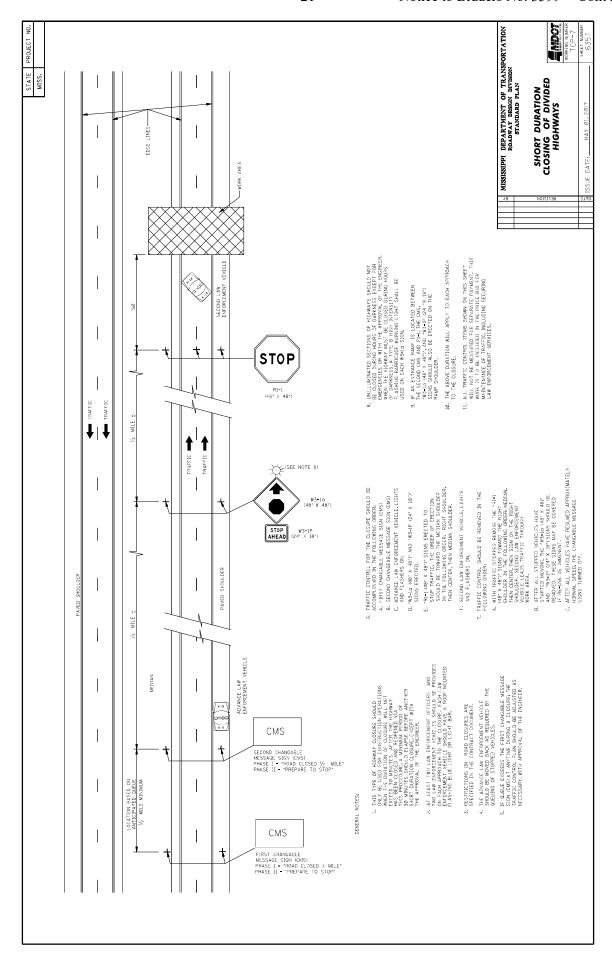


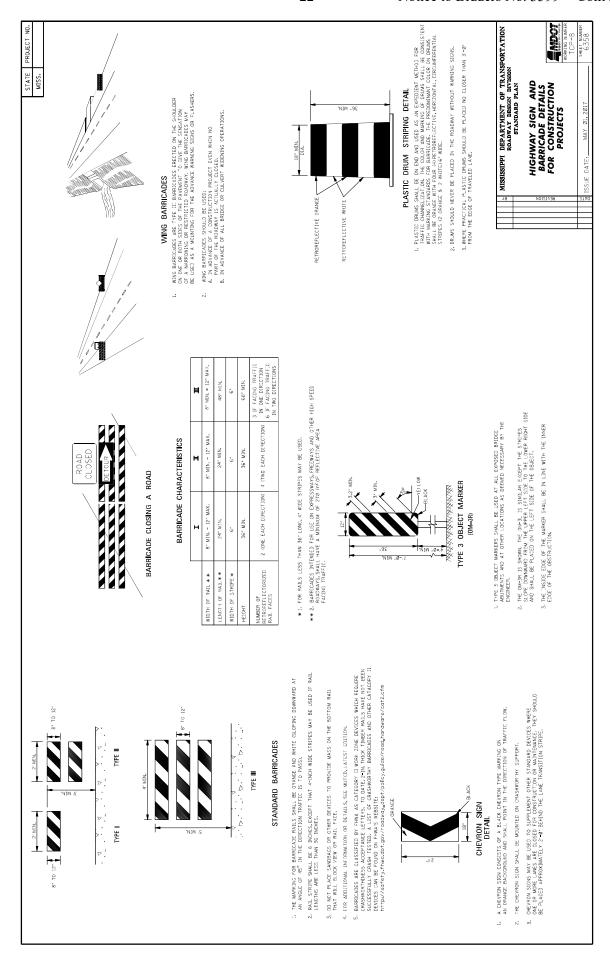


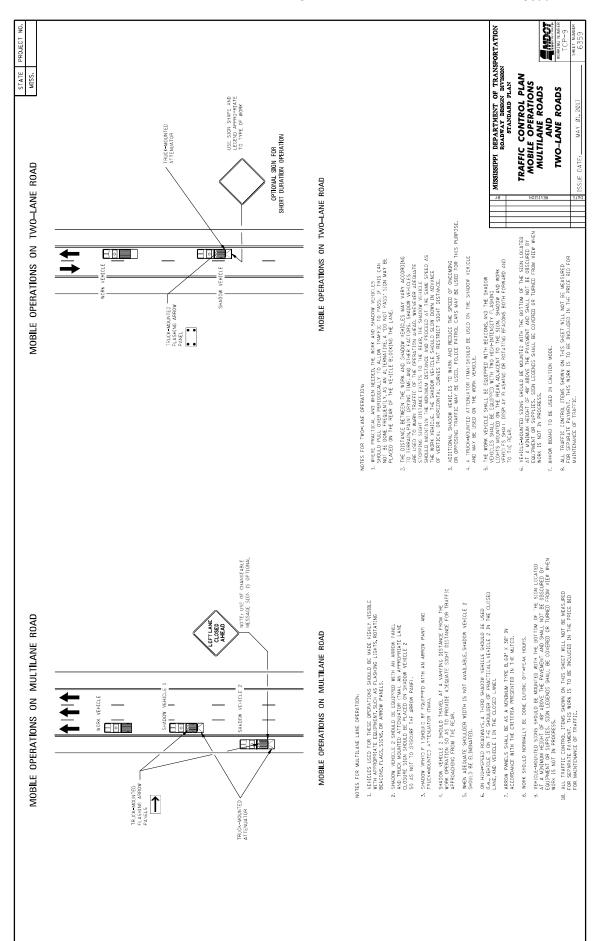


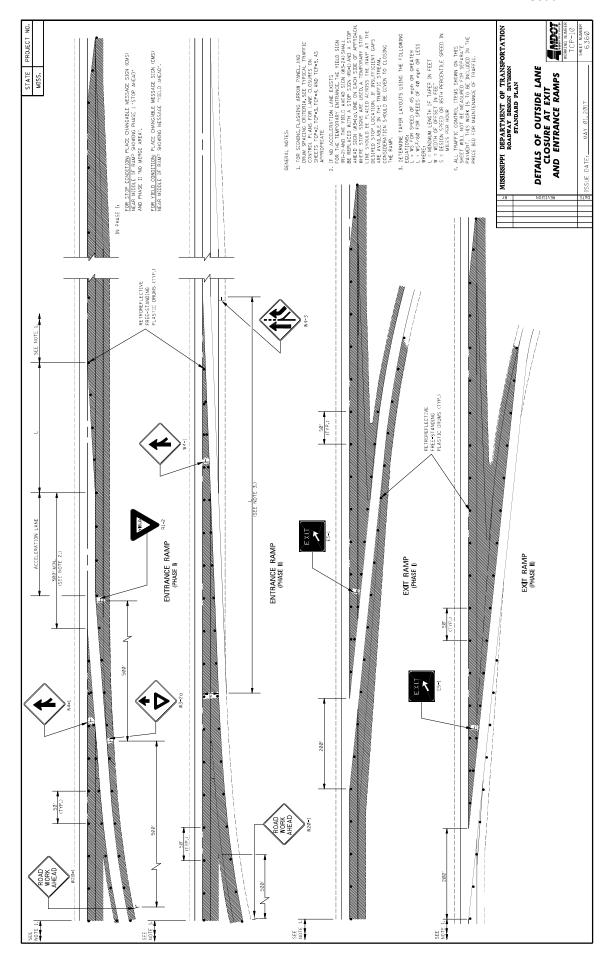


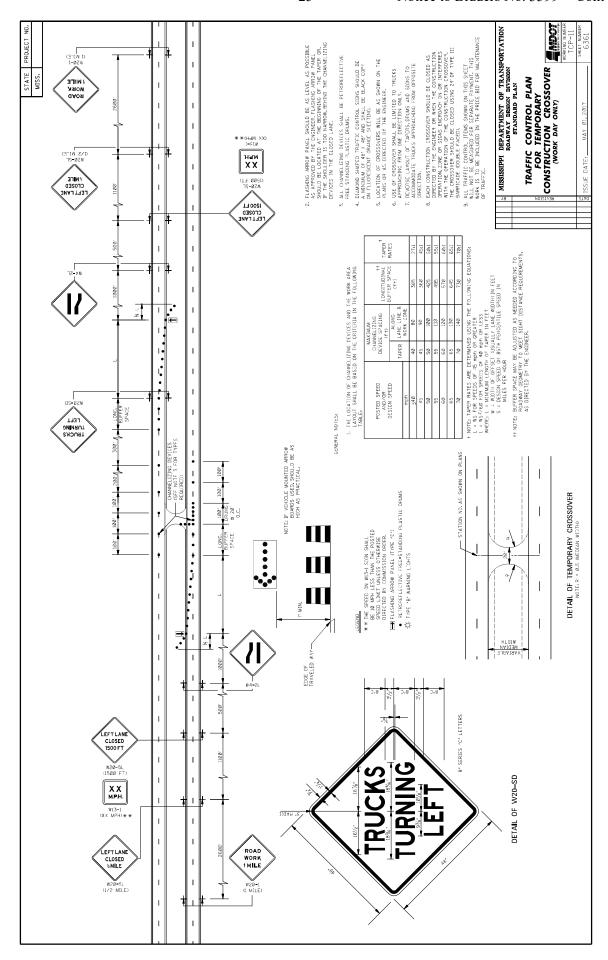


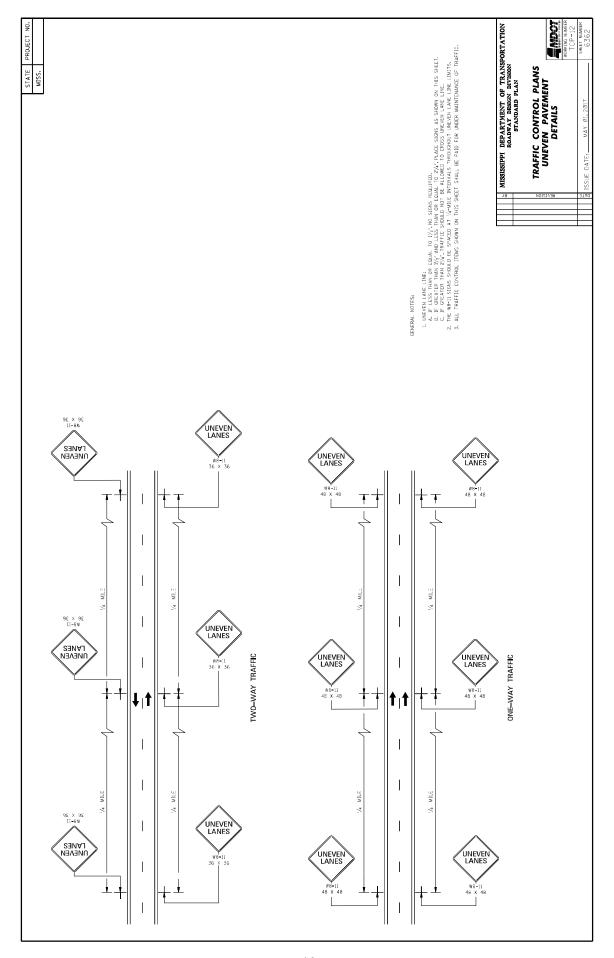


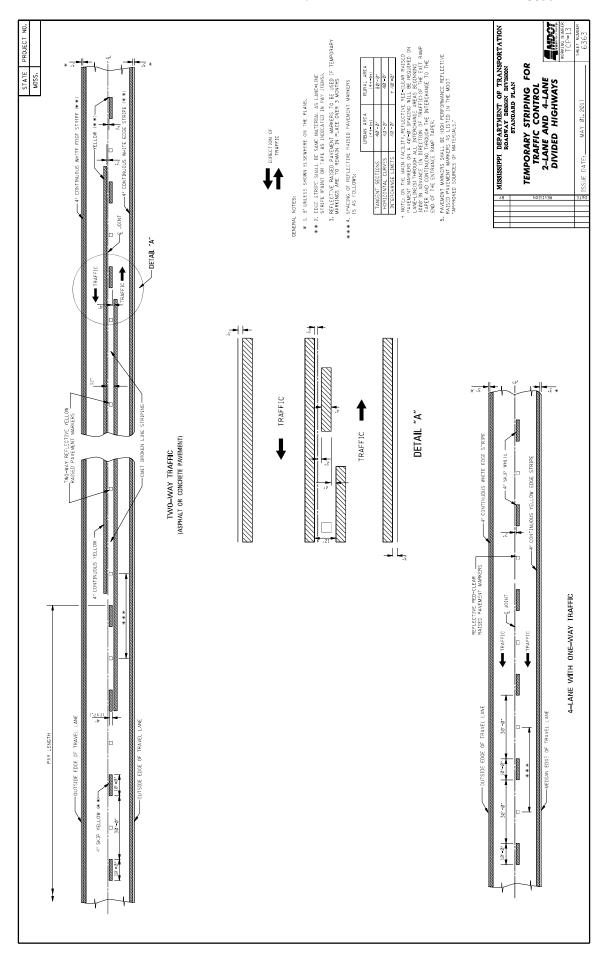


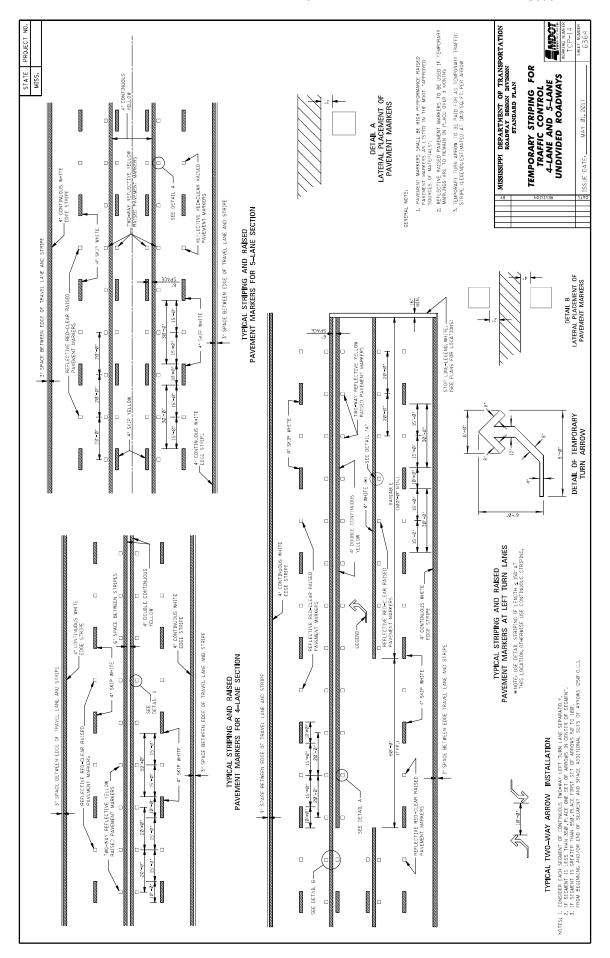


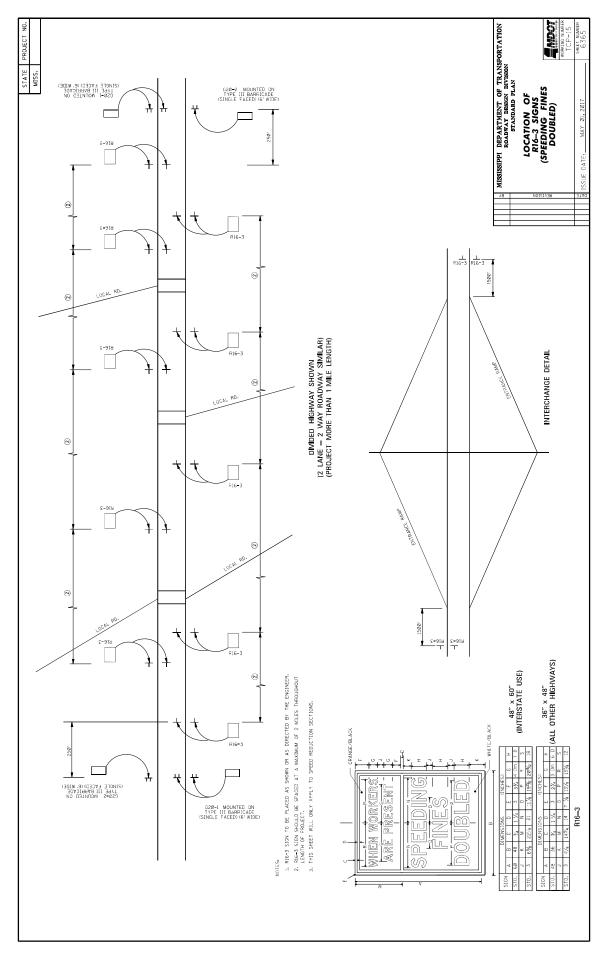


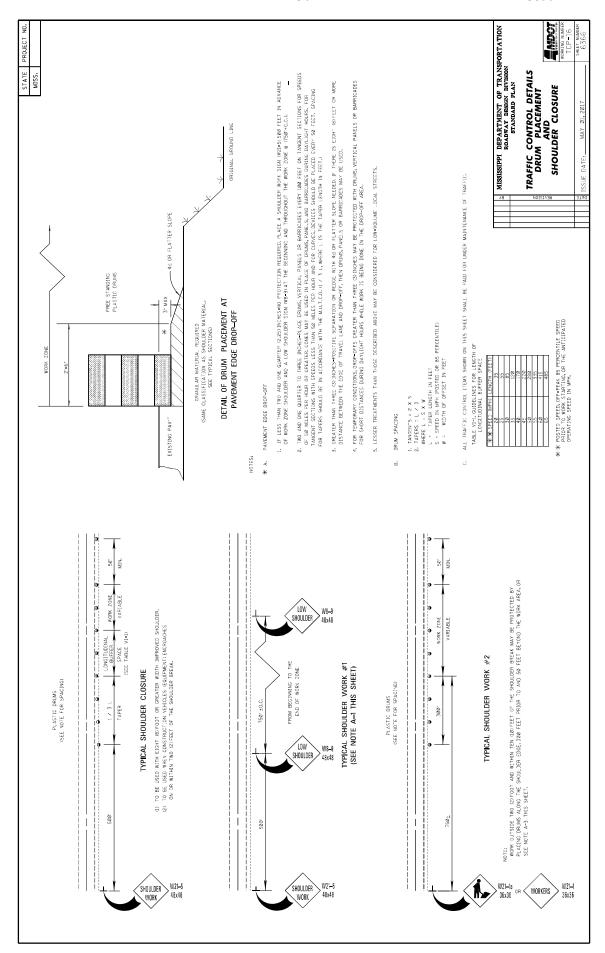


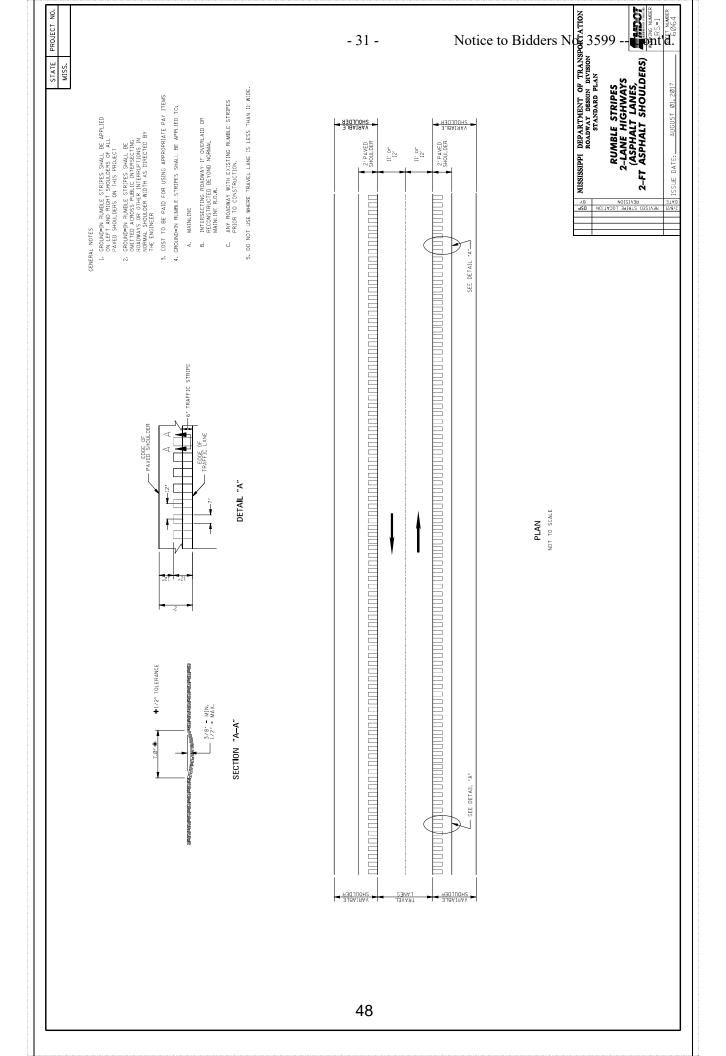


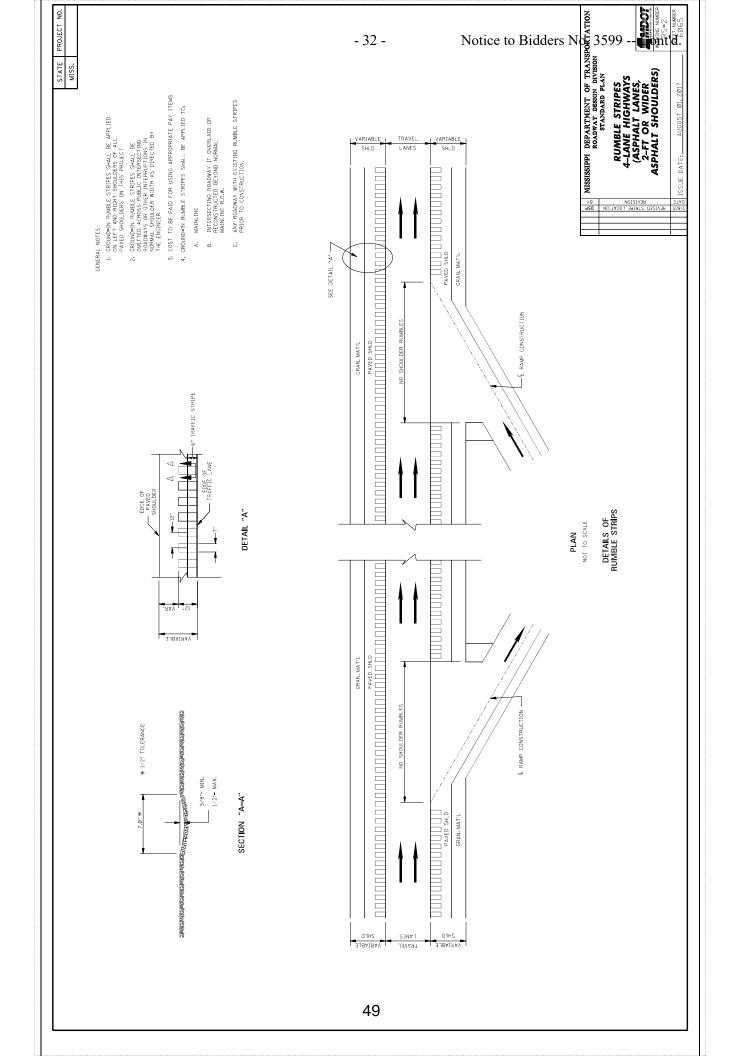


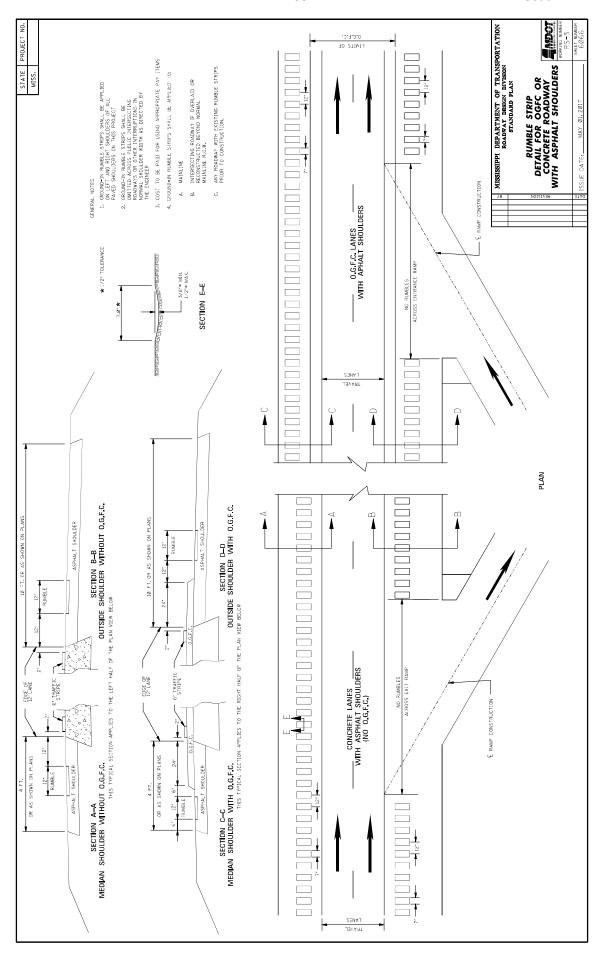












SECTION 904 - NOTICE TO BIDDERS NO. 4702 CODE: (SP)

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/

CODE: (IS)

SECTION 904 - NOTICE TO BIDDERS NO. 5551

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 7th 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. 7296 CODE: (SP)

DATE: 09/12/2025

SUBJECT: Contract Time

PROJECT: STBG-0024-01(035) / 109985301 – Hinds County

The calendar date for completion of work to be performed by the Contractor for this project shall be **November 28, 2025** which date or extended date as provided in Subsection 108.06 shall be the end of contract time. It is anticipated that the Notice of Award will be issued no later than **October 06, 2025** and the effective date of the Notice to Proceed / Beginning of Contract Time will be simultaneous with the execution of the contract.

CODE: (SP)

SECTION 904 -NOTICE TO BIDDERS NO. 7298

DATE: 9/10/2025

SUBJECT: Scope of Work

PROJECT: STBG-0024-01(035) / 109985301 – Hinds County

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

Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer, provided such changes will not be cause for contract price adjustment. Work for which no pay item is provided will not be paid for directly and shall therefore be considered an absorbed item of work.

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

All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure. The Contractor shall verify all dimensions of the existing structure prior to beginning work.

During construction, care shall be exercised to ensure that no debris falls into the roadway crossing below the structure. All debris, including any material that has accumulated on the bridge caps, shall become the property of the Contractor and shall be removed from the construction site.

Work on the project shall consist of the following bridge repairs on Bridge No. 0.1 (11533) on SR 22 in Hinds County.

Scope of Work (Bridge No. 0.1, 11533)

- Heat straighten and repaint damaged portion of Beam No. 4 in Span No. 4
- Replace mid-span diaphragm in Span No. 4
- Remove and epoxy repair portion of end wall at End Bent No. 5
- Epoxy injection area between top flange and bottom of bridge deck on Beam No. 4
- Epoxy repair spalled portions of Bent 4, east column
- Epoxy repair spalled joint beam at mid-span

- Epoxy repair damaged railing on east side of bridge approximately 10 feet from bridge end
- Cap cleaning at Int. Bent No. 4 and End Bent No. 5

For additional information and details, see work related items below and on the detail drawings.

Contractor Submittals

Prior to fabrication and construction, the following shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for approval. No work shall begin until all submittals have been authorized by the Director of Structures, State Bridge Engineer.

HEAT STRAIGHTENING REPAIR SUBMITTAL:

