MDOT Use Only
Checked _____
Loaded _____
Keyed _____

09 -

SM No. CSTP0456000061

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

09
Mill & Overlay approximately 3.4 miles of SR 854 from SR 39 to the Naval Air Station, known as Federal Aid Project No. STP-0456-00(006) / 109783301 in Lauderdale County.

Project Completion: 80 Working Days

(STATE DELEGATED)

NOTICE

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

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

SECTION 900

OF THE CURRENT 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

JACKSON, MISSISSIPPI

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

01/30/2026 11:57 AM

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Electronic bids will be received by the Mississippi Transportation Commission at 10:00 o'clock A.M., Tuesday, February 24, 2026, from the Bid Express Service and shorty thereafter publicly read on the Sixth Floor For:

Mill & Overlay approximately 3.4 miles of SR 854 from SR 39 to the Naval Air Station, known as Federal Aid Project No. STP-0456-00(006) / 109783301 in Lauderdale County.

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

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

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

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

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

BRAD WHITE
EXECUTIVE DIRECTOR

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

https://shop.mdot.ms.gov/default.aspx?StoreIndex=1

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: 03/01/2017

SUBJECT: Governing Specifications

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2 **CODE: (IS)**

DATE: 03/01/2017

SUBJECT: Status of Right-of-Way

Although it is desirable to have acquired all rights-of-way and completed all railroad agreements, utility adjustments and work to be performed by others prior to receiving bids, sometimes it is not considered to be in the public interest to wait until each and every such clearance has been obtained. The bidder is hereby advised of possible unacquired rights-of-way, relocates, railroad agreements and utilities adjustments which have not been completed.

The status of right-of-way acquisition, utility adjustments, encroachments, potentially contaminated sites, railroad facilities, improvements, and asbestos contamination are set forth in the following attachments.

In the event right of entry is not available to ALL parcels of right-of-way and/or all work that is to be accomplished by others on the date set forth in the contract for the Notice to Proceed is not complete, the Department will issue a restricted Notice to Proceed.

STATUS OF RIGHT-OF-WAY
STP-0456-00(006)
109783/301000
Lauderdale County

All rights of way and legal rights of entry have been acquired **except:**

None.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Inter-Departmental Memorandum

TO: Don Drake
ROW Division

DATE: October 22, 2025

FROM: Adam L. McDaniel
District Five

Digitally signed by Adam McDaniel
Date: 2025.10.22 09:32:27-05'00'

SUBJECT OR PROJECT NO: STP-0456-00(006)/109783-301000
ROW Documentation

INFORMATION COPY TO:

COUNTY: Lauderdale

Project File
Construction Division

District Status Report

1. STATUS OF RIGHT OF WAY: No new ROW required.

2. RIGHT OF WAY CLEARANCE: There are no visible encroachments that conflict with construction.

3. STATUS OF AFFECTED RAILROAD OPERATING FACILITIES: No railroads affected.

4. STATUS OF REQUIRED UTILITY RELOCATIONS: There are no known utility conflicts. Permits showing the approximate location of utilities within or along the ROW are on file with the Department. The Department cannot and does not warrant that this information is complete and accurate. The Contractor is advised to contact MS 811 and MDOT to have utility lines marked prior to subsurface work. The Contractor must coordinate directly with the involved utility owners to have underground utility lines field located in advance of construction.

5. STATUS OF CONSTRUCTION AGREEMENT: None required

ALM:alm

ASBESTOS ABATEMENT STATUS REPORT

STP-0456-00(006) 109783-301000

Lauderdale County

October 22, 2025

Reference is made to notices to bidders entitled "Asbestos National Emission Standards for Hazardous Air Pollutants (NESHAP)" and "Removal of Obstructions".

The following pertinent information is furnished concerning asbestos-containing materials (ACMs), if any, found in buildings to be removed by the Contractor.

There is no right-of-way required for this project, and the contractor will not need to remove any buildings.

STATUS OF POTENTIALLY CONTAMINATED SITES REPORT

STP-0456-00(006) 109783-301000

Lauderdale County

October 22, 2025

THERE IS NO RIGHT-OF-WAY REQUIRED FOR THIS PROJECT. NO INITIAL SITE ASSESSMENT WILL BE PERFORMED. IF CONTAMINATION ON THE EXISTING RIGHT-OF-WAY IS DISCOVERED, IT WILL BE HANDLED BY THE DEPARTMENT.

IMPROVEMENTS STATUS REPORT

Improvements to be included in the Notice to Bidders to be removed by the Construction Contractor

FMS Construction Project No: 109783-301000

FMS ROW Project No:

External ROW No: STP-0456-00(006)

Parcel No:
Station No:
Property Owner:
Description/Pictures:

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3 **CODE: (SP)**

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.

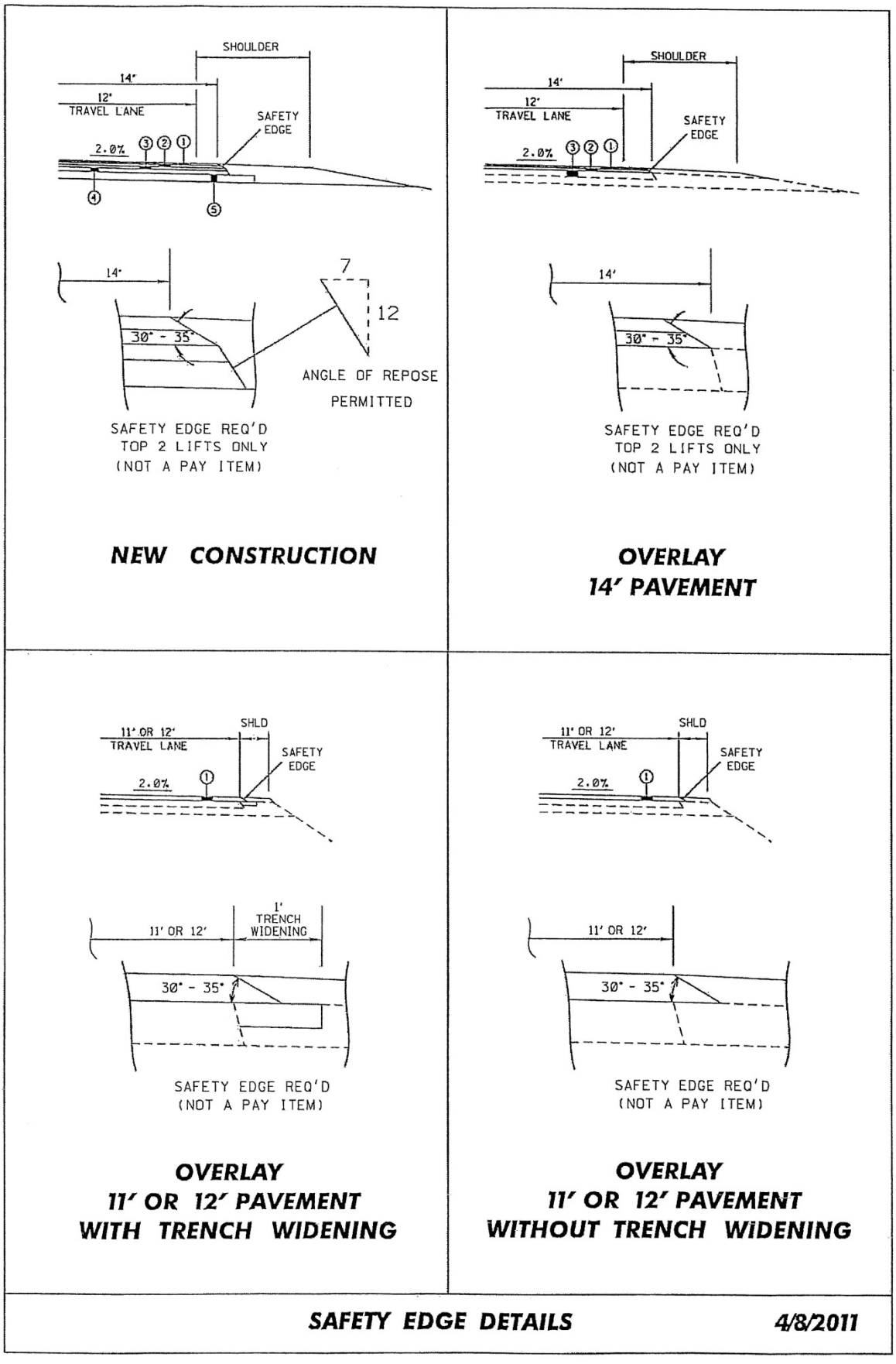
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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').


SHOULDER
14'
12'
TRAVEL LANE
SAFETY EDGE
2.0%
③ ② ①
④
⑤
14'
7
12
30° - 35°
ANGLE OF REPOSE PERMITTED
SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)
NEW CONSTRUCTION
SHOULDER
14'
12'
TRAVEL LANE
SAFETY EDGE
2.0%
③ ② ①
14'
30° - 35°
SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)
OVERLAY 14' PAVEMENT
11' OR 12'
TRAVEL LANE
SHLD
SAFETY EDGE
2.0%
①
1' TRENCH WIDENING
11' OR 12'
30° - 35°
SAFETY EDGE REQ'D (NOT A PAY ITEM)
OVERLAY 11' OR 12' PAVEMENT WITH TRENCH WIDENING
11' OR 12'
TRAVEL LANE
SHLD
SAFETY EDGE
2.0%
①
11' OR 12'
30° - 35°
SAFETY EDGE REQ'D (NOT A PAY ITEM)
OVERLAY 11' OR 12' PAVEMENT WITHOUT TRENCH WIDENING
SAFETY EDGE DETAILS
4/8/2011

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: 11/28/2017

SUBJECT: Errata and Modifications to the 2017 Standard Specifications

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1963 **CODE: (SP)**

DATE: 9/23/2019

SUBJECT: Guardrail Pads

Bidders are hereby advised that prior to construction of the guardrail pads, the Contractor shall coordinate with the guardrail Subcontractor to determine the guardrail pad dimensions necessary to meet MASH compliance.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2206 **CODE: (IS)**

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2273 **CODE: (SP)**

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.

DEPARTMENT OF REVENUE
STATE OF MISSISSIPPI

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 and subject to a penalty in the amount of $1000.

Identifying Dyed Diesel

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

This fact sheet is intended to help you become more familiar with Mississippi tax laws and your rights and responsibilities under the laws. Nothing in this fact sheet supersedes, alters, or otherwise changes any provisions of the tax law, regulations, court decisions, or notices.

Petroleum Tax Bureau
P. O. Box 1033
Jackson, MS 39215-1033
Phone: (601) 923-7150

DEPARTMENT OF REVENUE
STATE OF MISSISSIPPI

Special Fuel Used on Government Contracts

State and Local Government Contracts

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

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

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

Special Fuel Direct Pay Permit

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

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

Special Fuel Distributors

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

Environmental Protection Fee

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

Penalties

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

This fact sheet is intended to help you become more familiar with Mississippi tax laws and your rights and responsibilities under the laws. Nothing in this fact sheet supersedes, alters, or otherwise changes any provisions of the tax law, regulations, court decisions, or notices.

Petroleum Tax Bureau
P. O. Box 1033
Jackson, MS 39215-1033
Phone: (601) 923-7150

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904- NOTICE TO BIDDERS NO. 2397 **CODE: (SP)**

DATE: 03/24/2020

SUBJECT: Smoothness Tolerances for Ultra-Thin Asphalt Pavement

Bidders are hereby advised that the smoothness tolerances for ultra-thin asphalt pavement on this project shall meet the requirements of a Category C project in accordance with Subsection 403.03.2.1. There will be no final surface requirements or corrective action based for the short continuous interval. Bidders are responsible for the collection of a preliminary smoothness profile prior to any work being performed.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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° ±0.02°. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: **03/23/2022**

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

DATE: 11/22/2022

SUBJECT: App for Traffic Control Reports

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 5551 **CODE: (IS)**

DATE: **12/06/2023**

SUBJECT: **Federal Bridge Formula**

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

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

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

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

or

https://ops.fhwa.dot.gov/freight/publications/brdg_frm_wghts/

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 5570 **CODE: (SP)**

DATE: 07/28/2025

SUBJECT: Special Provisions Related to Concrete

Bidders are hereby advised that this contract contains one or more of the following **new** Special Provisions related to concrete:

Special Provision No. 907-501-1, Subject: Concrete Pavement
Special Provision No. 907-502-1, Subject: Concrete Bridge End Pavement
Special Provision No. 907-503-1, Subject: Replacement of Concrete Pavement
Special Provision No. 907-504-4, Subject: Fiber-reinforced Concrete Pavement
Special Provision No. 907-601-1, Subject: Structural Concrete
Special Provision No. 907-605-1, Subject: Underdrains
Special Provision No. 907-701-4, Subject: Hydraulic Cement
Special Provision No. 907-799-1, Subject: Hydraulic Cement Concrete Mixtures
Special Provision No. 907-803-6, Subject: Deep Foundations
Special Provision No. 907-804-13, Subject: Concrete Bridges and Structures
Special Provision No. 907-804-14, Subject: Bridge Deck Overlay

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7493 **CODE: (SP)**

DATE: 01/07/2026

SUBJECT: Contract Time

PROJECT: STP-0456-00(006) / 109783301 – Lauderdale 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 **March 10, 2026** and the date for Notice to Proceed / Beginning of Contract Time will be **April 09, 2026**.

Should the Contractor request a Notice to Proceed earlier than **April 09, 2026** and it is agreeable with the Department for an early Notice to Proceed, the requested date will become the new Notice to Proceed date. Regardless of whether or not an early Notice to Proceed is granted, contract time will start at the original Notice to Proceed date.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7494

DATE: 11/18/2025

SUBJECT: Specialty Items

PROJECT: STP-0456-00(006)/109783301 - LAUDERDALE

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

CATEGORY: DISPOSAL OF BUILDINGS, RIGHT OF WAY CLEARING & GRUBBING

Line No	Pay Item	Description
0060	202-B240	Removal of Traffic Stripe

CATEGORY: EROSION CONTROL

Line No	Pay Item	Description
0100	221-A001	Concrete Paved Ditch

CATEGORY: GUARDRAIL, GUIDERAIL

Line No	Pay Item	Description
0160	606-B003	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0170	606-C001	Guard Rail, Cable Anchor Type 1, Metal Post
0180	606-D003	Guard Rail, Bridge End Section, Special Design
0190	606-D005	Guard Rail, Bridge End Section, Type A
0200	606-D012	Guard Rail, Bridge End Section, Type D Modified
0210	606-E005	Guard Rail, Terminal End Section, Flared

CATEGORY: PAVEMENT STRIPING AND MARKING

Line No	Pay Item	Description
0420	907-626-A010	6" Thermoplastic Traffic Stripe, Skip White
0430	907-626-C010	Thermoplastic Audible Bump Edge Stripe
0440	907-626-C014	6" Thermoplastic Edge Stripe, Continuous White
0450	907-626-F005	6" Thermoplastic Edge Stripe, Continuous Yellow
0460	907-626-G004	Thermoplastic Detail Stripe, White
0470	907-626-G007	Thermoplastic Double Drop Detail Stripe, Yellow
0480	907-626-H009	Thermoplastic Legend, White
0490	907-626-H010	Thermoplastic Legend, White
0500	907-627-J001	Two-Way Clear Reflective High Performance Raised Markers
0510	907-627-K001	Red-Clear Reflective High Performance Raised Markers
0520	907-627-L001	Two-Way Yellow Reflective High Performance Raised Markers

CATEGORY: TRAFFIC CONTROL - PERMANENT

Line No	Pay Item	Description
0330	630-F006	Delineators, Guard Rail, White
0340	630-F007	Delineators, Guard Rail, Yellow
0350	630-G003	Type 3 Object Markers, OM-3L, Post Mounted
0360	630-G007	Type 3 Object Markers, OM-3R, Post Mounted

CATEGORY: TRAFFIC CONTROL - TEMPORARY

Line No	Pay Item	Description
0220	619-A1001	Temporary Traffic Stripe, Continuous White
0230	619-A2001	Temporary Traffic Stripe, Continuous Yellow
0240	619-A3001	Temporary Traffic Stripe, Skip White
0250	619-A5001	Temporary Traffic Stripe, Detail
0260	619-A6001	Temporary Traffic Stripe, Legend
0270	619-A6002	Temporary Traffic Stripe, Legend
0280	619-D1001	Standard Roadside Construction Signs, Less than 10 Square Feet
0290	619-D2001	Standard Roadside Construction Signs, 10 Square Feet or More
0300	619-G4005	Barricades, Type III, Single Faced

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 7495 **CODE: (SP)**

DATE: 01/15/2026

SUBJECT: Scope of Work

PROJECT: STP-0456-00(006) / 109783 - Lauderdale County

The contract documents do not include an official set of construction plans but may, by reference, include some Standard Drawings or Special Design Drawings.

Work on the project shall consist of the following:

Random clearing to Right of Way, spot milling/inlaying, profile milling, scrub sealing, and overlaying approximately 3.4 miles of existing pavement on SR 854 from SR 39 (Station 22+05) to the Naval Air Station (Station 199+65) in Lauderdale County. The left lanes have a station equation as follows: (Station 150+55 – Station 153+95 Ahead).

From the BOP at Station 22+05 to EOP at Station 199+65

The existing pavement for SR 854 consists of approximately 4 ¼" to 6 ⅞" HMA over 6" of chemically treated base material with 14' lanes.

The existing asphalt roadway shall be rehabilitated using the following sequence of operations: Any deteriorated areas of roadway shall be spot milled/inlayed by fine milling 1 ½" and inlayed with 1 ½" of 12.5mm, ST, Asphalt Pavement at the locations listed in the attached table. The mainline shall be profile milled using a 12 ft wide milling machine. A scrub seal shall then be placed on the mainline pavement at 28' wide. After the scrub seal has cured for five (5) calendar days, the roadway shall then be overlaid with 1" of Ultra-Thin Asphalt Pavement (UTAP). The section of Chip Pickering Road between the lanes of SR 854 and the section of Hickory Grove Rd running parallel to 854 shall also be scrub sealed and overlaid. Existing stop sign rumble bars shall be removed prior to profile milling.

The spot milled/inlayed locations shall have a fog seal applied to prevent the absorption of emulsions applied during the scrub seal. The fog seal placement shall be in accordance with Special Provision No. 907-414. The fog seal shall contain no rejuvenators. Tables showing these locations are attached.

The polymer modified asphalt rejuvenating scrub seal shall be placed on the full width of the travel lanes from BOP (22+05) to EOP (199+65) as per Special Provision No. 907-414 and the attached typical section. Prior to placing the scrub seal, the cracks in the roadway shall be cleaned using compressed air, or a comparable method, to remove any excess material. The existing thermoplastic pavement markings shall be removed prior to the scrub seal and the method of

removal shall be approved by the Engineer and shall be absorbed in other items. The thermoplastic pavement markings shall only be removed in the areas of the daily anticipated run for the scrub seal. If the Contractor elects to remove the entirety of the thermoplastic pavement markings contained in the project limits, then temporary pavement markings shall be required, and the cost shall be absorbed in other items. The scrub seal will not be applied to county roads, or driveway pads. Scrub Seal will be paid by the square yard of pavement surface to which it is applied under pay item No. 907-414-A001 and the bid price shall include all labor, materials, equipment, temporary markers, vegetation removal, thermoplastic removal, cleaning of the pavement surface, pre-sweeping, post-sweeping, removing excess aggregate, doing all the work involved in mixing, applying, and protecting the polymer modified asphalt rejuvenating scrub seal, and all incidentals necessary to complete the work. Prior to any sealing operation, the rectangular "Loose Rock" signs addressed in Special Provision No. 907-414 shall be installed and remain in place until all sealing operations are complete and the roadway is overlaid, or until directed by the Engineer. The "Loose Rock" signs shall be installed throughout the project limits in both directions at one (1) mile spacing beginning at the BOP and EOP as required. Pay for signs shown in the sign detail drawings shall be made under Pay Item No. 907-618-A001.

The scrub seal shall stop 50 feet from BOP, EOP, and bridge ends excluding the westbound bridge (Bridge #3.0A). Bridge 3.0B (eastbound) will not be overlaid and will follow the 50-foot transition detail; however, Bridge 3.0A (westbound) has previously been overlaid and will not follow the 50-foot transition detail. Bridge 3.0A (westbound) must be milled at 1 ½" before the scrub seal and ultra-thin overlay is applied to the bridge.

Local paved roads shall be overlaid with 1 ½" of 12.5-mm, ST, Asphalt Pavement from edge of existing mainline asphalt pavement to the end of MDOT maintenance or right-of-way or as directed. A milled tie in will be required at the end of local paved roads and shall adhere to the detail below.

Audible Thermoplastic Traffic Markings shall be installed at the edge stripe of the travel lanes as per Special Provision No. 907-626. Audible Thermoplastic Traffic Markings will be paid by the mile of stripe to which it is applied under pay item No. 907-626-C003 and the bid price shall include all labor, materials, equipment, and any other necessary items to install the Audible stripe in accordance with Special Provision No. 907-626.

Milling

Milling will not begin until an **approved** asphalt mix design has been received, nor until such time that, in the opinion of the Engineer, weather conditions have been consistently suitable enough to allow placement of the Asphalt Pavement after the milling operations.

The Reclaimed Asphalt Pavement (RAP) material removed by the milling operation shall become the property of the contractor.

Profile milling of the roadway shall be required prior to the application of the scrub seal and subsequent to the failed area repair. A twelve foot (12') wide milling machine shall be required for this operation.

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

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

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

Milling of driveway pads shall be keyed into the existing driveway at the tie in. Key Ins for driveway pads will be absorbed in other items bid.

Traffic will be allowed to travel on the mainline milled surface for 5 days, and the Contractor will be assessed a penalty of $5,000 per calendar day afterwards until the mainline milled surface is covered with the next lift of asphalt. Additionally, traffic will be allowed to run on all milled surfaces other than the mainline for 30 days unless otherwise stated. The additional allowance for the non-mainline milled surface is for the Contractor's convenience, and thus, the Contractor is responsible for any pavement failures or damage sustained during this period. Milling and paving of paved shoulders shall conform to Section 406.03.2 of the Standard Specifications.

Paving

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

Prior to mainline paving operations and subsequent to the repair of failed areas, spot milling shall be performed in the areas listed in the attached tables and at other areas as directed by the Engineer. Spot milling at a depth of 1 ½" inches and inlaying of 1 ½ inches shall be performed in the areas to remove cracked/oxidized asphalt. Payment for milling and paving will be made using the appropriate pay items. "Uneven Lanes" signs shall be used as required and as shown on the MDOT Standard Drawings.

The surface lift for failed area repair or concrete punchout repair shall have a maximum deviation of 3/8" as determined by a 10-foot straight edge. Any location that deviates more than this tolerance, as determined by the Engineer, shall be corrected at no additional cost to the State.

Publicly maintained roads and streets should be paved to the existing right-of-way and in accordance with the attached drawings.

Privately owned entrances shall be paved to the shoulder line per the included typical drawing unless otherwise directed. Pad dimensions shall match the existing lengths and widths unless otherwise directed. Pads shall be shaped horizontally and vertically to prevent excessive drop-offs. Any new driveway pads deemed necessary by the Engineer shall be placed according to specifications.

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

Granular Shoulder Material

Where applicable, the existing shoulders are to be raised to match the new pavement elevation by placing variable depth Granular, Crushed Stone Material. The shoulders shall be graded and pulled up daily to eliminate drop-offs more than 2 ¼". Placement of the granular material on the finished asphalt course shall not be permitted. The existing shoulder shall be scarified to allow incorporation of the new shoulder material. The material shall be bladed, rolled, and compacted to a finished slope of four percent (4%) in normal crown sections. Placement of this material shall be performed to provide a uniform and compacted shoulder with a minimum depth and width of material placed. Shoulders with adequate shoulder material in place shall be bladed to a slope of four percent (4%) in normal crown sections. The cost of blading will be an absorbed item and is to be included in the price of other items bid. Crushed concrete will not be allowed.

Granular Material, Crushed Stone shall be provided around driveway pads as directed to prevent shoulder drop-offs and shall be placed in a timely manner. Drop-offs exceeding 2 ¼" shall be corrected within 2 calendar days of the placement of the pad.

Any material excavated from the existing shoulder as a result of shoulder blading shall be used on the existing shoulder to match the new pavement elevation and any surplus material shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Engineer and will be an absorbed item. Material which cannot be suitably placed in adjacent areas and deemed to be excess excavation by the Engineer shall be removed from the project site. Payment for removal of excess material will be made using Pay Item No. 203-G002 Excess Excavation.

Temporary and Permanent Pavement Markings

Temporary traffic stripes will be required immediately after the milling, scrub seal, and/or required overlay and prior to opening the area to traffic. Temporary stripe is to be placed in the same location and configuration as the permanent stripe except that it may be offset as required for

milling and paving operations. If the temporary stripe is offset, the Contractor shall conduct operations in a manner to ensure the final temporary stripe is placed at the required location of the permanent stripe. If removal of temporary offset stripe is required to achieve the correct location and alignment of permanent stripe, the cost of removal will be absorbed in other items bid. Placing double temporary centerline will not be allowed.

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

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

All permanent striping will be thermoplastic, 90-mil thickness unless otherwise specified in Section 626.03.1.2. Edge lines will be placed to accommodate the lane widths shown on the attached applicable typical sections unless prevented by field conditions.

Per Section 626.03.1.2, a binder-sealer shall be applied to the concrete pavement or bridge surface prior to the placement of the thermoplastic material and shall be absorbed under the thermoplastic pay items. The type and amount of binder-sealer used shall adhere to the thermoplastic manufacturer's recommendations.

Transverse Stop Sign Rumble Strips (rumble bars) are to be placed in accordance with the attached detail and at the locations listed in the attached table.

Permanent raised pavement markers shall be installed on mainline and local public roads after completion of all paving operations. Two-way yellow permanent raised pavement markers shall be placed per layout prior to project (around west radius of crossover #1 and around east radius of crossover #12).

Payment for edge stripe on local roads shall be made under Pay Item No. 907-626-G004, Thermoplastic Detail Stripe, White when the length of said stripe is less than 150 feet when measured from the end of the radius. If the measured length is greater than 150 feet, then payment shall be made under Pay Item No. 907-626-C014, 6" Thermoplastic Edge Stripe, Continuous White.

Payment for centerline stripe on local roads shall be made under Pay Item No. 907-626-G005, Thermoplastic Detail Stripe, Yellow when the length of said stripe is less than 150 feet when measured from the stop bar. If the measured length is greater than 150 feet, then payment shall be made under Pay Item No. 907-626-F005, 6" Thermoplastic Edge Stripe, Continuous Yellow. Centerline Stripe shall be omitted on local roads whose width is less than 20 feet.

Guardrail

Guardrails are to be replaced at the locations shown on the attached table. Removal of guardrail shall consist of removal of bridge end section, w-beam/thrie beam, terminal end section, posts, and all other appurtenances. All guardrail removed is to be replaced the same day and prior to

reopening the adjacent lane of traffic. Voids created by the removal of posts, concrete anchors, footings, etc. shall be backfilled and compacted in accordance with Section 203 of the Standard Specifications.

The asphalt guardrail pad shall be milled and paved up to the face of the guardrail. The remaining asphalt guardrail pad behind the face of the guardrail shall be removed and shall be paid for using the milling pay item. The guardrail pad shall be reconstructed using crushed stone granular material and shall be a minimum of 4" in depth. If blading is required in order to meet the minimum depth, then said blading shall be an absorbed item and the excavated material shall be retained and used to raise the existing shoulder to match the new pavement elevation. Material which cannot be placed and blended in adjacent areas and deemed to be excess excavation by the Engineer shall be removed under Pay Item No. 203-G Excess Excavation. Prior to the placement of the Crushed Stone, a soil sterilant absorbed in other items bid shall be applied as per Section 616.03.2 and Geotextile Stabilization, Type V, Non-Woven installed underneath the limits of the crushed stone. The installed guardrail shall meet all requirements in order to be MASH compliant.

Guardrail lengths are based on flared terminal end lengths of 37.5 feet. If terminal of length other than this is used, an adjustment in w-beam length is required.

All dimensions and spacings shall be verified in the field by the Contractor prior to fabrication.

Permanent Signs

Object markers at bridge approaches and other locations are to be replaced as shown in the attached table. Removal of object markers shall be absorbed in the cost of other items bid.

Traffic Control

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

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

The Contractor shall daily, remove all debris from within the roadway and a 30-foot clear zone which, in the opinion of the Engineer, is a hazard to the traveling public. This activity shall begin with the beginning of work or the beginning of the contract time, whichever comes first. No direct

payment will be made for the debris removal; the cost is to be included in the prices of items bid on. Failure of the Contractor to remove the debris as prescribed herein shall be just cause for withholding the monthly progress estimate payment or suspending active operations until the debris is satisfactorily removed by the Contractor.

Temporary asphalt joints (aka paper joints) shall be employed at all locations requiring traffic to traverse an uneven, transverse, pavement joint. Paper joints shall be a minimum of 9 feet in length and for the full width of the milled/paved surface. Paper joints shall be adequately maintained.

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

Temporary Portable Rumble Strips, as described in Special Provision No. 907-619, shall be used in advance of each lane closure. Direct payment will not be made for this item and shall be considered absorbed under Pay Item No. 907-618-A001 Maintenance of Traffic.

Random Clearing

Random clearing shall be required at a distance of seventy feet (70') from the pavement edge or to the right-of-way line, whichever distance is less. In situations where the clearing limits will leave a strip of trees in the median 20 feet (20') wide or less, then said strip shall also be cleared. Tree limbing shall be required at a distance of up to thirty feet (30') vertically within the clearing limits.

The random clearing shall encompass trees four inches (4") or greater in diameter, scrubs, and overhang within the clearing limits. Trees shall either be cut flush with the ground line or if the Contractor elects to cut the tree above the groundline then the tree stump shall be ground flush with the ground line. The cut material shall either be hauled away from the project site or mulched in place to a depth of four inches (4") maximum in any one location. If the Contractor elects to utilize other means of disposal for the cut material, then said method shall be approved by the Engineer prior to commencement.

All areas disturbed by the Contractor shall be stabilized to the satisfaction of the Engineer at no additional cost to the state. The Contractor shall be responsible for any damage caused to above ground utilities, private property, and State owned property within the limits of the random clearing.

