Keyed

12 -



SM No. CSP0022040681

# PROPOSAL AND CONTRACT DOCUMENTS

### FOR THE CONSTRUCTION OF

12

Mill & Overlay approximately 4 miles on SR 15 from the beginning of the 3-Lane section south of Ripley to the end of the 3-Lane section north of Ripley, known as State Project No. SP-0022-04(068) / 108893301 in Tippah County.

Project Completion: Flexible

(STATE DELEGATED)

#### NOTICE

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

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

### **SECTION 900**

OF THE CURRENT 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

**JACKSON, MISSISSIPPI** 

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### **SECTION 901 - ADVERTISEMENT**

Electronic bids will be received by the Mississippi Transportation Commission at <u>10:00 o'clock A.M.</u>, <u>Tuesday</u>, <u>March 22</u>, <u>2022</u>, from the Bid Express Service and shortly thereafter publicly read on the Sixth Floor for:

Mill & Overlay approximately 4 miles on SR 15 from the beginning of the 3-Lane section south of Ripley to the end of the 3-Lane section north of Ripley, known as State Project No. SP-0022-04(068) / 108893301 in Tippah County.

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

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

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

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

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

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

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

JEFFREY C. ALTMAN
ACTING EXECUTIVE DIRECTOR

### SUPPLEMENT TO NOTICE TO BIDDERS NO. 1

**DATE:** 06/08/2021

**SUBJECT:** Governing Specifications

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

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

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

**DATE:** 03/01/2017

**SUBJECT:** Governing Specifications

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

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

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

CODE: (SP)

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

**DATE:** 01/17/2017

**SUBJECT:** Final Clean-Up

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

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

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

SECTION 904 - NOTICE TO BIDDERS NO. 9 CODE: (IS)

**DATE:** 03/01/2017

**SUBJECT:** Federal Bridge Formula

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

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

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

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

or

http://www.ops.fhwa.dot.gov/Freight/publications/brdg frm wghts/bridge formula all rev.pdf

An on line BRIDGE FORMULA WEIGHTS CALCULATOR is available at

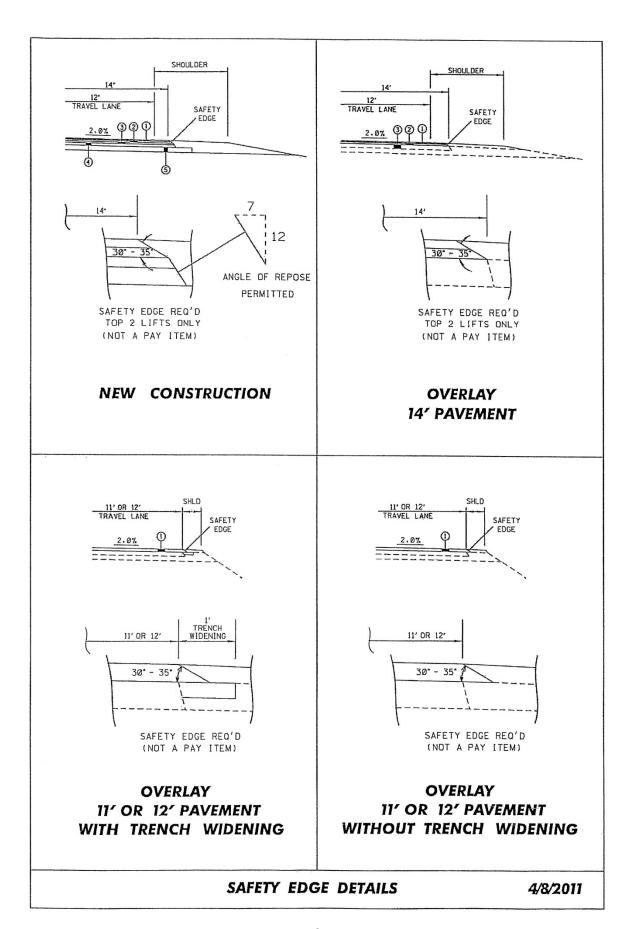
http://ops.fhwa.dot.gov/freight/sw/brdgcalc/calc\_page.htm

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

**DATE:** 03/01/2017

**SUBJECT:** Safety Edge

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



### **SECTION 904 - NOTICE TO BIDDERS NO. 113**

CODE: (SP)

**DATE:** 04/18/2017

**SUBJECT:** Tack Coat

Bidders are advised that in addition to the products listed on the Department's APL as referenced in Subsection 401.03.1.2 on page 256, the Contractor may use one of the following as a tack coat.

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

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. 446 CODE: (SP)

**DATE:** 10/18/2017

**SUBJECT:** Traffic on Milled Surface in Urban Areas

Bidders are hereby advised that when the main lanes of a roadway are fine milled, traffic will be allowed to run on a milled surfaces for up to five (5) calendar days. The Contractor will be assessed a penalty of \$5,000 per calendar day afterwards until the milled surfaces are covered with the next lift of asphalt. It shall be the Contractor's responsibility to ensure that the milling operations do not commence until such time as forecasted weather conditions are suitable enough to allow the placement of the asphalt pavement after the milling operations.

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

**DATE:** 11/28/2017

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

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

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

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

**DATE:** 11/13/2018

**SUBJECT:** Early Notice to Proceed

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

SECTION 904 - NOTICE TO BIDDERS NO. 1226

CODE: (IS)

**DATE:** 11/16/2018

**SUBJECT:** Material Storage Under Bridges

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

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

**DATE:** 11/27/2018

**SUBJECT:** Fuel and Material Adjustments

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

CODE: (IS)

SECTION 904 - NOTICE TO BIDDERS NO. 2206

**DATE:** 01/14/2020

**SUBJECT: MASH Compliant Devices** 

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

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

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

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

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

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 2273

**DATE:** 02/12/2020

**SUBJECT:** Mississippi Special Fuel Tax Law

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



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

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

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

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

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

#### **Refund Gasoline User**

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

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

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

#### **Refund Gasoline Dealer**

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

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

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

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

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

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

### **Identifying Dyed Diesel**

Revised March 2017

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



Page 1 of 1



### **Special Fuel Used on Government Contracts**

#### State and Local Government Contracts

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

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

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

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

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

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

### **Special Fuel Distributors**

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

#### **Environmental Protection Fee**

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

#### **Penalties**

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

SECTION 904- NOTICE TO BIDDERS NO. 2365 CODE: (SP)

**DATE:** 03/23/2020

**SUBJECT:** Special Project Signs

Bidders are advised that this project will require Special Project Signs. The signs and posts will be State Furnished and Contractor will only be required to install, maintain, and remove the signs. The signs shall be erected prior to beginning any construction and remain in place for the duration of the project. The signs shall be installed near the beginning and end of the project at locations approved by the Engineer. The signs will remain the property of the Department at the end of the project. All costs for special project signs should be included in the bid price for pay item 618-A: Maintenance of Traffic.



6.0" Radius, 0.8" Border, Blue on White;

"Project Funded By" D 2K; "Mississippi Lottery" D 2K; "Thank Your" E 2K; "State Legislator" E 2K;

### SUPPLEMENT TO NOTICE TO BIDDERS NO. 2654

**DATE:** 05/02/2020

The goal is <u>5</u> percent for the Disadvantaged Business Enterprise. All Bidders are required to submit Form OCR-481 for all DBEs. Bidders are advised to check the bid tabulation link for this project on the MDOT website at:

https://mdot.ms.gov/portal/current letting

Bid tabulations are usually posted by 3:00 pm on Letting Day.

CODE: (SP)

SECTION 904 - NOTICE TO BIDDERS NO. 2654

**DATE:** 05/02/2020

SUBJECT: Disadvantaged Business Enterprises In Special Funded Projects

The Department has developed a Disadvantaged Business Enterprise Program that is applicable to this contract and is made a part thereof by reference, except approvals and concurrences by the Federal Highway Administration is not applicable to this contract since it is not financed in whole or in part with Federal Funds.

Copies of the program may be obtained from:

Office of Civil Rights Mississippi Department of Transportation P. O. Box 1850 Jackson, Mississippi 39215-1850

### **POLICY**

It is the policy of the Mississippi Department of Transportation to provide a level playing field, to foster equal opportunity in all contracts, to improve the flexibility of the DBE Program, to reduce the burdens on small businesses, and to achieve that amount of participation that would be obtained in a non-discriminatory market place. In doing so, it is the policy of MDOT that there will be no discrimination in the award and performance of these contracts on the basis of race, color, sex, or national origin.

### ASSURANCES THAT CONTRACTORS MUST TAKE:

MDOT will require that each contract which MDOT signs with a subrecipient or a Contractor, and each subcontract the Prime Contractor signs with a Subcontractor, includes the following assurances:

"The Contractor, subrecipient or Subcontractor shall not discriminate on the basis of race, color, sex or national origin in the performance of this contract. Failure by the Contractor to carry out these requirements is a material breach of this contract, which may result in the termination of this contract or such other remedy as MDOT deems appropriate."

### **DEFINITIONS**

For purposes of this provision the following definitions will apply:

"Disadvantaged Business" means a small business concern: (a) which is at least 51 percent owned by one or more socially and economically disadvantaged individual(s) or in the case of any publicly owned business, at least 51 percent of the stock of which is owned by one or more socially

and economically disadvantaged individual(s); and (b) whose management and daily business operations are controlled by one or more of the socially and economically disadvantaged individual(s) who own it. It is important to note that the business owners themselves must control the operations of the business. Absentee ownership or title ownership by an individual who does not take an active role in controlling the business is not consistent with eligibility as a DBE under 49 CFR Part 26.71.

### **CONTRACTOR'S OBLIGATION**

The Contractor and all Subcontractors shall take all necessary and reasonable steps to ensure that DBE firms compete for and participate in the performance of a portion of the work in this contract and shall not discriminate on the basis of race, color, sex or national origin. Failure on the part of the Contractor to carry out the DBE requirements of this contract constitutes a breach of contract and after proper notification the Department may terminate the contract or take other appropriate action as determined by the Department.

When a contract has a zero percent (0%) DBE goal, the Contractor still has the responsibility to take all necessary and reasonable steps to ensure that DBE firms can compete for and participate in the performance of the work in the contract. In this case, all work performed by a certified DBE firm is considered to be a "race neutral" measure and the Department will receive DBE credit towards the overall State goals when the DBE firm is paid for their work. If the Prime Contractor is a certified DBE firm, the Department can receive DBE credit only for the work performed by the Prime Contractor's work force or any work subcontracted to another DBE firm. Work performance by a non-DBE Subcontractor is not eligible for DBE credit.