The Contractor shall submit a repair plan associated with the work items described in these plans.

CONTAINMENT PLAN SUBMITTAL:

The Contractor shall submit a containment plan associated with the work items described in these plans.

WELDING CERTIFICATION SUBMITTAL:

The Contractor shall submit:

- a. Certification for all welders
- b. Welding procedures
- c. A procedure for storage and handling of welding electrodes, wires, and flux
- d. A flux recovery procedure (if applicable)

TEMPORARY BRACING PLAN SUBMITTAL:

The Contractor shall submit a temporary bracing plan associated with the diaphragm replacement work outlined in this proposal.

SHOP DRAWING SUBMITTAL:

The Contractor shall submit shop drawings for fabrication of the diaphragm assembly to be replaced.

Mid-Span Diaphragm Replacement

Mid-span diaphragm in Span No. 4 connecting to Beam No. 4 must be replaced and reconnected once Beam No. 4 has been heat straightened and restored. New structural shapes to be fabricated for diaphragm assemblies shall be the same or equivalent size as the member being replaced and must fit with the existing structure. The Contractor should be aware that standard fabrication tolerances may cause the new member not to fit. Field measurements should be made so that tolerances may be specified, if required when ordering new members. Structural steel removed from the structure shall become the property of the Contractor and its removal from the job site shall be included in the bid price of the repair work. The Contractor shall submit a temporary bracing plan and shop drawings for diaphragm assembly prior to beginning work to be approved by the Director of Structures, State Bridge Engineer prior to use.