Miscellaneous Notes

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

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

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

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

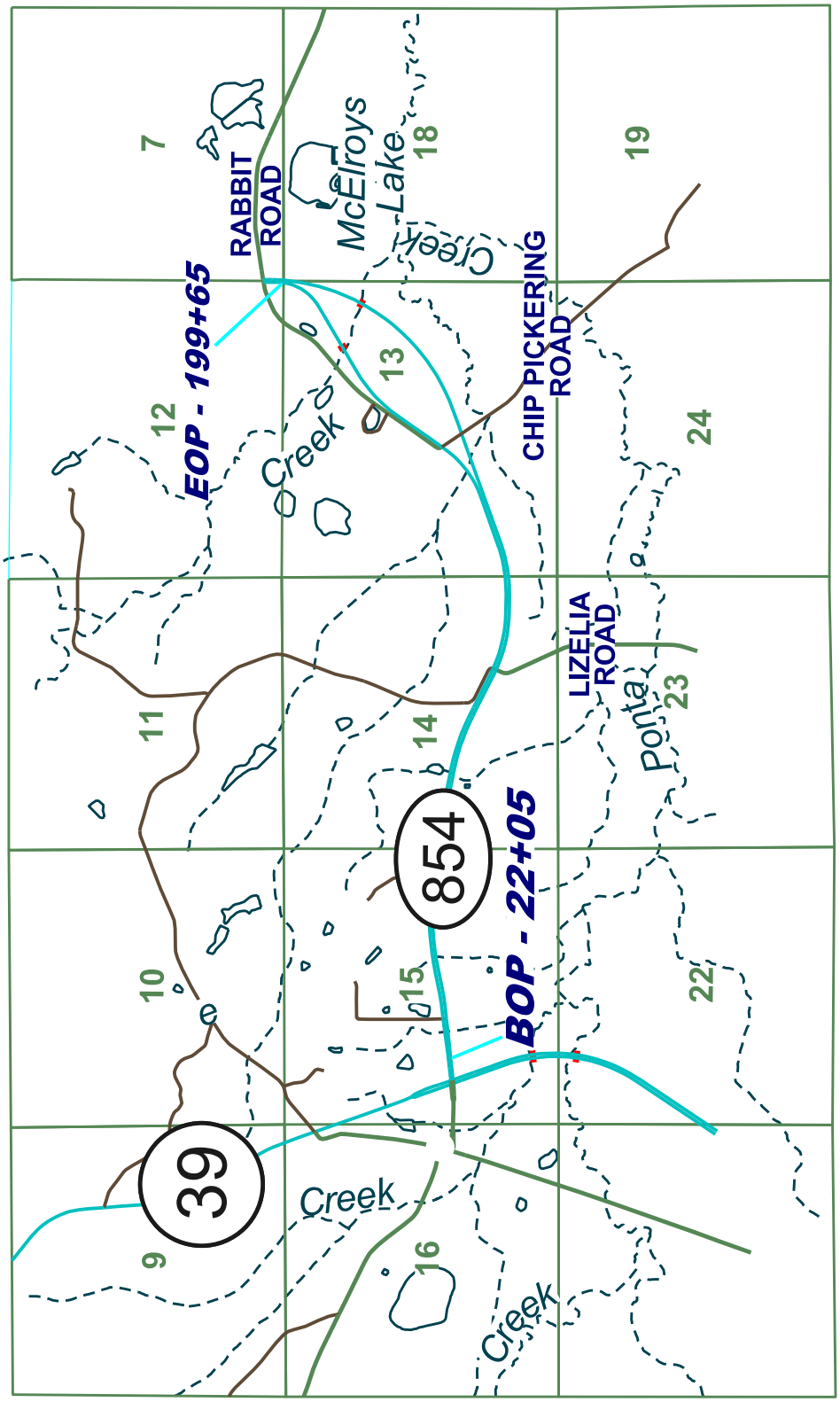
Prior to the final inspection, bridges, islands, and areas with curb shall be swept/cleaned. Care should be taken to prevent milled asphalt, asphalt debris, vegetative/granular debris, etc. from entering drainage structures or clogging other drainage ways. Disposal of material will not be measured for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

Box culverts and drainage channels listed in the attached table shall have the existing debris and sediment removed by the Contractor, and shall be paid for using Pay Item No.(s) 202-B096 Removal of Debris and Sand From Box Culvert, 10-Foot and Greater Width, and 202-B276 Removal of Debris from Drainage Channels. The applicable pay item shall be measured along the length of the box culvert or in the case of multiple barrels along the length of each barrel of the box culvert, and along the length of the drainage channel. The depth of sediment listed for each box culvert/drainage channel is for estimation purposes only, and the actual depth of the sediment shall be field verified by the Contractor prior to bidding the Project. The disposal of this material will not be measured for separate payment.

General epoxy repairs will be required at Bridge 3.0B due to the exposure of rebar on the diaphragms at Bent 1 as directed by the project engineer. Prior to placement of the mortar mix, the prepared surface shall be primed with neat epoxy. Epoxy shall be selected from the MDOT Approved Products List. The applicable pay item shall be measured by the square foot and shall be paid for using Pay Item No. 907-824-A003.

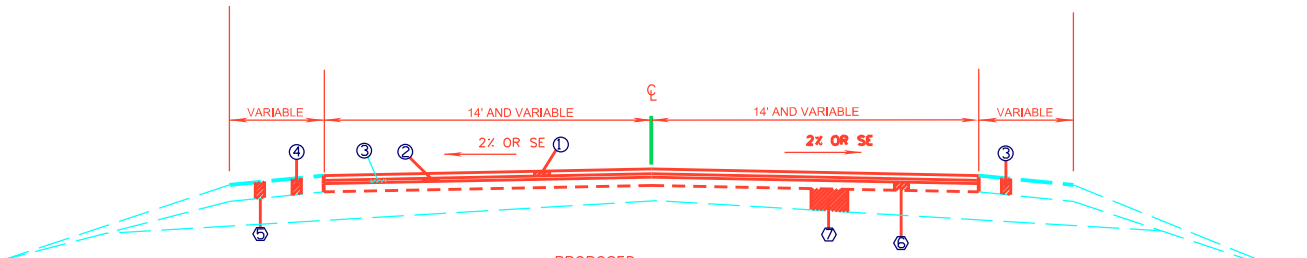
Paved ditches listed in the attached table shall be removed and re-installed by the Contractor and shall be paid for using Pay Item No.(s) 202-B063 Removal of Concrete Paved Ditch, and 221-A001 Concrete Paved Ditch. The limits of removal shall be determined by the attached table or by the project engineer. The applicable pay item shall be measured by square yards and cubic yards respectively.

LAUDERDALE COUNTY
STP-0456-00(006) / 109783-301000
SR 854



STP-0456-00(006) / 109783-301000
TYPICAL SECTION

Station 22+05 (BOP) TO 199+65 (EOP)
RT & LT LANES
MAINLINE

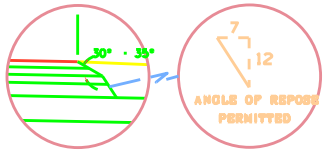


PROPOSED

① 1" ULTRA-THIN ASPHALT PAVEMENT (UTAP)
② PROFILE MILL
③ SCRUB SEAL
④ CRUSHED STONE AS NEEDED

EXISTING

⑤ 4" & VARIABLE GRANULAR MATERIAL IN PLACE
⑥ 4½" - 6 ⅞" OF VARIABLE HMA
⑦ 6" OF CHEMICALLY TREATED BASE MATERIAL

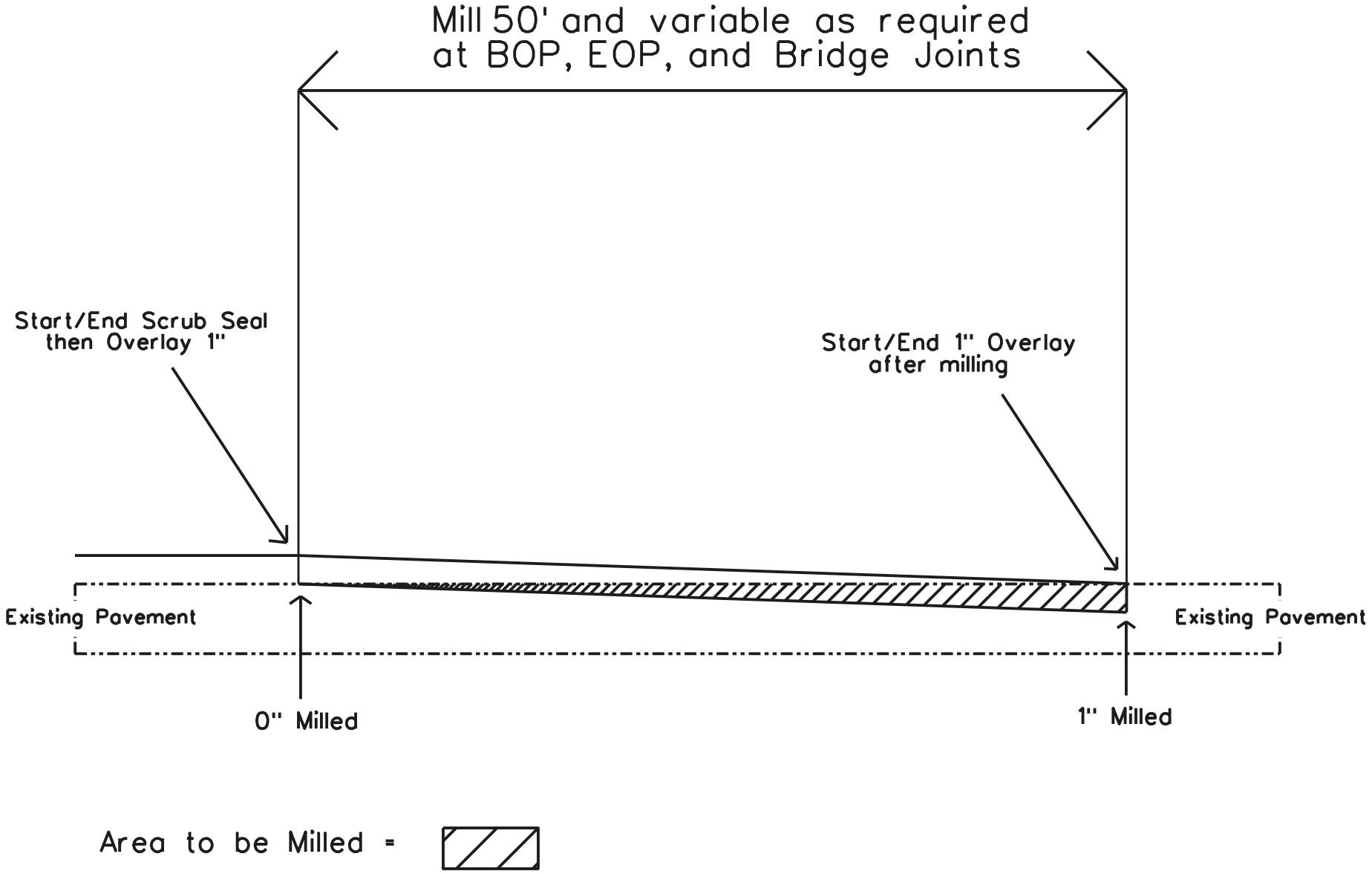


SAFETY EDGE REQ'D TOP 2 LIFTS ONLY (NOT A PAY ITEM)

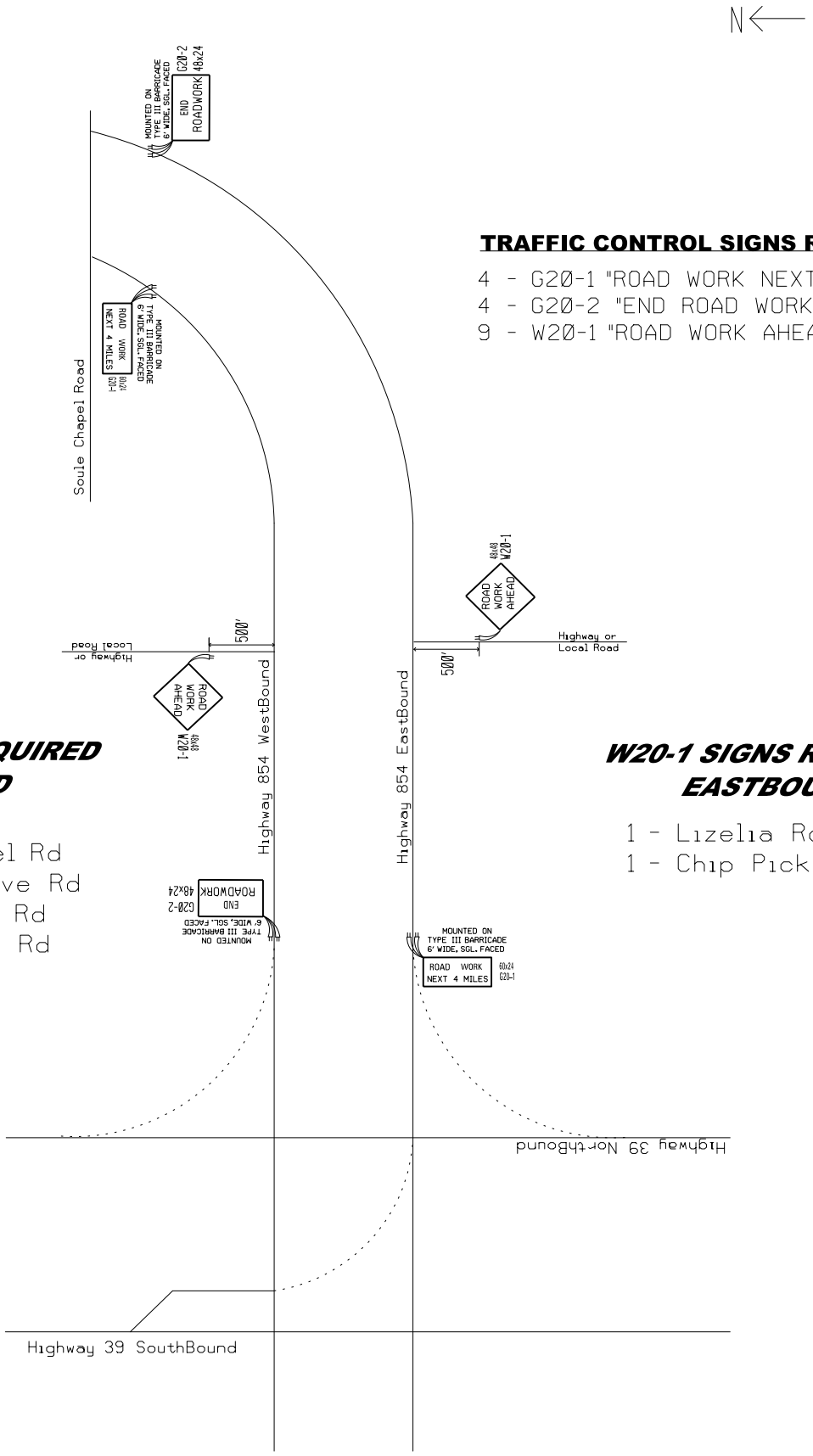
NOTES:

1. Repair any failed areas by 1.5" Mill and Inlay with 12.5mm, ST. Asphalt Pavement.
2. Fog seal shall be applied over all inlaid sections prior to scrub seal.
3. Scrub Seal shall terminate 50' from B.O.P./E.O.P. and Bridge Ends to allow overlay tie.

PAVING & MILLING TRANSITION DETAIL



CONSTRUCTION SIGNING DETAIL



TRAFFIC CONTROL SIGNS REQUIRED:

4 - G20-1 "ROAD WORK NEXT 4 MILES"
4 - G20-2 "END ROAD WORK"
9 - W20-1 "ROAD WORK AHEAD"

W20-1 SIGNS REQUIRED WESTBOUND

1 - Rabbit Rd
2 - Soule Chapel Rd
2 - Hickory Grove Rd
1 - E Telephone Rd
1 - W Telephone Rd

W20-1 SIGNS REQUIRED EASTBOUND

1 - Lizelia Rd
1 - Chip Pickering

NOTES: One (1) W20-1 "ROAD WORK AHEAD" Sign is required at each Local Road, Street, or Highway entering the Project.
G20-1 and G20-2 signs mounted on Type III Single Faced Barricades. Placed a minimum of 500' before the BOP and EOP.

SR 854 Random Clearing Locations - 109783/301000

Station #	-	Station #	Stations	Location	Notes/Remarks
23+00	-	24+00	1	RT/RT Lane	Clearing to Right of Way
28+00	-	29+00	1	RT/RT Lane	Clearing to Right of Way
29+00	-	31+00	2	RT/RT Lane	Clearing to Right of Way
33+00	-	38+00	5	RT/RT Lane	Clearing to Right of Way
38+00	-	40+00	2	RT/RT Lane	Clearing to Right of Way
56+00	-	61+00	5	RT/RT Lane	Clearing to Right of Way
64+00	-	80+00	16	RT/RT Lane	Clearing to Right of Way
90+00	-	91+00	1	RT/RT Lane	Clearing to Right of Way
91+00	-	92+00	1	RT/RT Lane	Clearing to Right of Way
92+00	-	96+00	4	RT/RT Lane	Clearing to Right of Way
100+00	-	101+00	1	RT/RT Lane	Clearing to Right of Way
103+00	-	104+00	1	RT/RT Lane	Clearing to Right of Way
105+00	-	120+00	15	RT/RT Lane	Clearing to Right of Way
122+00	-	139+00	17	RT/RT Lane	Clearing to Right of Way
140+00	-	141+00	1	RT/RT Lane	Clearing to Right of Way
141+00	-	147+00	6	RT/RT Lane	Clearing to Right of Way
150+00	-	182+00	32	RT/RT Lane	Clearing to Right of Way
182+00	-	184+00	2	RT/RT Lane	Clearing to 70' from edge of pavement
184+00	-	199+65	16	RT/RT Lane	Clearing to Right of Way
150+00	-	182+00	32	LT/RT Lane	Clearing to Right of Way
182+00	-	184+00	2	LT/RT Lane	Clearing to 70' from edge of pavement
184+00	-	193+00	9	LT/RT Lane	Clearing to Right of Way

TOTAL = **172** **Stations**

Station #	-	Station #	Stations	Location	Notes/Remarks
25+00	-	31+00	6	LT/LT Lane	Clearing to Right of Way
33+00	-	35+00	2	LT/LT Lane	Clearing to Right of Way
38+00	-	49+00	11	LT/LT Lane	Clearing to Right of Way
50+00	-	53+00	3	LT/LT Lane	Clearing to Right of Way
55+00	-	56+00	1	LT/LT Lane	Clearing to Right of Way
56+00	-	57+00	1	LT/LT Lane	Clearing to Right of Way
67+00	-	68+00	1	LT/LT Lane	Clearing to Right of Way
88+00	-	94+00	6	LT/LT Lane	Clearing to Right of Way
105+00	-	106+00	1	LT/LT Lane	Clearing to Right of Way
107+00	-	108+00	1	LT/LT Lane	Clearing to Right of Way
108+00	-	114+00	6	LT/LT Lane	Clearing to Right of Way
119+00	-	120+00	1	LT/LT Lane	Clearing to Right of Way
121+00	-	134+00	13	LT/LT Lane	Clearing to Right of Way
135+00	-	138+00	3	LT/LT Lane	Clearing to Right of Way
142+00	-	149+00	7	LT/LT Lane	Clearing to Right of Way
165+00	-	166+00	1	LT/LT Lane	Clearing to Right of Way
179+00	-	183+00	4	LT/LT Lane	Clearing to 70' from edge of pavement
189+00	-	193+00	4	LT/LT Lane	Clearing to Right of Way
156+00	-	179+00	23	RT/LT Lane	Clearing to Right of Way
179+00	-	183+00	4	RT/LT Lane	Clearing to 70' from edge of pavement
183+00	-	192+00	9	RT/LT Lane	Clearing to Right of Way

TOTAL = **108** **Stations**

Transition Milling @ 0" - 1"								
Lane	Begin	End	Length	Width	SF	Transition Milling (SY)	Asphalt For Tack Coat (GAL)	12.5mm, ST
Rt Lanes (BOP)	22+05	22+55	50	35.5	1775	197.22	19.7	11.09
Lt Lanes (BOP)	22+05	22+55	50	28	1400	155.56	15.56	8.75
Rt Lanes (Bridge)	181+15	181+65	50	40	2000	222.22	22.22	12.50
Lt Lanes (Bridge)	181+47	181+97	50	31	1550	172.22	17.22	9.68
Rt Lanes (EOP)	199+15	199+65	50	33	1650	183.33	18.33	10.31
Lt Lanes (EOP)	199+15	199+65	50	28	1400	155.56	15.56	8.75
Driveway Pads As Needed (Rt Lane)	22+05	199+65	N/A	N/A	7430.5	825.61	N/A	N/A
Driveway Pads As Needed (Lt Lane)	22+05	199+65	N/A	N/A	8294.5	921.61	N/A	N/A
County Roads (Rt Lane)	22+05	199+65	50	20	2000	222.22	N/A	N/A
County Roads (Lt Lane)	22+05	199+65	50	20	4000	444.44	N/A	N/A
TOTAL					25500.0	3500.00	108.61	61.07

Spot Milling @ 1.5" - Cracked Areas									
Lane	Begin	End	Length	Width	SF	Spot Milling (SY)	Asphalt For Tack Coat (GAL)	12.5mm, ST	Asphalt For FOG SEAL (GAL)
Crossover (Chip Pickering Rd)	149+00	149+50	10	45	450	50	5.0	5.74	0.63
Crossover (Chip Pickering Rd)	149+00	149+50	51	21	1071	119	11.9	13.66	1.50
TOTAL					1521	169	16.9	19.39	2.13

LAUDERDALE COUNTY
STP-0456-00(006) / 109783-301000

CONSTRUCTION SIGNS						
Sign	**DESCRIPTION**	**DIMENSIONS**	**SF**	**QUANTITY**	**TOTAL (<10 SF)**	**TOTAL (≥10 SF)**
G20-1	ROAD WORK NEXT 4 MILES	60" x 24"	10	4	0	40
G20-2	END ROAD WORK	48" x 24"	8	4	32	0
W20-1	ROAD WORK AHEAD	48" x 48"	16	9	0	144
				TOTAL:	**32 SF**	**184 SF**

BARRICADES				
PAY ITEM	**DESCRIPTION**	**LF**	**QUANTITY**	**TOTAL(LF)**
619-G4005	TYPE III BARRICADE, 6' WIDE, SINGLE FACED	6	8	48
			TOTAL:	**48 LF**

Guardrail Quantities

STATION	LOCATION (LT/RT)	GUARDRAIL (W-BEAM) (LF)	THRIE BEAM TRANS. SECT. (LF)	THRIE BEAM (LF)	FLARED TERMINAL END SECT. (EA)	TANGENT TERMINAL END SECT. (EA)	Cable Anchor TYPE I (EA)	BRIDGE END SECTION TYPE "A" (EA)	BRIDGE END SECTION TYPE "D" MODIFIED (EA)	DELINEATORS WHITE (EA)	DELINEATORS YELLOW (EA)	Type 3 Object Markers (EA)	GUARDRAIL REMOVAL (LF)	REMARKS BRIDGE #
147+00	RT/RT	137.5			1		1			6		1 (OM-3R)	179	2.3B
141+50	LT/RT	137.5			1		1				6	1 (OM-3L)	179	2.3B
144+00	LT/LT	137.5			1		1			6		1 (OM-3R)	179	2.3A
179+50	RT/RT	162.5			1				1	7		1 (OM-3R)	216	3.0B
179+50	LT/RT	162.5			1				1		7	1 (OM-3L)	217	3.0B
183+50	LT/LT	150			1			1		7		1 (OM-3R)	205	3.0A
183+50	RT/LT	150			1			1			7	1 (OM-3L)	205	3.0A
TOTAL =		1037.5	0	0	7	0	3	2	2	26	20	7	1380	
		L.F.	EA.	LF.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	LF.	

* REMOVAL OF ALL GUARDRAIL (BRIDGE END SECTIONS, W-BEAM, TYPE-I CABLE ANCHORAGE, TERMINAL END SECTIONS, ETC.) WILL BE PAID UNDER PAY ITEM 202-B REMOVAL OF GUARD RAIL.
* REMOVAL OF GUARDRAIL DELINEATORS ARE CONSIDERED INCIDENTAL TO THE REMOVAL OF GUARDRAIL AND WILL NOT BE MEASURED AS A SEPARATE PAY ITEM.
* ALL GUARDRAIL (METAL RAIL AND METAL POSTS ONLY) WILL BE RETAINED BY MDOT. WOODEN POSTS, ALL BLOCKOUTS, CONCRETE ANCHORS, ETC. WILL BE THE PROPERTY OF THE CONTRACTOR.
* TOTAL GUARDRAIL LENGTH IS BASED ON A TERMINAL END SECTION 37.5' LONG. IF A TERMINAL END SECTION OF A DIFFERENT LENGTH IS USED, THE LENGTH OF THE W-BEAM MAY HAVE TO BE ADJUSTED.

LAUDERDALE COUNTY
STP-0456-00(006) /
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Concrete Paved Ditch					
Station No.	Length	Width	Slope	Removal: SY	CY
141+80 - 142+00	20	6	4:1	13.33	1.5269
142+50 - 142+70	20	6	4:1	13.33	1.5269
			TOTAL:	**26.66**	**3.0538**

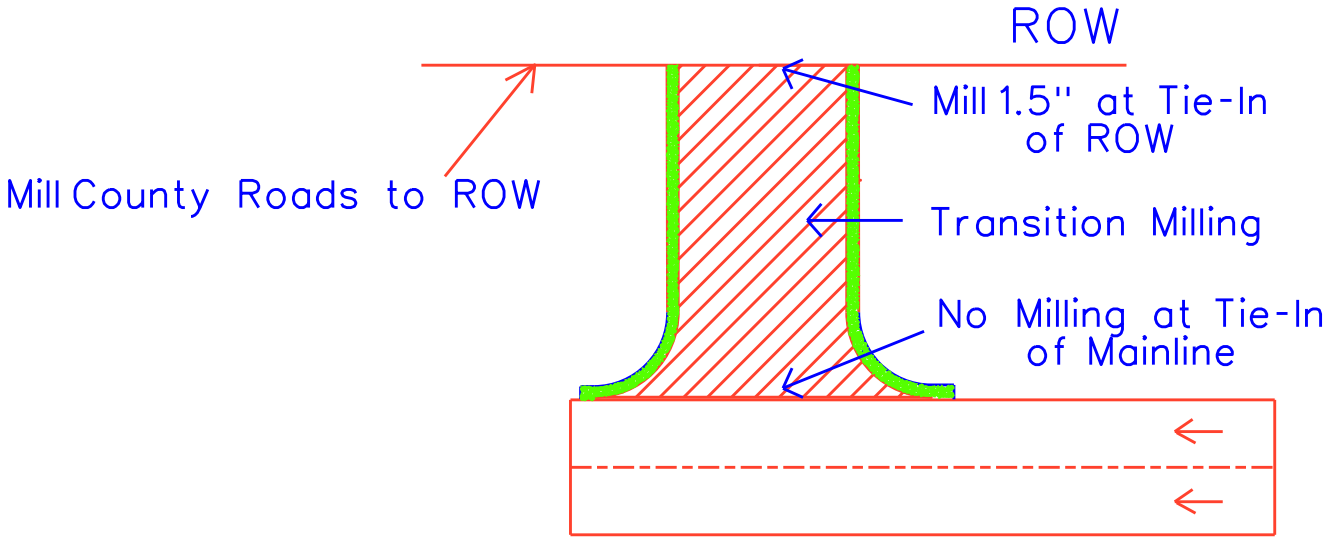
Toe Wall for Concrete Paved Ditch					
Station No.	Length	Width	Depth	CY	Notes
141+80	0.5	6	1.5	0.1667	Toe Wall paid as additional concrete for paved ditch
142+00	0.5	6	1.5	0.1667	
142+50	0.5	6	1.5	0.1667	
142+70	0.5	6	1.5	0.1667	
			TOTAL:	**0.6667**	

Drainage Structure Cleanout Quantities

Station	Box Width	Box Length	Depth of Sediment	Length of Channels	Total Length for Pay	Pay Item	Notes
142+70	N/A	N/A	4.5	32	32	202-B276 (Removal of Debris from Drainage Channel)	Median (Between Box Culverts)
142+40	N/A	N/A	4.5	11	11	202-B276 (Removal of Debris from Drainage Channel)	L/L
143+00	32	123	4.5	N/A	113	202-B096 (Removal of Debris and Sand from Box Culvert - 10' and Greater)	Rt Lane
142+25	32	172	4.5	N/A	172	202-B096 (Removal of Debris and Sand from Box Culvert - 10' and Greater)	Lt Lane

* Pay Item "Removal of Debris and Sand from Box Culvert" represents the length from end of apron to end of apron.

Milling Detail
County Roads



Notes:

-Transition Milling from 1.5" at Tie-In of ROW to 0" at Tie-In of Mainline.

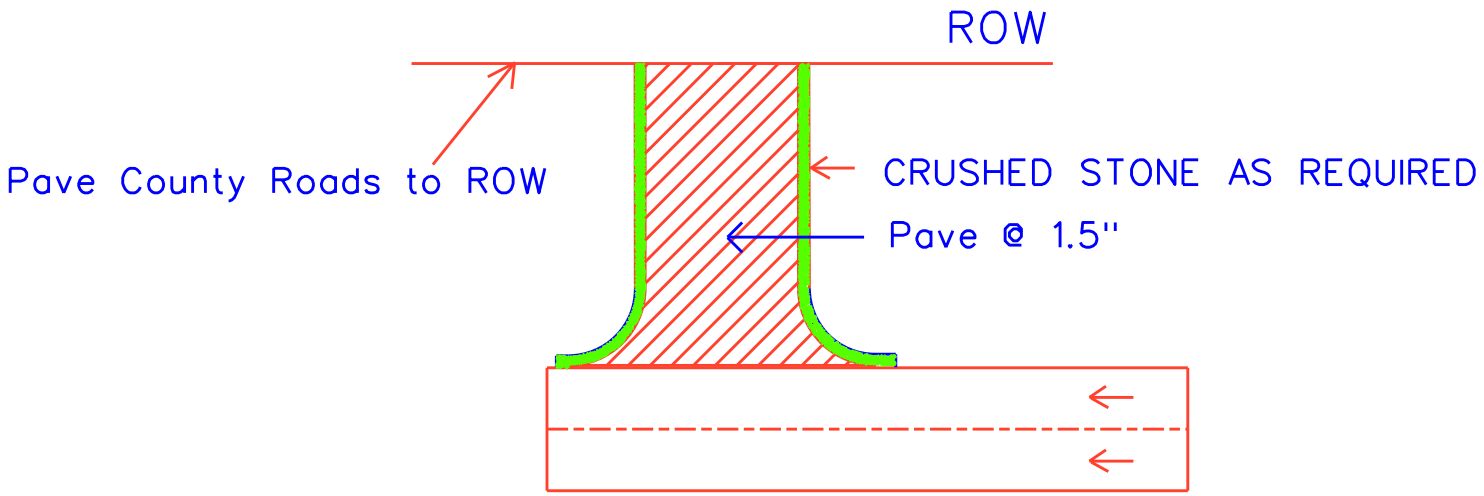
-Milling for transitions and ties will be absorbed in other items bid.

-Milling area =

COUNTY ROADS:

LIZELIA ROAD
CHIP PICKERING ROAD
W TELEPHONE ROAD
E TELEPHONE ROAD
HICKORY GROVE ROAD
SOULE CHAPEL ROAD

Paving Detail
County Roads



Notes:

-Paving limits of county/local roads tie-in at ROW..