### **CONTRACT GOAL**

The goal for participation by DBEs is established for this contract in the attached Supplement. The Contractor shall exercise all necessary and reasonable steps to ensure that participation is equal to or exceeds the contract goal.

If the percentage of the contract that is proposed for DBEs is 1% or greater, shall be so stated on the last bid sheet of the proposal.

All Bidders shall submit to the Office of Civil Rights Form OCR-481, signed by the Prime Contractor and the DBE Subcontractors, no later than the 3<sup>rd</sup> business day after opening of the bids.

Form OCR-481 is available on the MDOT website at www.mdot.ms.gov under the Civil Rights tab, or by calling 601-359-7466.

The OCR-481 Form must contain the following information:

The name and address of each certified DBE Contractor/Supplier;

The Reference Number, percent of work to be completed by the DBE subcontractor and the dollar amount of each item. If a portion of an item is subcontracted, a breakdown of that item

including quantities and unit price must be attached, detailing what part of the item the DBE firm is to perform and who will perform the remainder of the item.

If the DBE Commitment shown on the last bid sheet of the proposal, does not equal or exceed the contract goal, the bidder must submit, to MDOT Contract Administration Division prior to bid opening, information to satisfy the Department that adequate good faith efforts have been made to meet the contract goal.

Failure of the lowest bidder to furnish acceptable proof of good faith efforts, <u>submitted to MDOT Contract Administration Division prior to bid opening</u>, shall be just cause for rejection of the proposal. Award may then be made to the next lowest responsive bidder or the <u>project may</u> be readvertised.

### **GOOD FAITH EFFORTS**

The following factors are illustrative of matters the Department will consider in judging whether or not the bidder has made adequate good faith effort to satisfy the contract goal.

- (1) Whether the bidder attended the pre-bid meeting that was scheduled by the Department to inform DBEs of subcontracting opportunities;
- (2) whether the bidder advertised in general circulation, trade association, and minority-focus media concerning the subcontracting opportunities;
- (3) whether the bidder provided written notice to a reasonable number of specific DBEs that their interest in the contract is being solicited;
- (4) whether the bidder followed up initial solicitations of interest by contacting DBEs to determine with certainty whether they were interested;
- (5) whether the bidder selected portions of the work to be performed by DBEs in order to increase the likelihood of meeting the contract goal;
- (6) whether the bidder provided interested DBEs with adequate information about the plans, specifications and requirements of the contract;
- (7) whether the bidder negotiated in good faith with interested DBEs and did not reject them as unqualified without sound reasons based on a thorough investigation of their capabilities; and
- (8) whether the bidder made efforts to assist interested DBEs in obtaining any required bonding or insurance.
- (9) whether the bidder has written notification to certified DBE Contractors soliciting subcontracting for items of work in the contract.
- (10) whether the bidder has a statement of why an agreement was not reached.

(11) Proof of written notification to certified DBE Contractors by certified mail that their interest is solicited in subcontracting the work defaulted by the previous DBE or in subcontracting other items of work in the contract.

The bidder's execution of the signature portion of the proposal shall constitute execution of the following assurance:

The bidder hereby gives assurance that a good faith effort has been made to meet the contract goal for DBE participation for which this proposal is submitted.

### **DIRECTORY**

A list of "Certified DBE Contractors" which have been certified as such by the Mississippi Department of Transportation and other Unified Certification Partners (UPC) can be found on the Mississippi Department of Transportation website at <a href="www.mdot.ms.gov">www.mdot.ms.gov</a>. The DBE firm must be certified at the time the project is let and approved by MDOT to count towards meeting the DBE goal.

### **REPLACEMENT**

If a DBE Subcontractor cannot perform satisfactorily, and this causes the OCR-481 commitment to fall below the contract goal, the Contractor shall take all necessary reasonable steps to replace the DBE with another certified DBE Subcontractor or submit information to satisfy the Mississippi Department of Transportation that adequate good faith efforts have been made to replace the DBE. The good faith efforts outlined previously in this document still apply. The replacement DBE must be a DBE who was on the Department's list of "Certified DBE Contractors" when the job was let, and who is still active All DBE replacements must be approved by the Department.

Under no circumstances shall the <u>Prime</u> or any <u>Subcontractor</u> perform the DBE's work (as shown on the OCR-481) without prior written approval from the Department. See "Sanctions" at the end of this document for penalties for performing DBE's work.

When a Contractor proposes to substitute/replace/terminate a DBE that was originally named on the OCR-481, the Contractor must obtain a release, in writing, from the named DBE explaining why the DBE Subcontractor cannot perform the work. A copy of the original DBE's release must be attached to the Contractor's written request to substitute/replace/terminate along with appropriate subcontract forms for the substitute/replacement/terminated Subcontractor, all of which must be submitted to the DBE Coordinator and approved, in advance, by MDOT.

### **PREBID MEETING**

A pre-bid meeting will be held in the Commission Room on the 1<sup>st</sup> floor of the MDOT Administration Building in Jackson at 2:00 P.M. on the day preceding the date of the bid opening.

This meeting is to inform DBE firms of subcontracting and material supply opportunities. Attendance at this meeting is considered of prime importance in demonstrating good faith effort to meet the contract goal.

### PARTICIPATION / DBE CREDIT

Participation shall be counted toward meeting the goal in this contract as follows:

- (1) If the Prime Contractor is a certified DBE firm, only the value of the work actually performed by the DBE Prime can be counted towards the project goal, along with any work subcontracted to a certified DBE firm.
- (2) If the Prime Contractor is not a DBE, the work subcontracted to a certified DBE Contractor will be counted toward the goal.
- (3) The Contractor may count toward the goal a portion of the total dollar value of a contract with a joint venture eligible under the standards of this provision equal to the percentage of the DBE partner in the joint venture. The joint venture must submit a Joint Venture Eligibility Form provided by the Mississippi Department of Transportation.
- (4) Expenditures to DBEs that perform a commercially useful function may be counted toward the goal. A business is considered to perform a commercially useful function when it is responsible for the execution of a distinct element of the work and carries out its responsibilities by actually performing, managing, and supervising the work involved.
- (5) The Contractor may count 100% of the expenditures for materials and supplies obtained from certified DBE suppliers and manufacturers that produce goods from raw materials or substantially alters them for resale provided the suppliers and manufacturers assume the actual and contractual responsibility for the provision of the materials and supplies. The Contractor may count 60 percent of the expenditures to suppliers that are not manufacturers, provided the supplier performs a commercially useful function in the supply process. Within 30 days after receipt of the materials, the Prime Contractor shall furnish to the DBE Coordinator invoices from the certified supplier to verify the DBE goal.
- (6) Any work that a certified DBE firm subcontracts or sub-subcontracts to a non-DBE firm will not count towards the DBE goal
- (7) Only the dollars <u>actually paid</u> to the DBE firm may be counted towards the DBE goal.

### **AWARD**

Award of this contract to the low bidder will be contingent upon the following condition:

(1) All Bidders must submit to the Office of Civil Rights for approval, Form OCR-481 (DBE Commitment) no later than the 3<sup>rd</sup> business day after opening of the bids, or submit information with the bid proposal to satisfy the Department and that adequate good faith

<u>efforts</u> have been made to meet the contract goal. For answers to questions regarding Form OCR-481, contact the MDOT Office of Civil Rights at (601) 359-7466.

(2) Bidder must include OCR-485 information with their bid proposal listing all firms that submitted quotes for material supplies or items to be subcontracted. OCR-485 information must be signed and included with the bid proposal. If the OCR-485 information is not included as part of bid proposal, your bid will be deemed irregular.

Prior to the start of any work, the bidder must notify the Project Engineer, in writing, of the name of the designated "DBE Liaison Officer" for this project. This notification must be posted on the bulletin board at the project site.

### **DEFAULT**

If the <u>contract goal established</u> by MDOT in this proposal is 1% or greater, it must be met to fulfill the terms of the contract. The Contractor may list DBE Subcontractors and items that exceed MDOT's contract goal, but should unforeseen problems arise that would prevent a DBE from completing its total commitment percentage, the Contractor will meet the terms of the contract as long as it meets or exceeds MDOT's Contract Goal. For additional information, refer to "Replacement" section of this Notice.

### **DBE REPORTS**

- (1) OCR-481: Refer to "CONTRACT GOAL" section of this Notice to Bidders for information regarding this form.
- (2) OCR-482: At the conclusion of the project the Contractor will submit to the Project Engineer for verification of quantities and further handling Form OCR-482 whereby the Contractor certifies to the amounts of payments made to each Contractor/Supplier. The Project Engineer shall submit the completed Form OCR-482 to the DBE Coordinator (Office of Civil Rights). Final acceptance of the project is dependent upon Contract Administration Division's receipt of completed Form OCR-482 which they will receive from the Office of Civil Rights.
- (3) OCR-483: The Project Engineer/Inspector will complete Form OCR-483, the Commercially Useful Function (CUF) Performance Report, in accordance with MDOT S.O.P. No. OCR-03-05-02-483. Evaluations reported on this form are used to determine whether or not the DBE firm is performing a CUF. The Prime Contractor should take corrective action when the report contains any negative evaluations. DBE credit may be disallowed and/or other sanctions imposed if it is determined the DBE firm is not performing a CUF. This form should also be completed and returned to the DBE Coordinator (Office of Civil Rights).
- (4) OCR-484: Each month, the Prime Contractor will submit to the Project Engineer OCR-484 that certifies payments to all Subcontractors and shows all firms even if

the Prime Contractor has paid no monies to the firm during that estimate period (negative report). The Project Engineer will attach the form to the monthly estimate before forwarding to the Contract Administration Division for further processing. Failure of the Contractor to submit the OCR-484 will result in the estimate not being processed and paid.

- (5) OCR-485: Bidder must submit <u>signed form with bid proposal</u> of all firms that submitted quotes for material supplies or items to be subcontracted. If the OCR-485 information is not included as part of bid proposal, your bid will be deemed irregular.
- (6) OCR-487: Only used by Prime Contractors that are certified DBE firms. This form is used in determining the exact percentage of DBE credit for the specified project. The low Bidder should return this form to MDOT with the OCR-481 form, or can also be returned with the Permission to Subcontract Forms (CAD-720, CAD-725 and CAD-521).

DBE Forms, can be obtained from the Office of Civil Rights Division, MDOT Administration Building, 401 North West Street, Jackson, MS, or at <a href="https://www.mdot.ms.gov">www.mdot.ms.gov</a> under the Civil Rights tab.