The Project Engineer shall verify that the temporary bracing is installed in accordance with the approved bracing plan, and member and all the connections have been successfully installed. The following procedure shall be followed for replacing diaphragm assemblies:

- a) Cut existing C15x33.9 at mid-span.
- b) Remove the two portions of the existing C15x33.9 and L6"x4"x3/8".
- c) Install connection L6"x4"x3/8" and C15x33.9 in accordance with the detail drawings and information plans.

Care shall be exercised during installation and removal of the temporary bracing to prevent damage to adjacent members. Any resulting damage shall be repaired to the satisfaction of the Engineer at no cost to the State. The Contractor should be aware that additional minor items of repair work not specifically listed may be necessary to complete the items to be repaired and that compensation therefore will be included in the prices and payments for bid items.

All bolted connections shall be made with ¾" bolts that meet or exceed A.S.T.M. designation F3125, grade A325, and coated per ASTM F2329. Nuts and washers shall conform to A.S.T.M. A563, Grade DH and A.S.T.M. F436, galvanized. Nuts shall be heavy hex. Nuts shall be tapped oversize the minimum amount required for proper assembly. Direct tension indicators shall meet the requirements of A.S.T.M. F959 and shall be galvanized by the mechanical process meeting the requirements of A.S.T.M. B695, Class 50 coating. High strength bolts, nuts, or direct tension indicators shall not be reused after tightening. Each high strength bolt shall be tightened to provide, when all bolts in the joint are tight, at least a minimum tension as follows: 3/4" diameter bolts = 28,250 lbs.

All structural steel shall conform to A.S.T.M designation A709 grade 50. All steel shall be new.

Prior to construction, certification for all welders and a procedure for storage and handling of welding electrodes to be used on this project shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for approval.

All welding shall be done by the electric arc process and shall conform to the ANSI/AASHTO/AWS D1.5 BRIDGE WELDING CODE.

The intermediate diaphragm assembly shall be cleaned and painted with one shop coat of inorganic zinc, one field intermediate coat of acrylic latex, and one field top coat of acrylic latex per Section 814 of the Specifications.

Payment for this work shall be made under Pay Items No. 907-824-PP006 Bridge Repair, Mid-Span Diaphragm Replacement.

Heat Straightening Repair

The eastern girder of Bridge No. 0.1 (11533) shall be heat straightened according to the Heat-Straightening Repair Notes below. Also, any components (connection angles, diaphragm sections, etc.) attached to the girder that require heat straightening to get the girder back into final acceptable tolerance shall be completed at this time. Heat-Straightening Repair will be paid for under Pay

Item No. 907-824-PP004, Bridge Repair, Heat-Straightening Repair.

Heat Straightening Repair Notes

- 1. Heat-straightening of the damaged steel bridge member shall be performed by the carefully planned and supervised application of a limited amount of localized heat to the damaged member. Mechanical means may be used to straighten the material only in conjunction with the application of heat. The only mechanical devices allowed during heat-straightening will be those used to restrain or help direct movement of the member during the cooling process.
- 2. Prior to construction, the company performing the heat-straightening shall provide documentation that shows at least three (3) years of experience in heat-straightening repairs of damaged steel highway or railroad bridge members to the Director of Structures, State Bridge Engineer for review. Also, the documentation shall show that the company/person, and the person(s) who will directly supervise the work, have been continuously involved in the business of heat-straightening bridge structural steel on a continuous basis for the past three (3) years. At a minimum, the documentation for each project listed should include the year the heat-straightening work was completed, a brief description of the repair made, the name of the heat-straightening supervisor on the project, and the name and telephone number of the owner of the structure repaired.
- 3. Prior to construction, heat-straightening repair plans shall be submitted in duplicate through the project Engineer to the Director of Structures, State Bridge Engineer, for approval.
- 4. All gas fueled heating equipment (including fuel) necessary to perform the heat-straightening work shall be furnished by the Contractor.
- 5. In general, the methods of repair will rely on the experience of the Contractor and the "National Cooperative Highway Research Program" (NCHRP) Report No. 271 which contains broad guidelines to this type of repair.
- 6. The straightening heat should be applied to small areas, usually triangular in shape. The heating sequence to produce the most efficient results shall be determined by the Contractor. Generally, it is not advantageous to heat the same areas more than once.
- 7. The maximum temperature to which the steel shall be heated is 1200 degrees Fahrenheit (730 degrees Celsius). The Contractor may visually determine that this temperature has been reached when the color of the steel becomes a dull red. The Engineer may periodically monitor the temperature of the steel to verify that the maximum temperature has not been exceeded. The equipment for checking the temperature shall be provided by the Contractor and meet the approval of the Engineer. The Contractor shall furnish a high temperature pyrometer, for measuring the temperature of the heated member, if requested by the Engineer. Temperature indicating crayons may be used if approved by the Engineer.
- 8. No accelerated or artificial cooling will be permitted.
- 9. The final acceptable local tolerances for the repaired member shall be as follows:
 - a. The straightness of a member shall be within ¼" per 10 feet of the member's length when measured along the member's flanges and legs using a tight string line.
 - b. Flanges, webs, and legs of members shall be within 1/4" of the plane of the original milled surface when measured with a straight edge.

- 10. The coated area damaged during the heat straightening process shall be recoated with encapsulating paint. For encapsulating note see "Encapsulating Field Painting" section of the scope of work.
- 11. If any concrete component of the bridge is damaged as a result of heat straightening, the concrete components shall be repaired, as directed by the Director of Structures, State Bridge Engineer. No payment will be made for repairing the damaged concrete component.

Epoxy Injection Repair

Epoxy injection shall be done in accordance with Subsection 907-824.03.5. Payment for the work shall be made under Pay Item No. 907-824-E001, Epoxy Injection.

General Epoxy Repair

General Epoxy Repair shall be done in accordance with Subsection 907-824.03.1 and with the approved materials outlined in Subsection 907-824.02.1. All work and material required to perform this item of work shall be paid for under Pay Item No. 907-824-A003, General Epoxy Repair.

This item shall be bid on such that this item may be increased, decreased, or eliminated as directed by the Project Engineer.

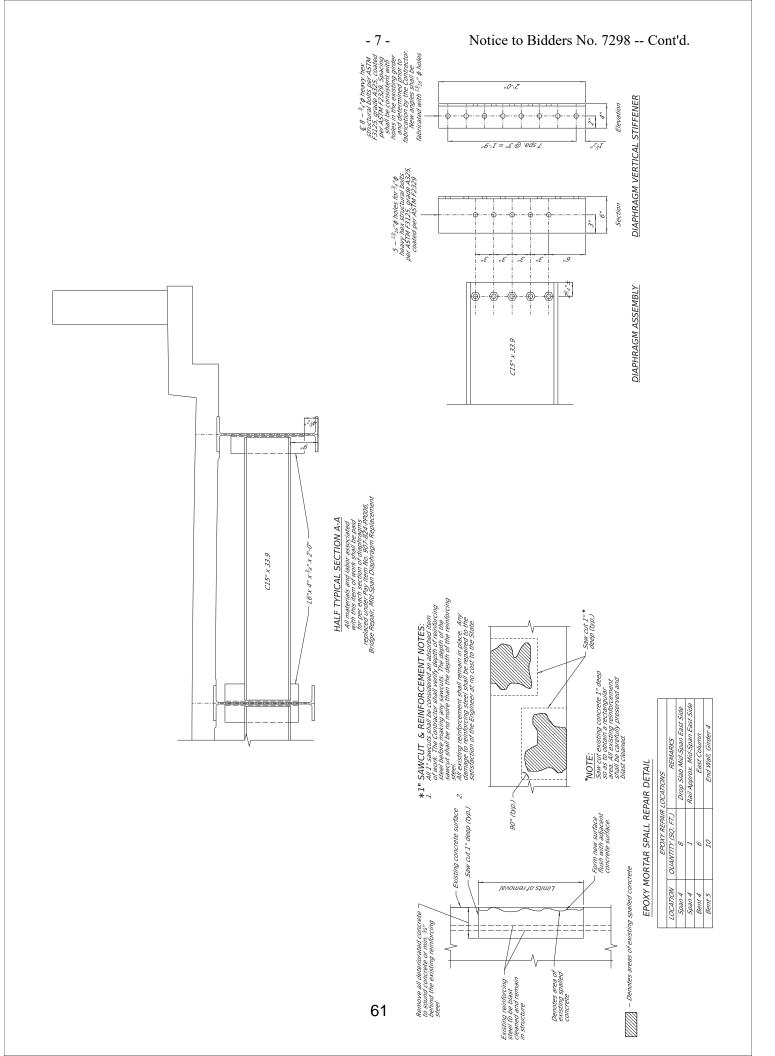
Locations for epoxy repair are shown in the detail drawings.

Encapsulating Field Painting

Encapsulating field painting shall be done in accordance with Subsection 907-824.03.6. This item of work shall be paid for under Pay Item No. 907-824-F001 Encapsulating Field Painting.

Cap Cleaning

Cap cleaning shall be done in accordance with Subsection 907-824-03.3. This item of work shall be paid for under Pay Item No. 907-824-C001 Cap Cleaning.