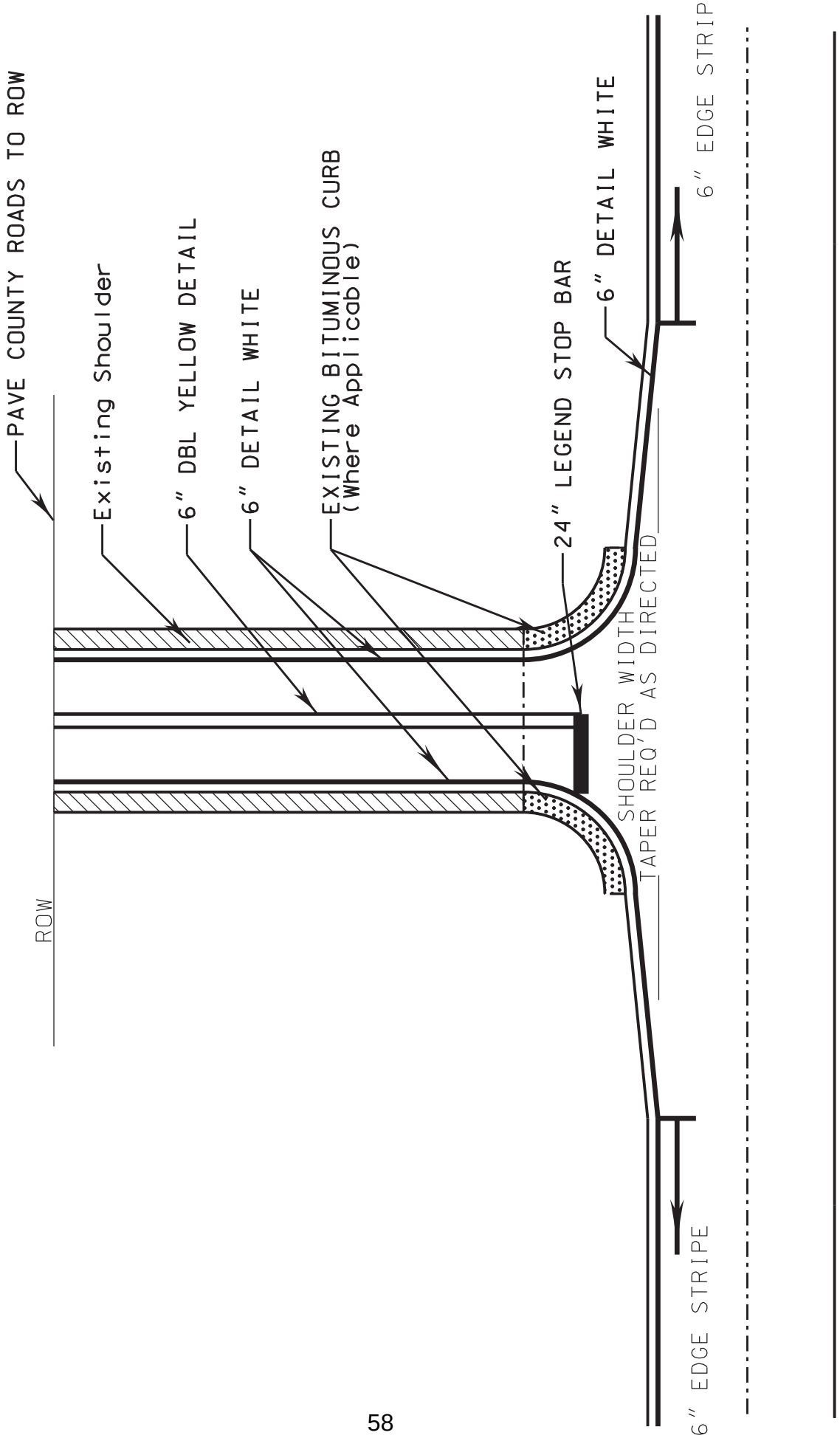
-Place 1.5" of 12.5mm, ST, Mixture to tie to mainline overlay.

Paving area =

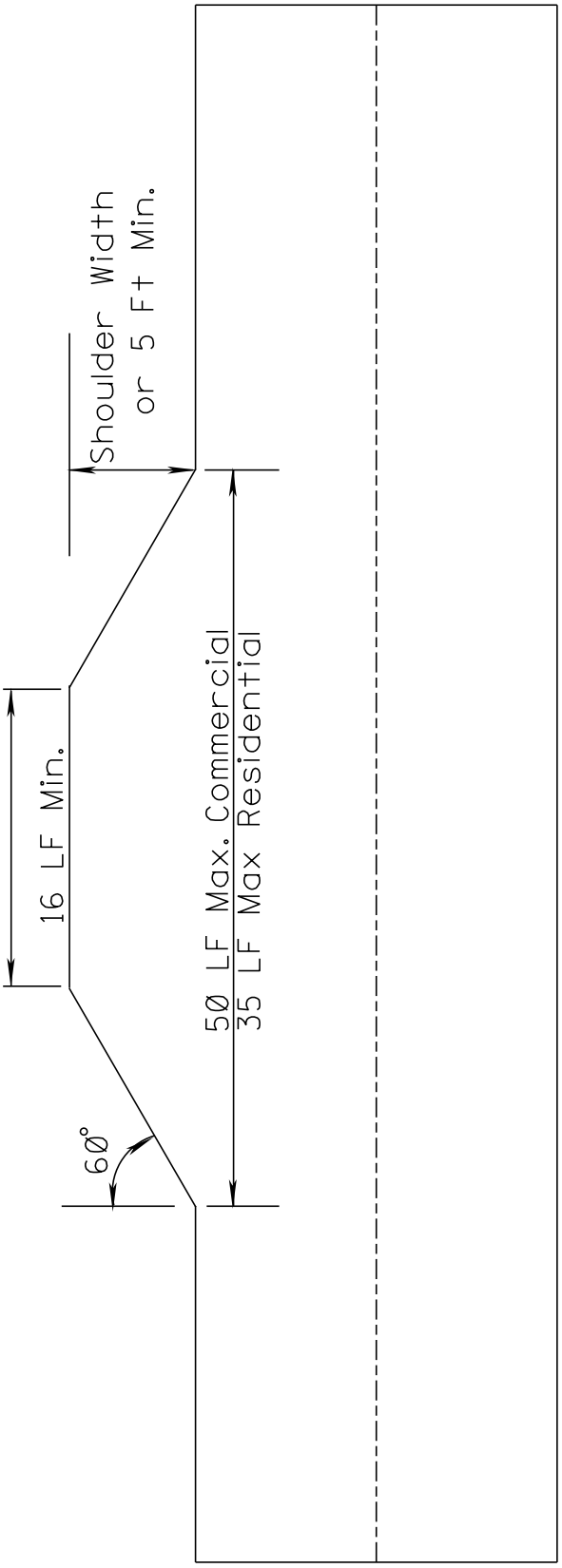
COUNTY ROADS:

LIZELIA ROAD
CHIP PICKERING ROAD
W TELEPHONE ROAD
E TELEPHONE ROAD
HICKORY GROVE ROAD
SOULE CHAPEL ROAD

STRIPE DETAIL - COUNTY ROADS



TYPICAL RAMP/PAD DETAIL



LAUDERDALE COUNTY
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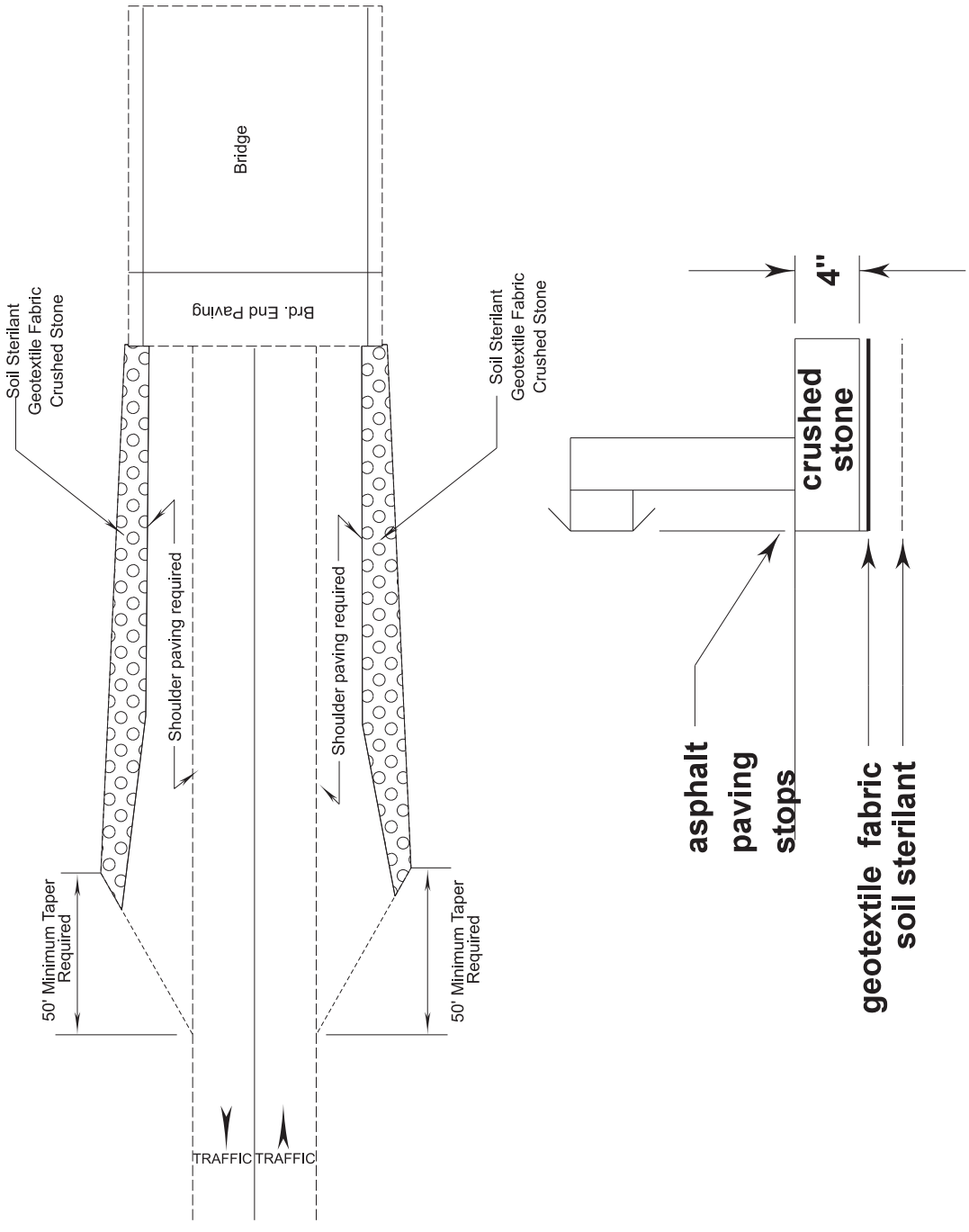


DESIGNED BY:	FMS CON: /	TYPICAL SECTION ROADSIDE CLEAR ZONES REQUIRED	SHEET ID
DETAILED BY:	PROJECT NO.:		SHEET NO.
CHECKED BY:	COUNTY:		
DATE:			

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MDOT

DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS - ROADSIDE CLEAR ZONE REQ'D

NOTE: THE PROJECT ENGINEER MAY REQUEST CLEARING IN OTHER LOCATIONS AS NEEDED.

3/13/2024 2:51:42 PM New Clearing limits Interstate.dgn PLAN SHEET

SHEET NO.	SHEET ID	TYPICAL SECTION ROADSIDE CLEAR ZONES REQUIRED	
		FMS CON: /	COUNTY:
		PROJECT NO.:	DESIGNED BY:
			DETAILED BY:
			CHECKED BY:
			DATE:

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

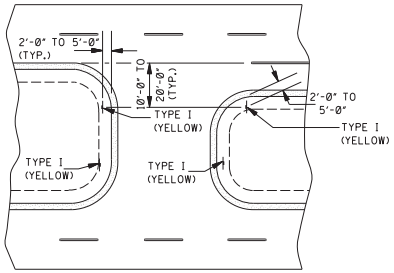
MDOT

TYPICAL SECTIONS - ROADSIDE CLEAR ZONE REQ'D

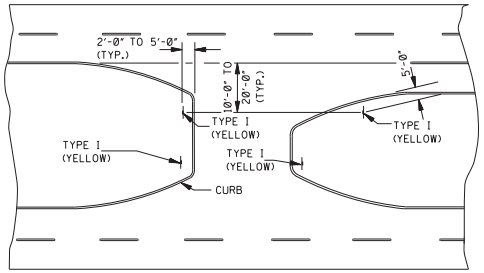
NOTE: THE PROJECT ENGINEER MAY REQUEST CLEARING IN OTHER LOCATIONS AS NEEDED.

3/13/2024 2:51:42 PM New Clearing limits Interstate.dgn PLAN SHEET

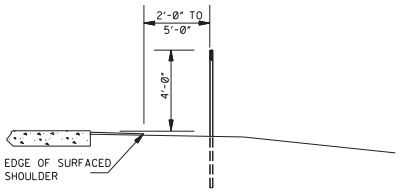
STATE	PROJECT NO.
MISS.	



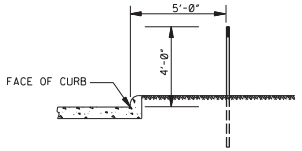
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OVER 42'–0"



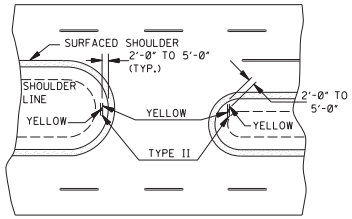
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OVER 42'–0"



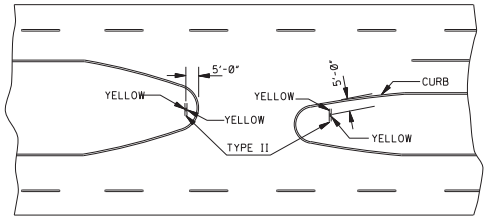
DELINEATOR MOUNTING ON CROSSOVER WITH USABLE SHOULDER



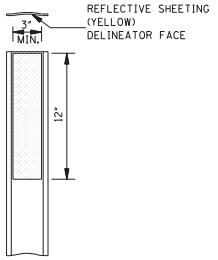
DELINEATOR MOUNTING ON CURBED CROSSOVER



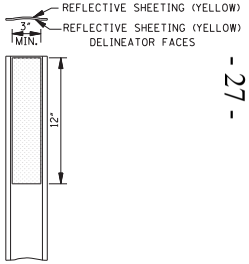
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OF 42'–0" OR LESS



TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OF 42'–0" OR LESS



DETAIL OF TYPE I FLEXIBLE POST DELINEATOR



DETAIL OF TYPE II FLEXIBLE POST DELINEATOR

NOTE: CARSONITE'S CURV-FLEX DELINEATOR POSTS ARE SHOWN. OTHER FLEXIBLE POSTS THAT HAVE BEEN APPROVED FOR LISTING IN THE DEPARTMENT'S "APPROVED SOURCE OF MATERIALS" MAY BE FURNISHED.

NOTE: PLACE DELINEATORS NO MORE THAN 20'-0" FROM EDGE OF TRAVEL LANES EDGES.

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. POST REQUIRING THE INSTALLATION OF A BASE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.
4. THE COLOR OF DELINEATORS SHALL BE THE COLOR OF THE ADJACENT EDGELINE PER MUTCD SECTION 3F.03.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

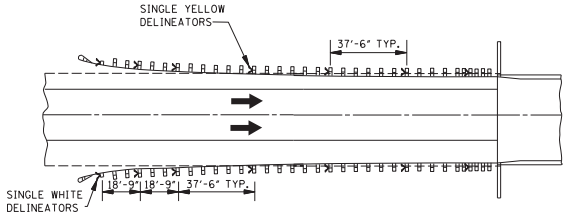
TYPICAL CROSSOVER DELINEATION

ISSUE DATE: AUGUST 01, 2017

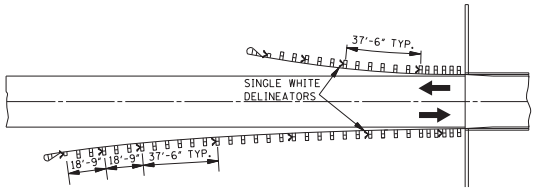
MDOT

WORKING NUMBER	SHEET NUMBER
MN-8B	6316

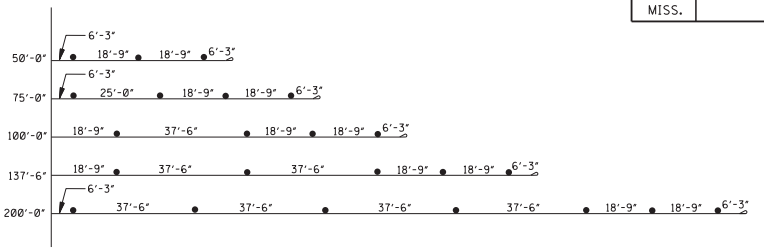
STATE	PROJECT NO.
MISS.	



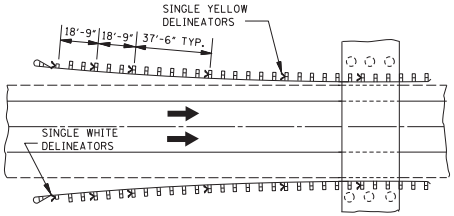
BRIDGE APPROACH INSTALLATION
(ONE–WAY TRAFFIC)



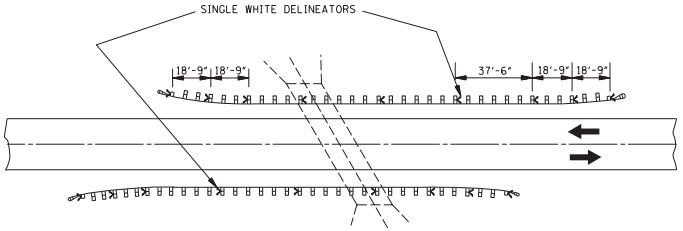
BRIDGE APPROACH INSTALLATION
(TWO–WAY TRAFFIC)



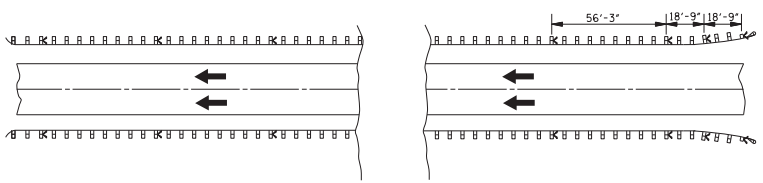
GRAPHIC SHOWING SPACINGS OF GUARDRAIL DELINEATORS
AT SOME COMMONLY USED BRIDGE APPROACHES



ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS
(ONE–WAY TRAFFIC)

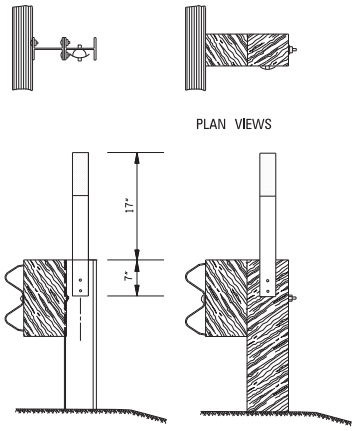


ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS
(TWO–WAY TRAFFIC)

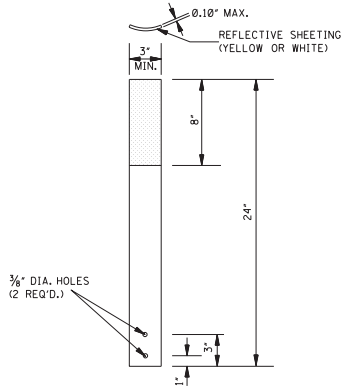


EMBANKMENT OR ROADSIDE OBSTACLE INSTALLATION–LENGTH GREATER THAN 250'
(ONE–WAY TRAFFIC)

NOTE: ONE-WAY TRAFFIC SHOWN. DELINEATOR SPACING FOR TWO-WAY TRAFFIC SIMILAR. DELINEATOR COLOR WILL BE THE SAME AS THE ADJACENT PAVEMENT EDGE MARKING. THE FIRST THREE (3) MARKERS WILL FACE TRAFFIC IN OFF LANE FOR TWO-WAY TRAFFIC AS SHOWN IN DRAWING FOR OBSTACLE INSTALLATION FOR TWO-WAY TRAFFIC.



TYPICAL FLEXIBLE POST DELINEATOR
GUARDRAIL INSTALLATION



DETAIL OF FLEXIBLE
GUARDRAIL DELINEATOR

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. DELINEATORS FOR GUARDRAIL SHALL BE MOUNTED ON FLEXIBLE POSTS AS FOLLOWS:
   THE DELINEATOR POSTS WILL BE FROM THE DEPARTMENTS "APPROVED SOURCE OF MATERIALS" AND WILL BE FASTENED TO GUARDRAIL POST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

Notice to Bidders No. 7495 -- Rev.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

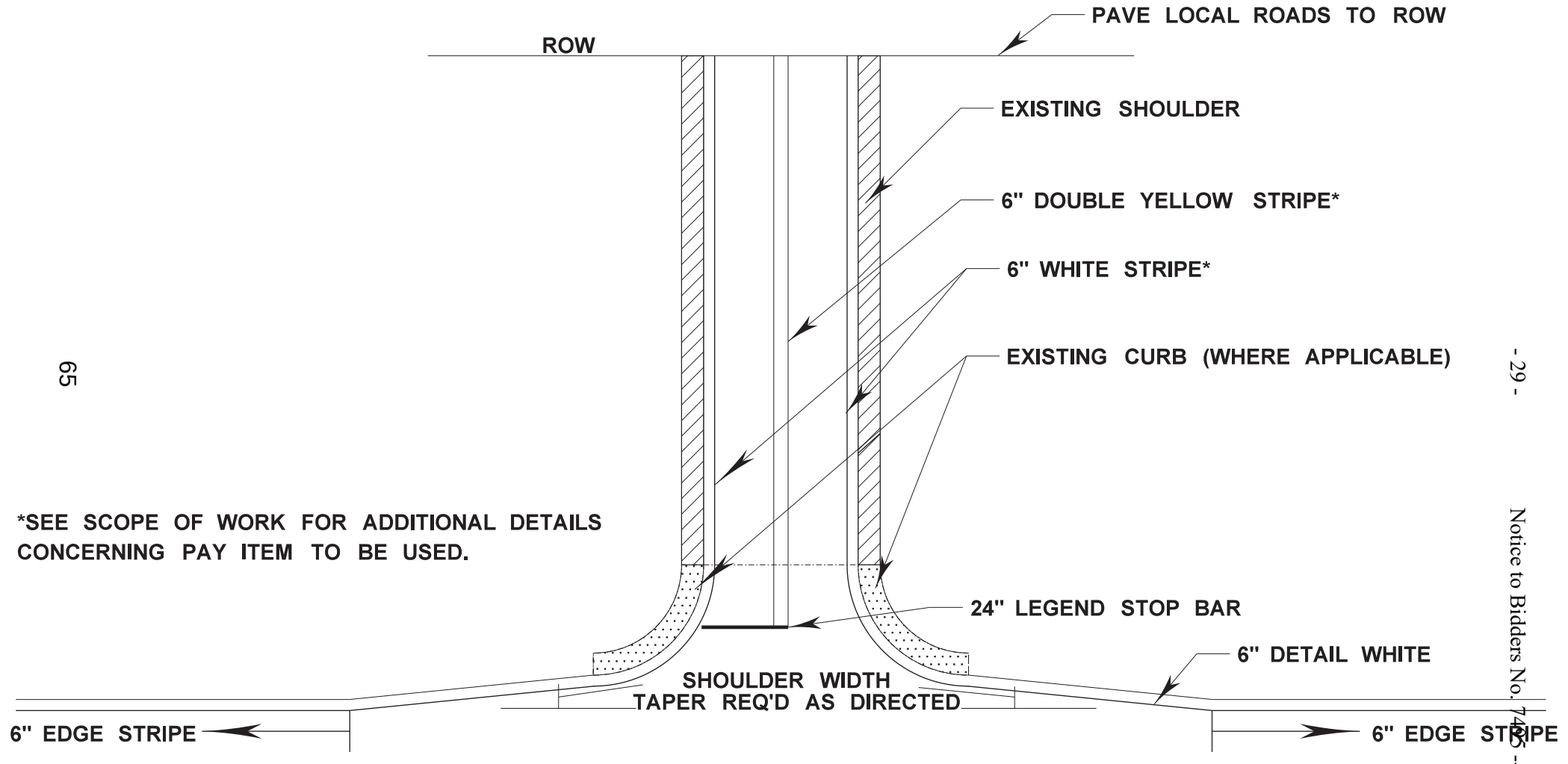
TYPICAL GUARDRAIL DELINEATION

ISSUE DATE: AUGUST 01, 2017

MDOT
WORKING NUMBER
GN-8C
SHEET NUMBER
6317

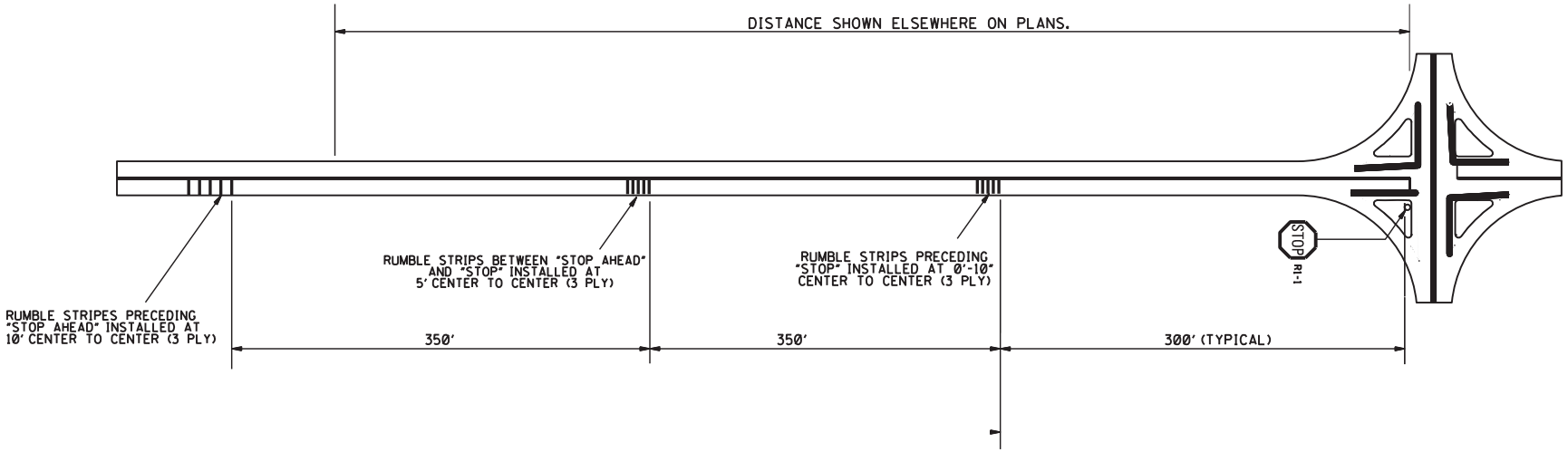
LAUDERDALE COUNTY - STP-0456-00(006) / 109783-301000

STRIPE DETAIL - LOCAL ROADS



NOTE: CENTERLINE STRIPE SHALL BE OMITTED ON LOCAL ROADS WHOSE WIDTH IS LESS THAN 20 FEET.

STATE	PROJECT NO.
MISS.	UPDATE



NOTES:
INSTALL RUMBLE STRIPS AS SHOWN:

1. ONE SET OF RUMBLE STRIPS APPROXIMATELY 250 FT. FROM "STOP AHEAD".
2. ONE SET OF RUMBLE STRIPS APPROXIMATELY 300 FT. FROM "STOP".
3. ONE SET OF RUMBLE STRIPS APPROXIMATELY HALFWAY BETWEEN FIRST AND LAST SET.
4. RUMBLE STRIPS TO BE THERMOPLASTIC (120 MIL/EACH, 360 MIL TOTAL).
5. FIVE RUMBLE STRIPS PER SET MINIMUM.
6. INSTALLATION MAY VARY DUE TO TERRAIN.
7. SIGNS SHOULD BE 48" FOR CHANNELIZED INTERSECTION, 36" FOR NON-CHANNELIZED INTERSECTION.
8. RUMBLE STRIPS TO BE PAID AS LEGEND, LF PER PLY.

* RUMBLE BARS TO BE PLACED AT DISTANCE SHOWN ABOVE UNLESS EXISTING BARS ARE PRESENT.
IF EXISTING BARS ARE PRESENT, REPLACEMENT WILL BE AT THE EXISTING LOCATION AND CONFIGURATION.

NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STOP SIGN RUMBLES

PROJ. NO.: UPDATE
COUNTY: UPDATE
FILENAME: SDSSR-1.dgn
DESIGN TEAM UPDATE CHECKED UPDATE DATE 8-7-17

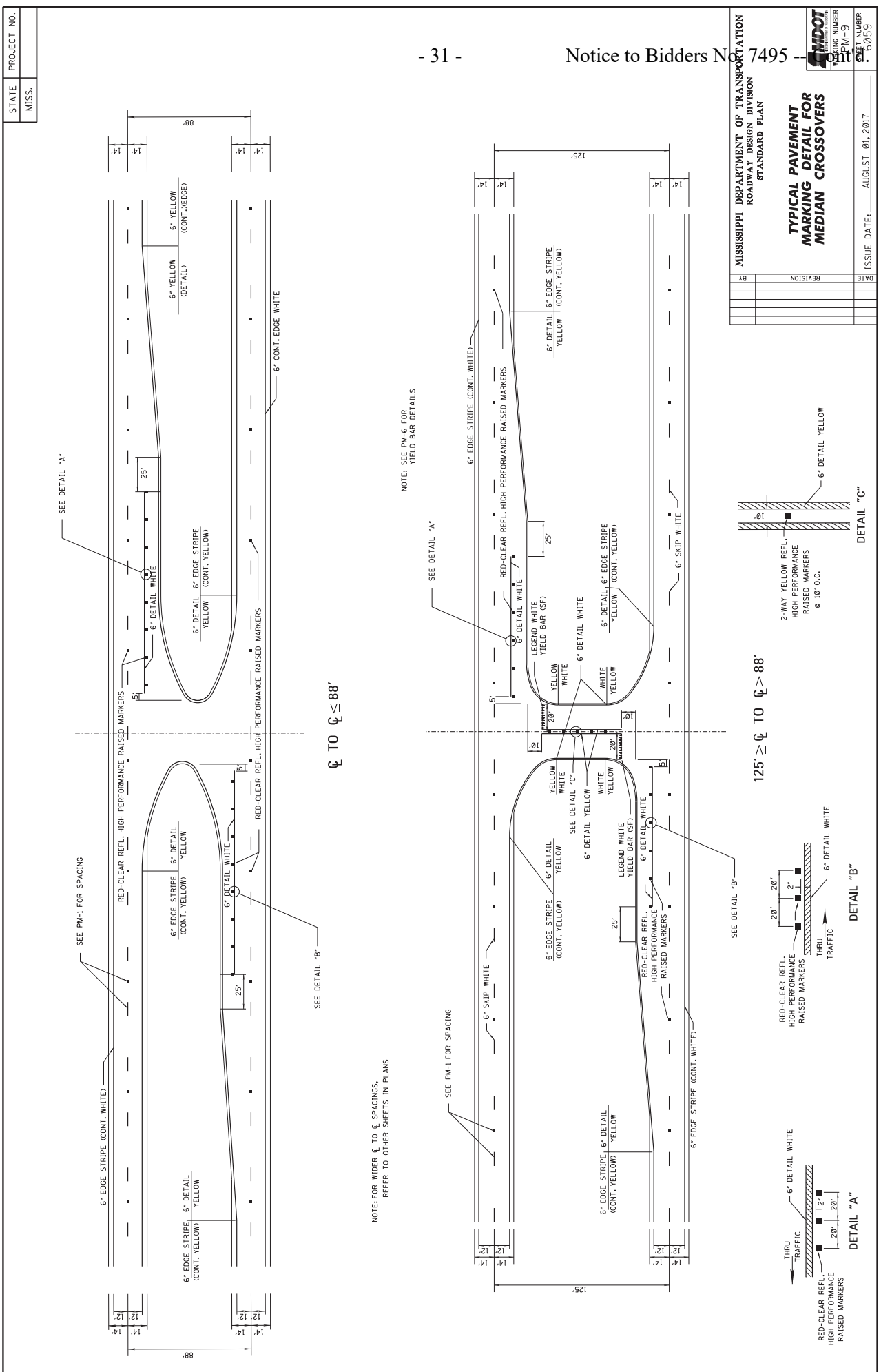
PRELIMINARY
NOT FOR CONSTRUCTION

WORKING NUMBER
SDSSR-1
SHEET NUMBER
PG

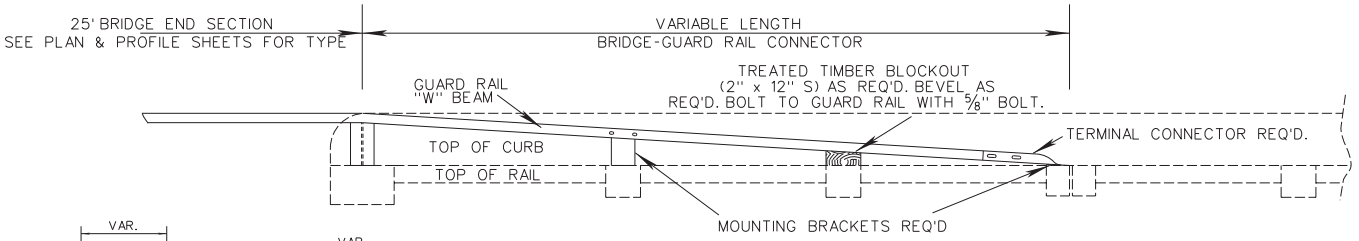
BY
REVISION
DATE

Notice to Bidders Nov 4, 2025 - Corr

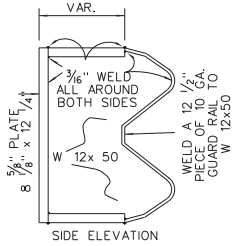
MODIFY: 2024 JOSEPH RUMBLE BAR DETAIL.DGN
PLAN PREPARED BY: MISSISSIPPI DEPARTMENT OF TRANSPORTATION


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PAVEMENT MARKING DETAIL FOR MEDIAN CROSSOVERS
REVISION
DATE
BY
ISSUE DATE: AUGUST 01, 2017
DRAWING NUMBER PM-9
SHEET NUMBER 6059
℄ TO ℄≤88'
125'≥℄ TO ℄>88'
SEE DETAIL "A"
SEE DETAIL "B"
SEE DETAIL "C"
SEE PM-1 FOR SPACING
NOTE: SEE PM-6 FOR YIELD BAR DETAILS
NOTE: FOR WIDER ℄ TO ℄ SPACINGS, REFER TO OTHER SHEETS IN PLANS
6" EDGE STRIPE (CONT. WHITE)
6" CONT. EDGE WHITE
RED-CLEAR REFL. HIGH PERFORMANCE RAISED MARKERS
6" DETAIL YELLOW
6" EDGE STRIPE (CONT. YELLOW)
6" DETAIL WHITE
6" YELLOW (DETAIL)
6" YELLOW (CONT. EDGE)
6" SKIP WHITE
LEGEND WHITE YIELD BAR (SF)
YELLOW WHITE
WHITE YELLOW
2-WAY YELLOW REFL. HIGH PERFORMANCE RAISED MARKERS @ 10' O.C.
DETAIL "A"
DETAIL "B"
DETAIL "C"
THRU TRAFFIC
RED-CLEAR REFL. HIGH PERFORMANCE RAISED MARKERS

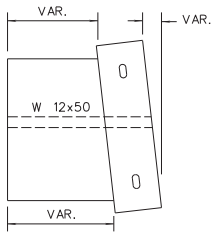
SPECIAL DESIGN
BRIDGE-GUARD RAIL CONNNECTOR



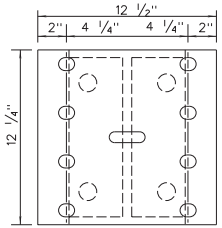
BRIDGE-GUARD RAIL CONNECTOR DETAIL



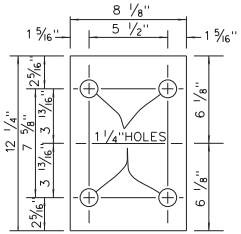
SIDE ELEVATION



TOP VIEW

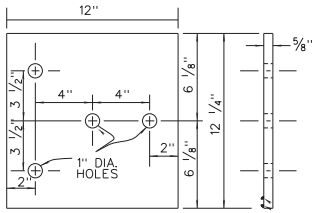


FRONT ELEVATION SHOWING 10 GA.
GUARD RAIL CONNECTION TO W12x50 BACK OF RAIL PLATE & BACK OF BRACKET

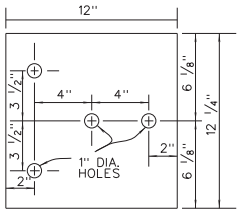


8 1/8" x 12 1/4" x 5/8" PLATE

DETAIL OF INTERMEDIATE BRACKET

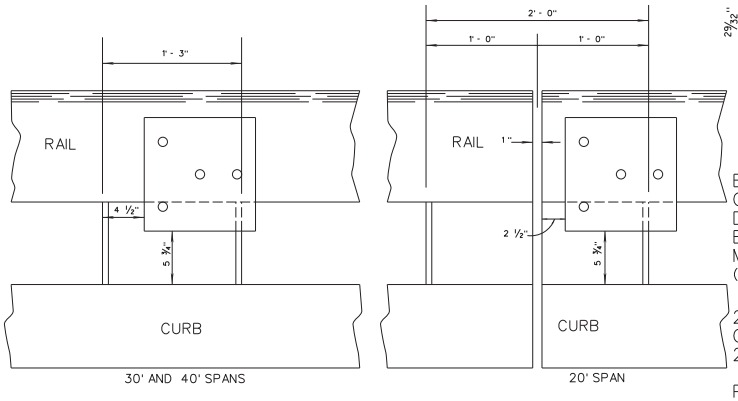


DETAIL OF FRONT PLATE



DETAIL OF BACK PLATE

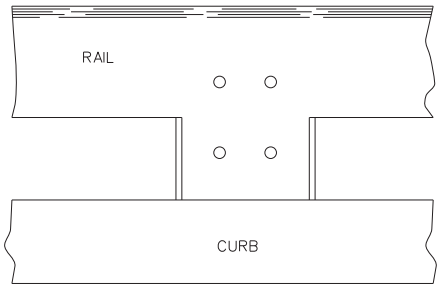
DETAIL OF TERMINAL CONNECTOR PLATE



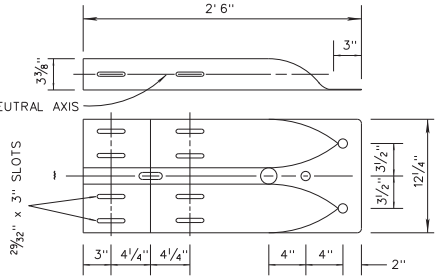
30' AND 40' SPANS

20' SPAN

DETAILS SHOWING PLACEMENT OF HOLES FOR CONNECTOR
(VIEWED FROM ROADWAY)



DETAILS SHOWING PLACEMENT OF HOLES FOR INTERMEDIATE BRACKET
(VIEWED FROM ROADWAY)



TERMINAL CONNECTOR
(AASHTO DESIGNATION : M180, CLASS B, TYPE 2)

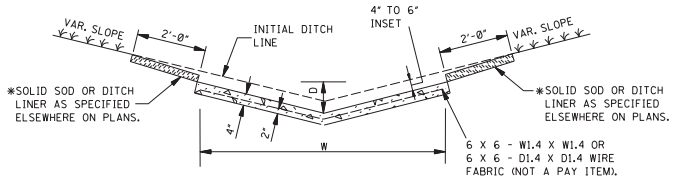
NOTES:

BRIDGE-GUARD RAIL CONNECTOR TO CONSIST OF ONE(1) 25' SECTION OF GUARD RAIL (FIELD CUT, DRILLED, AND GALVANIZED), FABRICATED BRACKETS AND PLATES, TERMINAL CONNECTOR, MOUNTING HARDWARE, AND TIMBER BLOCKOUT (COMPLETE IN PLACE).

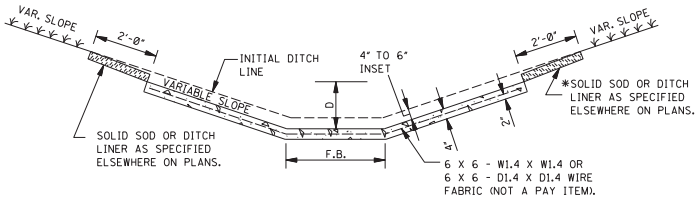
2 BRIDGE-GUARD RAIL CONNECTORS REQ'D ON BRIDGES 24' WIDE, 4 REQ'D ON BRIDGES 26' OR WIDER.

PRIOR TO FABRICATION, ALL DIMENSIONS FOR MOUNTING BRACKETS, CONNECTORS, BOLT LENGTH AND GUARD RAIL SHALL BE DETERMINED IN THE FIELD BY THE CONTRACTOR. DIMENSION SHOWN MAY VARY FROM ACTUAL FIELD CONDITIONS AT EACH SITE.

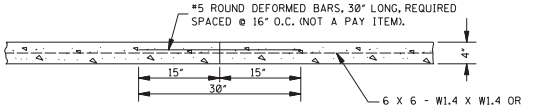
PAY ITEM NO. 606-G002 SPECIAL SECTIONS, GUARD RAIL BRIDGE END CONNECTION PER EACH



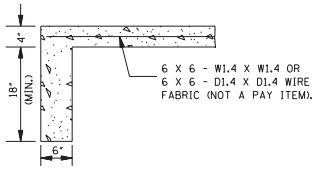
"V" TYPE SECTION



FLAT BOTTOM SECTION



DETAIL OF CONSTRUCTION JOINT



DETAIL OF TOE WALL

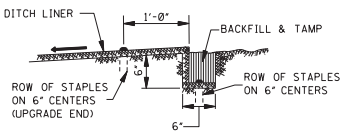
NOTE: TOE WALL REQUIRED UPSTREAM AND DOWNSTREAM.

CONCRETE PAVED DITCH

NOTES:

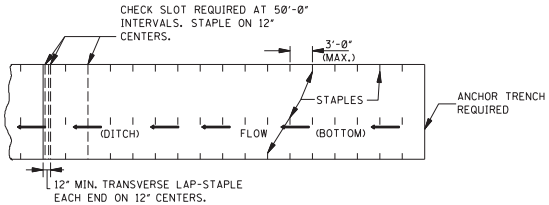
1. CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
2. DIMENSIONS D & W ARE AS FOLLOWS:
   D(MINIMUM) = 6"
   D(NOMINAL) = 9"
   W(MINIMUM) = 24"
3. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.

*4. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

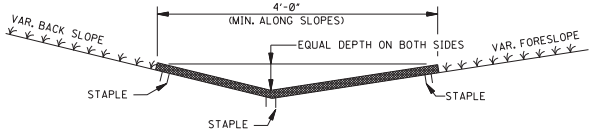


ANCHOR TRENCH DETAIL

NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING AND ENDING OF EACH AREA TO BE COVERED, EXCEPT DOWNSTREAM END ADJOINING A STRUCTURE.



PLAN

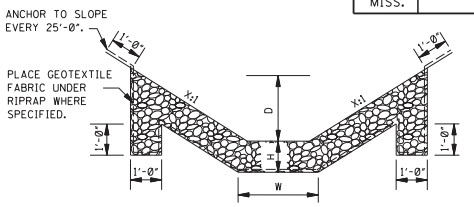


SECTION

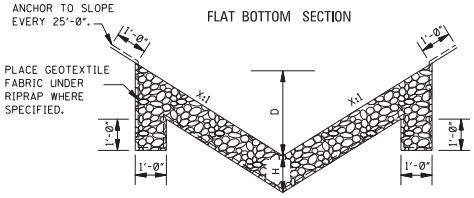
DITCH LINER TREATMENT

(EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER WILL BE VEGETATED PRIOR TO TREATMENT, UNLESS OTHERWISE INDICATED.



FLAT BOTTOM SECTION



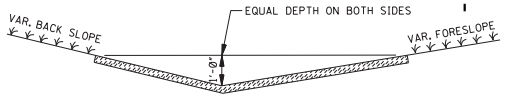
"V" TYPE SECTION

RIPRAP TREATMENT

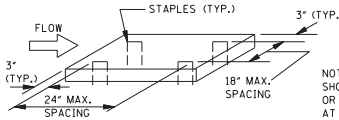
NOTES:

1. DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
2. THE RIPRAP SIZE AND MINIMUM DEPTH "H" FOR RIPRAP TREATMENT ARE AS FOLLOWS.

RIPRAP SIZE & MINIMUM DEPTH "H"	
H (in)	RIPRAP SIZE (lbs)
12"	100
18"	300



SOLID SOD TREATMENT



NOTE: SOLID SOD (STRIPS OR BLOCKS) SHOULD BE STAPLED, PINNED, TIED OR STAKED AT THE FOUR CORNERS OR AT THE MAXIMUM SPECIFIED SPACING.

GENERAL NOTE:

1. FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER.

DITCH LINER
SOLID SOD
CONCRETE PAVED DITCH
RIPRAP

STATE	PROJECT NO.
MISS.	

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

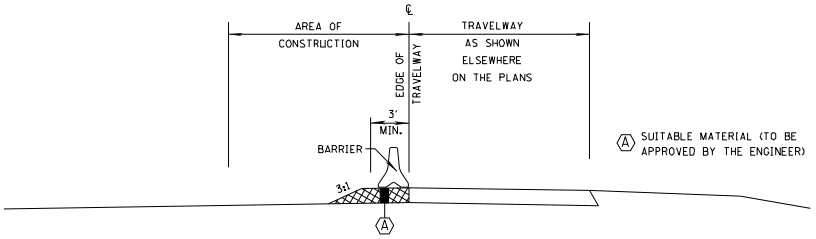
DETAILS OF TYPICAL DITCH TREATMENTS

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER DT-1
SHEET NUMBER 6123

Notice to Bidders No. 7495 -- Rev. 1.

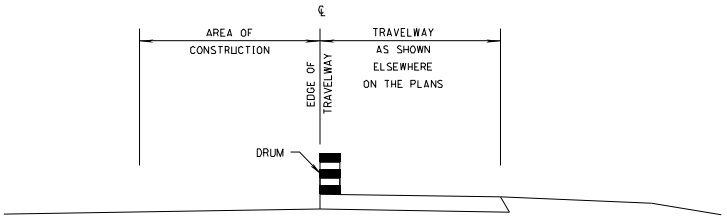
STATE	PROJECT NO.
MISS.	



ELEVATION VIEW FOR POSITIVE BARRIER

NOTES:

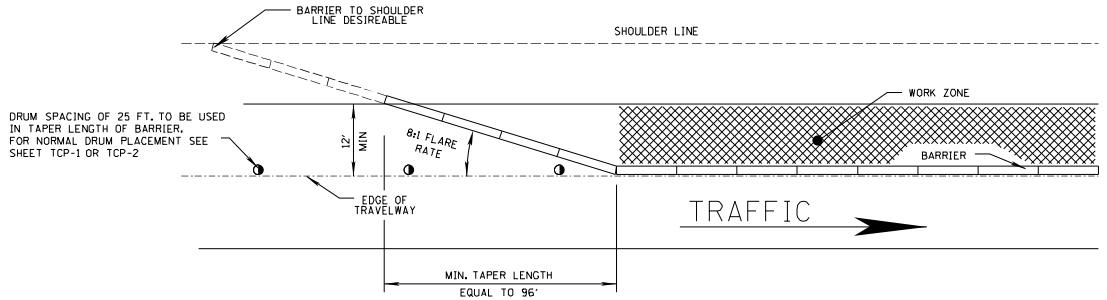
1. POSITIVE BARRIER IS REQ'D IN THE AREA OF OPEN PUNCH OUTS THAT ARE WITHIN SIX (6) FEET OF THE TRAVELWAY WHENEVER ACTUAL REPAIR WORK IS NOT BEING PERFORMED WITHIN THE LANE CLOSURE.
2. MATERIAL USED TO SUPPORT POSITIVE BARRIER MUST BE AT SAME ELEVATION AS PAVEMENT IN ADJACENT TRAVELWAY.
3. DELINEATORS REQUIRED ON ALL NON-REFLECTIVE BARRIER, AS SHOWN ON WORKING NO. CMB-3.



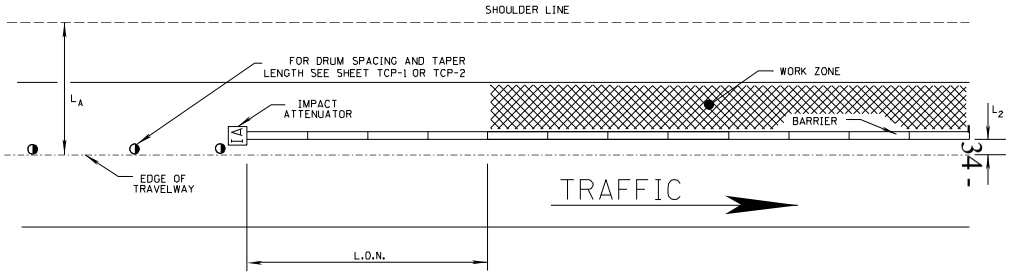
ELEVATION VIEW FOR DRUM

NOTES:

1. WHILE WORK IS BEING PERFORMED WITHIN THE LANE CLOSURE, DROP-OFFS MUST BE PROTECTED WITH DRUMS, ETC. IN EMERGENCIES EXCAVATED SECTION MAY BE BACKFILLED WITH GRANULAR MATERIAL, STONE OR OTHER APPROVED MATERIAL TO AVOID OVERNIGHT DROP-OFFS.
2. LANE CLOSURES WITH OPEN PUNCH OUT AREAS MAY NOT BE LEFT UNATTENDED WHEN DRUMS ARE BEING USED FOR LANE CLOSURE



DETAIL OF POSITIVE BARRIER WITH TAPER



DETAIL OF POSITIVE BARRIER WITH IMPACT ATTENUATOR

NOTES:

1. LENGTH OF NEED, L.O.N. = $\frac{L_R(L_A - L_2)}{L_A}$

WHERE: L_A = LATERAL EXTENT OF THE AREA OF CONCERN
L_R = RUNOUT LENGTH
L_2 = LATERAL OFFSET FROM EDGE OF TRAVELED WAY TO BARRIER.

2. RUNOUT LENGTH (L_R) IS TO BE DETERMINED USING THE FOLLOWING TABLE:

RUNOUT LENGTH (L_R) GIVEN TRAFFIC VOLUME (ADT) (ft)				
DESIGN SPEED (mph)	OVER 10,000 veh/day	5,000-10,000 veh/day	1,000-5,000 veh/day	UNDER 1,000 veh/day
70	360	330	290	250
60	300	250	210	200
50	230	190	160	150
40	160	130	110	100
30	110	90	80	70

GENERAL NOTES:

1. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER OTHER BID ITEMS.
2. FOR DETAILS OF DRUM PLACEMENT SEE OTHER TRAFFIC CONTROL PLANS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

LANE CLOSURE DETAILS FOR GREATER THAN 3 INCH DROPOFF

PROJ. NO.:
COUNTY:
FILENAME: SDTCP-C.DGN
DESIGN TEAM UPDATE CHECKED UPDATE DATE UPDATE

REVISION BY
DATE

WORKING NUMBER
SDTCP-C
SHEET NUMBER

Notice to Bidders No. 7495 -- Contract ID 220034 -

PLAN
PROJECT DEVELOPMENT DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
MKODIVY 002.00 AMPM DGN FILENAME

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7496 **CODE: (SP)**

DATE: **11/20/2025**

SUBJECT: **Underground Utilities**

PROJECT: **STP-0456-00(006) / 109783301 – Lauderdale County**

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

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

The contacts for MDOT utility lines are as follows:

Underground Power Lines:
Michael Lee – 601-683-3341 – mlee@mdot.ms.gov
Billy Coward – 601-683-3341 – bcoward@mdot.ms.gov

Underground Communication Lines:
Kerby McFarland – 601-359-7450 – kmcfarland@mdot.ms.gov
Steven Newell – 601-359-7450 – snewell@mdot.ms.gov
Henry Lewis – 601-359-1454 – hlewis@mdot.ms.gov

Underground Signal Lines:
Amrik Singh – 601-359-1454 – asingh@mdot.ms.gov
Kenneth Welch – 601-359-1454 – kwelch@mdot.ms.gov

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 7497 **CODE: (SP)**

DATE: 11/20/2025

SUBJECT: Temporary Construction Signs

PROJECT: STP-0456-00(006) / 109783301 – Lauderdale County

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

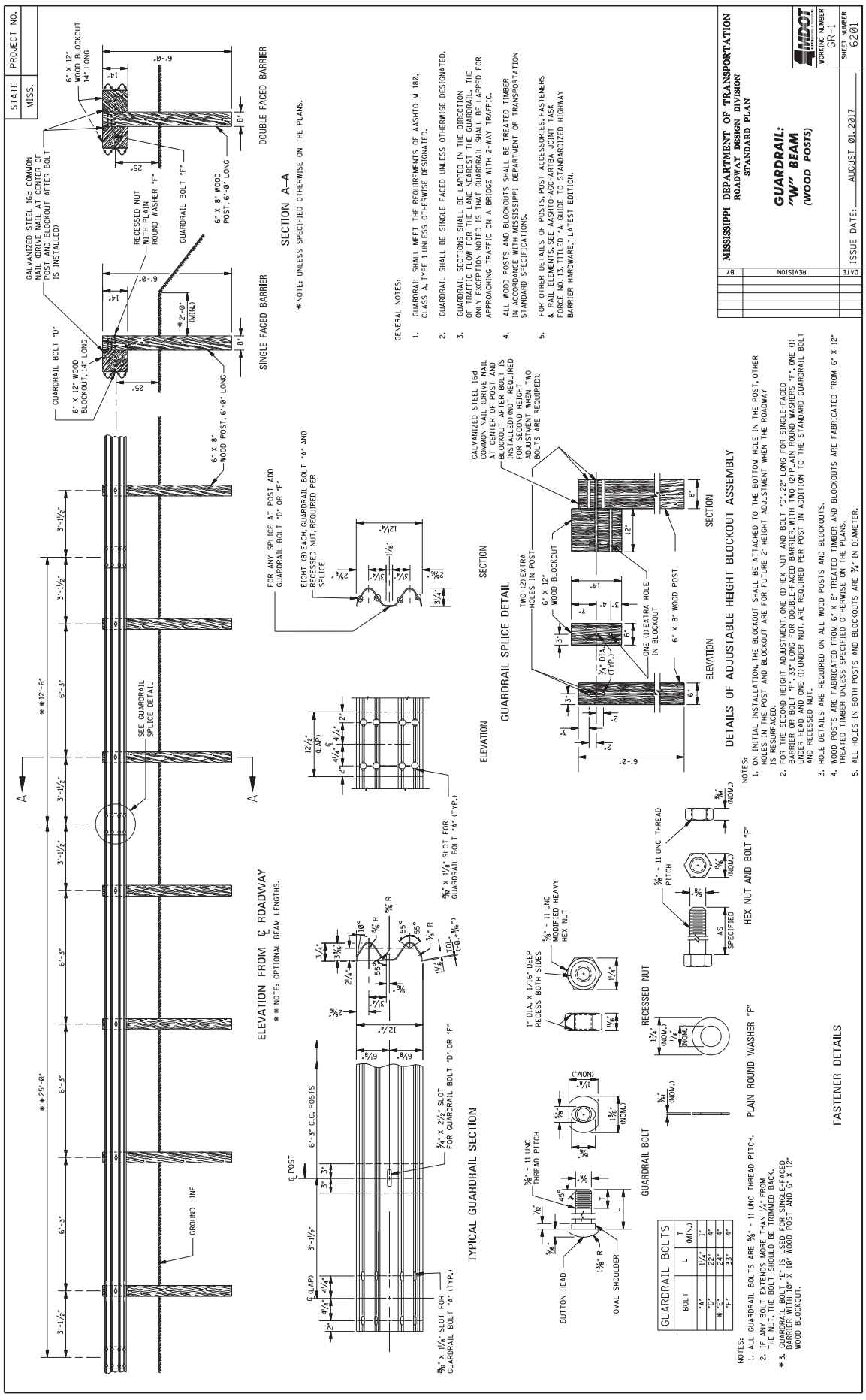
Should the Bidders elect to install Temporary Construction Signs by first driving short u-channel sections and then bolting the longer, correct height u-channel sections to them, the Bidders are advised that these short sections shall be a minimum of five (5) feet from the ground level when driven and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

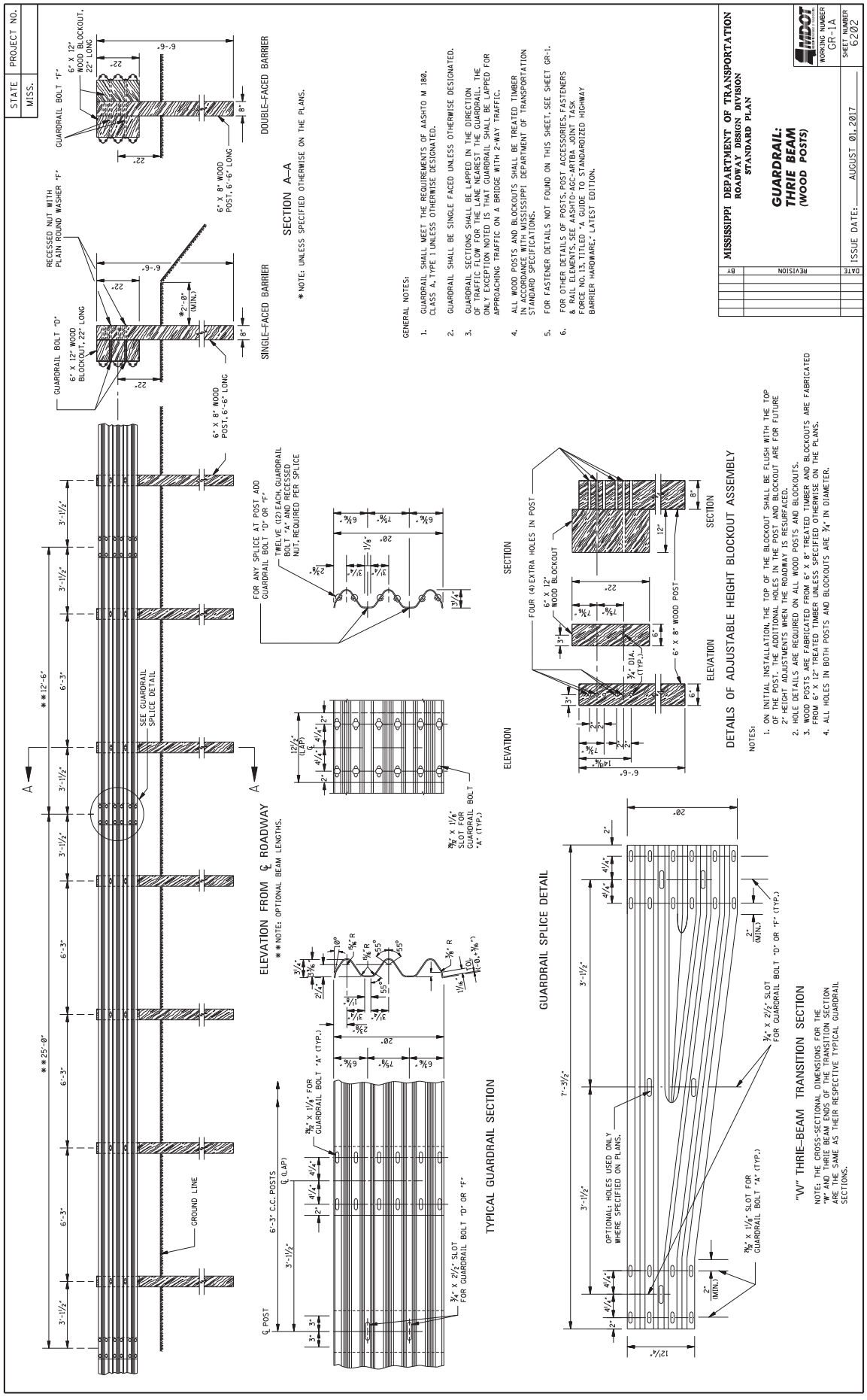
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

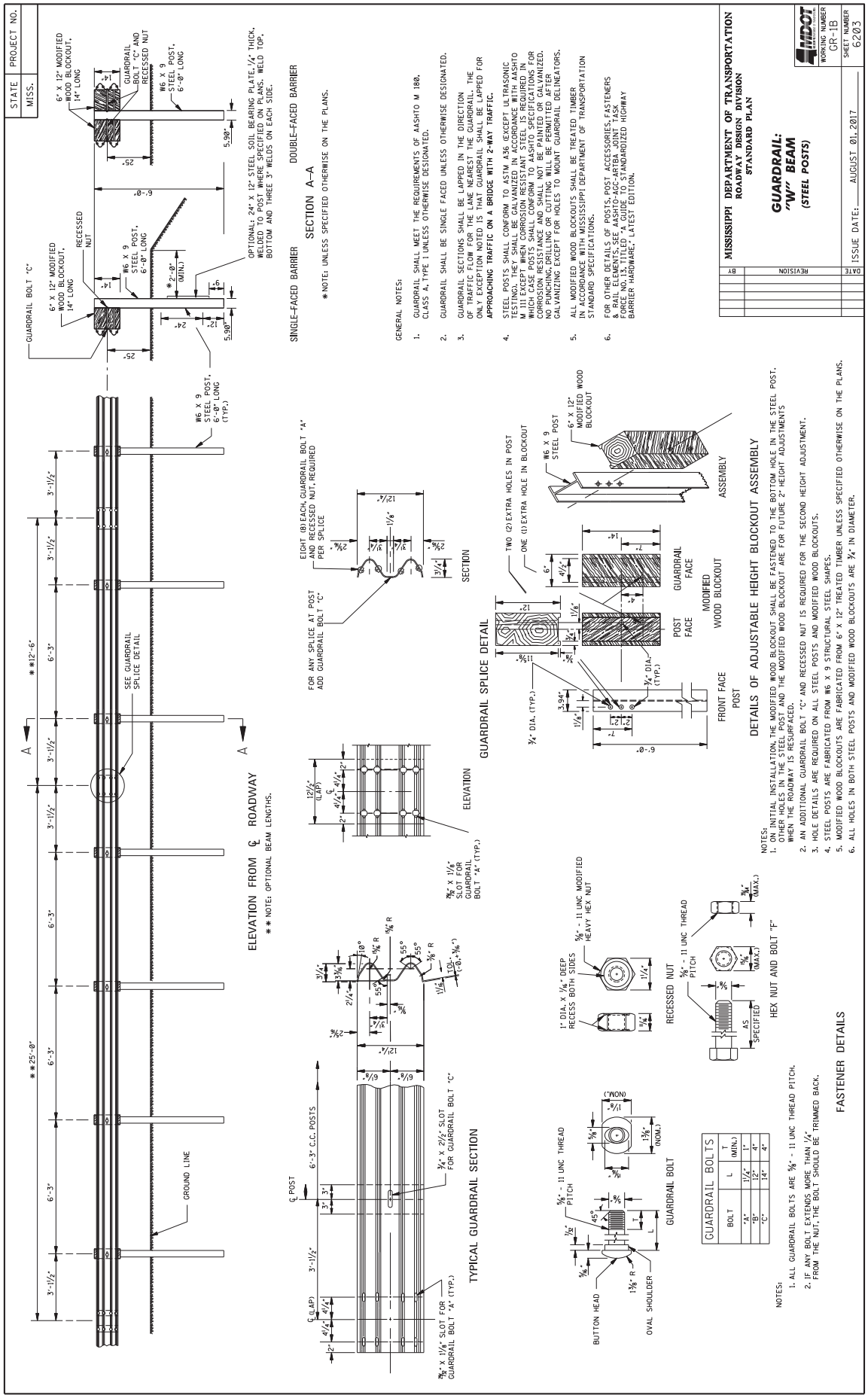
SUPPLEMENT TO NOTICE TO BIDDERS NO. 7624