### **SANCTIONS**

The Department has the option to enforce any of the following penalties for failure of the Prime Contractor to fulfill the DBE goal as stated on the OCR-481 form or any violations of the DBE program guidelines:

- (1) Disallow credit towards the DBE goal
- (2) Withhold progress estimate payments
- (3) Deduct from the final estimate or recover an amount equal to the unmet portion of the DBE goal which may include additional monetary penalties as outlined below based on the number of offenses and the severity of the violation as determined by MDOT.

Offense #1	10% of unmet portion of goal	or	\$5,000 lump sum payment	or	Both
Offense #2	20% of unmet portion of goal	or	\$10,000 lump sum payment	or	Both
Offense #3	40% of unmet portion of goal	or	\$20,000 lump sum payment	or	\$20,000 lump sum payment and debarment

(4) Debar the Contractor involved from bidding on Mississippi Department of Transportation projects for a period of up to 12 months after notification by certified email.

### 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. 3318

**DATE:** 04/29/2021

**SUBJECT: DBE Pre-Bid Meeting** 

Due to the COVID-19 pandemic and the Department not allowing visitors in the Administration Building at this time, the DBE Pre-Bid Meeting referenced on Pages 4 & 5 of Notice to Bidders No. 2654 will be held by <u>video conference only</u>. The meeting will be held at 2:00 P.M. on the day preceding the date of the bid opening using Zoom video conferencing software. Anyone interested in participating can download Zoom and connect to the meeting at the below link.

https://zoom.us/j/5548736403?pwd=SDh5S2hQSE5pNG5FOEkzR3NsUnBYQT09

Password (if prompted): 272147

For those unable to participate via Zoom, the below teleconference number may be used instead.

1-888-227-7517

Conference Code: 404496

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

**DATE:** 09/21/2021

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

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

SECTION 904 - NOTICE TO BIDDERS NO. 4036 CODE: (SP)

**DATE:** 02/07/2022

**SUBJECT:** Contract Time

**PROJECT:** SP-0022-04(068) / 108893301 – Tippah County

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable working days are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award will be issued no later than **April 12, 2022**.

The Contractor shall request a Notice to Proceed/Beginning of Contract Time date between the dates of May 12, 2022 and June 9, 2022.

Should the Contractor request a Notice to Proceed earlier than <u>May 12, 2022</u> and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed and Beginning of Contract Time date.

Should the Contractor not request a Notice to Proceed by <u>June 9, 2022</u>, the date for the Notice to Proceed and Beginning of Contract Time will be <u>June 9, 2022</u>.

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

<u>71</u> Working Days have been allowed for the completion of work on this project.

The progress schedule for this project shows the Notice to Proceed and Beginning of Contract Time starting at the latest possible date. If the Contractor requests a Notice to Proceed earlier than this date, the Contractor shall submit a revised progress schedule showing the work beginning at the new Notice to Proceed and Beginning of Contract Time date.

**SECTION 904 - NOTICE TO BIDDERS NO. 4037** 

CODE: (SP)

**DATE:** 12/1/2020

**SUBJECT:** Temporary Transverse Joints

Bidders are hereby advised of the following transition requirements of temporary transverse joints to be placed under this project.

	Short Term Temporary	Temporary		
Roadway Type	(In place for less than 7	(In place for more than 7		
	calendar days)	calendar days)		
Interstates & divided	Four feet (4') length for each	Ten feet (10') length for each		
highways with speed limits	one inch (1") of thickness	one inch (1") of thickness		
greater than 55 MPH				
Other highways with speed	Three feet (3') length for each	Five feet (5') length for each		
limits less than or equal to 55	mits less than or equal to 55 one inch (1") of thickness			
MPH				

It is intended to place the taper as near a straight line taper as possible, but it should not vary along a straight line from the bottom to the top at any point by more than 3/16".

If the time the paper joint is in service exceeds the time threshold, the existing paper joint will be removed and the appropriate joint will be installed as directed by the Engineer.

All costs associated with placement, maintenance, and removal of temporary transverse joints will not be measured for separate payment and shall be absorbed in other items bid.

CODE: (IS)

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

**DATE:** 11/22/2017

**SUBJECT: Bidding Requirements and Conditions** 

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

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

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

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

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

CODE: (SP)

#### SPECIAL PROVISION NO. 907-103-2

**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. 907-105-1**

**DATE:** 05/07/2021

**SUBJECT:** Authority of the Engineer

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>907-105.1--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.

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: (IS)

#### SPECIAL PROVISION NO. 907-109-3

**DATE:** 02/23/2021

**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.

#### 907-109.06--Partial Payment.

<u>907-109.06.2--Advancement on Materials</u>. 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.

CODE: (SP)

#### **SPECIAL PROVISION NO. 907-204-1**

**DATE:** 05/04/2021

**SUBJECT:** Geogrid

Section 204, Geogrid Reinforcement of Embankment Slopes and Subgrades, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

**907-204.05--Basis of Payment.** Add the "907" prefix to the pay item listed in Subsection 204.05 on page 119.

CODE: (SP)

#### SPECIAL PROVISION NO. 907-624-1

**DATE:** 01/17/2017

**SUBJECT:** Inverted Profile Thermoplastic Traffic Stripe

Section 907-624, Inverted Profile Thermoplastic Traffic Stripe, is hereby added to and made part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

<u>907-624.01--Description.</u> Inverted profile thermoplastic pavement markings consists of furnishing materials and placing inverted profile thermoplastic pavement markings in reasonably close conformity with these specifications and the details shown on the plans or established.

Inverted profile thermoplastic pavement markings, high contract, shall consist of furnishing materials and placing inverted profile thermoplastic pavement markings over a black thermoplastic pavement marking in order to enhance the marking's visibility.

#### 907-624.02--Materials.

<u>907-624.02.1--General.</u> The inverted profile thermoplastic marking material shall consist of an alkyd/maleic or hydrocarbon based formulation. The material shall be so manufactured as to be applied to the pavement in a molten form, with internal and surface application of glass spheres, and upon cooling to normal pavement temperature, shall produce an adherent, reflectorized pavement marking of specified thickness and width, capable of resisting deformation.

Materials shall be obtained from approved sources as listed on the Department's "List of Approved Sources" for Inverted Profile Thermoplastic Pavement Marking Materials. The material shall not scorch, break down, discolor, or deteriorate when held at the application temperature for four hours or when reheated four times to the application temperature. Temperature-vs-viscosity characteristics of the plastic material shall remain constant when reheated four times, and shall be the same from batch to batch.

The thermoplastic material shall be a product especially compounded for pavement markings. The pavement markings shall maintain their original dimension and shall not smear or spread under normal traffic at temperatures below 140°F. The markings shall have a uniform cross section. Pigment shall be evenly dispersed throughout its thickness. The exposed surface shall be free from tack and shall not be slippery when wet. The material shall not lift from pavement in freezing weather. Cold ductility of the material shall be such as to permit normal movement with the pavement surface without chipping or cracking.

Black thermoplastic compound for the placement of inverted profile thermoplastic pavement markings, high contract, shall consist of a hydrocarbon or alkyd/maleic based formulation.

The manufacturers of the thermoplastic compound, glass beads and epoxy primer sealer shall furnish to the Engineer three copies of certified test reports showing results of all tests specified herein and shall further certify that the materials meet all requirements. The Contractor shall provide the warranty as specified herein to the Engineer.

<u>907-624.02.2--Inverted Profile Thermoplastic Material.</u> The thermoplastic material shall consist of homogeneously mixed pigments, fillers, resins and glass beads, and shall be available in both white and yellow. The material shall be free from all skins, dirt, and foreign objects. Materials shall conform to AASHTO M 249 with the following modifications:

907-624.02.2.1--Intermixed Glass Beads. The thermoplastic material shall contain a minimum of 40 percent Class H glass beads by weight. Class H glass beads shall meet the requirements of ASTM D 1155, and shall be coated with an adhesion promoting coating which shall also provide moisture resistance as tested by AASHTO M 247, Section 4.4.2. Class H beads shall have a minimum of 70 percent true spheres and the +20 sieve shall be tested visually.

The gradation of the Class H beads shall meet the following:

U. S. Standard Sieve	% Passing
12	100
14	95 - 100
16	80 - 100
18	30 - 100
20	15 - 100
30	10 - 100
50	0 - 50
100	0 - 5

<u>907-624.02.2.2--Binder Content.</u> The binder content of the thermoplastic material shall be 19 percent minimum.

<u>907-624.02.2.3--Titanium Dioxide.</u> The titanium dioxide shall meet ASTM D 476, Type II, Rutile grade - 10 percent minimum titanium content.

<u>907-624.02.2.4--Yellow Pigment.</u> The yellow pigment for the yellow thermoplastic material shall be five (5) percent minimum.

<u>907-624.02.2.5--Specific Gravity.</u> The specific gravity of the thermoplastic pavement marking material shall not exceed 2.35.

#### **907-624.02.2.6--Flow Characteristics.**

<u>907-624.02.2.6.1--Flowability</u>. After heating the thermoplastic material for four (4) hours  $\pm 5$  minutes at  $425 \pm 3^{\circ}$ F and testing flowability, the white thermoplastic shall have a maximum percent residue of 22 percent and the yellow thermoplastic shall have a maximum residue of 24 percent.

<u>907-624.02.2.6.2--Flow Resistance.</u> The material shall exhibit a maximum flow of 10%. The material's ability to form ribs on the markings shall be evaluated by casting a disc of material approximately 3.5 inches wide by 1.0 inch long by and 0.60 inch deep. After the material is cooled to ambient temperature, measure the exact height. The material shall then be stored at 190°F for four (4) hours. After the material is cooled to ambient temperature, re-measure the exact height and express the flow resistance as a flow percentage.

<u>907-624.02.2.7--Reflectivity.</u> The initial reflectance for the in-place marking shall have a minimum reflectance value of 450 mcd/fc/sq. ft. for white and 350 mcd/fc/sq. ft. for yellow, when measured with a Mirolux Ultra 30 retroreflectometer, or approved equal.

<u>907-624.02.2.8--Wet Reflectivity.</u> The initial reflectance for the in-place marking when wet shall have a minimum reflectance value of 200 mcd/fc/sq. ft. for white and 175 mcd/fc/sq. ft. for yellow, when measured with an approved retroreflectometer. The stripe shall be wetted utilizing a pump type sprayer for five (5) seconds. After 30 seconds, place the retroreflectometer on the stripe and measure the reflectance.