Bridge ID: 11533

Structure Name: 0.1

County: Hinds

Facility: SR 22

Feature: I 20

Location SR 22 OVER I 20

SECTION 904 - NOTICE TO BIDDERS NO. 7299 CODE: (SP)

DATE: 09/04/2025

SUBJECT: Temporary Construction Signs

PROJECT: STBG-0024-01(035) / 109985301 – 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. 7300 CODE: (SP)

DATE: 9/9/2025

SUBJECT: Lane Closure Restrictions

PROJECT: STBG-0024-01(035) / 109985301 – Hinds County

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

<u>I-20</u>

• Lane closures shall not be allowed **Monday through Thursday** from **7:00 AM to 6:00 PM**

• Lane closures shall not be allowed **Friday through Saturday** from **7:00 AM to 7:00 PM**

• No lane closures will be allowed on **Sunday**. **Sunday** is defined as **7:00 PM Saturday** to **7:00 PM Sunday**.

The Contractor will be charged a fee of <u>\$500.00</u> 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. 7301 CODE: (SP)

DATE: 9/9/2025

SUBJECT: Additional Construction Requirements

PROJECT: STBG-0024-01(035) / 109985301 – Hinds County

Bidders are hereby advised of the following additional construction requirements:

• The Contractor shall assume responsibility for the traffic control of the project on the NTP date. The Contractor shall coordinate with Trent Holbrook (601-946-7044) in order for the Department to remove the existing portable traffic signals from the project site. The Contractor shall provide all necessary traffic control during this operation, and shall give the Department 24 hours notice prior to commencement.

SECTION 904 - NOTICE TO BIDDERS NO. 7370

CODE: (SP)

DATE: 09/04/2025

SUBJECT: Underground Utilities

PROJECT: STBG-0024-01(035) / 109985301 - 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 http://bidx.com.

CODE: (SP)

SPECIAL PROVISION NO. 907-103-2

DATE: 06/22/2017

SUBJECT: Award and Execution of Contract

Section 103, Award and Execution of Contract, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-103.01--Consideration of Proposal.</u> Delete the second and third paragraphs of Subsection 103.01 on page 19, and substitute the following.

<u>907-103.01.1--For Projects Constructed Without Federal Funds.</u> Resident Contractors actually domiciled in Mississippi are to be granted preference over nonresidents in awarding of Contracts financed 100% with State funds.

In consideration of proposals that are equal to or in excess of \$50,000 and financed 100% with State funds, a nonresident bidder domiciled in a state having laws granting preference to local Contractors will be considered for such contracts on the same basis as the nonresident bidder's state awards contracts to Mississippi Contractors bidding under similar circumstances. When a nonresident Contractor submits a bid equal to or in excess of \$50,000 on a contract financed 100% with State funds, a copy of the current laws from the state of domicile and an explanation thereof pertaining to treatment of nonresident Contractors shall be attached. If no preferential treatment is provided for Contractors in the state of domicile and contracts are awarded to the lowest responsible bidder, a statement to this effect shall be attached. Should the attachment not accompany the bid when submitted, the Contractor shall have 10 days following the opening of the bids to furnish the required information to the Contract Administration Director for attachment to the bid. Failure to provide the attachment within 10 days will result in the nonresident Contractor's bid being rejected and not considered for award. As used herein, the term "resident Contractor" includes a nonresident person, firm or corporation that has been qualified to do business in this State and has maintained a permanent full-time office in the State of Mississippi for two years prior to the submission of the bid, and the subsidiaries and affiliates of such a person, firm or corporation.

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.

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 www.equipmentwatch.com 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

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.

907-618.04--Method of Measurement. 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: (SP)

SPECIAL PROVISION NO. 907-618-12

DATE: 05/03/2024

SUBJECT: Traffic Control Management

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.

<u>907-618.01.2--Traffic Control Management.</u> Delete subparagraph (g) of Subsection 618.01.2 on page 441, and substitute the following.

g) Perform a minimum of once-a-week inspections from the Notice to Proceed until a Partial or Final Maintenance Release is obtained. Once work begins, daily daytime inspections and weekly nighttime inspections are required on projects with predominantly daytime work, and daily nighttime inspections and weekly daytime inspections are required on projects with predominantly nighttime work. Weekly inspections will be allowed for periods outside of active construction. When lane closures are present or any non-fixed signs or traffic handling devices such as cones or barrels are in place, inspections shall be performed daily whether work is being performed or not.

<u>907-618.05--Basis of Payment</u>. Delete pay item 618-A on page 449 and substitute the following.

907-618-A: Maintenance of Traffic - lump sum

CODE: (IS)

SPECIAL PROVISION NO. 907-619-5

DATE: 01/17/2018

SUBJECT: Traffic Control for Construction Zones

Section 619, Traffic Control for Construction Zones, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-619.02--Materials.

<u>907-619.02.8--Traffic Signals and Flashers.</u> Delete Subsection 619.02.8.1 on pages 452 thru 455, and substitute the following.

<u>907-619.02.8.1-Portable Traffic Signals.</u> Portable traffic signals shall be trailer or pedestal mounted units that provide for easy, legal transportation and quick setup and deployment. Each unit shall be self-contained. The types of portable traffic signals are as follows.

- Type 1 portable traffic signal shall include two signal heads per trailer with one signal head mounted on an overhead mast arm that can be extended over the travel lane, and the other signal head shall be mounted on the vertical upright of the trailer.
- Type 2 portable traffic signal shall include one signal head that is mounted on the vertical upright of the pedestal/cart or trailer. Pedestal/Cart mounted shall be designated as Type 2A and Trailer mounted shall be designated as Type 2B. Type 2 portable traffic signals shall be tested to MASH Standards or NCHRP Test Level 3 crash testing requirements by an accredited independent test facility, with supporting documentation available upon request.
- Type 3 portable traffic signal shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned in each applicable section below.

The portable traffic signals shall be MUTCD Compliant and utilize standard ITE signal heads, and adhere to the ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement. The units shall be battery powered with a solar charging system, and be equipped with an onboard battery charger capable of being used with a 120V AC power source. Portable traffic signals shall be able to communicate with other portable signals via 900 MHz or other accepted wireless communications. If wireless connectivity is not feasible, hardwired connectivity shall be an acceptable alternative, as approved by the Engineer. Portable Traffic Signals shall include all the major components listed below or be able to perform the functions of these components. The major components of the unit shall include, but are not limited to, the trailer or pedestal/cart, telescoping mast arm (on Type 1 and 3), signal head(s) and back plates, traffic signal controller with operating software, solar charging system with batteries, input and output devices, vehicle detection, flasher units, conflict monitor, relays,

communications system and other equipment required for the safe operation and installation of the unit.

907-619.02.8.1.1--Signal Heads. The signal heads and all applicable components of the portable traffic signal shall meet the physical display and operational requirements of conventional traffic signals as specific in the Manual on Uniform Traffic Control Devices (MUTCD). The signal heads shall be cast aluminum or polycarbonate and shall meet the requirements laid out in the Mississippi Standard Specification for traffic signal heads and associated MDOT material specifications for traffic signal heads. The signal heads shall accommodate standard 12-inch LED indications meeting the ITE Specification "Vehicle Traffic Control Signal Heads" and ITE Specifications and Standards for Vehicle Traffic Control Signal Heads, Light Emitting Diode (LED) Circular Signal Supplement.

For Type 1, Type 2 and Type 3 portable traffic signals, the signal heads shall have the ability to be rotated 180 degrees to face in the opposite direction and shall have the ability to rotate and lock in approximately 10 degree increments to position the signal head for the optimum visibility to motorists.

For Type 1 portable traffic signals, each unit shall contain two signal heads with one signal head mounted on an overhead mast arm that can be extended over the travel lane with a minimum clearance of 17 feet measured from the bottom of the signal head unit to the road surface. The lower signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 2 portable traffic signals, the signal head shall be mounted to the vertical upright of the trailer at a minimum height of eight feet (8') from the bottom of the signal head unit to the road surface.

For Type 3 portable traffic signals, each unit shall be the same as Type 1 mentioned above but with enhanced capabilities as mentioned below.

907-619.02.8.1.2--Controller and Operating Requirements. The portable traffic signal (Types 1, 2, and 3) shall include a solid state Controller Unit (CU) that is in compliance with NEMA TS 5 Performance Standard. The CU shall have an easy to read front panel backlit display for viewing and programming the configuration settings and CU status. The CU shall be capable of operating the portable traffic signal system in a fixed time, traffic actuated or manual control mode. Multiple portable traffic signals shall have the capability to be interconnected to form a portable traffic signal system. Each portable traffic signal within a connected system shall have the capability to serve as either the master or remote signal. Each portable traffic signal shall include a Conflict Monitor Unit (CMU), or Malfunction Management Unit (MMU) to ensure phase conflicts do not exist during operation.

For Type 1 and Type 2 portable traffic signals, a minimum of five (5) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of four (4) traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have

the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

For Type 3 portable traffic signals, a minimum of ten (10) automatic time-of-day timing plans within a 24-hour period should be available in fixed time mode. The CU should have the ability to control a minimum of 16 traffic phases with programmable cycle time adjustments and user adjustable red, amber, minimum green and maximum green times. The CU shall have the capability of programming green and red times from 1 to 999 seconds and yellow times up to 15 seconds in one-second increments. The CU shall also have the capability of facilitating standby modes of red, red flash and yellow flash.

The system shall also have the ability to operate in vehicle actuation mode when vehicle detection components are used. The operating system shall have the capability to allow the Portable Traffic Signal to be connected to and controlled by a standard NEMA controller.

The system shall have the capability to be controlled remotely using a hardwired or wireless remote. The wireless radio remote shall be capable of communicating at a clear line of site distance up to ½ mile from the master.

The CU shall have the capability of interfacing with a Remote Monitoring System (RMS) capable of reporting signal location, battery voltage, and system faults. The RMS shall include a password-protected web site, viewable via an internet connection. In the event of a system fault, the RMS shall provide specific information concerning the cause of the system fault (example: "red lamp on signal number 1 out"). The RMS shall immediately contact previously designated individuals via SMS text messaging or email, upon a fault event.