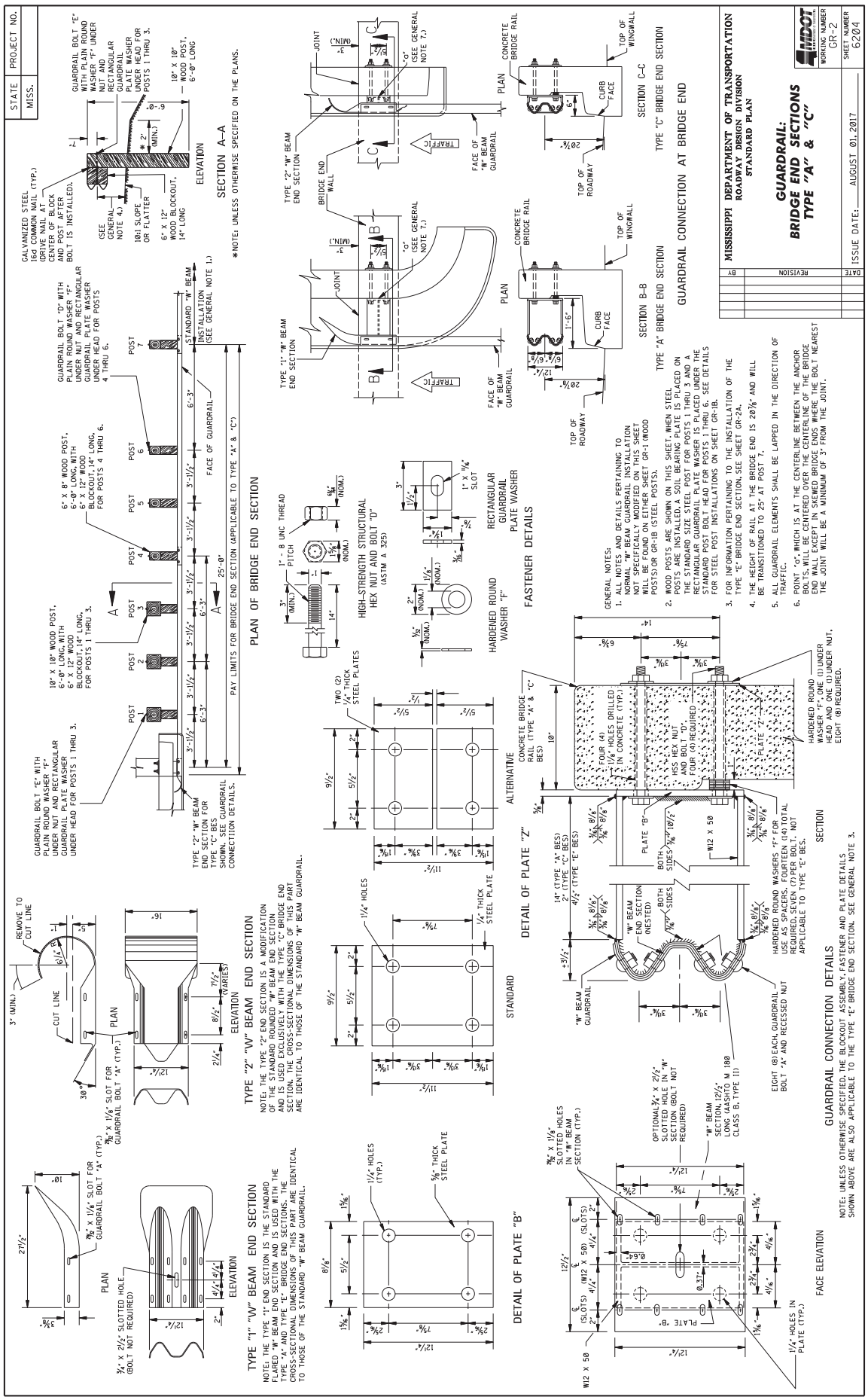
DATE: **01/26/2026**

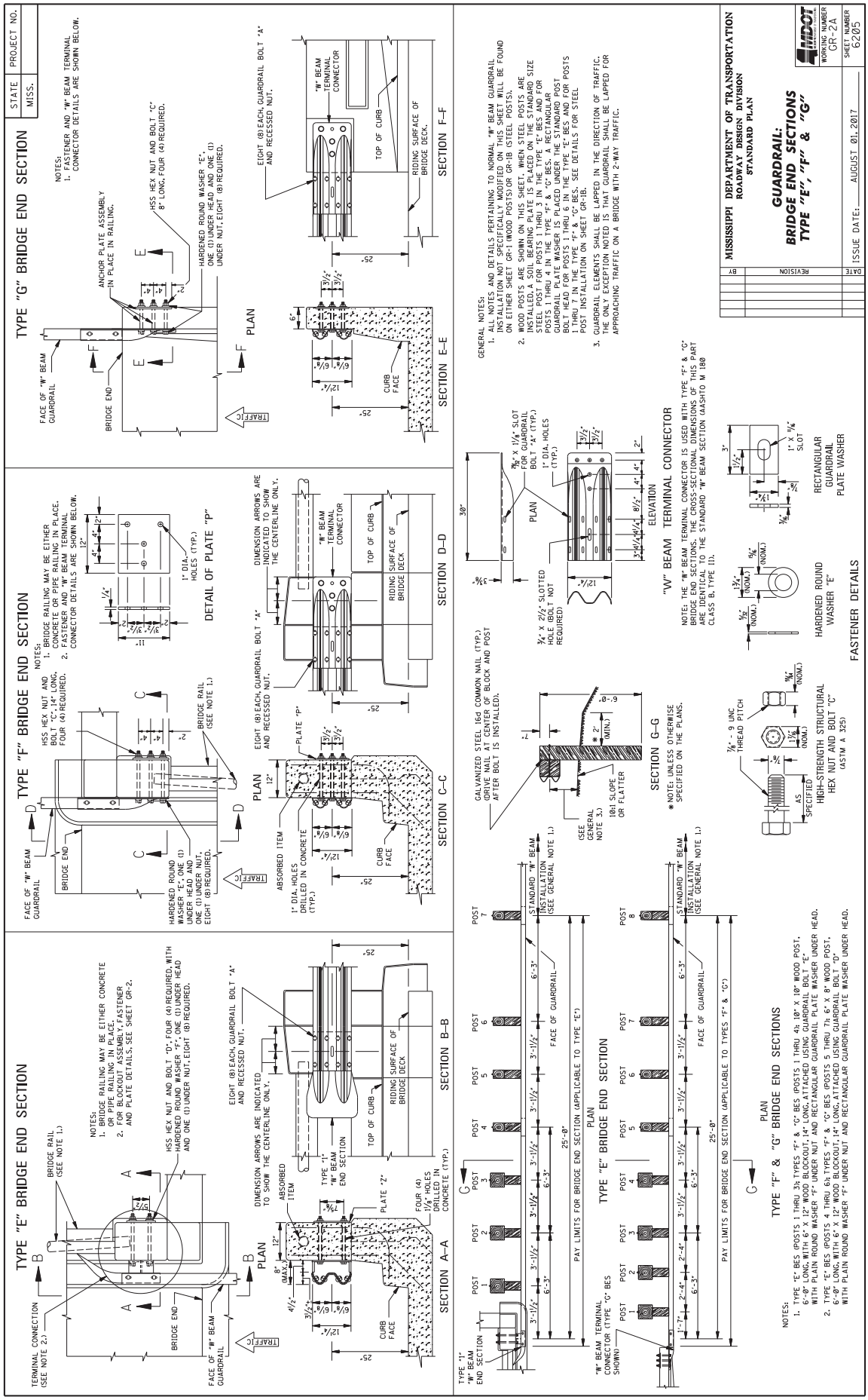
After the last drawing on page 33, add the following.

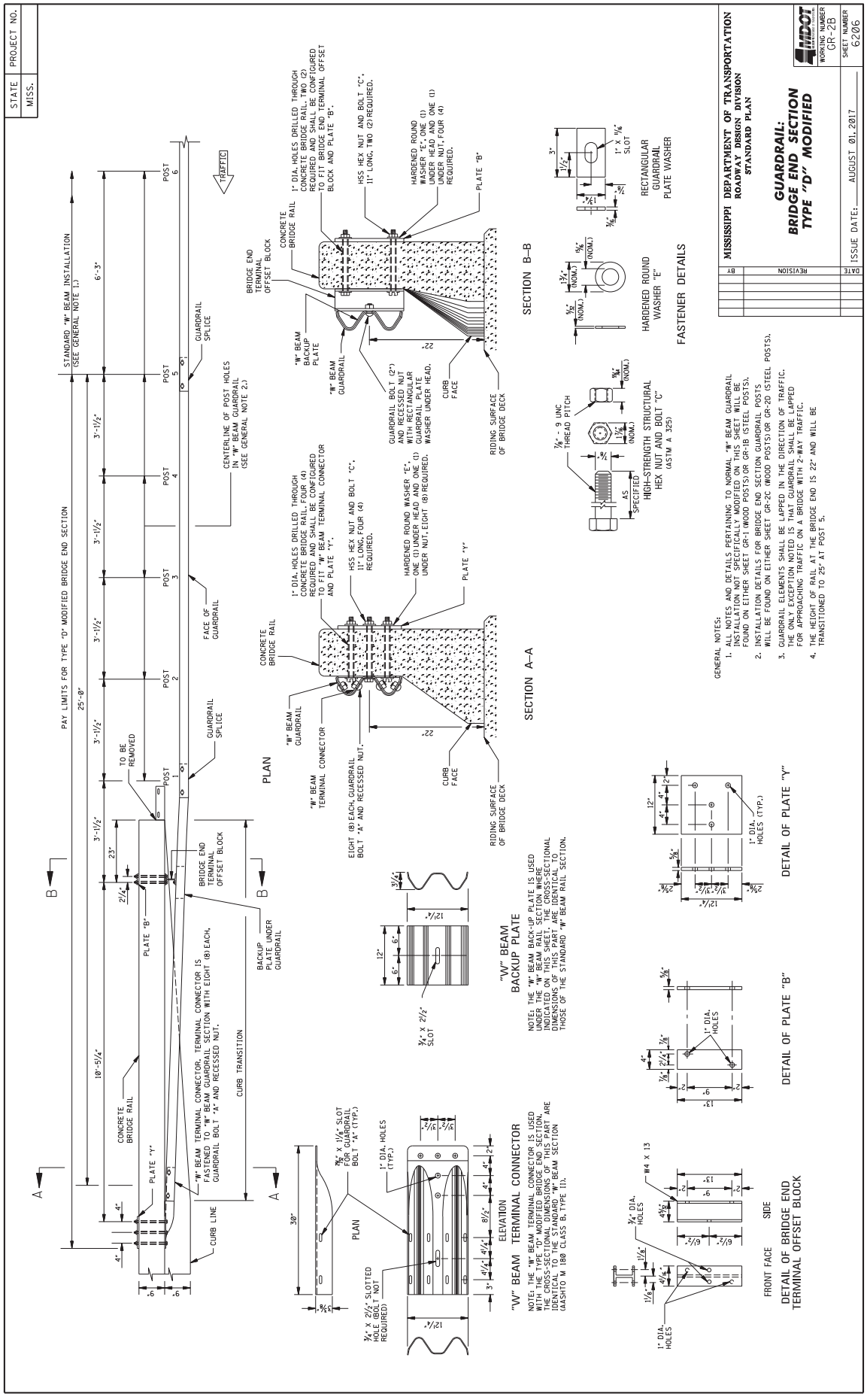

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: "W" BEAM (WOOD POSTS)
WORKING NUMBER GR-1
SHEET NUMBER 6201
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
5. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
SINGLE-FACED BARRIER
DOUBLE-FACED BARRIER
SECTION A-A
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER BOLT IS INSTALLED)
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT "F"
6" X 12" WOOD BLOCKOUT 14" LONG
6" X 8" WOOD POST, 6'-0" LONG
GUARDRAIL BOLT "D"
6" X 12" WOOD BLOCKOUT, 14" LONG
6" X 8" WOOD POST, 6'-0" LONG
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
SEE GUARDRAIL SPLICE DETAIL
GROUND LINE
TYPICAL GUARDRAIL SECTION
℄ POST
6'-3" C.C. POSTS
3/4" X 2 1/2" SLOT FOR GUARDRAIL BOLT "D" OR "F"
13/16" X 1 1/4" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
GUARDRAIL BOLTS
BOLT | L | T (MIN.)
"A" | 11/4" | 1"
"D" | 22" | 4"
* "E" | 24" | 4"
"F" | 33" | 4"
NOTES:
1. ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
* 3. GUARDRAIL BOLT "E" IS USED FOR SINGLE-FACED BARRIER WITH 10' X 10" WOOD POST AND 6" X 12" WOOD BLOCKOUT.
FASTENER DETAILS
BUTTON HEAD
OVAL SHOULDER
5/8" - 11 UNC THREAD PITCH
1" DIA. X 1/16" DEEP RECESS BOTH SIDES
3/4" - 11 UNC MODIFIED HEAVY HEX NUT
RECESSED NUT
PLAIN ROUND WASHER "F"
HEX NUT AND BOLT "F"
GUARDRAIL SPLICE DETAIL
FOR ANY SPLICE AT POST ADD GUARDRAIL BOLT "D" OR "F".
EIGHT (8) EACH GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
SECTION
ELEVATION
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER BOLT IS INSTALLED) NOT REQUIRED FOR SECOND HEIGHT ADJUSTMENT WHEN TWO BOLTS ARE REQUIRED.
TWO (2) EXTRA HOLES IN POST
6" X 12" WOOD BLOCKOUT
ONE (1) EXTRA HOLE IN BLOCKOUT
6" X 8" WOOD POST
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
NOTES:
1. ON INITIAL INSTALLATION, THE BLOCKOUT SHALL BE ATTACHED TO THE BOTTOM HOLE IN THE POST. OTHER HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENT WHEN THE ROADWAY IS RESURFACED.
2. FOR THE SECOND HEIGHT ADJUSTMENT, ONE (1) HEX NUT AND BOLT "D", 22" LONG FOR SINGLE-FACED BARRIER OR BOLT "F", 33" LONG FOR DOUBLE-FACED BARRIER, WITH TWO (2) PLAIN ROUND WASHERS "F", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, ARE REQUIRED PER POST IN ADDITION TO THE STANDARD GUARDRAIL BOLT AND RECESSED NUT.
3. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
4. WOOD POSTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER AND BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
5. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.

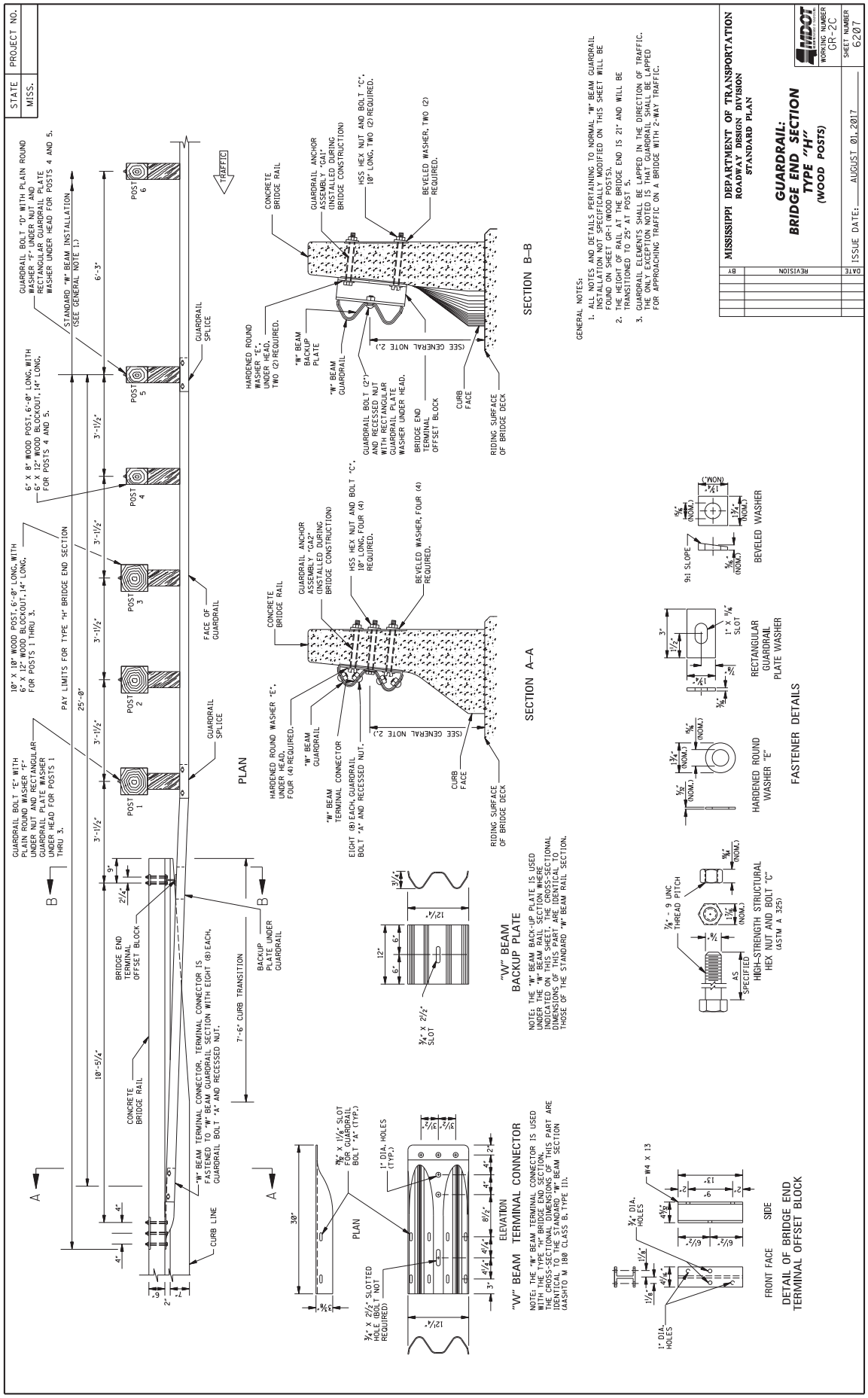

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: THRIE BEAM (WOOD POSTS)
WORKING NUMBER GR-1A
SHEET NUMBER 6202
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
5. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
SECTION A–A
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
SINGLE-FACED BARRIER
DOUBLE-FACED BARRIER
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT "D"
GUARDRAIL BOLT "F"
6" X 12" WOOD BLOCKOUT, 22" LONG
6" X 8" WOOD POST, 6'-6" LONG
*2'-0" (MIN.)
8"
22"
6'-6"
ELEVATION FROM ℄ ROADWAY
**NOTE: OPTIONAL BEAM LENGTHS.
SEE GUARDRAIL SPLICE DETAIL
GROUND LINE
**25'-0"
**12'-6"
6'-3" C.C. POSTS
3'-1½"
6'-3"
TYPICAL GUARDRAIL SECTION
℄ POST
℄ (LAP)
FOR ANY SPLICE AT POST ADD TWELVE (12) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
GUARDRAIL BOLT "D" OR "F"
ELEVATION
SECTION
⅞" X 1¼" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
¾" X 2½" SLOT FOR GUARDRAIL BOLT "D" OR "F"
⅞" X 1¼" FOR GUARDRAIL BOLT "A" (TYP.)
GUARDRAIL SPLICE DETAIL
OPTIONAL HOLES USED ONLY WHERE SPECIFIED ON PLANS.
7'-3½"
"W" THRIE-BEAM TRANSITION SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THE "W" AND THRIE BEAM ENDS OF THE TRANSITION SECTION ARE THE SAME AS THEIR RESPECTIVE TYPICAL GUARDRAIL SECTIONS.
FOUR (4) EXTRA HOLES IN POST
6" X 12" WOOD BLOCKOUT
6" X 8" WOOD POST
¾" DIA. (TYP.)
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
NOTES:
1. ON INITIAL INSTALLATION, THE TOP OF THE BLOCKOUT SHALL BE FLUSH WITH THE TOP OF THE POST. THE ADDITIONAL HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
3. WOOD POSTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER AND BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
4. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾" IN DIAMETER.

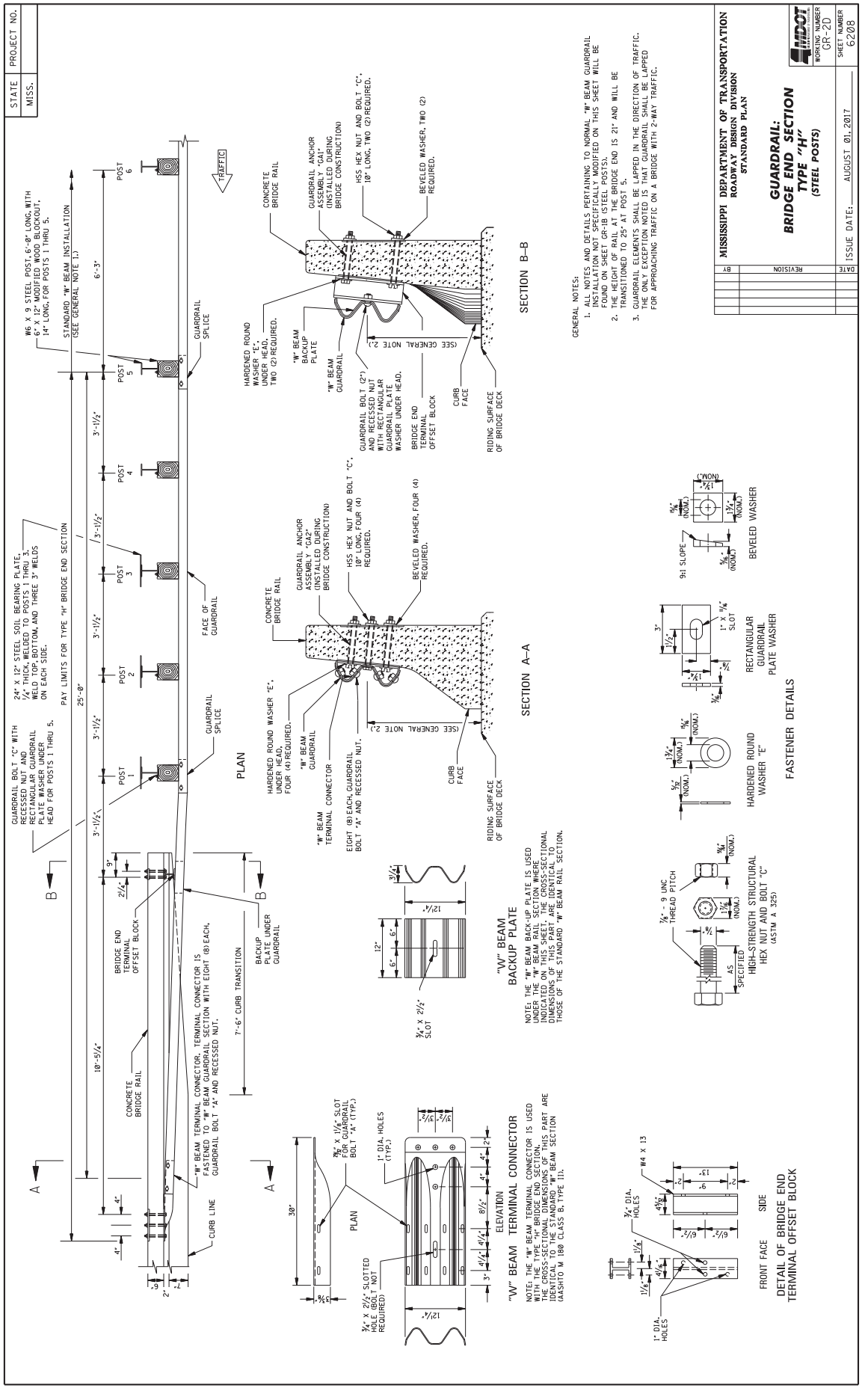

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: "W" BEAM (STEEL POSTS)
WORKING NUMBER GR-1B
SHEET NUMBER 6203
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
ELEVATION FROM ℄ ROADWAY
** NOTE: OPTIONAL BEAM LENGTHS.
SINGLE-FACED BARRIER
DOUBLE-FACED BARRIER
SECTION A–A
* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
GUARDRAIL BOLT "C"
6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG
RECESSED NUT
W6 X 9 STEEL POST, 6'-0" LONG
GUARDRAIL BOLT "A" AND RECESSED NUT
OPTIONAL: 24" X 12" STEEL SOIL BEARING PLATE, ¼" THICK, WELDED TO POST WHERE SPECIFIED ON PLANS. WELD TOP, BOTTOM AND THREE 3" WELDS ON EACH SIDE.
GENERAL NOTES:
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. STEEL POSTS SHALL CONFORM TO ASTM A36 (EXCEPT ULTRASONIC TESTING) AND SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 EXCEPT WHEN CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE POSTS SHALL CONFORM TO AASHTO SPECIFICATIONS FOR CORROSION RESISTANCE AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING, DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
5. ALL MODIFIED WOOD BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
GUARDRAIL SPLICE DETAIL
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT, REQUIRED PER SPLICE
FOR ANY SPLICE AT POST ADD GUARDRAIL BOLT "C"
SECTION
ELEVATION
TWO (2) EXTRA HOLES IN POST
ONE (1) EXTRA HOLE IN BLOCKOUT
W6 X 9 STEEL POST
6" X 12" MODIFIED WOOD BLOCKOUT
GUARDRAIL FACE
POST FACE
MODIFIED WOOD BLOCKOUT ASSEMBLY
FRONT FACE POST
DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY
NOTES:
1. ON INITIAL INSTALLATION, THE MODIFIED WOOD BLOCKOUT SHALL BE FASTENED TO THE BOTTOM HOLE IN THE STEEL POST. OTHER HOLES IN THE STEEL POST AND THE MODIFIED WOOD BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. AN ADDITIONAL GUARDRAIL BOLT "C" AND RECESSED NUT IS REQUIRED FOR THE SECOND HEIGHT ADJUSTMENT.
3. HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND MODIFIED WOOD BLOCKOUTS.
4. STEEL POSTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
5. MODIFIED WOOD BLOCKOUTS ARE FABRICATED FROM 6" X 12" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
6. ALL HOLES IN BOTH STEEL POSTS AND MODIFIED WOOD BLOCKOUTS ARE ¾" IN DIAMETER.
GROUND LINE
℄ POST
6'-3" C.C. POSTS
℄ (LAP)
¾" X 1½" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
¾" X 2½" SLOT FOR GUARDRAIL BOLT "C"
TYPICAL GUARDRAIL SECTION
NOTES:
1. ALL GUARDRAIL BOLTS ARE ⅝" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN ¼" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
GUARDRAIL BOLTS
BOLT | L | T (MIN.)
"A" | 1¼" | 1"
"B" | 12" | 4"
"C" | 14" | 4"
⅝" - 11 UNC THREAD PITCH
BUTTON HEAD
OVAL SHOULDER
GUARDRAIL BOLT
1" DIA. X ⅛" DEEP RECESS BOTH SIDES
⅝" - 11 UNC MODIFIED HEAVY HEX NUT
RECESSED NUT
⅝" - 11 UNC THREAD PITCH
AS SPECIFIED
¾" (MAX.)
HEX NUT AND BOLT "F"

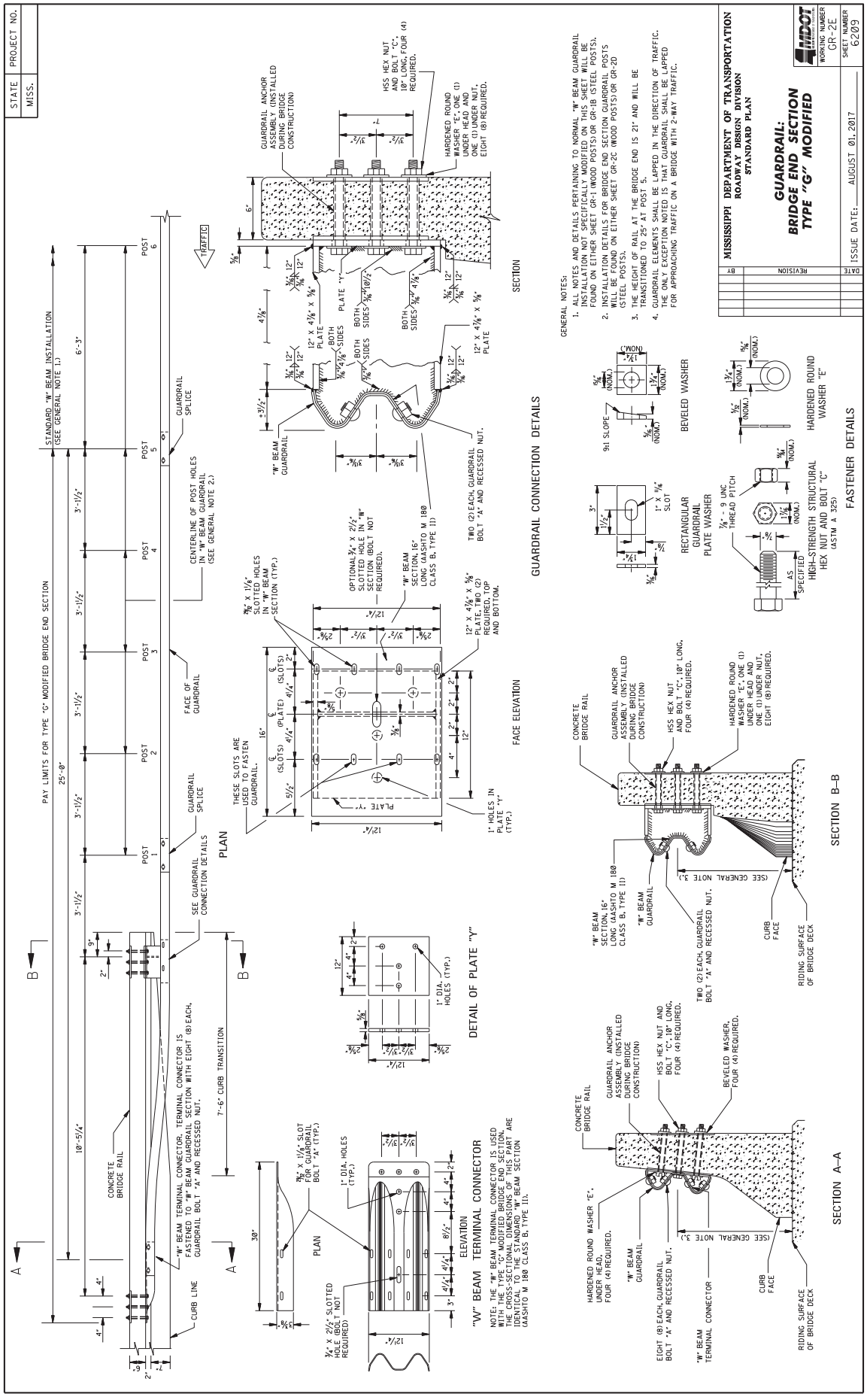

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTIONS
TYPE "A" & "C"
WORKING NUMBER GR-2
SHEET NUMBER 6204
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
PLAN OF BRIDGE END SECTION
TYPE "A" BRIDGE END SECTION
TYPE "C" BRIDGE END SECTION
GUARDRAIL CONNECTION AT BRIDGE END
SECTION A–A
SECTION B–B
SECTION C–C
ELEVATION
PLAN
TYPE "1" "W" BEAM END SECTION
TYPE "2" "W" BEAM END SECTION
STANDARD
ALTERNATIVE
DETAIL OF PLATE "Z"
DETAIL OF PLATE "B"
FASTENER DETAILS
GUARDRAIL CONNECTION DETAILS
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
2. WOOD POSTS ARE SHOWN ON THIS SHEET. WHEN STEEL POSTS ARE INSTALLED, A SOIL BEARING PLATE IS PLACED ON THE STANDARD SIZE STEEL POST FOR POSTS 1 THRU 3 AND A RECTANGULAR GUARDRAIL PLATE WASHER IS PLACED UNDER THE STANDARD POST BOLT HEAD FOR POSTS 1 THRU 6. SEE DETAILS FOR STEEL POST INSTALLATIONS ON SHEET GR-1B.
3. FOR INFORMATION PERTAINING TO THE INSTALLATION OF THE TYPE "E" BRIDGE END SECTION, SEE SHEET GR-2A.
4. THE HEIGHT OF RAIL AT THE BRIDGE END IS 20⅞" AND WILL BE TRANSITIONED TO 25" AT POST 7.
5. ALL GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC.
6. POINT "O", WHICH IS AT THE CENTERLINE BETWEEN THE ANCHOR BOLTS, WILL BE CENTERED OVER THE CENTERLINE OF THE BRIDGE END WALL EXCEPT IN SKEWED BRIDGE ENDS WHERE THE BOLT NEAREST THE JOINT WILL BE A MINIMUM OF 3" FROM THE JOINT.
NOTE: UNLESS OTHERWISE SPECIFIED, THE BLOCKOUT ASSEMBLY FASTENER AND PLATE DETAILS SHOWN ABOVE ARE ALSO APPLICABLE TO THE TYPE "E" BRIDGE END SECTION. SEE GENERAL NOTE 3.