<u>907-624.02.2.9--Inverted Profile</u>. The thermoplastic pavement marking material shall be applied to have individual profiles having a minimum height of 0.140 inches with the recessed inverted profiles having a thickness of 0.025 to 0.050 inches. The profiles shall be well defined, spaced approximately one (1) inch apart, and not excessively run back together.

# 907-624.02.3--Black Pavement Marking Material for High Contrast Inverted Profile Pavement Markings.

<u>907-624.02.3.1--General.</u> In the molten state, the material shall not give off fumes that are toxic or otherwise injurious to persons or property. The manufacturer shall provide material safety data sheets for the product.

The temperature versus viscosity characteristic of the plastic material shall remain constant and the material shall not deteriorate in any manner during three reheating processes. There shall be no obvious change in color of the material as a result of up to three reheatings, or in maintaining the material at application temperature up to an aggregate time of four (4) hours, or from batch to batch. The maximum elapsed time after application at which normal traffic will leave no impression or imprint on the new stripe shall be 30 seconds when the air and road surface temperature is approximately  $68 \pm 5^{\circ}F$ . The applied stripe shall remain free from tack and shall not lift from the pavement under normal traffic conditions within a road temperature range of  $20^{\circ}F$  to  $150^{\circ}F$ . The stripe shall maintain its original dimensions and placement. Cold ductility of the material shall be such as to permit normal dimensional distortion as a result of tire impact within the temperature range specified.

The material shall provide a stripe that has a uniform thickness throughout its cross section.

<u>907-624.02.3.2--Binder.</u> The binder shall be hydrocarbon or alkyd/maleic based. The binder shall consist of a homogeneous mixture of pigment, fillers, resins, waxes and plasticizers. The total

binder content shall be well distributed throughout the compound. The binder shall be free from all foreign objects or ingredients that would cause bleeding, staining or discoloration. The binder shall be 19 percent minimum by weight of the thermoplastic compound.

<u>907-624.02.3.3--Pigment</u>. The pigment used for black pavement marking compound shall be as required and shall be uniformly distributed throughout the marking compound.

<u>907-624.02.3.4--Filler</u>. The filler to be incorporated with the resins shall be a white calcium carbonate, silica or any approved substitute.

<u>907-624.02.3.5--Specific Gravity.</u> The specific gravity of the marking compound shall not exceed 2.0.

<u>907-624.02.3.6--Softening Point.</u> After heating the marking compound for 4 hours  $\pm 5$  minutes at 375  $\pm 3$ °F and testing in accordance with ASTM E 28, the material shall have a minimum softening point of 180°F as measured by the ring and ball method.

<u>907-624.02.3.7--Tensile Bond Strength.</u> After heating the marking compound for 4 hours  $\pm 5$  minutes at  $375 \pm 3^{\circ}F$ , the tensile bond strength shall exceed 180 psi when tested in accordance with ASTM D 4806. The material shall be applied to unprimed, sandblasted Portland cement concrete block at a thickness of 0.0625-inch and at a temperature of  $375 \pm 3^{\circ}F$ . The test shall be conducted at room temperature.

<u>907-624.02.3.8--Impact Resistance.</u> After heating the marking compound for 4 hours  $\pm 5$  minutes at 375  $\pm 3$ °F, the impact resistance shall be a minimum of 50 inch-pounds minimum when tested in accordance with ASTM D 2794. No cracks or bond loss shall occur when a 0.0625-inch thick film drawdown is made at 375  $\pm 3$ °F on an unprimed sandblasted Portland cement concrete block. The sample is tested with a male indentor 5/8-inch and no female Die at room temperature.

<u>907-624.02.3.9--Identification</u>. Each package of material shall be stenciled with the manufacturer's name, the type of material and specification number, the month and year the material was packaged and lot number. The letters and numbers used in the stencils shall be a minimum of 1/2 inch in height.

<u>907-624.02.3.10--Packaging.</u> The material shall be packaged in suitable containers that will not adhere to the product during shipment and storage. The container of pavement marking material shall weigh approximately 50 lbs. Each container shall designate the color, type of resin, type of application and user information. The label shall warn the user that the material shall be heated in the range of 350° to 425°F.

<u>907-624.02.3.11--Storage Life.</u> The material shall meet the requirements of this specification for a period of one year. The material must also meet uniformly with no evidence of skins or unmelted particles for this one-year period. The manufacturer shall replace any material not meeting the above requirements.

<u>907-624.02.3.12--Certifications.</u> The material manufacturer shall furnish a certified copy of material test reports to the Engineer.

<u>907-624.02.4--Drop-On Glass Beads.</u> Drop-on glass beads shall be separated into two (2) classes, as follows:

<u>907-624.02.4.1--Class G Glass Beads.</u> Class G glass beads shall be coated with an adhesion promoting coating which shall also provide moisture resistance as tested by AASHTO M 247, Section 4.4.2 and shall exhibit the following characteristics:

- <u>Color and Clarity</u>: The glass beads shall be colorless and clear, and shall be free of carbon residues.
- **Index of Refraction:** minimum 1.50
- Roundness: The glass beads shall have a minimum of 80% true spheres per screen for the two highest sieve quantities, determined visually, and a maximum of 3% angular particles per sieve, determined visually. The remaining sieves shall have a minimum of 75% true spheres, determined visually per aspect ratio using microfiche reader.
- Air Inclusions: 10% maximum
- Specific Gravity: The specific gravity of the glass beads shall be a minimum of 2.50.
- Gradation: The gradation of Class G glass beads shall be as follows:

U. S. Standard Sieve	<u>% Passing</u>
12	100
14	100 - 95
16	100 - 80
18	100 - 20
20	90 - 20
30	100 - 50
Pan	100 - 90

All Class G glass beads shall be coated with an adhesion promoting coating.

<u>907-624.02.4.2--Class H Glass Beads.</u> Class H glass beads shall meet the requirements of ASTM D 1155, and shall be coated with an adhesion promoting coating which shall also provide moisture resistance as tested by AASHTO M 247, Section 4.4.2. Class H beads shall have a minimum of 70 percent true spheres and the +20 sieve shall be tested visually.

The gradation of the Class H beads shall meet the following:

U. S. Standard Sieve	% Passing
16	99 - 100
20	75 - 100
30	55 - 95
50	10 - 35
100	0 - 5

#### 907-624.03--Construction Requirements.

907-624.03.1--Equipment. The application equipment shall be specifically designed for placing thermoplastic material in a hot molten state on the pavement surface utilizing a pressure type application method. The thermoplastic stripe shall be formed by a die that is allowed to drag along in proximity with the pavement surface. The die is pulled forward by a special linkage that will allow it to automatically level itself as to float and remain parallel with the pavement surface. The traffic stripe shall be formed by reason that the hot thermoplastic material is forced under pressure through four sides to the die onto the pavement surface. The top of the die shall be enclosed and provide entry means for the hot molten thermoplastic material to enter the die cavity. The bottom of the die shall contain a movable door that is remote controlled so as to start or stop the flow of thermoplastic material onto the pavement surface. When the movable door is open, thermoplastic material can flow through the die and will apply a thermoplastic stripe that will be formed rearward of the advancing die. The pavement surface shall be at the bottom of the die enclosure. Thermoplastic material shall be fed to the die under pressure through flexible oil-jacketed stainless steel hoses. The thermoplastic material must be either pumped or fed from a pressure vessel to the die under pressure in order to obtain the proper adhesion with the pavement surface.

The system shall consist of a low pressure drop-on type glass bead gun, (bead coat #1). The thermoplastic die shall be oil-jacketed on four (4) sides and is formed from a single solid block of steel. The glass bead gun shall dispense glass beads onto the hot thermoplastic stripe from a height of approximately one (1) inch above the pavement surface. The point at which the glass beads strike the surface of the stripe shall be approximately three inches (3") behind the strike point of the thermoplastic material itself. This reflective bead coat #1 shall utilize Class G glass beads as specified herein, and shall provide a surface coating of 50 percent of the thermoplastic stripe surface. Of this 50 percent stripe coverage, at least 50 percent of the beads shall be embedded to a depth of 60 percent of their diameter.

A second curtain coater, low pressure drop-on type glass bead gun capable of applying a continuous sheet or ribbon of glass beads, shall follow at an interval of approximately 10 inches behind the first bead gun. This second glass bead gun shall apply bead coat #2 which will form a continuous drop-on coat of Class H glass beads immediately in front of the profiling device. This second curtain of glass beads shall have a low impact speed so that they are not forced into the stripe under pressure.

A special rotatable wheel profiling device shall be located approximately eight (8) inches behind bead gun #2. This rotatable wheel device shall be approximately seven (7) inches in diameter and shall have a plurality of spaced projections located around its circumference. The profiling device shall be wider than the stripe being applied in order that the stripe shall be adequately covered. The projections on the rotatable profiling device shall have an angular profiling surface set at an angle to the pavement surface. The rotatable profile device shall be mounted with an automatic leveling device to the same carriage assembly as the thermoplastic gun. This is required so that a traffic stripe of accurate and uniform definition can be obtained. The inverted profile grooves shall be pressed into the hot molten thermoplastic stripe within one (1) second of the thermoplastic material application in order to insure proper bead adhesion to the stripe. Using rollers to place grooves in the traffic stripe utilizing a separate vehicle or grooves that are not pressed within one

(1) second of the thermoplastic material application will not be allowed. To insure that no thermoplastic material adheres to the wheel as it rotates and profiles the stripe, a small air atomizer water jet shall apply a thin mist coat of water to the rotatable profile wheel. It is the intent of this specification that a minimum amount of water be used and that no water puddles greater than ½ inch in diameter be allowed to accumulate on the pavement surface in proximity to the freshly placed stripe. Excess water on the pavement surface can cause bond failure of the thermoplastic material.

All parts of the thermoplastic holding tank including manifolds, hoses, pipes, dies, etc., shall be oil-jacketed to insure accurate temperature control. The thermoplastic material shall be preheated in kettles designed specifically for that purpose. Each kettle of preheated thermoplastic material shall be properly mixed and heated to the correct application temperature. The preheated material shall then be fed to the thermoplastic gun for application.

The striping machine shall contain enough glass beads and water to apply one full kettle of thermoplastic material.

<u>907-624.03.2--Cleaning of Pavement Surface.</u> Immediately before application, the areas to receive markings shall be cleaned thoroughly using equipment capable of cleaning without damaging the pavement surface. This will include, but not be limited to, all vegetation, loose soil, oils, and other debris. On areas of pavement cured with compound, the membrane shall be removed completely by "shot" blasting, sand blasting or other approved method. Striping shall follow as closely as practical after the pavement surface has been cleaned.