The active timing program operating the PTS system shall be available and viewable through the RMS website at all times. The RMS shall maintain a history of the operating system in each signal including total operating hours, alerts, and the location of the PTS trailer.

<u>907-619.02.8.1.3--Wireless Communications</u>. The portable traffic signals shall communicate with other portable traffic signals within the signal system via license-free wireless 900 MHZ radio link communications as specified in Subsection 662.02.2 of the radio Interconnect System specification. The radio units shall maintain communications at a minimum distance of one (1) mile. The radio system shall conform to the applicable Federal Communications Commission requirements and all applicable state and local requirements.

The portable traffic signals shall be in direct communication at all times either by wireless or hardwire connection to provide for the required conflict monitoring / malfunction management system.

<u>907-619.02.8.1.4--Power Requirements.</u> Each Portable Traffic Signal shall be equipped with a power source consisting of a solar collection array, solar controller and/or charging unit and batteries sufficient to operate the signal system. The number and size of batteries shall be sufficient to operate the Type 1 and Type 3 signals for a minimum of 30 days and Type 2A signals for

minimum of five (5) days, and Type 2B signals for minimum of 15 days without additional charging or assist from the solar array. An on-board battery charger shall be compatible with both the solar array and with a 120V AC power source.

For Type 1 signals, the solar panel array shall provide for a minimum of 440 watts of solar collection capability.

For Type 2A signals, the solar panel array shall provide for a minimum of 90 watts of solar collection capability.

For Type 2B signals, the solar panel array shall provide for a minimum of 110 watts of solar collection capability.

For Type 3 signals, the solar panel array shall provide for a minimum of 480 watts of solar collection capability and shall include a tilt and rotate system to optimally position the panels.

All instrumentation for the electrical system and battery compartment shall be contained in a lockable weatherproof enclosure. Solar panels shall be secured to the mounting brackets for theft prevention.

907-619.02.8.1.5--Trailer and Lift System. The trailer or pedestal/cart and all mounted components shall conform to the wind loading requirements as follows: 100 mph minimum for Type 1 portable traffic signals, 55 mph minimum for Type 2A portable traffic signals, 75 mph minimum for Type 2B portable traffic signals, and 90 mph minimum for Type 3 portable traffic signals as described in the AASHTO Standard Specifications for Highway Signs, Luminaries and Traffic Signals, as specified in the plans including all interims and updates. At the request of the Engineer, proof of conformance to these wind load ratings shall be verified by a third-party. No additional loose ballast shall be used to meet these wind load requirements. The trailer shall be made of structural steel and shall include four (4) leveling/stabilizer jacks capable of lifting the trailer a minimum of six inches (6").

The trailer or pedestal shall be equipped with a mechanical, hydraulic or electric lift system sufficient for one person to be able to raise and lower the vertical upright and/or horizontal mast arm to and from the operating position.

For Type 1, 2B, and Type 3 signals, the trailer shall be equipped to provide legal and safe transport on the public highway system at speeds up to 55 mph.

All exterior metal surfaces, except signal heads and back plates, shall be powder-coat painted highway safety orange.

<u>907-619.02.9--Impact Attenuators.</u> Delete the sentence in the first paragraph of Subsection 619.02.9 on page 455, and substitute the following.

Impact attenuators must be listed on the Department's APL.

<u>907-619.02.11--Snap-Back Delineators.</u> Delete the sentence in the paragraph of Subsection 619.02.11 on page 456, and substitute the following.

Snap-back delineators shall be selected from the list of surface mounted flexible delineator posts as shown on the Department's APL.

907-619.02.14--Changeable Message Sign.

<u>907-619.02.14.5--PCMS Controller and Storage Cabinets.</u> Delete the fifth sentence in the first paragraph of Subsection 619.02.14.5 on pages 462 and 463, and substitute the following.

The controller cabinet shall be illuminated.

907-619.05-Basis of Payment. Add the following to the list of pay items ending on page 480.

907-619-E3: Changeable Message Sign *****
- per each
907-619-H2: Traffic Signal, Portable, Type
- per each

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."

907-701.02--Portland Cement.

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.

<u>907-701.02.1.1--Types of Portland Cement</u>. 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 (C₃A) 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

	LD-7		CHPF-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
Test on Residue from Distillation					
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

^{*} 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 ² – 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.

<u>907-707.02.3--Wood</u>. 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.

<u>907-707.06--Flexible Plastic Gasket for Joining Conduit</u>. 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.

CODE: (IS)

SPECIAL PROVISION NO. 907-711-2

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.

907-712.01--General. 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.

SPECIAL PROVISION NO. 907-714-4

CODE: (SP)

DATE: 07/28/2025

SUBJECT: Miscellaneous Materials

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.

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.

Delete Subsection 714.06 on page 798, and substitute the following.

907-714.06--Slag Cement.

907-714.06.1--General. The slag cement source must be approved for listing in the Department's

APL prior to use. The acceptance of slag cement shall be based on certified test reports, certification of shipment from the supplier, and tests performed on samples obtained after delivery in accordance with the Department's *Materials Division Inspection*, *Testing*, *and Certification Manual* and Department SOP.

The Contractor shall provide suitable means for storing and protecting the slag cement against dampness and contamination. Separate storage silos, bins, or containers shall be provided for slag cement. Slag cement that is partially set, caked or contains lumps shall not be used.

The State Materials Engineer shall be notified in writing of the nature, amount and identity of any processing or other additions made to the slag cement during production.

Slag cement from different mills shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer; except that this requirement will not be applicable to cement treatment of design soils or bases.

No additional cementitious materials, such as blended hydraulic cement, fly ash, metakaolin, or others, shall be added to or as a replacement for hydraulic cement when used with slag cement in the production of concrete. The replacement of hydraulic cement with slag cement shall be in accordance with the applicable replacement content specified in Subsection 701.02.2.

<u>907-714.06.2--Specific Requirements</u>. Slag cement shall meet the requirements of AASHTO M 302, Grade 100 or 120. Slag cement shall contain no chlorides.

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.

			Test Method	ASTM D 4632	ASTM D 4632	ASTM D 4632	ASTM D 6241	ASTM D 4533	ASTM D 6140	ASTM D 4491	ASTM D 4751		ASTM D 4355	ASTM D 276	ASTM D 4595
	IX	High Strength	!			-		-		-				1	2000
	ΛІШ	High S	-	-							-	-	-		099
	VII	જ	Non- Woven	280	50% Min	240	115	100	-	0.2	-	0.43	50% @ 500 hr		
	Λ	Separation, Stabilization & Reinforcement	Woven	450	50% max	400	180	150		0.2	0.43	-	50% @ 500 hr		-
	VI	I paration, St Reinfor	Non- Woven	180	50% Min	160	75	70		0.2		0.43	50% @ 500 hr		-
ctiles	A	Se	Woven	280	50% max	240	110	100		0.2	0.43	-	50% @ 500 hr		-
Table 1 - Geotextiles	Λ	Separation & Drainage		200	50% min	180	08	80	-	0.2	9.0	0.43	50% @ 500 hr		
	IV	Paving		06	50% min @ break			-	0.2		-	-		325	-
	Ш	Drainage		110	20% min	70	40	40	-	0.5	9.0	0.43	50% @ 500 hr		-
	Π^1	Sediment Control		06	50% max @ 45 lb					0.05	09.0	0.84	70% @ 500 hr		-
	$ ho_1$	Sedime		50						0.05	09:0	0.84	70% @ 500 hr		-
	Type Designation		Physical Property ²	Grab Strength (lb)	Elongation (%)	Seam Strength (lb)	Puncture Strength (1b)	Trapezoidal Tear (lb)	Asphalt Retention (gal/yd²)	Permittivity (sec ⁻¹) min	AOS Woven (mm) max	AOS Non-Woven (mm) max	Tensile Strength after UV (% Retained)	Melting Point °(F)	Minimum Ultimate Tensile Strength ³ (lb/in)

Notes: 1 - All property values, with the exception of apparent opening size (AOS), represent minimum average roll values in the weakest principal direction. 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

Delete Subsec

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.

<u>907-714.15.2--Marking</u>, <u>Shipment</u>, <u>and Storage</u>. 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.

907-714.15.4--Acceptance Sampling and Testing. 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			Test Method				
	I	II	III	IV	V	VI	
Long Term Design Load ¹ , pounds per foot, Machine Direction	250	500	750	1500	2500	3500	AASHTO R69, ASTM D5262
Minimum Ultimate Tensile Strength ² , pounds per foot, Machine Direction	500	1000	1500	3000	5000	7000	ASTM D6637
Open Area, percent	70	70	50	50	50	50	Direct Measurement

Minimum design criteria requirement.
 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. 907-720-4

DATE: 06/17/2025

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 or Type 2 beads. Type 1, 2, and 4 glass beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles. Type 1, 2, 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).

<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.

907-720.03.2.1—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 may be conducted at the request of the Engineer.

<u>907-720.04--Thermoplastic Marking Material.</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>907-720.04.1--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>907-720.04.2--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>907-720.04.3--Pre-formed Thermoplastic Material</u>. Heat-fused, pre-formed thermoplastic pavement marking material shall meet the color requirements of 907-720.02.

<u>907-720.04.4—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.

<u>907-720.05--Pavement Marking Tape.</u> Pavement marking tape shall be listed on the Department's Approved Lists.

<u>907-720.05.1—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>907-720.05.1.1--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° to 60° 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>907-720.05.1.2--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.

907-720.05.1.3--Tensile Strength and Elongation. 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>907-720.05.1.4--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>907-720.05.1.5--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.

907-720.05.1.6—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>907-720.05.2--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>907-720.05.2.1--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.

907-720.05.2.2—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.

<u>907-720.06--Raised Pavement Markers</u>. Pavement markers shall be listed on the Department's Approved Lists and shall conform to ASTM D 4280.