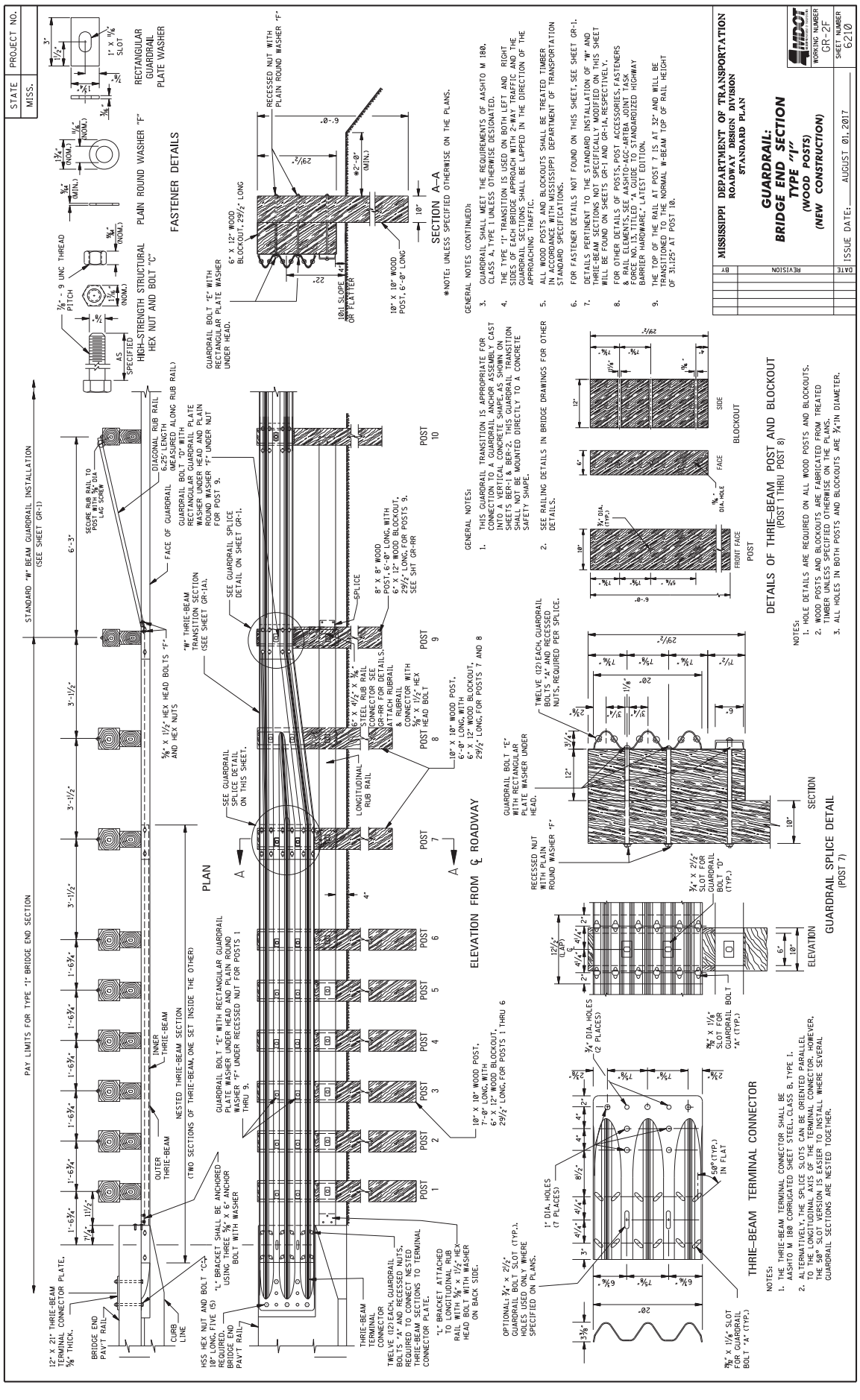

TYPE "E" BRIDGE END SECTION
TYPE "F" BRIDGE END SECTION
TYPE "G" BRIDGE END SECTION
DETAIL OF PLATE "P"
SECTION A–A
SECTION B–B
SECTION C–C
SECTION D–D
SECTION E–E
SECTION F–F
SECTION G–G
"W" BEAM TERMINAL CONNECTOR
FASTENER DETAILS
TYPE "E" BRIDGE END SECTION
TYPE "F" & "G" BRIDGE END SECTIONS
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTIONS
TYPE "E", "F" & "G"
WORKING NUMBER GR-2A
SHEET NUMBER 6205
ISSUE DATE: AUGUST 01, 2017
STATE MISS.
PROJECT NO.

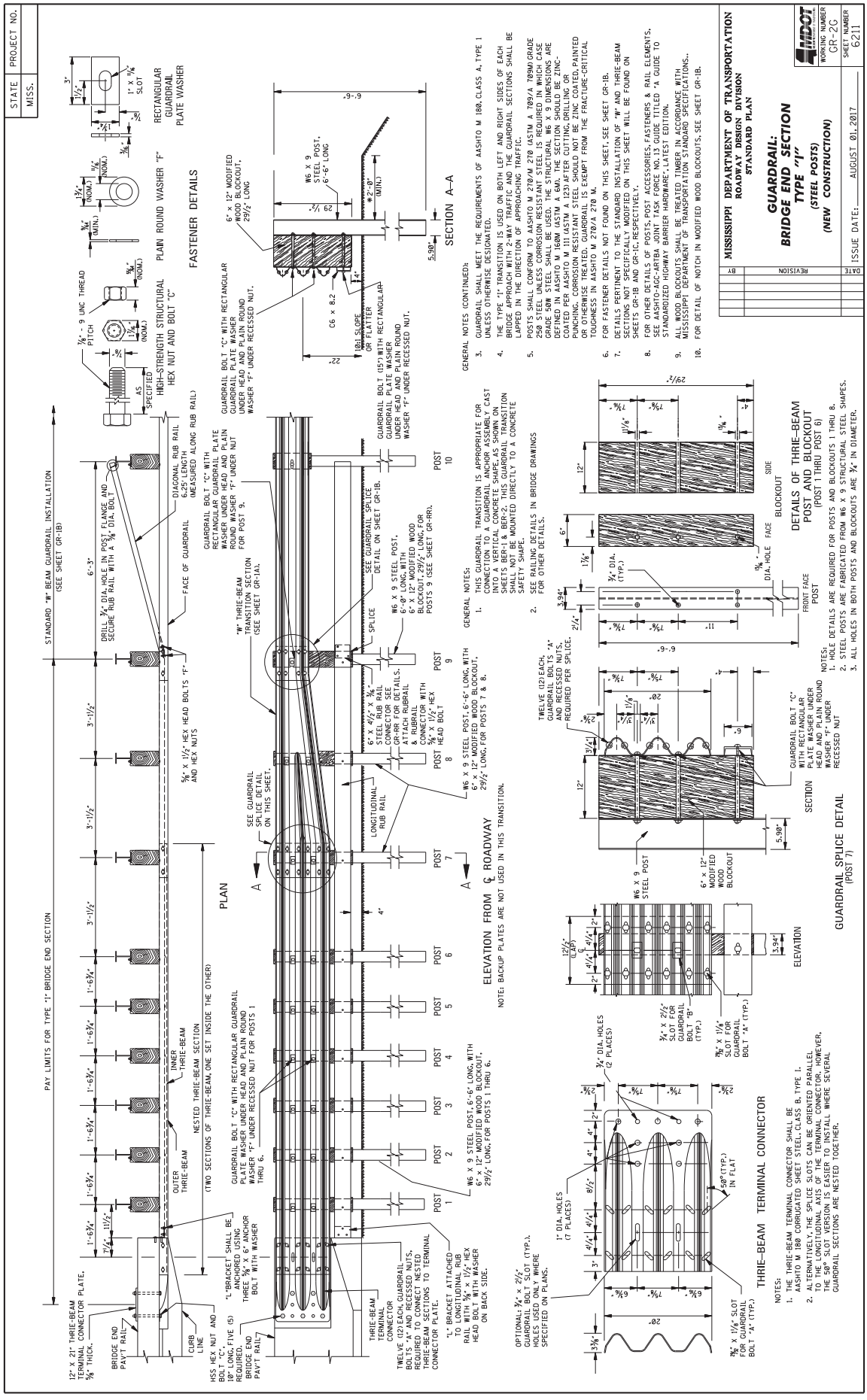

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "D" MODIFIED
WORKING NUMBER GR-2B
SHEET NUMBER 6206
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
PLAN
SECTION A–A
SECTION B–B
FASTENER DETAILS
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1C (WOOD POSTS) OR GR-1D (STEEL POSTS).
2. INSTALLATION DETAILS FOR BRIDGE END SECTION GUARDRAIL POSTS WILL BE FOUND ON EITHER SHEET GR-2C (WOOD POSTS) OR GR-2D (STEEL POSTS).
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. THE HEIGHT OF RAIL AT THE BRIDGE END IS 22" AND WILL BE TRANSITIONED TO 25" AT POST 5.
"W" BEAM BACKUP PLATE
NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.
"W" BEAM TERMINAL CONNECTOR
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "D" MODIFIED BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
DETAIL OF PLATE "B"
DETAIL OF PLATE "Y"
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
PAY LIMITS FOR TYPE "D" MODIFIED BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
CENTERLINE OF POST HOLES IN "W" BEAM GUARDRAIL (SEE GENERAL NOTE 2.)
TRAFFIC
CONCRETE BRIDGE RAIL
BRIDGE END TERMINAL OFFSET BLOCK
"W" BEAM BACKUP PLATE
"W" BEAM GUARDRAIL
GUARDRAIL BOLT (2") AND RECESSED NUT WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
CURB FACE
RIDING SURFACE OF BRIDGE DECK
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
HSS HEX NUT AND BOLT "C", 11" LONG, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, EIGHT (8) REQUIRED.
PLATE "Y"
1" DIA. HOLES DRILLED THROUGH CONCRETE BRIDGE RAIL, FOUR (4) REQUIRED AND SHALL BE CONFIGURED TO FIT "W" BEAM TERMINAL CONNECTOR AND PLATE "Y".
1" DIA. HOLES DRILLED THROUGH CONCRETE BRIDGE RAIL, TWO (2) REQUIRED AND SHALL BE CONFIGURED TO FIT BRIDGE END TERMINAL OFFSET BLOCK AND PLATE "B".
HSS HEX NUT AND BOLT "C", 11" LONG, TWO (2) REQUIRED.
HARDENED ROUND WASHER "E", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, FOUR (4) REQUIRED.
PLATE "B"
FACE OF GUARDRAIL
GUARDRAIL SPLICE
TO BE REMOVED
BACKUP PLATE UNDER GUARDRAIL
CURB TRANSITION
CURB LINE
CONCRETE BRIDGE RAIL
"W" BEAM TERMINAL CONNECTOR, TERMINAL CONNECTOR IS FASTENED TO "W" BEAM GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
25'-0"
10'-9 1/4"
6'-3"
3'-1 1/2"
23"
2 1/4"
4"
30"
3/4" X 2 1/2" SLOTTED HOLE (BOLT NOT REQUIRED)
3/4" X 1 1/4" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
1" DIA. HOLES (TYP.)
3/4" X 2 1/2" SLOT
W4 X 13
3/4" DIA. HOLES
1" DIA. HOLES
FRONT FACE
SIDE
1/2"
3/4"
1 1/4"
1 3/4" (NOM.)
7/8" (NOM.)
3/8" (NOM.)
1" X 1 1/4" SLOT
3/4" - 9 UNC THREAD PITCH
AS SPECIFIED

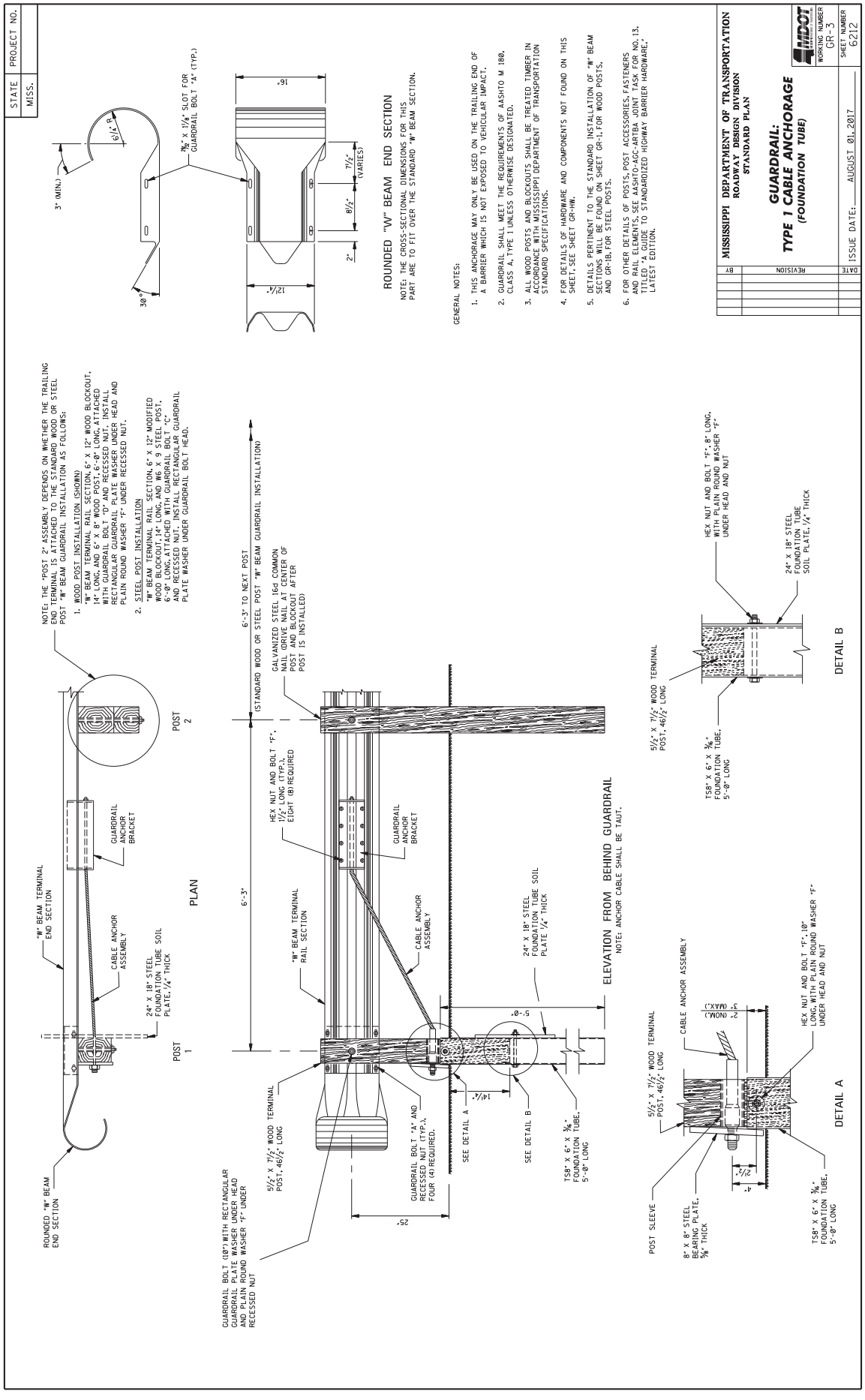

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "H"
(WOOD POSTS)
WORKING NUMBER GR-2C
SHEET NUMBER 6207
ISSUE DATE: AUGUST 01, 2017
REVISION
DATE
BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEET GR-1 (WOOD POSTS).
2. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 25" AT POST 5.
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
PLAN
SECTION A–A
SECTION B–B
"W" BEAM TERMINAL CONNECTOR
"W" BEAM BACKUP PLATE
FASTENER DETAILS
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
PAY LIMITS FOR TYPE "H" BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
TRAFFIC
CONCRETE BRIDGE RAIL
BRIDGE END TERMINAL OFFSET BLOCK
BACKUP PLATE UNDER GUARDRAIL
GUARDRAIL SPLICE
FACE OF GUARDRAIL
CURB LINE
7'-6" CURB TRANSITION
GUARDRAIL ANCHOR ASSEMBLY "GA2" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
BEVELED WASHER, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
"W" BEAM GUARDRAIL
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
(SEE GENERAL NOTE 2.)
CURB FACE
RIDING SURFACE OF BRIDGE DECK
GUARDRAIL ANCHOR ASSEMBLY "GA1" (INSTALLED DURING BRIDGE CONSTRUCTION)
GUARDRAIL BOLT (2) AND RECESSED NUT WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
"W" BEAM BACKUP PLATE
BRIDGE END TERMINAL OFFSET BLOCK
HARDENED ROUND WASHER "E", UNDER HEAD, TWO (2) REQUIRED.
HSS HEX NUT AND BOLT "C", 10" LONG, TWO (2) REQUIRED.
BEVELED WASHER, TWO (2) REQUIRED.
GUARDRAIL BOLT "E" WITH PLAIN ROUND WASHER "F" UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 1 THRU 3.
10" X 10" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, FOR POSTS 1 THRU 3.
6" X 8" WOOD POST, 6'-0" LONG, WITH 6" X 12" WOOD BLOCKOUT, 14" LONG, FOR POSTS 4 AND 5.
GUARDRAIL BOLT "D" WITH PLAIN ROUND WASHER UNDER NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 4 AND 5.
"W" BEAM TERMINAL CONNECTOR. TERMINAL CONNECTOR IS FASTENED TO "W" BEAM GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "H" BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
BEVELED WASHER
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
FRONT FACE
SIDE

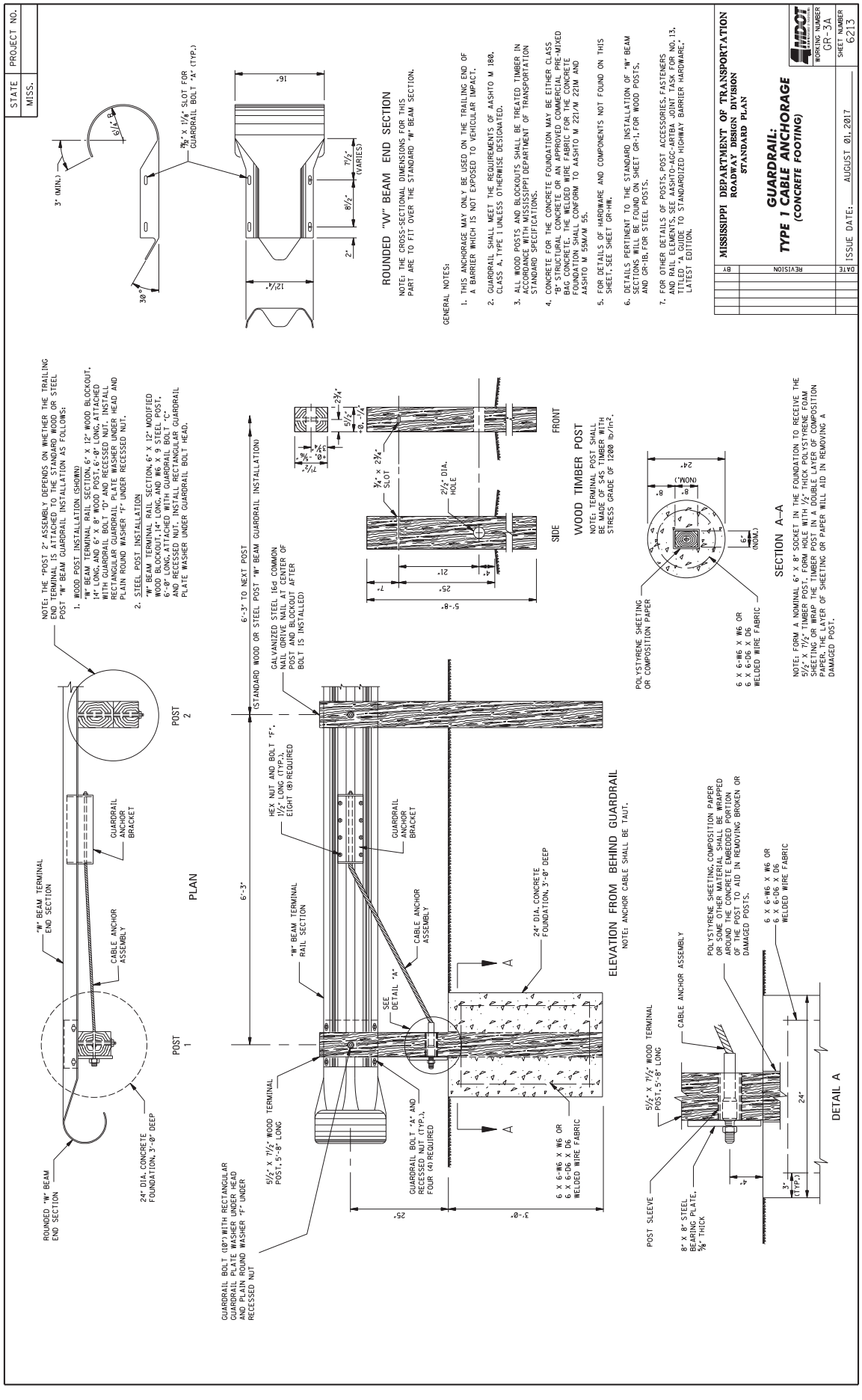

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: BRIDGE END SECTION TYPE "H" (STEEL POSTS)
WORKING NUMBER GR-2D
SHEET NUMBER 6208
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEET GR-1B (STEEL POSTS).
2. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 25" AT POST 5.
3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
PLAN
SECTION A–A
SECTION B–B
"W" BEAM BACKUP PLATE
"W" BEAM TERMINAL CONNECTOR
FASTENER DETAILS
DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK
TRAFFIC
CONCRETE BRIDGE RAIL
GUARDRAIL SPLICE
FACE OF GUARDRAIL
BRIDGE END TERMINAL OFFSET BLOCK
BACKUP PLATE UNDER GUARDRAIL
7'-6" CURB TRANSITION
CURB LINE
PAY LIMITS FOR TYPE "H" BRIDGE END SECTION
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
W6 X 9 STEEL POST, 6'-0" LONG, WITH 6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, FOR POSTS 1 THRU 5.
24" X 12" STEEL SOIL BEARING PLATE, 1/4" THICK, WELDED TO POSTS 1 THRU 3, WELD TOP, BOTTOM, AND THREE 3" WELDS ON EACH SIDE.
GUARDRAIL BOLT "C" WITH RECESSED NUT AND RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD FOR POSTS 1 THRU 5.
GUARDRAIL ANCHOR ASSEMBLY "GA1" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, TWO (2) REQUIRED.
BEVELED WASHER, TWO (2) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, TWO (2) REQUIRED.
"W" BEAM BACKUP PLATE
"W" BEAM GUARDRAIL
GUARDRAIL BOLT (2") AND RECESSED NUT WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD.
BRIDGE END TERMINAL OFFSET BLOCK
CURB FACE
RIDING SURFACE OF BRIDGE DECK
(SEE GENERAL NOTE 2.)
GUARDRAIL ANCHOR ASSEMBLY "GA2" (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
BEVELED WASHER, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
"W" BEAM TERMINAL CONNECTOR
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
"W" BEAM TERMINAL CONNECTOR. TERMINAL CONNECTOR IS FASTENED TO "W" BEAM GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
3'-1½"
6'-3"
25'-0"
10'-5¼"
4'
30"
9"
2¼"
3¾"
12¼"
12"
6"
3¼"
¾" X 2½" SLOT
1" DIA. HOLES (TYP.)
⅞" X 1¼" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
¾" X 2½" SLOTTED HOLE (BOLT NOT REQUIRED)
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "H" BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.
⅞" - 9 UNC THREAD PITCH
AS SPECIFIED
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
HARDENED ROUND WASHER "E"
RECTANGULAR GUARDRAIL PLATE WASHER
BEVELED WASHER
9:1 SLOPE
1" X 1⅜" SLOT
W4 X 13
¾" DIA. HOLES
1" DIA. HOLES
FRONT FACE
SIDE

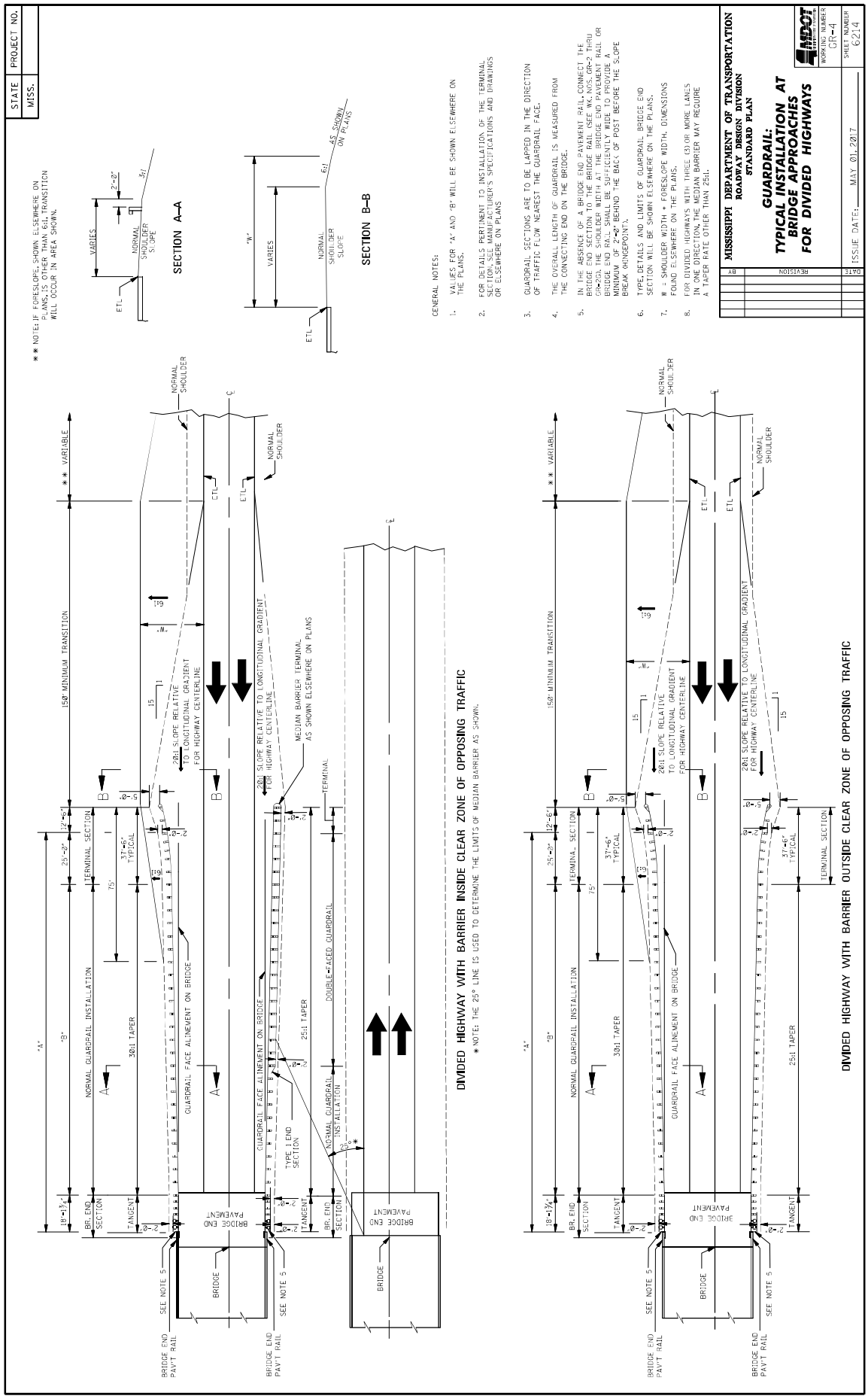

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "G" MODIFIED
WORKING NUMBER GR-2E
SHEET NUMBER 6209
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
2. INSTALLATION DETAILS FOR BRIDGE END SECTION GUARDRAIL POSTS WILL BE FOUND ON EITHER SHEET GR-2C (WOOD POSTS) OR GR-2D (STEEL POSTS).
3. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 25" AT POST 5.
4. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL SHALL BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
PLAN
STANDARD "W" BEAM INSTALLATION (SEE GENERAL NOTE 1.)
PAY LIMITS FOR TYPE "G" MODIFIED BRIDGE END SECTION
25'-0"
10'-5¼"
3'-1½"
6'-3"
POST 1
POST 2
POST 3
POST 4
POST 5
POST 6
GUARDRAIL SPLICE
CENTERLINE OF POST HOLES IN "W" BEAM GUARDRAIL (SEE GENERAL NOTE 2.)
FACE OF GUARDRAIL
SEE GUARDRAIL CONNECTION DETAILS
7'-6" CURB TRANSITION
CONCRETE BRIDGE RAIL
CURB LINE
"W" BEAM TERMINAL CONNECTOR, TERMINAL CONNECTOR IS FASTENED TO THE GUARDRAIL SECTION WITH EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
TRAFFIC
GUARDRAIL CONNECTION DETAILS
SECTION
GUARDRAIL ANCHOR ASSEMBLY (INSTALLED DURING BRIDGE CONSTRUCTION)
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
HARDENED ROUND WASHER "E", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, EIGHT (8) REQUIRED.
PLATE "Y"
12" X 4⅛" X ⅝" PLATE
BOTH SIDES
"W" BEAM GUARDRAIL
TWO (2) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
FACE ELEVATION
THESE SLOTS ARE USED TO FASTEN GUARDRAIL.
⅞" X 1⅛" SLOTTED HOLES IN "W" BEAM SECTION (TYP.)
OPTIONAL ¾" X 2½" SLOTTED HOLE IN "W" SECTION (BOLT NOT REQUIRED).
"W" BEAM SECTION, 16' LONG (AASHTO M 180 CLASS B, TYPE II)
12" X 4⅛" X ⅝" PLATE, TWO (2) REQUIRED, TOP AND BOTTOM.
1" HOLES IN PLATE "Y" (TYP.)
DETAIL OF PLATE "Y"
"W" BEAM TERMINAL CONNECTOR
NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "G" MODIFIED BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE II).
ELEVATION
PLAN
¾" X 2½" SLOTTED HOLE (BOLT NOT REQUIRED)
⅞" X 1⅛" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
1" DIA. HOLES (TYP.)
SECTION A–A
SECTION B–B
HARDENED ROUND WASHER "E", UNDER HEAD, FOUR (4) REQUIRED.
EIGHT (8) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
BEVELED WASHER, FOUR (4) REQUIRED.
HSS HEX NUT AND BOLT "C", 10" LONG, FOUR (4) REQUIRED.
TWO (2) EACH, GUARDRAIL BOLT "A" AND RECESSED NUT.
(SEE GENERAL NOTE 3.)
CURB FACE
RIDING SURFACE OF BRIDGE DECK
FASTENER DETAILS
9:1 SLOPE
BEVELED WASHER
RECTANGULAR GUARDRAIL PLATE WASHER
1" X 1⅛" SLOT
¾" - 9 UNC THREAD PITCH
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C" (ASTM A 325)
HARDENED ROUND WASHER "E"