<u>907-624.03.3--Application Over Existing Striping.</u> Where shown on the plans or directed by the Engineer, the existing traffic stripe shall be removed by grinding or sandblasting. When placing inverted profile thermoplastic pavement markings on existing pavement that has more than one light coat (pavement not showing through stripe) of striping material, the existing stripe shall be removed to the point that 80 percent of the pavement surface is visible.

Removal of existing stripe will be paid for as a separate item of work.

Where unsatisfactory striping performed by the Contractor must be removed and replaced in accordance with these specifications, the Contractor shall use the removal method described above. No payment will be made for removal or replacement of the Contractor's unsatisfactory striping.

<u>907-624.03.4--Surface Conditions.</u> When placing inverted profile thermoplastic pavement markings, no striping shall be permitted when the pavement surface temperature is less than 60°F. A non-contact infrared pyrometer shall be furnished by the Contractor for use by the Engineer for verification of the temperature. Striping shall not be performed when there is moisture on the pavement surface or when winds exceed 12 mph. When unseen moisture is suspected to be present, a moisture test shall be performed. The test shall be as follows:

- 1) Place a piece of roofing felt on the pavement surface.
- 2) Pour 0.5 gallon of thermoplastic material at application temperature onto the paper.

- 3) After two (2) minutes, lift the paper and inspect to see if moisture has been drawn from the pavement.
- 4) If moisture is present, striping is not to begin until the surface is moist free.

Documentation of weather and pavement conditions shall be recorded as part of completing the MDOT Inverted Profile Thermoplastic Pavement Marking Inspectors Report.

<u>907-624.03.5--Application.</u> Prior to the placement of pavement markings, the Contractor shall furnish the Engineer three copies of the manufacturer's warranty stating that the manufacturer will guarantee the pavement marking to meet the requirements of this specification.

The thermoplastic material shall be preheated and thoroughly mixed. The application temperature of the thermoplastic material shall be between 400°F and 430°F. A digital thermometer complete with a 24-inch probe shall be furnished by the Contractor for use by the Engineer for verification of the temperature.

When measured at the highest point of the profile, the cold thickness of the in-place thermoplastic stripe shall be a minimum of 0.140 inch for Inverted Profile Thermoplastic Pavement Markings. The thickness of the thermoplastic material in the bottom of the profiles shall range from 0.025 to 0.050 inch. The individual profiles shall be located transversely across the stripe at intervals of approximately one (1) inch. The bottoms of these intervals shall be between 3/32 inch and 5/16 inch wide. In order to drain water and to reflect light, it is normal for the top surface of the inverted profiles to be irregular. The application rate of thermoplastic material for Inverted Profile Thermoplastic Pavement Markings shall be a minimum of 2700± pounds per mile for a continuous 6-inch stripe.

The application rate for Class G glass beads (bead coat #1) shall be 300± pounds per mile for 6-inch continuous stripe.

The application rate for Class H glass beads (bead coat #2) shall be 300± pounds per mile for 6-inch continuous stripe.

The thickness of the striping materials shall be verified periodically (at least every 1320 feet) and any thickness more than five (5) percent under the designated thickness shall be reworked. A consistent, uncorrected under-run will not be allowed and the Contractor will be required to install the specified minimum thickness of 0.140 inch. A wet thickness gauge and cold thickness gauge shall be furnished by the Contractor for use by the Engineer for the verification of film thickness.

When striping over existing painted stripe (one light coat), on old oxidized asphalt, on all concrete surfaces or on asphalt surfaces when ambient temperatures are below 70°F, a two component epoxy primer sealer shall be used and installed as recommended in writing by the thermoplastic material manufacturer. The epoxy primer sealer shall be EX255/EX256 as manufactured by Crown Paint Company of Oklahoma City, Oklahoma, or approved equal. The Contractor shall furnish certification of compatibility of the epoxy primer sealer to be used with the thermoplastic material supplied. If an alternate epoxy primer sealer to the EX255/EX256 is used, the Contractor

shall furnish a mill analysis and proof of adequate performance of the alternate epoxy primer sealer when used with thermoplastic pavement markings.

<u>907-624.03.6--Inverted Profile Thermoplastic Traffic Stripe, High Contrast.</u> Before applying the black pavement marking material, the Contractor shall remove any dirt, glaze, grease or any other material that would reduce the adhesion of the thermoplastic to the pavement.

The pavement marking material shall be installed in a molten state by the spray method at a minimum temperature of 350°F and a maximum temperature of 425°F. Scorching or discoloration of material shall be cause for rejection by the Engineer. The machinery shall be constructed so that all mixing and conveying parts, up to and including the thermoplastic gun, maintain the material in the molten state.

The pavement marking materials shall not be applied when air and pavement surface temperatures are below 60°F or when the surface of the pavement contains any evidence of moisture.

The pavement marking material shall be applied at a thickness of not less than 0.040-inch.

The equipment used to install hot applied pavement marking material shall provide continuous mixing and agitation of the material while maintaining a minimum temperature exceeding 400°F. A strainer shall be in place between the main material reservoir and the gun to prevent accumulation and clogging. The equipment shall be constructed for easy accessibility to parts requiring cleaning and maintenance.

After the black thermoplastic pavement markings are applied, inverted profile thermoplastic markings shall be placed over the black thermoplastic pavement markings in accordance with the specifications and to the dimensions and details shown on the plans or established.

<u>907-624.03.7--Warranty.</u> The manufacturer shall warrant that the inverted profile thermoplastic markings will meet the minimum performance level of 150 mcd/fc/sq. ft. dry and 75 mcd/fc/sq. ft. wet for a period of 48 months from the date of final inspection when exposed to normal roadway conditions regardless of the average daily traffic. Failure to meet this requirement will result in the total replacement of the portion of the stripe shown to be below these minimums. All costs of labor, material and other incidentals necessary for the replacement of unacceptable pavement markings shall be at no additional costs to the State.

Compliance will be determined by an average brightness reading over a minimum zone marking length of 300 linear feet, using an approved reflectometer. The zone of measurement referred to includes centerline stripe, edge lines and skip lines.

Performance Requirements:	$\mathbf{W}$	hite	Yellow		
	<b>Dry</b>	<u>Wet</u>	<u>Dry</u>	Wet	
Initial Reflectivity, mcd/fc/sq. ft.	450	200	350	175	
48-Month Retained Reflectivity	150	75	150	75	

The measurement procedure for this warranty will entail a visual night inspection by a manufacturer representative and a MDOT representative to identify areas of the installation, which appear to be below the specified minimum, warranted reflectance value. All reflectance measurements for dry conditions shall be made on a clean dry surface at a minimum temperature of 40°F. All reflectance measurements for wet conditions shall be made using the setting conditions of Subsection 907-624.02.2.8 at a minimum temperature of 40°F.

Measurement intervals for installations with areas less than, or equal to, three (3) miles shall be at a minimum of three (3) check points for each zone. These check points should include the start point, approximate mid-point and the end point.

Measurement intervals for installations with areas greater than three (3) miles shall be at a minimum of three (3) check points, one at the start point, one at the end point and additional measurements spaced at 3-mile intervals between the start and end points of the area in question.

The number of measurements at each check point for each zone will be as follows:

- (A) Skip Lines: Eighteen (18) measurements, distributed over six (6) skip lines, shall be made at each check point.
- (B) Center Lines and/or Edge Lines: Eighteen (18) measurements shall be made over 300 linear feet of continuous stripe.

When taking reflectivity measurements, the value of the measurement shall be determined by averaging three measurements; one at the left edge of the stripe, one at the center of the stripe and one at the right edge of the stripe.

In addition, the reflectance values measured at each check point shall be averaged by zone to determine conformance to the minimum warranted reflective values.

<u>907-624.04--Method of Measurement.</u> Inverted profile thermoplastic traffic stripe of the type specified will be measured by the mile or by the linear foot, as indicated, from end-to-end of individual stripes. In the case of skip lines the measurement will include skips. The length used to measure centerline and edge stripes will be the horizontal length computed along the stationed control line. Inverted profile thermoplastic detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than six (6) inches in width will be converted to equivalent lengths of six-inch widths.

<u>907-624.05--Basis of Payment.</u> Inverted profile thermoplastic traffic stripe, measured as prescribed above, will be paid for at the contract unit price per mile or linear foot, as applicable, which shall be full compensation for completing the work.

# Payment will be made under:

- per linear foot or mile	6" Inverted Profile Thermoplastic Traffic Stripe, Skip White *	907-624-A:
- per linear foot or mile	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous White *	907-624-B:
- per linear foot or mile	6" Inverted Profile Thermoplastic Traffic Stripe, Skip Yellow *	907-624-C:
- per linear foot or mile	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous Yellow *	907-624-D:
- per linear foot	Inverted Profile Thermoplastic Detail Traffic Stripe, Color *	907-624-E:

<sup>\*</sup> High Contrast may be specified

CODE: (IS)

#### SPECIAL PROVISION NO. 907-631-1

**DATE:** 11/15/2017

**SUBJECT:** Traffic Signal Systems - General

Section 631, Traffic Signal Systems - General, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

#### 907-631.02--Materials.

<u>907-631.02.4--Operations.</u> Delete the second paragraph in Subsection 631.02.4 on page 513 and substitute the following.

The Contractor shall conduct the work at all times in such a manner as to ensure the least possible inconvenience to the traveling public, and to property owners on the streets, alleys, and other public places where the construction will take place.

<u>907-631.02.5--Electrical Service.</u> Delete the first paragraph in Subsection 631.02.5 on page 515 and substitute the following.

It shall be the Contractor's responsibility to make the necessary arrangements with the local power company to provide the electrical service for any new installation. The Contractor shall pay for, at no cost to the Department, all deposits, hook-up charges, or other service fees required by the power company for the establishment of new service. The cost of all such fees shall be considered incidental and absorbed within existing pay items. The Department or the local agency will be responsible for payment of the monthly service bill for the new power service installation. It shall be the responsibility of the Contractor to swap the electrical service account over to the Department or local agency.

#### 907-631.03--Construction Requirements.

<u>907-631.03.2--Electrical Service Equipment.</u> Delete the paragraphs of Subsection 631.03.2 on pages 515 and 516, and substitute the following.

The power supply assembly shall consist of all equipment mounted in a Power Service Pedestal as described in Subsection 722.13 or as otherwise shown in the plans. The configuration and installation of the equipment mounted on the assembly shall meet the safety requirements and approval of the utility company or municipality furnishing power for operation.