<u>907-720.06.1--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>907-720.06.2--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-Reflective 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>907-720.06.3—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.

<u>907-720.07--Adhesive for Pavement Markers</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

Per Subsection

- 6 -

testing package from each batch or material obtained from a package shipped to the project.

<u>907-720.07.1--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.

907-720.07.2--Bituminous Adhesive. The asphaltic adhesive material shall be flexible type.

<u>907-720.07.2.1--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. **ASTM D 3236** 10,000 Ductility @ 77°F, 5 cm/min **ASTM D 113** 15 Ductility @ 39.2°F, 1 cm/min 5 **ASTM D 113 ASTM D 5329** Asphalt Compatibility Pass

Table 3

<u>907-720.07.3—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.

Pass

Flexibility @ 20°F

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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 3rd 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CODE: (SP)

SPECIAL PROVISION NO. 907-824-4

DATE: 09/09/2025

SUBJECT: Routine Bridge Repair

Section 907-824, Routine Bridge Repair, 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 907-824 – ROUTINE BRIDGE REPAIR

<u>907-824.01--Description.</u> This work shall consist of constructing and installing routine bridge repair items including General Epoxy Repair, Bi-directional or Uni-directional Fiber Reinforced Polymer (FRP) Wrap, Cap Cleaning, Bearing Replacements, Epoxy Injection, and Encapsulated Field Painting in accordance with the details on the plans, and the requirements set out herein.

Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment.

It shall be the responsibility of the Contractor to protect the existing structure 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.

All details are based on the dimensions shown on the original plans for the existing structure. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure. The Contractor shall verify all dimensions of the existing structure prior to beginning work.

During construction, care shall be exercised to ensure that no debris falls into the crossing below the structure. All debris, including any material that has accumulated on the bridge deck or caps, shall become the property of the Contractor and shall be removed from the construction site and disposed of properly.

For additional information and details, see work related items below and on the standard drawings. At the Contractor's request, Bridge Division will provide a complete set of As-Built plans for the existing bridge.

907-824.02--Materials.

<u>907-824.02.1--General Epoxy Repair.</u> Materials for general epoxy repair shall be as follows or a material approved by the Director of Structures, State Bridge Engineer.

<u>Epoxy Resin</u>. Resin shall be selected from the MDOT Approved Products List and meet the requirements of ASTM C881, Type I, Grade 2, Class C.

Silica Sand. The materials shall be bagged general purpose cleaning sand.

<u>Epoxy Mortar Mix</u>. The epoxy mortar mix shall consist of part liquid epoxy and part clean dry sand mixed in the ratio recommended by the Manufacturer.

<u>907-824.02.2--FRP Wrap.</u> FRP wrap shall be one of the following products, or an approved equal, and shall be applied according to the Manufacturer's recommendations:

- "FRP Wrap" as manufactured by Fyfe Co. LLC, <u>www.aegion.com/about/our-brands/fyfe</u>
- "FRP Wrap" as manufactured by BASF Building Systems LLC, <u>www.master-builders-solutions.basf.us</u>
- "FRP Wrap" as manufactured by Sikawrap Inc. www.usa.sika.com
- "FRP Wrap" as manufactured by MAPEI Corp., www.mapei.com/us/en-us/

907-824.03--Construction Requirements.

<u>907-824.03.1--General Epoxy Repair.</u> Epoxy repair under this pay item is for general concrete spall repairs, and shall be bid such that the item may be increased, decreased or eliminated as directed by the Project Engineer. All epoxy repairs shall be performed in accordance with the details shown on the Drawings and in accordance with the notes herein. Repair concrete spalled areas on the bridge as directed by the Project Engineer and the locations listed in the plans using epoxy mortar. The Contractor shall determine the depth of reinforcement prior to any saw cutting. Spalled areas where pack rust has developed around or on reinforcement shall be blasted clean prior to repairing the spalled location. All areas of the bridge repaired with epoxy mortar shall be restored to the original dimensions as shown in the information plans, unless noted otherwise.

A Representative of the epoxy manufacturer must be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material.

Prior to placement of the mortar mix, the prepared surface shall be lightly primed with neat epoxy.

Acetone alcohol may be used to clean and lubricate trowels.

Curing time shall be in accordance with the Manufacturer's recommendations.

<u>907-824.03.2--FRP Wrap.</u> After all spalled locations on the bent caps, beams or piling are repaired, the repair locations on all bent caps shall be wrapped with FRP wrap in accordance with the notes below and the drawings.

FRP wrap shall be applied to bent caps, beams or piling as designated in the plans. FRP wrap shall be either bi-directional or uni-directional.

The Contractor shall furnish all submittals indicating the materials, tools, equipment, transportation, necessary storage, labor, installation plan and supervision required for the application of the composite or polymer system to the Director of Structures, State Bridge Engineer through the Project Engineer prior to construction. Products shall be stored according the manufacturer's requirements and shall avoid contact with moisture, dust and chemical exposure. All FRP composite systems shall be proprietary systems consisting of all associated fiber reinforcement and polymer adhesives/resins. FRP composites consisting of fiber reinforcement and polymers provided by more than one manufacturer are not allowed. The FRP composite system shall utilize carbon fiber reinforcement as the primary fiber material (primary structural component). The FRP system shall be top coated with a coating approved by the FRP system supplier. The coating color shall be selected by the Project Engineer.

FRP wraps shall not be installed when the ambient temperature is below 40°F or above 130°F. In cold conditions, auxiliary heat may be applied to raise the ambient temperature to a suitable level. Clean heat sources shall be utilized for this purpose (e.g., electric or propane) that do not contaminate the substrate with carbonation.

FRP wraps shall not be installed when surface moisture is present on the substrate or when rainfall or condensation is anticipated in the work areas. If water leakage exists through cracks or concrete joints, water flow shall be stopped prior to FRP installation. Resins (including primers and fillers) shall be mixed according to the FRP system manufacturer's installation instructions. All resin components shall be at a proper temperature and mixed in the manufacturer's prescribed mix ratio until there is a uniform and complete mixing of components.

Resin components are often contrasting colors, so full mixing is achieved when color streaks are eliminated. Resins should be mixed for the Manufacturer's prescribed mixing time and visually inspected for uniformity of color. A representative of the FRP wrap manufacturer must be present for sufficient time to assure that the Contractor is properly schooled in the installation of FRP wrap. Prior to installation of FRP wraps, the Contractor shall repair concrete spall areas in accordance with general epoxy repair notes herein and the details in the plans. The fibrous reinforcement system shall have a minimum tensile force as shown in the plan details. The direction of the fiber wrap shall be in the direction shown on the Contract Plans.

In addition to the Manufacturer's requirements, the Contractor shall ensure the structural and durability of the reinforced fiber wrap system by meeting the following acceptance guidelines:

Small delaminations, less than two inches (2") each, are permissible as long as the delaminated area is less than 5% of the total laminate area and there are no more than 10 such delamination per 10 feet.

Large delaminations, greater than 25 inches, can affect the performance of the installed system and shall be repaired by selectively cutting away the affected sheet and applying an overlapping sheet patch of equivalent piles. Delaminations less than 25 inches may be repaired by ply replacement.

The Contractor shall submit an FRP repair procedure to the Project Engineer for review and approval by the Director of Structures, State Bridge Engineer. This must be performed prior to repairing and delaminated areas.

<u>907-824.03.3--Cap Cleaning.</u> The caps at every bent shall be cleaned to the satisfaction of the Project Engineer after all other work has been done. All large debris shall be removed by hand while other debris, including but not limited to dirt and rust, shall be removed by pressure washing the bent caps. The pressure washer shall be able to maintain 3,500 psi of pressure. Prior to construction, the Contractor shall submit a proposed containment plan to the Project Engineer for approval by the Director of Structures, State Bridge Engineer.

<u>907-824.03.4--Bearing Replacements.</u> All bearings should be removed and replaced according to Bearing Assembly Details. All structural steel shall conform to ASTM A709, Grade 50. All steel shall be new. Extreme care shall be exercised in removing the existing bearing plates that are welded to the anchor plates embedded in the prestressed beams. Existing anchor bolts shall be ground to ½" below the concrete surface and grouted with epoxy mortar.

The bottom of the existing anchor plates shall be finished smooth to accommodate the new steel plates and painted with approved encapsulating paint. All pack rust and scale within the designated areas shall be removed by using small hand tools, mechanical process, or needle gun. All areas required to be painted containing grease films after the initial cleaning shall be cleaned with a biodegradable solvent. All debris removed from the existing structure shall become property of the Contractor and shall be disposed of properly. The Contractor shall provide technical data for the proposed encapsulating paint to be used on this project to the Project Engineer for approval by the Director of Structures, State Bridge Engineer. New paint shall be applied by hand, with either a brush or roller.

The new steel plates shall be cleaned and then painted with one shop coat of inorganic zinc, one field intermediate coat of acrylic latex, and one field top coat of acrylic latex per Section 814 of the Standard Specifications. Painting of new steel plates and existing anchor plates shall not be measured for separate pay and all costs shall be included in the price bid for Bearing Replacement.

Prior to any construction or fabrication, the Contractor shall comply with the submittal requirements listed in the bearing replacement details. The Contractor shall be responsible for adjusting the elements of the new construction to ensure a proper fit with the existing structure.

The Contractor shall provide adequate bracing and jacking arrangements as required to replace the existing bearings. The beam end shall only be raised to ¼" from its original position. Traffic shall be maintained on the bridge during the duration of the repair.

The Contractor shall employ the service of a Mississippi Registered Professional Engineer who is knowledgeable in the field of Bridge Design. A complete set of bracing and jacking arrangement plans along with design calculations shall be submitted to the Director of Structures, State Bridge Engineer through the Project Engineer for review prior to construction and shall bear the design Engineer's seal.