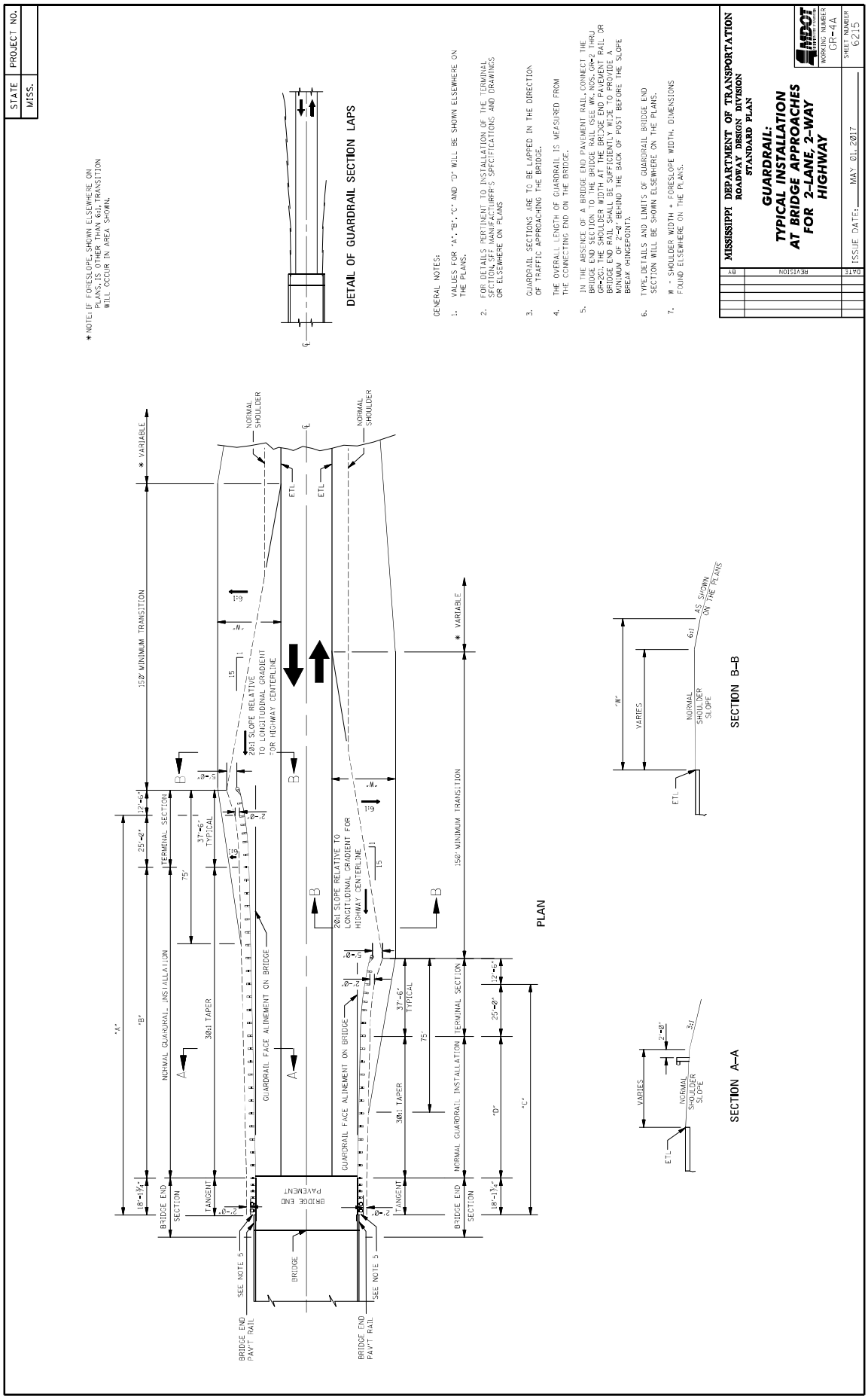

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "I"
(WOOD POSTS)
(NEW CONSTRUCTION)
WORKING NUMBER GR-2F
SHEET NUMBER 6210
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
STANDARD "W" BEAM GUARDRAIL INSTALLATION (SEE SHEET GR-1)
PAY LIMITS FOR TYPE "I" BRIDGE END SECTION
PLAN
ELEVATION FROM ℄ ROADWAY
SECTION A–A
FASTENER DETAILS
HIGH-STRENGTH STRUCTURAL HEX NUT AND BOLT "C"
PLAIN ROUND WASHER "F"
RECTANGULAR GUARDRAIL PLATE WASHER
DETAILS OF THRIE-BEAM POST AND BLOCKOUT (POST 1 THRU POST 8)
THRIE-BEAM TERMINAL CONNECTOR
GUARDRAIL SPLICE DETAIL (POST 7)
GENERAL NOTES:
GENERAL NOTES (CONTINUED):
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
NOTES:
NOTES:

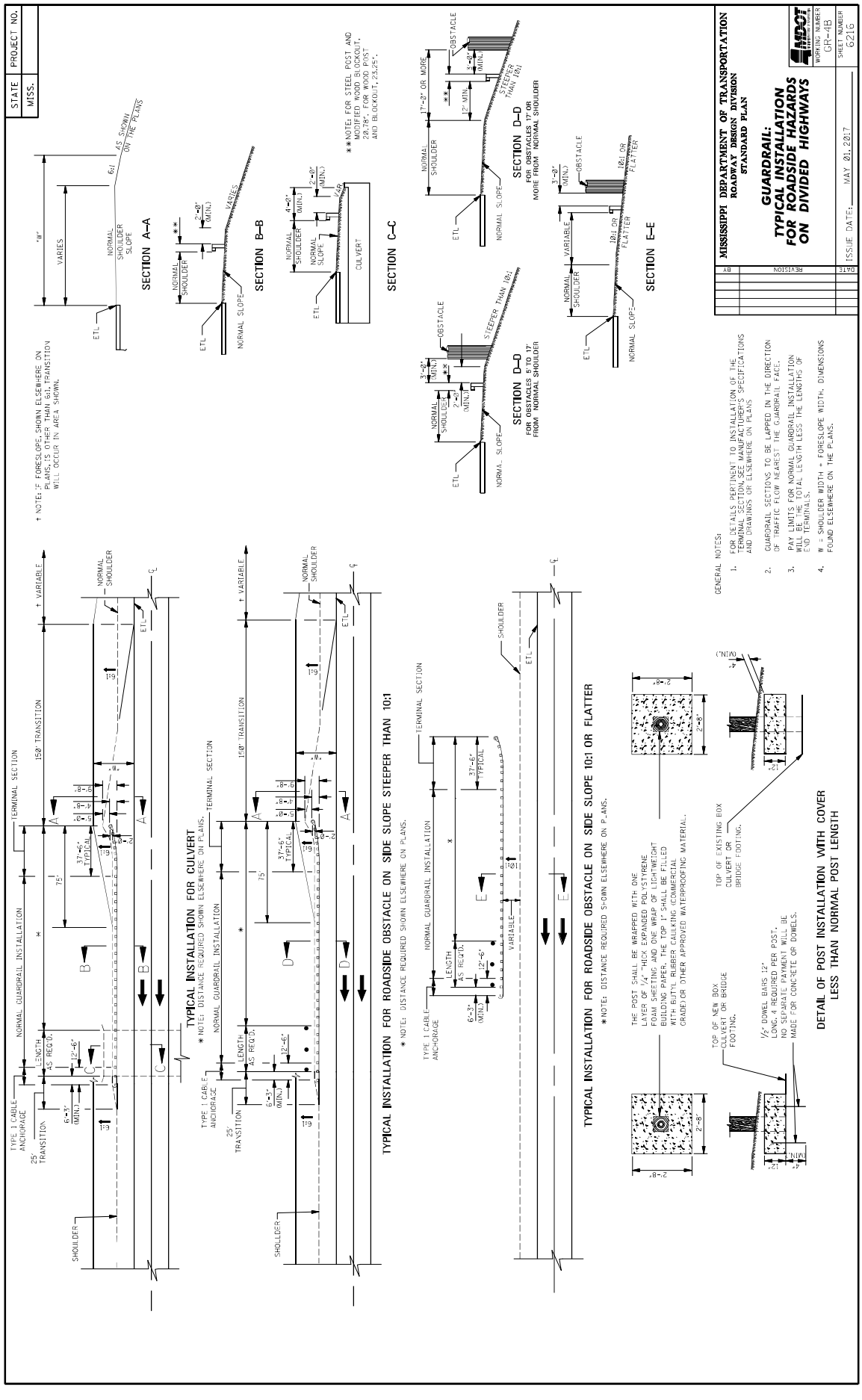

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
BRIDGE END SECTION
TYPE "1"
(STEEL POSTS)
(NEW CONSTRUCTION)
WORKING NUMBER GR-2C
SHEET NUMBER 6211
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
PAY LIMITS FOR TYPE "1" BRIDGE END SECTION
STANDARD "W" BEAM GUARDRAIL INSTALLATION (SEE SHEET GR-1B)
PLAN
ELEVATION FROM ℄ ROADWAY
NOTE: BACKUP PLATES ARE NOT USED IN THIS TRANSITION.
FASTENER DETAILS
SECTION A–A
THRIE–BEAM TERMINAL CONNECTOR
GUARDRAIL SPLICE DETAIL (POST 7)
DETAILS OF THRIE–BEAM POST AND BLOCKOUT (POST 1 THRU POST 6)
GENERAL NOTES (CONTINUED):
GENERAL NOTES:

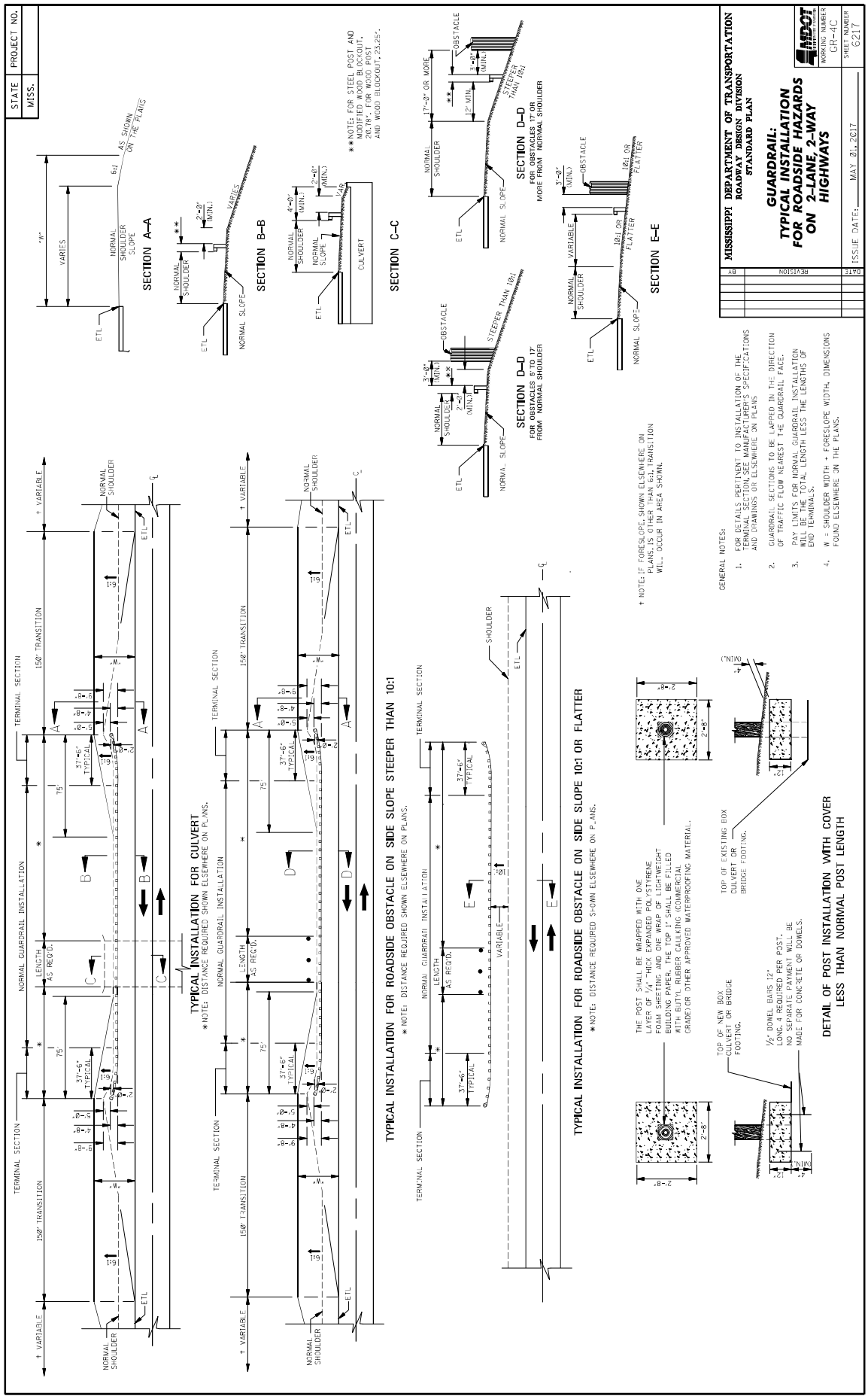

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPE 1 CABLE ANCHORAGE
(FOUNDATION TUBE)
WORKING NUMBER GR-3
SHEET NUMBER 6212
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
GENERAL NOTES:
1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
2. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
3. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
4. FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
5. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
ROUNDED "W" BEAM END SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.
3" (MIN.)
6 1/4" R
30°
25/8" X 1 1/4" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
16"
12 1/4"
8 1/2"
7 1/2" (VARIES)
2"
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:
1. WOOD POST INSTALLATION (SHOWN)
"W" BEAM TERMINAL RAIL SECTION, 6" X 12" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
2. STEEL POST INSTALLATION
"W" BEAM TERMINAL RAIL SECTION, 6" X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-6" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.
"W" BEAM TERMINAL END SECTION
CABLE ANCHOR ASSEMBLY
GUARDRAIL ANCHOR BRACKET
24" X 18" STEEL FOUNDATION TUBE SOIL PLATE, 1/4" THICK
POST 1
POST 2
PLAN
6'-3" TO NEXT POST (STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION)
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BLOCKOUT AFTER POST IS INSTALLED)
HEX NUT AND BOLT "F", 1" LONG (TYP.) EIGHT (8) REQUIRED
"W" BEAM TERMINAL RAIL SECTION
6'-3"
5 1/2" X 7 1/2" WOOD TERMINAL POST, 46 1/2" LONG
GUARDRAIL BOLT (18") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT
GUARDRAIL BOLT "A" AND RECESSED NUT (TYP.), FOUR (4) REQUIRED.
25"
SEE DETAIL A
SEE DETAIL B
14 1/4"
5'-0"
TS8" X 6" X 3/16" FOUNDATION TUBE, 5'-0" LONG
ELEVATION FROM BEHIND GUARDRAIL
NOTE: ANCHOR CABLE SHALL BE TAUT.
HEX NUT AND BOLT "F", 8" LONG, WITH PLAIN ROUND WASHER "F" UNDER HEAD AND NUT
5 1/2" X 7 1/2" WOOD TERMINAL POST, 46 1/2" LONG
TS8" X 6" X 3/16" FOUNDATION TUBE, 5'-0" LONG
24" X 18" STEEL FOUNDATION TUBE SOIL PLATE, 1/4" THICK
DETAIL B
POST SLEEVE
8" X 8" STEEL BEARING PLATE, 3/8" THICK
CABLE ANCHOR ASSEMBLY
2" (NOM.) 3" (MAX.)
HEX NUT AND BOLT "F", 10" LONG, WITH PLAIN ROUND WASHER "F" UNDER HEAD AND NUT
2 1/2"
4"
DETAIL A

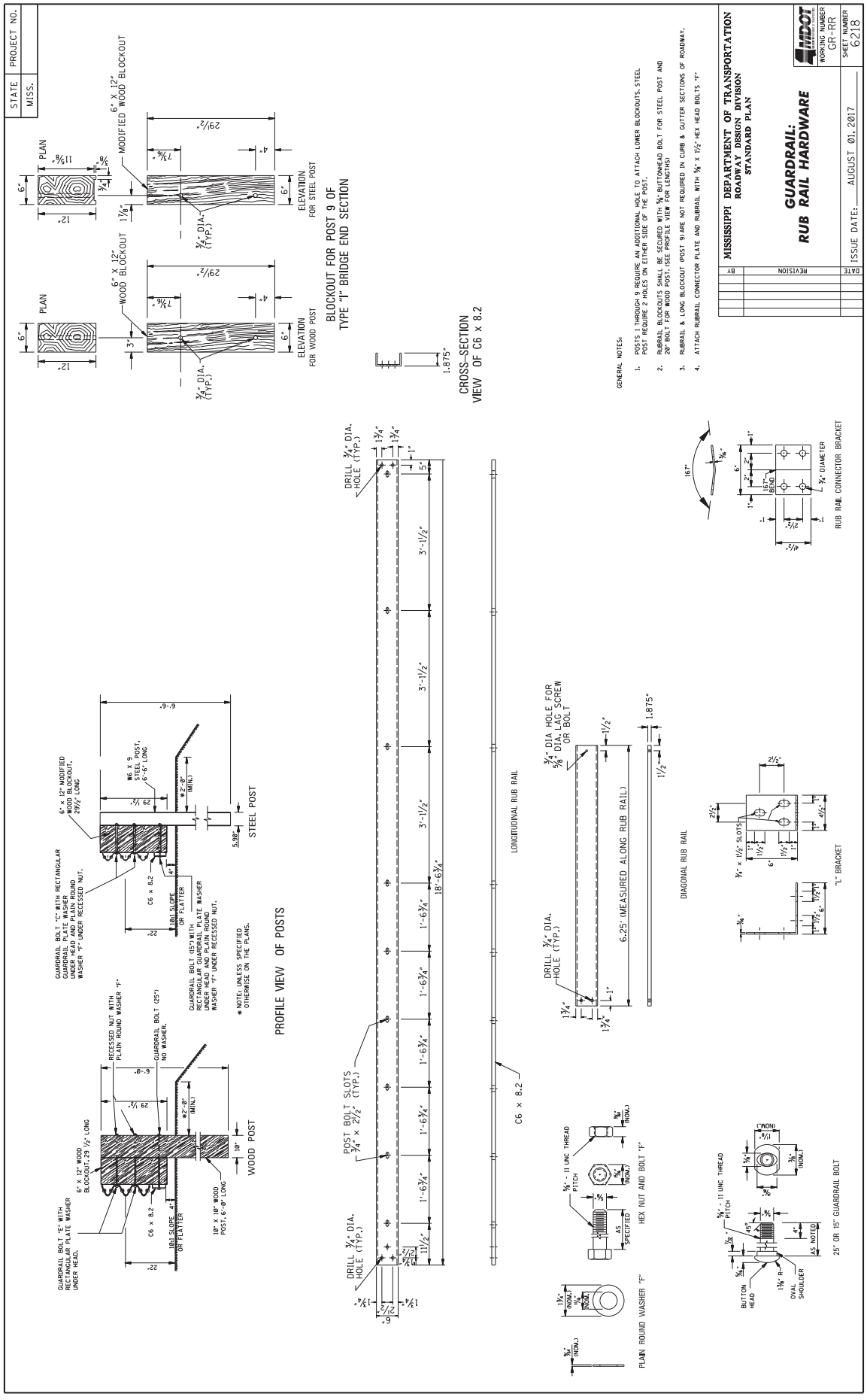

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPE 1 CABLE ANCHORAGE
(CONCRETE FOOTING)
WORKING NUMBER GR-3A
SHEET NUMBER 6213
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
ROUNDED "W" BEAM END SECTION
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.
GENERAL NOTES:
1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
2. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
3. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
4. CONCRETE FOR THE CONCRETE FOUNDATION MAY BE EITHER CLASS "B" STRUCTURAL CONCRETE OR AN APPROVED COMMERCIAL PRE-MIXED BAG CONCRETE. THE WELDED WIRE FABRIC FOR THE CONCRETE FOUNDATION SHALL CONFORM TO AASHTO M 221/M 221M AND AASHTO M 55M/M 55.
5. FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
6. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
7. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:
1. WOOD POST INSTALLATION (SHOWN)
"W" BEAM TERMINAL RAIL SECTION, 6' X 12" WOOD BLOCKOUT, 14" LONG, AND 6' X 8" WOOD POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
2. STEEL POST INSTALLATION
"W" BEAM TERMINAL RAIL SECTION, 6' X 12" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-6" LONG ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.
3" (MIN.)
30°
13/16" DIA.
7/8" X 1 1/4" SLOT FOR GUARDRAIL BOLT "A" (TYP.)
16"
12 1/4"
8 1/2"
7 1/2" (VARIES)
2"
"W" BEAM END SECTION
ROUNDED "W" BEAM END SECTION
24" DIA. CONCRETE FOUNDATION, 3'-0" DEEP
GUARDRAIL ANCHOR BRACKET
CABLE ANCHOR ASSEMBLY
PLAN
POST 1
POST 2
6'-3"
6'-3" TO NEXT POST
(STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION)
GALVANIZED STEEL 16d COMMON NAIL (DRIVE NAIL AT CENTER OF POST AND BEND AFTER BOLT IS INSTALLED)
HEX NUT AND BOLT "F", 1½" LONG (TYP.), EIGHT (8) REQUIRED
"W" BEAM TERMINAL RAIL SECTION
SEE DETAIL "A"
5½" X 7½" WOOD TERMINAL POST, 5'-8" LONG
GUARDRAIL BOLT (10") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT
GUARDRAIL BOLT "A" AND RECESSED NUT (TYP.), FOUR (4) REQUIRED
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
25"
3'-0"
ELEVATION FROM BEHIND GUARDRAIL
NOTE: ANCHOR CABLE SHALL BE TAUT.
¾" X 2¾" SLOT
2½" DIA. HOLE
5'-8"
25"
21"
7"
4"
SIDE
FRONT
WOOD TIMBER POST
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lb/in².
POLYSTYRENE SHEETING OR COMPOSITION PAPER
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
24" (NOM.)
8" (NOM.)
SECTION A–A
NOTE: FORM A NOMINAL 6" X 8" SOCKET IN THE FOUNDATION TO RECEIVE THE 5½" X 7½" TIMBER POST. FORM HOLES WITH 1½" DIAMETER FOAM SHEETING OR WRAP THE TIMBER POST IN A DOUBLE LAYER OF COMPOSITION PAPER. THE LAYER OF SHEETING OR PAPER WILL AID IN REMOVING A DAMAGED POST.
5½" X 7½" WOOD TERMINAL POST, 5'-8" LONG
CABLE ANCHOR ASSEMBLY
POLYSTYRENE SHEETING, COMPOSITION PAPER OR SOME OTHER MATERIAL SHALL BE WRAPPED AROUND THE CONCRETE EMBEDDED PORTION OF THE POST TO AID IN REMOVING BROKEN OR DAMAGED POSTS.
6 X 6-W6 X W6 OR 6 X 6-D6 X D6 WELDED WIRE FABRIC
POST SLEEVE
8" X 8" STEEL BEARING PLATE, ⅝" THICK
24"
4"
3" (TYP.)
DETAIL A

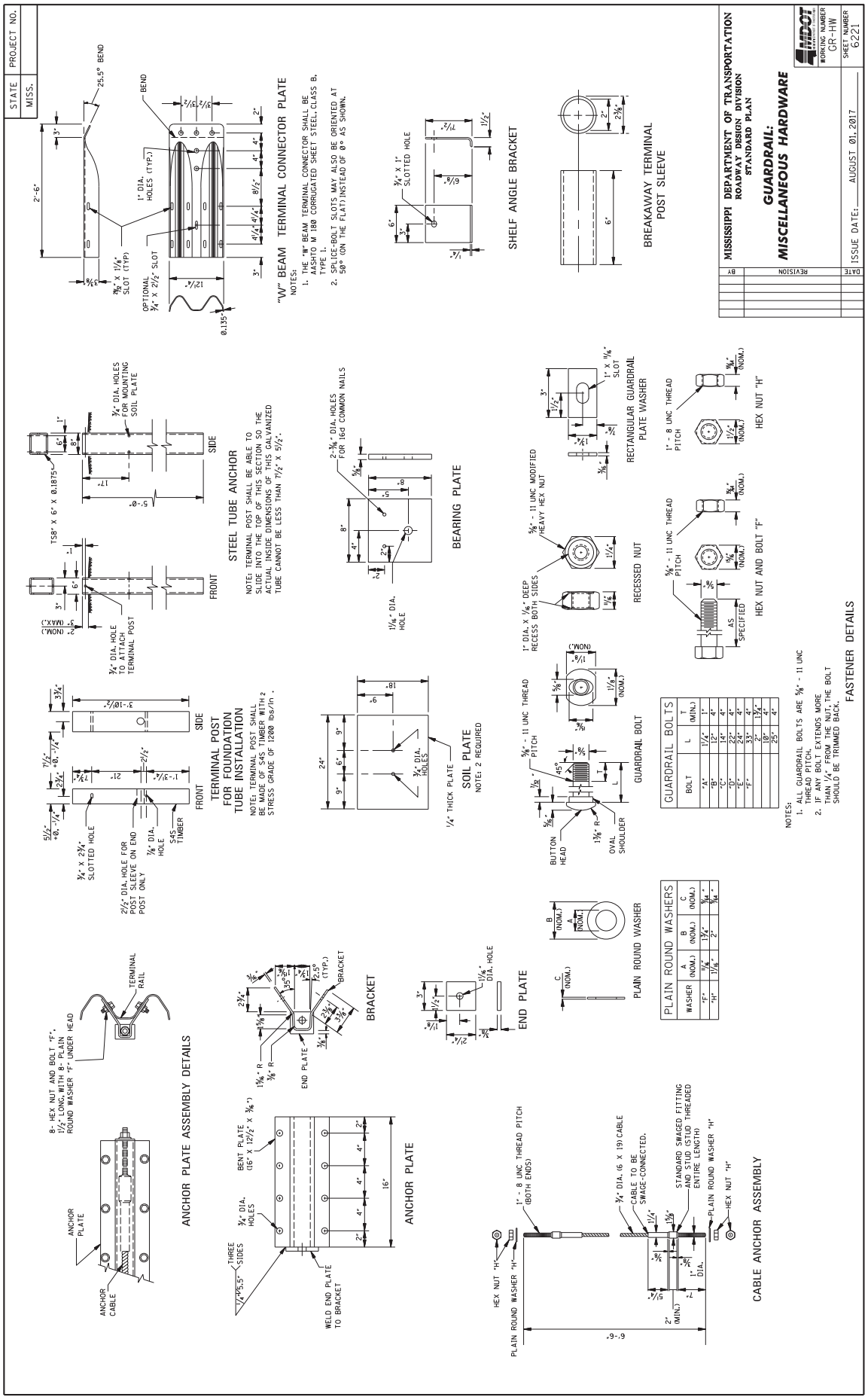

STATE MISS.
PROJECT NO.
** NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
SECTION A–A
SECTION B–B
GENERAL NOTES:
1. VALUES FOR "A" AND "B" WILL BE SHOWN ELSEWHERE ON THE PLANS.
2. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
3. GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
4. THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
5. IN THE ABSENCE OF A BRIDGE END PAVEMENT RAIL CONNECT THE BRIDGE END SECTION TO THE BRIDGE RAIL SECTION ACROSS OPEN-THRU GRATING. THE SHOULDER WIDTH AT THE BRIDGE END PAVEMENT RAIL OR BRIDGE END RAIL SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
6. TYPE DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.
7. W = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.
8. FOR DIVIDED HIGHWAYS WITH THREE (3) OR MORE LANES IN ONE DIRECTION, THE MEDIAN BARRIER MAY REQUIRE A TAPER RATE OTHER THAN 25:1.
BY REVISION DATE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR DIVIDED HIGHWAYS
WORKING NUMBER GR-4
ISSUE DATE: MAY 01, 2017
SHEET NUMBER 6214
DIVIDED HIGHWAY WITH BARRIER INSIDE CLEAR ZONE OF OPPOSING TRAFFIC
* NOTE: THE 25' LINE IS USED TO DETERMINE THE LIMITS OF MEDIAN BARRIER AS SHOWN.
DIVIDED HIGHWAY WITH BARRIER OUTSIDE CLEAR ZONE OF OPPOSING TRAFFIC
** VARIABLE
150' MINIMUM TRANSITION
NORMAL GUARDRAIL INSTALLATION
TERMINAL SECTION
30:1 TAPER
25:1 TAPER
GUARDRAIL FACE ALINEMENT ON BRIDGE
DOUBLE-FACED GUARDRAIL
TYPE 1 END SECTION
BRIDGE END PAVEMENT
BRIDGE
BRIDGE END PAVT RAIL
SEE NOTE 5
NORMAL SHOULDER
20:1 SLOPE RELATIVE TO LONGITUDINAL GRADIENT FOR HIGHWAY CENTERLINE
MEDIAN BARRIER TERMINAL AS SHOWN ELSEWHERE ON PLANS
ETL
VARIES
NORMAL SHOULDER SLOPE
AS SHOWN ON PLANS