When required, service poles shall be provided by the Contractor and consist of wood poles with required pole line hardware, conduit, ground rods, guy wires and anchors and all other accessories and appurtenances mounted on the pole, except those items furnished by the utility company or

municipality, or as specified separately in the contract or plans. Costs of service poles shall be included in other items bids.

Main disconnect switches shall be separately housed on the power supply assembly. Circuit breaker cabinets and meters shall not be installed on the street or walk side of the pole or pedestal.

<u>907-631.03.3--Performance Tests.</u> Delete the second sentence of Subsection 631.03.3 on page 516.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-640-1

**DATE:** 11/15/2017

**SUBJECT:** Inductive Loop Vehicle Detection Systems

Section 640, Inductive Loop Vehicle Detection Systems, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

<u>907-640.01--Description.</u> Delete the first sentence of Subsection 640.01 on page 578, and substitute the following.

This work consists of furnishing all component materials required to form complete independent vehicle inductive loop detection systems as specified herein.

# 907-640.02--Materials.

<u>907-640.02.2.4.1--Tuning.</u> Delete the sentence in Subsection 640.02.2.4.1 on page 579, and substitute the following.

The amplifier card shall tune automatically upon the application of power in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.20.

<u>907-640.02.2.4.2--Modes of Operation.</u> Delete the sentence in Subsection 640.02.2.4.2 on page 579, and substitute the following.

Each amplifier card channel shall be capable of functioning in both presence and pulse mode in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.17.

<u>907-640.02.2.4.3--Sensitivity Control.</u> Delete the sentence in Subsection 640.02.2.4.3 on page 579, and substitute the following.

Each channel of the amplifier card shall meet NEMA TS 2-2003 v02.06 Section 6.5.2.15 requirements for sensitivity controls.

<u>907-640.02.2.4.4--Crosstalk Avoidance.</u> Delete the sentence in Subsection 640.02.2.4.4 on page 579, and substitute the following.

The amplifier card shall be capable of preventing crosstalk between channels of the same unit in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.23.

<u>907-640.02.2.4.5--Outputs.</u> Delete the sentence in Subsection 640.02.2.4.5 on page 579, and substitute the following.

Each output device shall conform to NEMA TS 2-2003 v02.06 Section 6.5.2.26 requirements.

<u>907-640.02.2.4.6--Controls and Indicators.</u> Delete the sentence in Subsection 640.02.2.4.6 on page 580, and substitute the following.

All amplifier card controls and indicators shall be in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.25.

<u>907-640.02.2.4.7--Self-Tracking.</u> Delete the sentence in Subsection 640.02.2.4.7 on page 580, and substitute the following.

The amplifier card shall automatically accommodate after-tuning changes in the loop/lead-in in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.21.

<u>907-640.02.2.4.10--Loop Detector Amplifier Tests.</u> Delete the sentence in Subsection 640.02.2.4.10 on page 580, and substitute the following.

Each amplifier card shall conform to the performance requirements set forth in NEMA TS 2-2003 v02.06 Section 2.8.

<u>907-640.02.2.4.12--Delay and Extension Timing.</u> Delete the last two sentences in Subsection 640.02.2.4.12 on page 580, and substitute the following.

Detector card delay timing capabilities shall be provided in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.24.1. Detector card extension timing capabilities shall be provided in accordance with NEMA TS 2-2003 v02.06 Section 6.5.2.24.2.

<u>907-640.03.1.2--Saw Cuts</u>. Delete the second sentence of the second paragraph of Subsection 640.03.1.2 on page 581, and substitute the following.

Where lead-in cable is required to pass through the curbside, it shall be installed in ¾-inch PVC or rigid steel conduit.

<u>907-640.04--Method of Measurement</u>. Delete the first paragraph of Subsection 640.04 on page 583.

Vehicle Loop Assembly and Shielded Cable will be measured by the linear foot computed horizontally along the saw slot, regardless of number of turns, in which the loop wire or shielded cable is installed and will include the loop lead-in to the pull box.

<u>907-640.05--Basis of Payment.</u> Delete the pay items listed on pages 583 and 584, and substitute the following.

907-640-A: Vehicle Loop Assembly - per linear foot
907-640-B: Shielded Cable, AWG \_\_, \_\_ Conductor - per linear foot
907-640-C: Loop Detector Amplifier \* - per each

<sup>\*</sup> Additional information may be indicated

#### SPECIAL PROVISION NO. 907-701-3

CODE: (IS)

**DATE:** 05/04/2021

**SUBJECT:** Hydraulic Cement

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

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

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

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

#### 907-701.02.1-General.

<u>907-701.02.1.2--Alkali Content.</u> Delete the sentence in Subsection 701.02.1.2 on page 719, and substitute the following.

When used in portland cement concrete, the total alkali contribution from all cement types in this Subsection shall not exceed 4.0 lb. per cubic yard of concrete calculated as follows:

lb alkali per cu Yd = 
$$\frac{\text{(lb cement per cu Yd)x(\%Na}_2\text{O equivalent in cement)}}{100}$$

In the above calculation, the maximum cement alkali content reported on the cement mill certificate shall be used. An example calculation can be found in the Department's *Concrete Field Manual*.

<u>907-701.02.2--Replacement by Other Cementitious Materials.</u> Delete the paragraph in Subsection 701.02.2 on page 719, and substitute the following.

The maximum replacement of cement by weight is 25% for fly ash or 50% for ground granulated blast furnace slag (GGBFS). Replacement contents below 20% for fly ash or 45% for GGBFS may be used, but will not be given any special considerations, such as the maximum acceptance temperature for portland cement concrete containing pozzolans in Subsection 804.02.13.1.5. Special considerations shall only apply for replacement of cement by fly ash or GGBFS.

Delete Subsection 701.02.2.1 on pages 719 and 720, and substitute the following.

# 907-701.02.2.1--Portland Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater.

When portland cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall be as follows in Table 1. Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed in Table 1.

Sulfate Exposure	Water-soluble sulfate (SO <sub>4</sub> ) in soil, % by mass	Sulfate (SO <sub>4</sub> ) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type I cement with one of the following replacements of cement by weight:  24.5 - 25.0% Class F fly ash, or  49.5 - 50.0% GGBFS  or  Type II**** cement
Severe	0.20 - 2.00	1,500 - 10,000	Type I cement with a replacement by weight of 49.5 - 50.0% GGBFS, or  Type II* cement with one of the following replacements of cement by weight:  24.5 - 25.0% Class F fly ash, or  49.5 - 50.0% GGBFS

Table 1- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Delete Subsection 701.02.2.2 on page 720, and substitute the following.

<u>907-701.02.2.2--Portland Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater.</u> When portland cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 701.02.2.1.

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

907-701.04.1--General. Delete Subsection 701.04.1.1 on page 720, and substitute the following.

<u>907-701.04.1.1--Types of Blended Hydraulic Cement</u>. Blended hydraulic cements (blended cements) shall be of the following types and conform to AASHTO M 240:

<sup>\*</sup> Type III cement conforming to AASHTO M85 with a maximum 8% tricalcium aluminate (C<sub>3</sub>A) may be used in lieu of Type II cement as allowed in Subsection 701.02.1; this cement is given the designation "Type III(MS)."

<sup>\*\*</sup> Class F fly ash or GGBFS may be added as a replacement for cement as allowed in Subsection 907-701.02.2.

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.

<u>907-701.04.1.2--Alkali Content.</u> Delete the sentence in Subsection 701.04.1.2 on page 720, and substitute the following.

All blended cement types shall be made with clinker that would result in cement meeting the requirements of Subsection 701.02.1.2 when used in the production of AASHTO M 85, Type I or Type II cement.

The blended cement manufacturer shall include the percent equivalent alkalis as Na<sub>2</sub>O on their cement mill reports.

When calculating the total alkali contribution with blended cements, use the equivalent alkali content of the base portland cement. An example calculation for cases where blended cements are used can be found in the Department's *Concrete Field Manual*.

<u>907-701.04.2--Replacement by Other Cementitious Materials.</u> Delete the paragraph in Subsection 701.04.2 on page 720, and substitute the following.

The maximum replacement of blended cement Type IL by weight is 35% for fly ash or 50% for GGBFS. Replacement contents below 20% for fly ash or 45% for GGBFS may be used, but will not be given any special considerations, such as the maximum acceptance temperature for blended cement concrete containing pozzolans in Subsection 804.02.13.1.5. Special considerations shall only apply for replacement of blended cement by fly ash or GGBFS.

No additional cementitious materials, such as portland cement, blended cement, fly ash, GGBFS, or others, shall be added to or as a replacement for blended cement Types IP and IS.

Delete Subsection 701.04.2.1 on pages 720 and 721, and substitute the following.

<u>907-701.04.2.1--Blended Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater</u>. When blended cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall be as follows in Table 2. Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed in Table 2.

**Table 2- Cementitious Materials for Soluble Sulfate Conditions or Seawater** 

Sulfate	Water-soluble	Sulfate (SO <sub>4</sub> )	Cementitious material required
Exposure	sulfate (SO <sub>4</sub> ) in	in water, ppm	
	soil, % by mass		
Moderate	0.10 - 0.20	150 - 1,500	Type IL (MS)* cement,
and			Type IL cement with one of the following
Seawater			replacements of cement by weight:
			24.5 - 35.0% Class F fly ash, or
			49.5 - 50.0% GGBFS,
			Type IP (MS) cement,
			or
			Type IS (MS) cement
Severe	0.20 - 2.00	1,500 - 10,000	Type IL cement with a replacement of
			cement by weight of 49.5 - 50.0% GGBFS,
			or
			Type IL (MS) cement with one of following
			replacements of cement by weight:
			24.5 - 35.0% Class F fly ash, or
			49.5 - 50.0% GGBFS

<sup>\*</sup> Class F fly ash or GGBFS may be added as a replacement for cement as allowed in Subsection 907-701.04.2.

Delete Subsection 701.04.2.2 on page 721, and substitute the following.

<u>907-701.04.2.2--Blended Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions</u> <u>or Seawater</u>. When blended cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 701.04.2.1.

Delete Subsection 701.04.3 on page 721.

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		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

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

CODE: (IS)

#### **SPECIAL PROVISION NO. 907-703-1**

**DATE:** 06/13/2018

**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--Course 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  $1\frac{1}{2}$ -inch sieve for Size No. 67 aggregates.

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.

907-712.04.2--Tie Wire. 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.