Jacks shall be coupled to a common manifold. Jacking point shall be under the bottom flange of the beam at the bent and no jacking points will be allowed under any diaphragm or bay. After the beam is raised into position, temporary blocking shall be provided to secure the beam in this position while work is being performed. Temporary blocking points shall be under the bottom flange of the beam at the bent and no temporary blocking will be allowed under any diaphragm or bay.

Any damage to the bridge resulting from uneven or improper jacking shall be repaired by the Contractor at no additional cost to the State.

<u>907-824.03.5--Epoxy Injection.</u> All cracks greater than 1/32" shall be injected with an approved epoxy resin adhesive of the gel type. Prior to injecting any cracks, the crack shall be cleaned with a high velocity filtered air jet.

A representative of the epoxy manufacturer shall be present for sufficient time to ensure that the Contractor is properly schooled in the use of the epoxy material. Epoxy resin adhesive shall be installed in strict accordance with the manufacturer recommendations. Curing time shall be in accordance with manufacturer's recommendations. After epoxy injection is complete, all injection ports shall be removed.

<u>907-824.03.6--Encapsulating Field Painting.</u> The Contractor should be aware that the existing paint on the steel structure may contain lead.

Prior to construction, the Contractor shall submit a Temporary Containment Plan for the removal of the existing paint and rust from the designated repair areas to the Project Engineer for approval by the Director of Structures, State Bridge Engineer. Also, the Contractor shall submit a Temporary Containment Plan for painting the designated repair areas.

All pack rust and scale within the designated areas shall be removed by using small hand tools, mechanical process, or needle gun. All areas required to be painted containing grease films after the initial cleaning shall be cleaned with a biodegradable solvent. Existing paint shall be roughened to ensure the new paint will adhere to the existing painted surface. All debris and paint removed from the existing structure shall become the property of the Contractor and shall be disposed of properly.

All exposed steel surfaces in the repair areas shall be painted with an encapsulating paint designed to encapsulate lead-based paints, and applied according to the manufacturer's recommendations. This will include but is not limited to: existing bearings, beams, and diaphragm assemblies, etc.

The Contractor shall provide technical data for the proposed encapsulating paint to be used on this project to the Project Engineer for approval by the Director of Structures, State Bridge Engineer.

New paint shall be applied by hand with brush or roller.

<u>907-824.04--Method of Measurement.</u> Epoxy Repair, completed in accordance with the plans and specifications, will be measured per square foot. All items of work related to epoxy repair shall be included in the square foot unit price.

FRP Wrap, Bi-directional and Uni-directional, completed in accordance with the plans and specifications, will be measured per linear foot or square foot.

Cap Cleaning, completed in accordance with the plans and specifications, will be measured per each.

Bearing Replacements, completed in accordance with the plans and specifications, will be measured per each.

Epoxy injection, complete in accordance with the plans and specifications, will be measured by the linear foot.

Encapsulating Field Painting, complete in accordance with the plans and specifications, will be measured by the square foot.

<u>907-824.05--Basis of Payment.</u> Epoxy Repair, measured as prescribed above, will be paid for at the contract unit price per square foot, which price shall be full compensation for materials, labor, equipment, and incidentals necessary to complete the work.

FRP Wrap, Bi-directional and Uni-directional, measured as prescribed above, will be paid for at the contract unit price per linear foot or square foot, which price shall be full compensation for all labor, materials, surface preparation, and incidentals associated with the installation of FRP wraps, including epoxy mortar repairs, necessary to complete the work.

Cap Cleaning, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for all materials, labor, equipment and incidentals necessary to complete the work.

Bearing Replacements, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for all materials, labor, equipment and incidentals necessary to complete the work.

Epoxy Injection, measured as prescribed above, will be paid for at the contract unit price per linear foot, which price shall be full compensation for all materials, labor, equipment and incidentals necessary to complete the work.

Encapsulating Field Painting, measured as prescribed above, will be paid for at the contract unit price per square foot, which price shall be full compensation for all materials, labor, equipment, cleaning, and incidentals necessary to complete the work.

Payment will made under:

907-824-A: General Epoxy Repair - per square foot

907-824-B: FRP Wrap, * - per linear foot or square foot

907-824-C: Cap Cleaning - per each

907-824-D: Bearing Replacements ** - per each

907-824-E: Epoxy Injection - per linear foot

907-824-F: Encapsulating Field Painting - per square foot

^{*} Indicate Bi-directional, Uni-directional, etc.

^{**} Type of Bearing (Prestressed Concrete Girder, Concrete Box Girder or Steel Girder) may be specified.

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 s follows:
President	Address
Secretary	Address
Treasurer	Address

Revised 1/2016

The following is my (our) itemized proposal.

Bridge Repair on SR 22 (Bridge No. 0.1) over I-20, known as State Project No. STBG-0024-01(035) / 109985301 in Hinds County.

Line no.	Item Code	Adj Code	Quantity	Units Roadway I	Description[Fixed Unit Price] tems
0010	619-D1001		70	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0020	619-D2001		296	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0030	619-G4001		48	Linear Feet	Barricades, Type III, Double Faced
0040	619-G4005		60	Linear Feet	Barricades, Type III, Single Faced
0050	619-G5001		30	Each	Free Standing Plastic Drums
0060	619-G7001		10	Each	Warning Lights, Type "B"
0070	620-A001		1	Lump Sum	Mobilization
0080	907-618-A001		1	Lump Sum	Maintenance of Traffic
0090	907-618-M2001		100	Hours	Work Zone Law Enforcement (\$60.00)
0100	907-619-E3001		2	Each	Changeable Message Sign
0110	907-619-H2001		2	Each	Traffic Signal, Portable, Type 1
				Bridge Ite	ems
0120	907-824-A003		25	Square Feet	General Epoxy Repair
0130	907-824-C001		2	Each	Cap Cleaning
0140	907-824-E001		25	Linear Feet	Epoxy Injection
0150	907-824-F001		413	Square Feet	Encapsulating Field Painting
0160	907-824-PP004		1	Lump Sum	Bridge Repair, Heat-Straightening Repair
0170	907-824-PP006		1	Each	Bridge Repair, Mid-Span Diaphragm Replacement

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.

•	X		
•	X		
	ĸ		
	×		
•			
٠	K		
	k		
	ĸ		
	K		
	X		
	ĸ		
	K		
٠	К		
	ĸ		
	×		
٠	X		
	X		
	X		
	X		
•	X		
	X		
	x		
٠	X		
	X		
	ĸ		
	K		
٠	K		
	ĸ		
	ĸ		
	X		
•	K		
	k		
	••		
	K		
٠	К		
	K		
	ĸ		
٠	X		
	X		
	x		
	X		
	×		
	X		
	* *		
	* * *		
	* *		
	* * *		
	* * * * *		

	* * * * *		

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)

Total Contract Reduction								
Total Item Reduction								
Unit Price Reduction								
Unit								
Pay Item Number								
Project Number	1.	2.	3.	4.	5.	6.	7.	8.

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 NOT</u> co	onstitute <u>APPROVAL</u> of the subcontracts.
(Individual or Firm)	(Address)
NOTE: Failure to complete the above <u>DOES NOT</u> prosubcontracts, if any, equal to or in excess of accordance with regulations promulgated and Contractors on September 8, 2011.	fifty thousand dollars (\$50,000.00) will be in
Contractor	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION

I, ,
(Name of person signing bid)
individually, and in my capacity as of
(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
(Name of Firm, Partnership, or Corporation)
on Project No. STBG-0024-01(035)/ 109985301000
in <u>Hinds</u> 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; no 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.

XX7'.	1 6	20		
Witness our signatures, this the	day of	, 20_	·	
Contractor				
D				
By:				
Title				
Cionad and sociad in the massages of them	a and address of ve	itm a ga)		
Signed and sealed in the presence of: (name	ne and address of w	itness)		
Signed and sealed in the presence of: (name		itness)		
		itness)		
MISSISSIPPI TRANSPORTATION COM		itness)		
		itness)		
MISSISSIPPI TRANSPORTATION COM		itness)		
MISSISSIPPI TRANSPORTATION COM		itness)		
MISSISSIPPI TRANSPORTATION COM		itness)		

SECTION 903 PERFORMANCE BOND

Project No.:	
For the construction of:	
Contract date:	Contract Price:
FOR OWNER: MISSISSIPPI MISSISSIPPI 39201.	TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON,
	e, contact person, phone number and address):
SURETY (legal name, phone num	mber, principal place of business and address <i>for notice purposes</i>):
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:

PERFORMANCE ROND FOR THE FOLLOWING CONTRACT:

- (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:	-
Title:	-
Address:	-
Address:	-
	-
SURETY	
Company:	-
) (G)
Signature:	MS Insurance ID #
Name:	-
Title:	_
Address:	_
	_
SURETY (if applicable)	
Company:	
company.	=
Signature:	MS Insurance ID #
	<u>-</u>
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.

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



BID BOND

KNOW ALL MEN BY THESE PRE	SENTS, that we		
	, <u> </u>	Contractor	
		Address	
		City, State ZIP	
As principal, hereinafter called the Pr	rincipal, and	Surety	
a corporation duly organized under the			
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			
State Project No. STBG-0024-01(0. NOW THEREFORE, the condition of said Principal will, within the time reperformance of the terms and condition will pay unto the Obligee the different which the Obligee legally contracts which in no event shall liability hereunder.	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 so on this obligation to be void; otherw the amount of the bid of the said Perform the work if the latter amount in hereof.	sufficient bond to secure the rise the Principal and Surety Principal and the amount for
Signed and sealed this	day 01	, 20	
	(Principal)		(Seal)
	В	y:	
(Witness)	(Name)	y:(Title)	
	(Surety)	(Seal)	
(Witness)	(Attorney-in-Fa	By:	
	(MS Agent)		
	Mississ	sippi Insurance ID Number	