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

#### 907-712.05.2.3--Blank.

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

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

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

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

# 907-712.06--Guard and Guardrail Posts.

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

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

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

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

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

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

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

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

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

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

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

CODE: (SP)

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

**DATE:** 08/31/2021

**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.

### 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	<b>ASTM D 276</b>	ASTM D 4595
	IX	High Strength	-					-		l					2000
	VIII	High										1			099
	_	Ξ <u>Ξ</u>	Non- Woven	280	50% Min	240	115	100		0.2		0.43	50% @ 500 hr		
	IIV		Woven	450	50% max	400	180	150		0.2	0.43	-	50% @ 500 hr		
	_	paration, Stabiliza Reinforcement	Non- Woven	180	50% Min	160	75	70		0.2		0.43	50% @ 500 hr		
ctiles	IA	Se	Woven	280	50% max	240	110	100		0.2	0.43	-	50% @ 500 hr		
Table 1 - Geotextiles	>	Separation & Drainage		200	50% min	180	80	80		0.2	9.0	0.43	50% @ 500 hr		l
Ţ,	Ν	Paving		06	50% min @ break			1	0.2	ļ		-		325	
	Ш	Drainage		110	20% min	70	40	40	1	0.5	9.0	0.43	50% @ 500 hr		
	$\Pi^1$	Sediment Control		06	50% max @ 45 lb				1	0.05	09.0	0.84	70% @ 500 hr		
	$\mathbf{I}_1$	Sedimer		50				1		0.05	09.0	0.84	70% @ 500 hr	1	
	Type Designation		Physical Property <sup>2</sup>	Grab Strength (lb)	Elongation (%)	Seam Strength (lb)	Puncture Strength (1b)	Trapezoidal Tear (lb)	Asphalt Retention (gal/yd²)	Permittivity (sec <sup>-1</sup> ) min	AOS Woven (mm) max	AOS Non-Woven (mm) max	Tensile Strength after UV (% Retained)	Melting Point °(F)	Minimum Ultimate Tensile Strength <sup>3</sup> (lb/in)

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

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

### 907-714.15--Geogrids.

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

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

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

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

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

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

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

by the Department.

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

TABLE II GEOGRIDS

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

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

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

CODE: (SP)

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

**DATE:** 12/07/2021

**SUBJECT:** Timber and Dimension Lumber

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

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

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

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

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

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

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

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

### 907-718.03.1--Blank.

### 907-718.03.2--Treatment.

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

### 907-718.03.2.2--Blank.

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

### 907-718.03.3--Blank.

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

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

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

CODE: (IS)

### **SPECIAL PROVISION NO. 907-720-2**

**DATE:** 09/11/2018

**SUBJECT: Acceptance Procedure for Glass Beads** 

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

### 907-720.01--Glass Beads.

<u>907-720.01.4--Acceptance Procedures.</u> Delete the last sentence of the paragraph in Subsection 720.01.4 on page 841, and substitute the following.

Acceptance sampling and testing of glass beads will be in accordance with the Department's Materials Division Inspection, Testing, and Certification Manual, Section 2.9.2 -- Glass Beads.

### **SPECIAL PROVISION NO. 907-721-2**

CODE: (IS)

**DATE:** 01/08/2020

**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

CODE: (IS)

### SPECIAL PROVISION NO. 907-722-1

DATE: 11/15/2017

**SUBJECT:** Materials for Traffic Signal Installation

Section 722, Materials for Traffic Signal Installation, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follow.

<u>907-722.02.3--Design Strength Requirements.</u> Delete Subsection 722.02.3 on pages 864 thru 866, and substitute the following.

Unless specified otherwise in the plans, poles shall meet the requirements of the AASHTO Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals, as specified in the plans with all interim supplements. All components of the assemblies shall be designed to the following:

- Importance Factor: 1.0; 50 year mean recurrence interval
- Basic Wind Speed (3 second gust): As shown on the project plans
- Minimum Gust Effect Factor: 1.14
- Fatigue Category: II
- Ice Loading: As shown on the project plans
- Natural Wind Gust Pressure Loads: Included
- Truck Induced Gust Pressure Loads: Not included
- Galloping: Not included

<u>907-722.02.5--Mast Arms for Traffic Signal and Equipment Poles</u>. Delete the first four sentences of the third paragraph of Subsection 722.02.5 on page 867, and substitute the following.

Anchor base plates must meet the minimum requirements of ASTM A36 or ASTM A709 Grade 36 or ASTM A572 Grade 50 and must be welded to the shaft by either telescoped with two continuous arc welds or by back up ring using full penetration welds. Flange plate shall telescope the large end of the arm and be welded by either two (2) continuous arc welds, one (1) being on the outside of the plate, adjacent to the shaft, and the other one (1) on the inside at the end of the tubular cross section or by back up ring using full penetration welds. The thru-bolt flange plate or tapped flange plate supporting the mast arm shall be welded to the pole near the top and supported side plate tangent to the pole and gusset plates both top and bottom. The thru-bolt or tapped flange plate must be sufficient to develop the full capacity of the connecting bolts.

<u>907-722.03--Electric Cable.</u> Delete the paragraphs for Loop Detector Wire and Loop Detector Lead-in Cable in Subsection 722.03 on page 869.

Delete the first sentence of "Communication Cable" in Subsection 722.03 on page 870, and substitute the following.

Communication cables shall be as per the manufacturer's recommendation.

<u>907-722.05.4--Type III or Type IV Rigid Non-Metallic Conduit.</u> After the last sentence of Subsection 722.05.4 on page 871, add the following.

Schedule 40 conduit shall be used unless otherwise noted in the plans.

Delete the title of Subsection 722.13.3 on page 876, and substitute the following.

### 907-722.13.3--Power Service Pedestal.

Delete the first paragraph of Subsection 722.13.3 on page 876, and substitute the following.

The pedestal shall be of NEMA Type 3R rainproof construction and shall be UL Listed as "Enclosed Industrial Control Equipment" (UL 508A). External construction shall comply with UL50 requirements and shall be unpainted aluminum.

Nominal size of the pedestal shall be 48"H x 16"W x 16"D.

Pedestal shall have a voltage rating or 120v/240v single phase with an Amperage rating of 800A.

After the first sentence of the seventh paragraph of Subsection 722.13.3 on page 876, add the following.

An outdoor rated heavy duty combination lock shall be provided to lock the customer compartment door.

<u>907-722.14.1.3--Optical System.</u> Delete the sixteenth paragraph of Subsection 722.14.1.3 on page 879, and substitute the following.

The signal module on-board circuitry shall include voltage surge protection to withstand high-repetition noise transients and low-repetition high-energy transients as stated in Section 2.1.6, NEMA Standard TS 2, 1992.

Delete the last sentence of the seventeenth paragraph of Subsection 722.14.1.3 on page 879, and substitute the following.

Load switches shall be compatible with NEMA TS 1 or later, or Model 170-1989 or later.

Delete Subsection 722.14.5 on page 882, and substitute the following.

### 907-722.14.5--Blank.

Delete Subsections 722.14.7 and 722.14.8 on page 882.

### SECTION 905 - PROPOSAL

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

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

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

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

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

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

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

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

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

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

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

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

### SECTION 905 -- PROPOSAL (CONTINUED)

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

	Respectfully Submitted,
	DATE
	Contractor
	BYSignature
	TITLE
	ADDRESS
	CITY, STATE, ZIP
	PHONE
	FAX
	E-MAIL
(To be filled in if a corporation)	
Our corporation is chartered under the Laws of the names, titles and business addresses of the executives are as	State of and the follows:
President	Address
Secretary	Address
Treasurer	Address

Revised 1/2016

The following is my (our) itemized proposal.

 $\label{eq:miles} \beginning of the 3-Lane section south of Ripley to the end of the 3-Lane section north of Ripley, known as State Project No. SP-0022-04(068) / 108893301 in Tippah County.$ 

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
0010	202 D007		700	Roadway I	
0010	202-B007		708	Square Yard	Removal of Asphalt Pavement, All Depths
0020	202-B215		62 536	Each	Removal of Sign Including Post & Footing
0030	202-B240	(T)	536	Linear Feet	Removal of Traffic Stripe
0040	203-G001	(E)	100	Cubic Yard	Excess Excavation, FM, AH
0050	209-A009		256	Square Yard	Geotextile Stabilization, Type VII, Non-Woven
0060	304-A002	(GY)	1,215	Cubic Yard	Granular Material, LVM, Class 3, Group C
0070	403-A005	(BA1)	178	Ton	19-mm, MT, Asphalt Pavement
0800	403-A014	(BA1)	10,656	Ton	9.5-mm, MT, Asphalt Pavement
0090	406-D001		127,043	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0100	407-A001	(A2)	9,687	Gallon	Asphalt for Tack Coat
0110	503-C010		825	Linear Feet	Saw Cut, Full Depth
0120	618-A001		1	Lump Sum	Maintenance of Traffic
0130	618-B001		1	Square Feet	Additional Construction Signs (\$10.00)
0140	619-A1001		16	Mile	Temporary Traffic Stripe, Continuous White
0150	619-A2001		15	Mile	Temporary Traffic Stripe, Continuous Yellow
0160	619-A4002		8	Mile	Temporary Traffic Stripe, Skip Yellow
0170	619-A5001		12,402	Linear Feet	Temporary Traffic Stripe, Detail
0180	619-A6001		3,436	Square Feet	Temporary Traffic Stripe, Legend
0190	619-A6002		456	Linear Feet	Temporary Traffic Stripe, Legend
0200	620-A001		1	Lump Sum	Mobilization
0210	626-B004		8	Mile	6" Thermoplastic Traffic Stripe, Continuous White
0220	626-D003		8	Mile	6" Thermoplastic Traffic Stripe, Skip Yellow
0230	626-E004		9	Mile	6" Thermoplastic Traffic Stripe, Continuous Yellow
0240	626-G002		7,580	Linear Feet	Thermoplastic Detail Stripe, White
0250	626-G003		8,172	Linear Feet	Thermoplastic Detail Stripe, Yellow
0260	626-H004		3,173	Square Feet	Thermoplastic Legend, White
0270	626-H005		3,436	Linear Feet	Thermoplastic Legend, White
0280	627-K001		96	Each	Red-Clear Reflective High Performance Raised Markers
0290	627-L001		3,340	Each	Two-Way Yellow Reflective High Performance Raised Markers
0300	630-A001		406	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness
0310	630-C001		78	Linear Feet	Square Tube Posts, 4.0 lb/ft
0320	630-C005		624	Linear Feet	Square Tube Posts, 2.0 lb/ft
0330	630-F006		30	Each	Delineators, Guard Rail, White
0340	907-204-A003		256	Square Yard	Geogrid, Type II, Biaxial
0350	907-640-A001		3,026	Linear Feet	Vehicle Loop Assemblies
				ERNATE GROUP	*

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]							
0360	304-H001	(GY)	130	Cubic Yard	3/4" and Down Crushed Stone Base, LVM							
ALTERNATE GROUP AA NUMBER 2												
0370	304-H002	(GY)	130	Cubic Yard	Size 610 Crushed Stone Base, LVM							
ALTERNATE GROUP AA NUMBER 3												
0380	304-H003	(GY)	130	Cubic Yard	Size 825B Crushed Stone Base, LVM							
ALTERNATE GROUP BB NUMBER 1												
0390	628-H001		268	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Continuous White							
0400	628-I002		134	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Skip Yellow							
0410	628-J001		134	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Continuous Yellow							
			ALT	ERNATE GROUP	BB NUMBER 2							
0420	907-624-B002		268	Linear Feet	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous White							
0430	907-624-C001		134	Linear Feet	6" Inverted Profile Thermoplastic Traffic Stripe, Skip Yellow							
0440	907-624-D002		134	Linear Feet	6" Inverted Profile Thermoplastic Traffic Stripe, Continuous							

# SECTION 905 - COMBINATION BID PROPOSAL (Continued)

### CONDITIONS FOR COMBINATION BID

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

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

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### COMBINATION BID PROPOSAL

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

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

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

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

# SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

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

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

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

### **CERTIFICATE**

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

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

### **CERTIFICATION**

I, ,
(Name of person signing bid)
individually, and in my capacity as 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, Bidder
(Name of Firm, Partnership, or Corporation)
on Project No. SP-0022-04(068)/ 108893301000
Tippah 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 SP-0022-04(068)/ 108893301000

LOCATED IN THE COUNTY(IES) OF **Tippah** 

STATE OF MISSISSIPPI, COUNTY OF HINDS

This contract entered into by and between the Mississippi Transportation Commission on one hand, and the undersigned contractor, on the other witnesseth;

That, in consideration of the payment by the Mississippi Transportation Commission of the prices set out in the proposal hereto attached, to the undersigned contractor, such payment to be made in the manner and at the time of times specified in the specifications and the special provisions, if any, the undersigned contractor hereby agrees to accept the prices stated in the proposal in full compensation for the furnishing of all materials and equipment and the executing of all the work contemplated in this contract.

It is understood and agreed that the advertising according to law, the Advertisement, the instructions to bidders, the proposal for the contract, the specifications, the revisions of the specifications, the special provisions, and also the plans for the work herein contemplated, said plans showing more particularly the details of the work to be done, shall be held to be, and are hereby made a part of this contract by specific reference thereto and with like effect as if each and all of said instruments had been set out fully herein in words and figures.

It is further agreed that for the same consideration the undersigned contractor shall be responsible for all loss or damage arising out of the nature of the work aforesaid; or from the action of the elements and unforeseen obstructions or difficulties which may be encountered in the prosecution of the same and for all risks of every description connected with the work, exceptions being those specifically set out in the contract; and for faithfully completing the whole work in good and workmanlike manner according to the approved Plans, Specifications, Special Provisions, Notice(s) to Bidders and requirements of the Mississippi Department of Transportation.

It is further agreed that the work shall be done under the direct supervision and to the complete satisfaction of the Executive Director of the Mississippi Department of Transportation, or his authorized representatives, and when Federal Funds are involved subject to inspection at all times and approval by the Federal Highway Administration, or its agents as the case may be, or the agents of any other Agency whose funds are involved in accordance with those Acts of the Legislature of the State of Mississippi approved by the Governor and such rules and regulations issued pursuant thereto by the Mississippi Transportation Commission and the authorized Federal Agencies.

The Contractor agrees that all labor as outlined in the Special Provisions may be secured from list furnished by

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

The Contractor agrees that he has read each and every clause of this Contract, and fully understands the meaning of same and that he will comply with all the terms, covenants and agreements therein set forth.

Witne	ess our signatures this the	day of
Contractor(s)		
Ву		MISSISSIPPI TRANSPORTATION COMMISSION
Title	By	
Signed and sealed in the presence of (names and addresses of witnesses)		Executive Director
		Secretary to the Commission
		Commission in session on the day of, Page No
Revised 8/06/2003		

### S E C T I O N 9 0 3 PERFORMANCE AND PAYMENT BOND

CONTRACT BOND FOR: SP-0022-04(068)/ 108893301000

LOCATED IN THE COUNTY(IES) OF: Tippah

STATE OF MISSISSIPPI, COUNTY OF HINDS

Know all men by these pr	resents: that we,	
	(Contractor)	
	Principal, a	
residing at	in the	State of
and		
residing at	(Surety) in the St	ate of,
authorized to do business	in the State of Mississippi, unc	er the laws thereof, as surety, effective as of the contract date
shown below, are held an	d firmly bound unto the State c	f Mississippi in the sum of
(\$	) Dollars, lawful mond	ey of the United States of America, to be paid to it for which
payment well and truly to	be made, we bind ourselves, o	ur heirs, administrators, successors, or assigns jointly and
severally by these present	rs.	
The conditions of this bor	nd are such, that whereas the sa	id
principal, has (have) enter	red into a contract with the Mis	sissippi Transportation Commission, bearing the date of
day of	A.D	hereto annexed, for the construction of certain projects(s) in
the State of Mississippi as	s mentioned in said contract in	accordance with the Contract Documents therefor, on file in the
offices of the Mississippi Now therefore, if the above	Department of Transportation,	Jackson, Mississippi.
singular the terms, coven observed, done, kept and material and equipment is specifications and special contemplated until its fin and save harmless said in the negligence, wrongful principal (s), his (their) therewith, and shall be in the Transportation Commission property, the State may be the Contractor(s), his (the persons furnishing labor Liability Insurance, and	ants, conditions, guarantees are performed and each of them specified in said contract in stall provisions are included in an all completion and acceptance dississispi Transportation Compared or criminal act, overcharge, fragents, servants, or employee table and responsible in a civilian or any officer of the State one or be overcharged or otherwise or be overcharged or otherwise or material, equipment or supplied to the specific or supplied to the state of the state o	ide by and well and truly observe, do keep and perform all and ad agreements in said contract, contained on his (their) part to be, at the time and in the manner and form and furnish all of the rict accordance with the terms of said contract which said plans, and form a part of said contract and shall maintain the said work as specified in Subsection 109.11 of the approved specifications, mission from any loss or damage arising out of or occasioned by raud, or any other loss or damage whatsoever, on the part of said in the performance of said work or in any manner connected a action instituted by the State at the instance of the Mississippi e authorized in such cases, for double any amount in money or vise defrauded of, by reason of wrongful or criminal act, if any, of hall promptly pay the said agents, servants and employees and all plies therefor, including premiums incurred, for Surety Bonds, turance; with the additional obligation that such Contractor shall the contributions damages.

any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the Executive Director of the Mississippi Department of Transportation, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

(Contractors) Principal	Surety
Ву	By
	(Signature) Attorney in Fact
	Address
Title	
(Contractor's Seal)	(Printed) MS Agent
	(Signature) MS Agent
	Address
	(Surety Seal)
	Mississippi Insurance ID Number



### **BID BOND**

KNOW ALL MEN BY THESE PRE	SENTS, that we			
	, <u> </u>		Contractor	
			Address	
As principal, hereinafter called the Pu	incipal and		City, State ZIP	
As principal, hereinafter called the Pr				
a corporation duly organized under the	ne laws of the state of _			
as Surety, hereinafter called the Suret	ty, are held and firmly	bound unto	State of Mississip	pi, Jackson, Mississippi
As Obligee, hereinafter called Oblige	ee, in the sum of <b>Five</b>	Per Cent (5	5%) of Amount Bid	
	Dollars(\$		)	
for the payment of which sum will a executors, administrators, successors				
WHEREAS, the Principal has submit beginning of the 3-Lane section sou Project No. SP-0022-04(068) / 1088 NOW THEREFORE, the condition of said Principal will, within the time re performance of the terms and condition will pay unto the Obligee the different which the Obligee legally contracts which the Obligee legally contracts which the Obligee legally contracts where the obligee legally	th of Ripley to the en 193301 in Tippah Course this obligation is such equired, enter into a for ons of the contract, then the ince in money between with another party to peer exceed the penal summer to the enter exceed the penal summer to the enter exceed the penal summer exceed the penal sum	nd of the 3-lanty. that if the a mal contrace this obligate the amount rform the was hereof.	foresaid Principal shalt and give a good and ation to be void; other of the bid of the said work if the latter amount	of Ripley, known as State  Il be awarded the contract, the Il sufficient bond to secure the Twise the Principal and Surety Principal and the amount for
Signed and sealed this	day of		, 20	
	(Principal)			(Seal)
	Ву	<b>'</b> :	2)	
(Witness)	(Name)	(Title	.)	
	(Surety)	(Seal)	)	
			By:	
(Witness)	(Attorney-in-Fac	et)		
	(MS Agent)			
	Mississ	ippi Insuran	nce ID Number	

FORM CSD-612 Rev. 1 / 2015												- 1000					l	
WORK PHASE DESCRIPTION	LINE NUMBERS	JAN FEB	MAR APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER O	OCTOBER NO	NOV DECJAN FEB	EB MAR	APRIL M	MAY JUNE	JULY	AUGUST	SEPTEMBER OCTOBER		NOV DEC
Miscellaneous	10-50,110-200, 300-380				0			77										
Pavement	60-100				2			99										
Pavement Markings	210-290, 390-440							66 7.1										
Ë	March 22, 2022																	
NOA:	April 12, 2022																	
NTP/BCT:	June 9, 2022 (Flexible)																	
W.D.:	7.1																	
	MONTH	JAN FEB	MAR APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER O	OCTOBER NO	NOV DECJAN FEB	EB MAR	APRIL M	MAY JUNE	JULY	AUGUST	SEPTEMBER (	OCTOBER	NOV DEC WORKING
ANITIOIDATED	The same of the contract of th	,	4	1		1	t		_			1	1	1				

NOTE: THE ANTICIPATED WORKING DAYS SHOWN ON THIS SCHEDULE ARE FOR INFORMATIONAL PURPOSES ONLY. THE ACTUAL WORKING DAY TOTAL AS ASSESSED BY THE PROJECT ENGINEER ON FORM CSD-765 SHALL GOVERN.