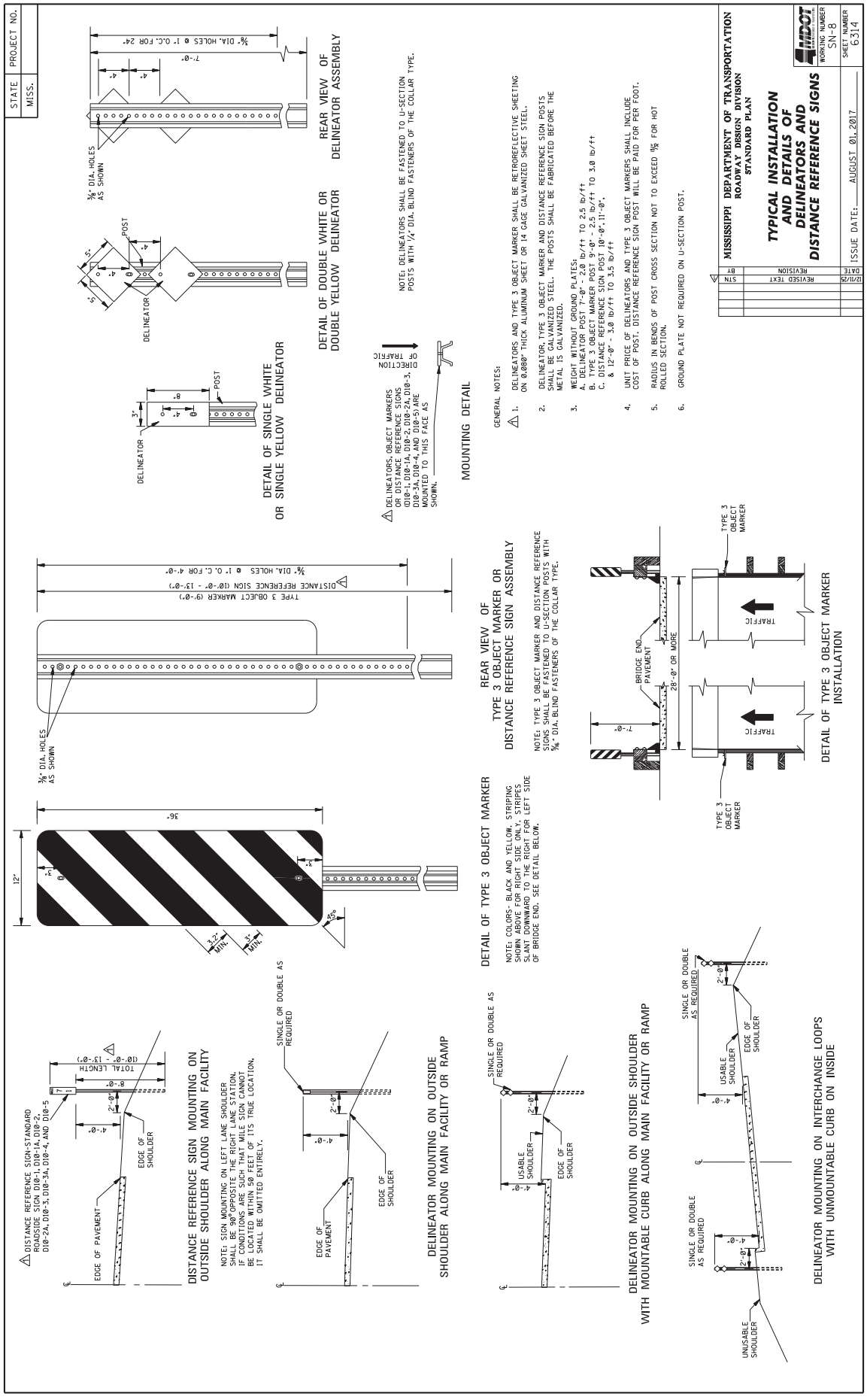

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION
AT BRIDGE APPROACHES
FOR 2-LANE 2-WAY
HIGHWAY
WORKING NUMBER GR-4A
SHEET NUMBER 6215
ISSUE DATE: MAY 01, 2017
BY REVISION DATE
* NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
DETAIL OF GUARDRAIL SECTION LAPS
GENERAL NOTES:
1. VALUES FOR "A", "B", "C" AND "D" WILL BE SHOWN ELSEWHERE ON THE PLANS.
2. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
3. GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC APPROACHING THE BRIDGE.
4. THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
5. IN THE ABSENCE OF A BRIDGE END PAVEMENT RAIL, CONNECT THE BRIDGE END SECTION TO THE BRIDGE RAIL (SEE MS-GR-2 THRU GR-2C). THE SHOULDER WIDTH AT THE BRIDGE END PROVIDED FOR BRIDGE END RAIL SHALL BE SUFFICIENT TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
6. TYPE DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.
7. "W" = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.
PLAN
SECTION A–A
SECTION B–B
"A"
"B"
"C"
"D"
"W"
* VARIABLE
150' MINIMUM TRANSITION
NORMAL GUARDRAIL INSTALLATION
TERMINAL SECTION
BRIDGE END SECTION
TANGENT
37'-6" TYPICAL
75'
25'-0"
12'-6"
18'-9"
30:1 TAPER
GUARDRAIL FACE ALINEMENT ON BRIDGE
BRIDGE END PAVEMENT
BRIDGE
SEE NOTE 5
BRIDGE END PAVT' RAIL
20:1 SLOPE RELATIVE TO LONGITUDINAL GRADIENT FOR HIGHWAY CENTERLINE
NORMAL SHOULDER
ETL
AS SHOWN ON THE PLANS
6:1
NORMAL SHOULDER SLOPE
VARIES
2'-0"
3:1


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
TYPICAL INSTALLATION
FOR ROADSIDE HAZARDS
ON DIVIDED HIGHWAYS
WORKING NUMBER GR-4B
SHEET NUMBER 6216
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
SECTION A–A
SECTION B–B
SECTION C–C
SECTION D–D
FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER
SECTION D–D
FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER
SECTION E–E
† NOTE: IF FORESLOPE, SHOWN ELSEWHERE ON PLANS, IS OTHER THAN 6:1, TRANSITION WILL OCCUR IN AREA SHOWN.
** NOTE: FOR STEEL POST AND WOOD BLOCKOUT, SEE "STEEL POST" AND BLOCKOUT, 23.45".
TYPICAL INSTALLATION FOR CULVERT
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER
*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
DETAIL OF POST INSTALLATION WITH COVER
LESS THAN NORMAL POST LENGTH
GENERAL NOTES:
1. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
2. GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
3. PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.
4. W = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL: TYPICAL INSTALLATION FOR ROADSIDE HAZARDS ON 2-LANE, 2-WAY HIGHWAYS
WORKING NUMBER GR-4C
SHEET NUMBER 6217
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
SECTION A-A
SECTION B-B
SECTION C-C
SECTION D-D FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER
SECTION D-D FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER
SECTION E-E
** NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, USE 12" POWER POST 12FB31 AND WOOD BLOCKOUT, 23.25".
† NOTE: IF FORESLOPE SHOWN ELSEWHERE ON PLANS IS OTHER THAN 6:1, TRANSITION WIL. OCCUR IN AREA SHOWN.
GENERAL NOTES:
1. FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
2. GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
3. PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.
4. W = SHOULDER WIDTH + FORESLOPE WIDTH. DIMENSIONS FOUND ELSEWHERE ON THE PLANS.
TYPICAL INSTALLATION FOR CULVERT
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER
* NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.
THE POST SHALL BE WRAPPED WITH ONE LAYER OF 1/4" THICK EXPANDED POLYSTYRENE FOAM SHEETING AND ONE WRAP OF LIGHTWEIGHT BUILDING PAPER. THE TOP 1' SHALL BE FILLED WITH BUTYL RUBBER CAULKING (COMMERCIAL GRADE) OR OTHER APPROVED WATERPROOFING MATERIAL.
TOP OF NEW BOX CULVERT OR BRIDGE FOOTING.
TOP OF EXISTING BOX CULVERT OR BRIDGE FOOTING.
1/2" DOWEL BARS 12" LONG 4 REQUIRED PER POST. NO SPECIAL PAYMENT WILL BE MADE FOR CONCRETE OR DOWELS.
DETAIL OF POST INSTALLATION WITH COVER LESS THAN NORMAL POST LENGTH


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
RUB RAIL HARDWARE
WORKING NUMBER GR-RR
SHEET NUMBER 6218
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
GENERAL NOTES:
1. POSTS 1 THROUGH 9 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKOUTS. STEEL POST REQUIRE 2 HOLES ON EITHER SIDE OF THE POST.
2. RUBRAIL BLOCKOUTS SHALL BE SECURED WITH ⅝" BUTTONHEAD BOLT FOR STEEL POST AND 20" BOLT FOR WOOD POST. (SEE PROFILE VIEW FOR LENGTHS)
3. RUBRAIL & LONG BLOCKOUT (POST 9) ARE NOT REQUIRED IN CURB & GUTTER SECTIONS OF ROADWAY.
4. ATTACH RUBRAIL CONNECTOR PLATE AND RUBRAIL WITH ⅝" X 1½" HEX HEAD BOLTS "F"
BLOCKOUT FOR POST 9 OF TYPE "1" BRIDGE END SECTION
6" X 12" WOOD BLOCKOUT
MODIFIED WOOD BLOCKOUT
PLAN
ELEVATION FOR WOOD POST
ELEVATION FOR STEEL POST
¾" DIA. (TYP.)
CROSS-SECTION VIEW OF C6 x 8.2
PROFILE VIEW OF POSTS
GUARDRAIL BOLT "C" WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
6" X 12" MODIFIED WOOD BLOCKOUT, 29½" LONG
#6 X 9 STEEL POST, 6'-6" LONG
STEEL POST
C6 x 8.2
10¹/₂° SLOPE OR FLATTER
GUARDRAIL BOLT (15") WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.
RECESSED NUT WITH PLAIN ROUND WASHER "F"
GUARDRAIL BOLT (25") NO WASHER.
6" X 12" WOOD BLOCKOUT, 29 ½" LONG
GUARDRAIL BOLT "E" WITH RECTANGULAR PLATE WASHER UNDER HEAD.
10° X 10" WOOD POST, 6'-0" LONG
WOOD POST
DRILL ¾" DIA. HOLE (TYP.)
POST BOLT SLOTS ¾" X 2½" (TYP.)
LONGITUDINAL RUB RAIL
C6 x 8.2
¾" DIA HOLE FOR ⅝" DIA. LAG SCREW OR BOLT
6.25" (MEASURED ALONG RUB RAIL)
DIAGONAL RUB RAIL
RUB RAIL CONNECTOR BRACKET
¾" DIAMETER
16° BEND
¾" X 1½" SLOTS
"L" BRACKET
¾" - 11 UNC THREAD PITCH
HEX NUT AND BOLT "F"
PLAIN ROUND WASHER "F"
BUTTON HEAD
OVAL SHOULDER
25" OR 15" GUARDRAIL BOLT


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
GUARDRAIL:
MISCELLANEOUS HARDWARE
WORKING NUMBER GR-HW
SHEET NUMBER 6221
ISSUE DATE: AUGUST 01, 2017
REVISION
DATE
BY
"W" BEAM TERMINAL CONNECTOR PLATE
NOTES:
1. THE "W" BEAM TERMINAL CONNECTOR SHALL BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE 1.
2. SPLICE-BOLT SLOTS MAY ALSO BE ORIENTED AT 50° (ON THE FLAT) INSTEAD OF 0° AS SHOWN.
SHELF ANGLE BRACKET
BREAKAWAY TERMINAL POST SLEEVE
STEEL TUBE ANCHOR
NOTE: TERMINAL POST SHALL BE ABLE TO SLIDE INTO THE TOP OF THIS SECTION SO THE ACTUAL INSIDE DIMENSIONS OF THIS GALVANIZED TUBE CANNOT BE LESS THAN 7½" X 5½".
BEARING PLATE
TERMINAL POST FOUNDATION TUBE INSTALLATION
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH a STRESS GRADE OF 1200 lbs/in².
SOIL PLATE
NOTE: 2 REQUIRED
RECTANGULAR GUARDRAIL PLATE WASHER
RECESSED NUT
HEX NUT "H"
HEX NUT AND BOLT "F"
GUARDRAIL BOLT
GUARDRAIL BOLTS
PLAIN ROUND WASHER
PLAIN ROUND WASHERS
NOTES:
1. ALL GUARDRAIL BOLTS ARE ⅝" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN ¼" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
FASTENER DETAILS
ANCHOR PLATE ASSEMBLY DETAILS
BRACKET
END PLATE
ANCHOR PLATE
CABLE ANCHOR ASSEMBLY


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS
WORKING NUMBER SN-8
SHEET NUMBER 6314
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT
DATE
BY
STN
GENERAL NOTES:
1. DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE RETROREFLECTIVE SHEETING ON 0.080" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
2. DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS SHALL BE FABRICATED BEFORE THE METAL IS GALVANIZED.
3. WEIGHT WITHOUT GROUND PLATES:
A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft
B. TYPE 3 OBJECT MARKER POST 9'-0" - 2.5 lb/ft TO 3.0 lb/ft
C. DISTANCE REFERENCE SIGN POST 10'-0",11'-0", & 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
4. UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST. DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
5. RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 5/8 FOR HOT ROLLED SECTION.
6. GROUND PLATE NOT REQUIRED ON U-SECTION POST.
NOTE: DELINEATORS SHALL BE FASTENED TO U-SECTION POSTS WITH 1/4" DIA. BLIND FASTENERS OF THE COLLAR TYPE.
REAR VIEW OF DELINEATOR ASSEMBLY
DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR
DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR
MOUNTING DETAIL
DELINEATORS OBJECT MARKERS OR DISTANCE REFERENCE SIGNS (D10-1, D10-1A, D10-2, D10-2A, D10-3, D10-3A, D10-4, AND D10-5) ARE MOUNTED TO THIS FACE AS SHOWN.
DIRECTION OF TRAFFIC
REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY
NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS SHALL BE FASTENED TO U-SECTION POSTS WITH 5/16" DIA. BLIND FASTENERS OF THE COLLAR TYPE.
DETAIL OF TYPE 3 OBJECT MARKER
NOTE: COLORS- BLACK AND YELLOW. STRIPING SHOWN ABOVE FOR RIGHT SIDE ONLY. STRIPES SLANT DOWNWARD TO THE RIGHT FOR LEFT SIDE OF BRIDGE END. SEE DETAIL BELOW.
DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION
DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY
NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 500' OPPOSITE THE RIGHT LANE STATION. IF CONDITIONS ARE SUCH THAT MILE SIGN CANNOT BE LOCATED WITHIN 500 FEET OF ITS TRUE LOCATION, IT SHALL BE OMITTED ENTIRELY.
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP
DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE
DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP WITH MOUNTABLE CURB
DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 7624 **CODE: (SP)**

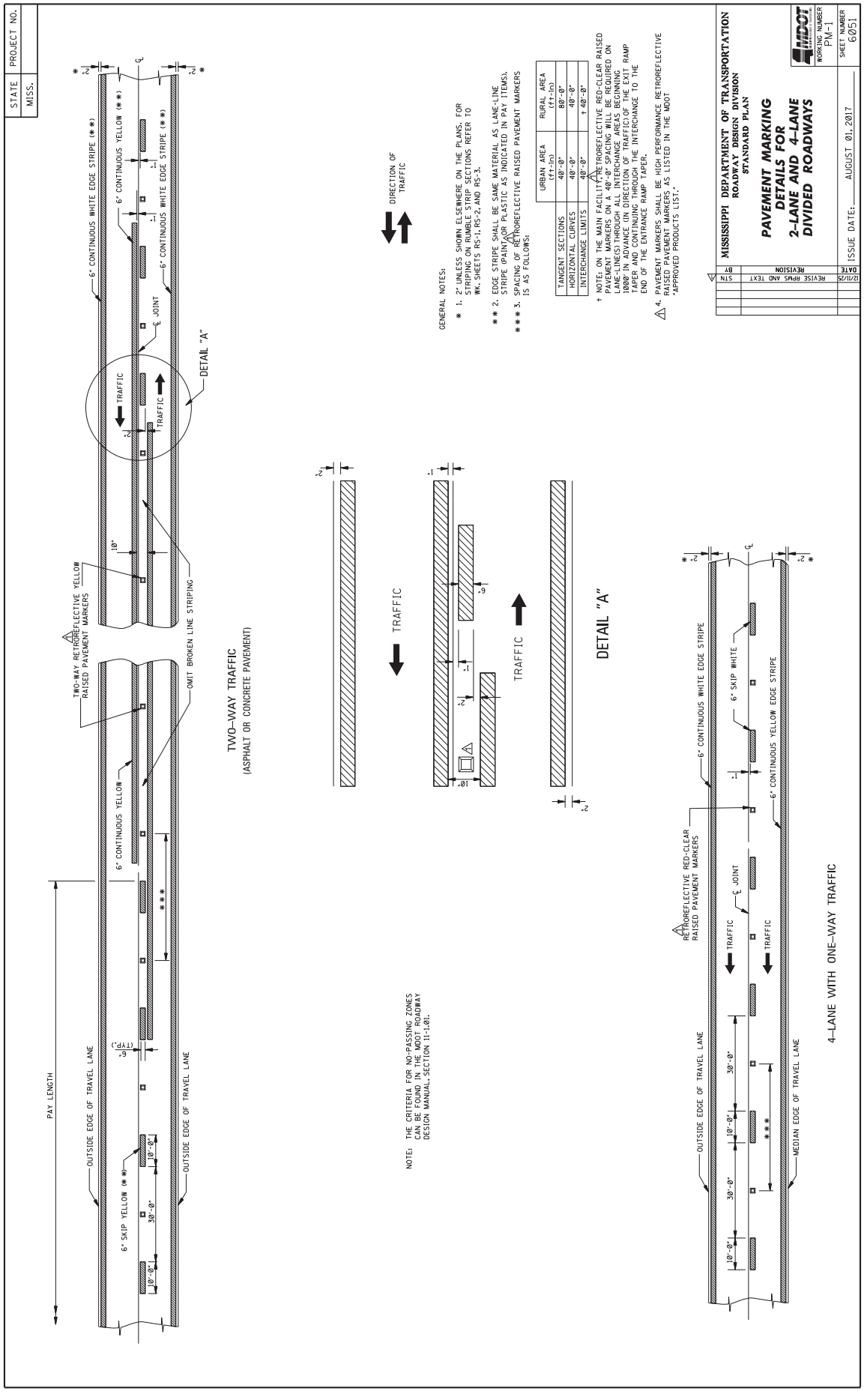
DATE: 01/20/2026

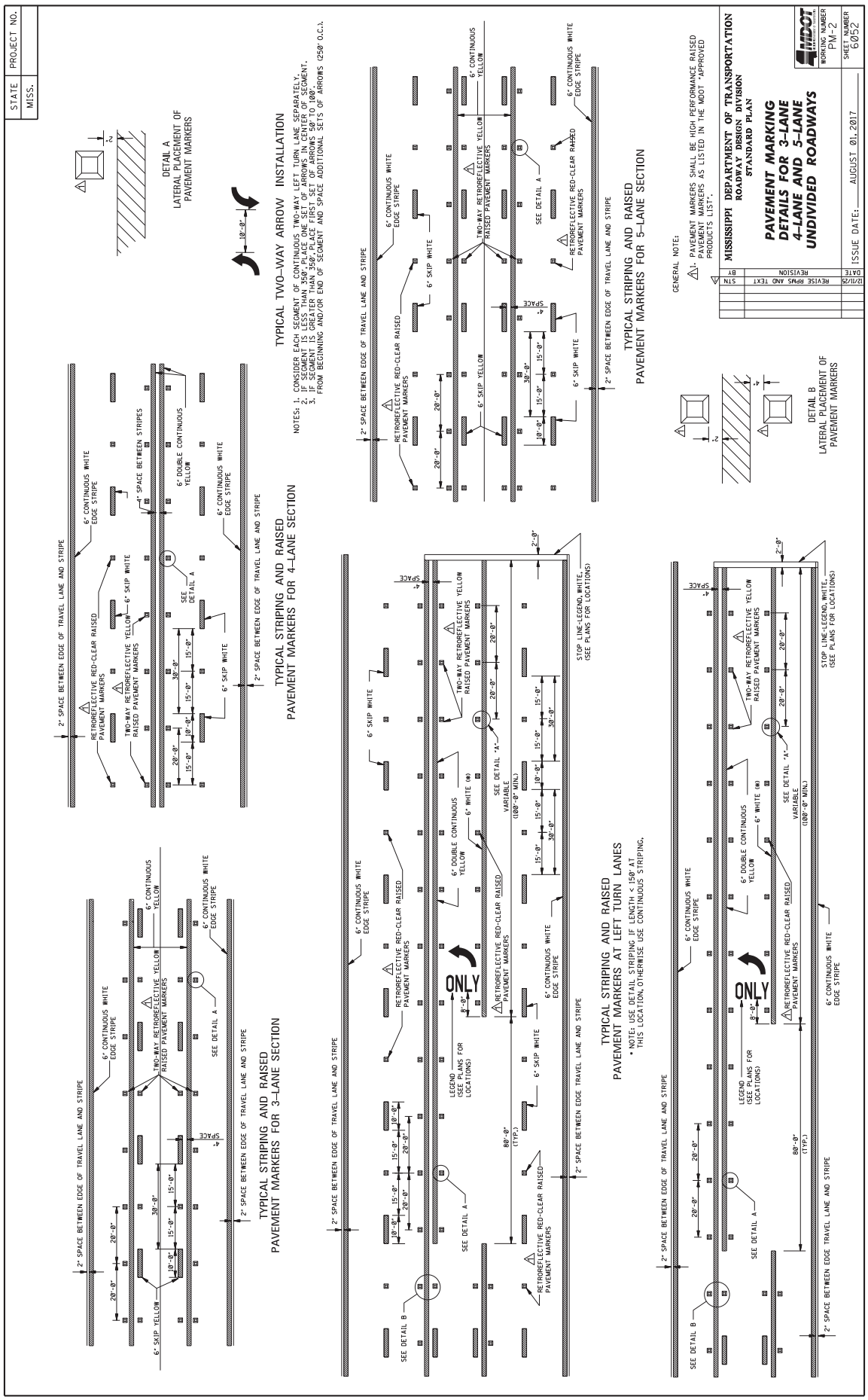
SUBJECT: Standard Drawings

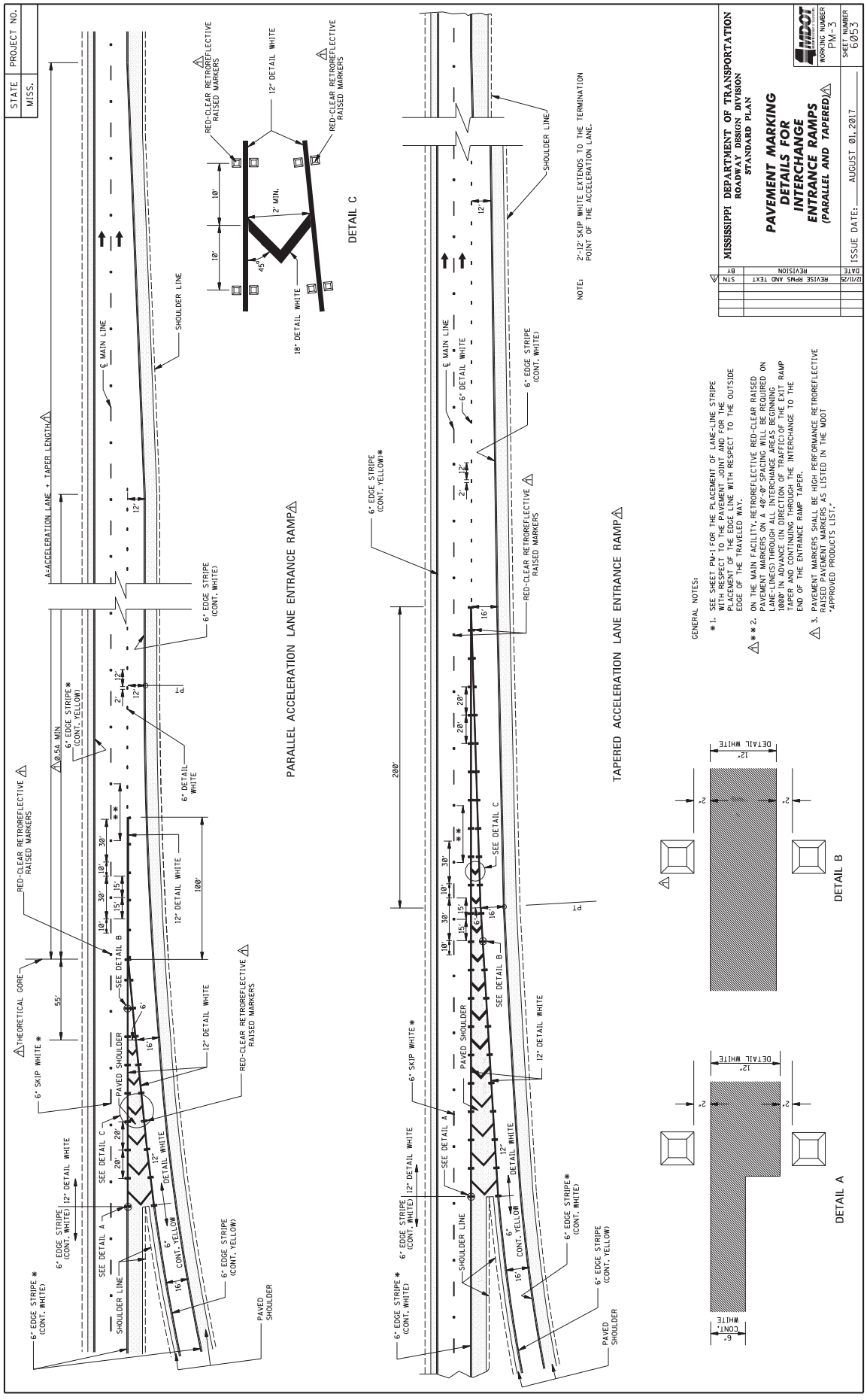
Standard Drawings attached hereto shall govern appropriate items of required work.

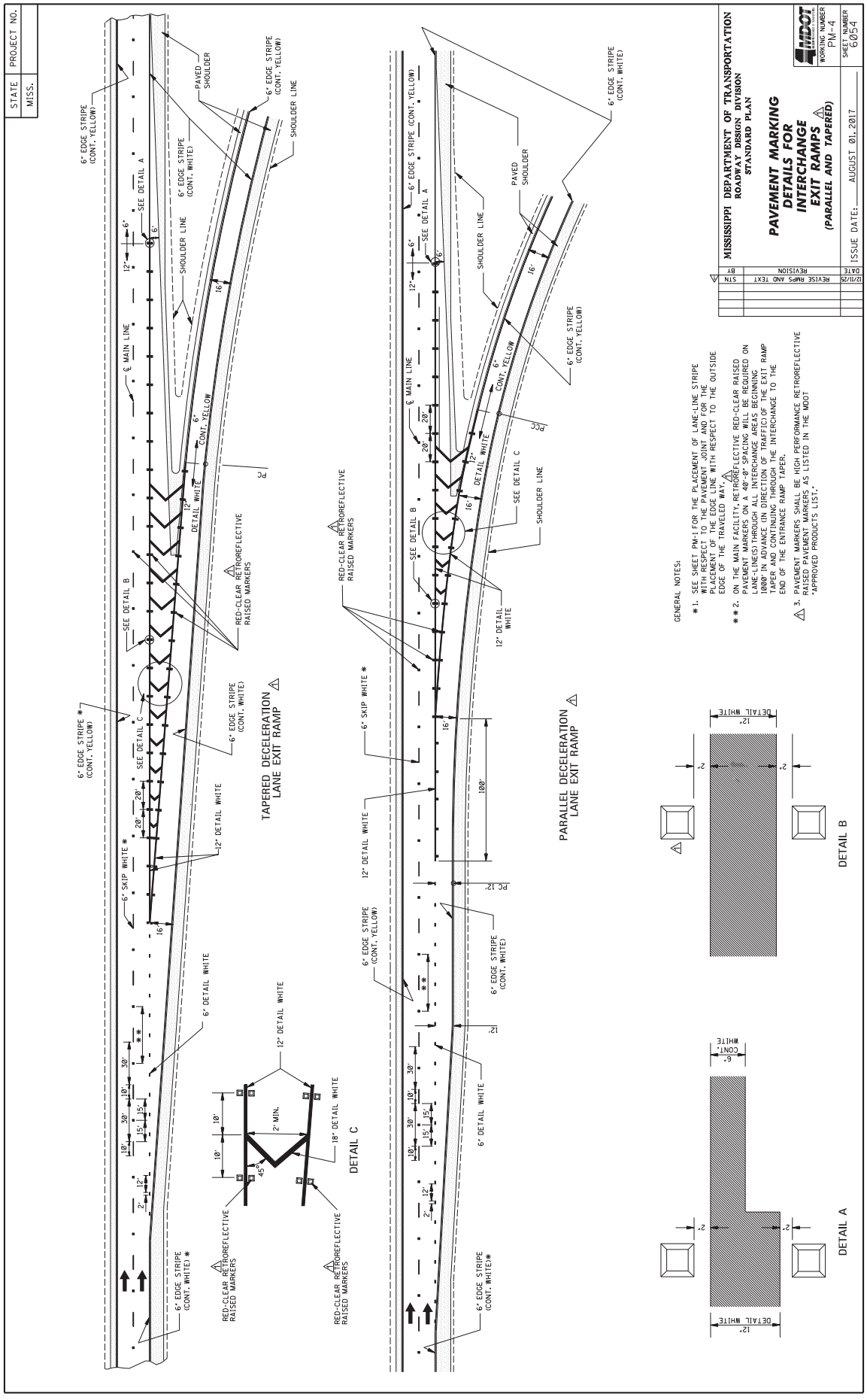
Larger copies of Standard Drawings may be purchased from:

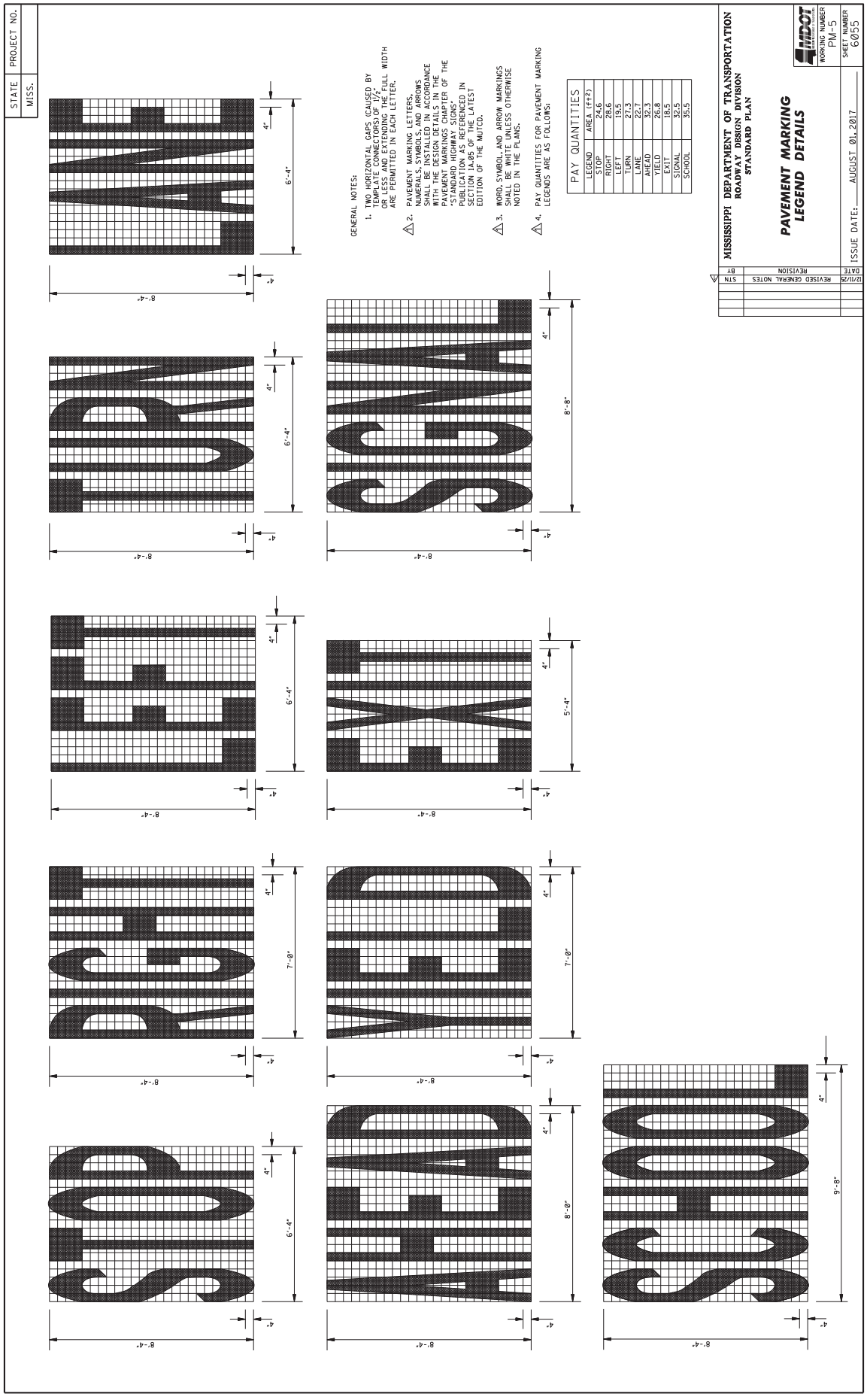
MDOT Plans Print Shop
MDOT Shop Complex, Building C, Room 114
2567 North West Street
P.O. Box 1850
Jackson, MS 39215-1850
Telephone: (601) 359-7460
or FAX: (601) 359-7461
or e-mail: plans@mdot.state.ms.us

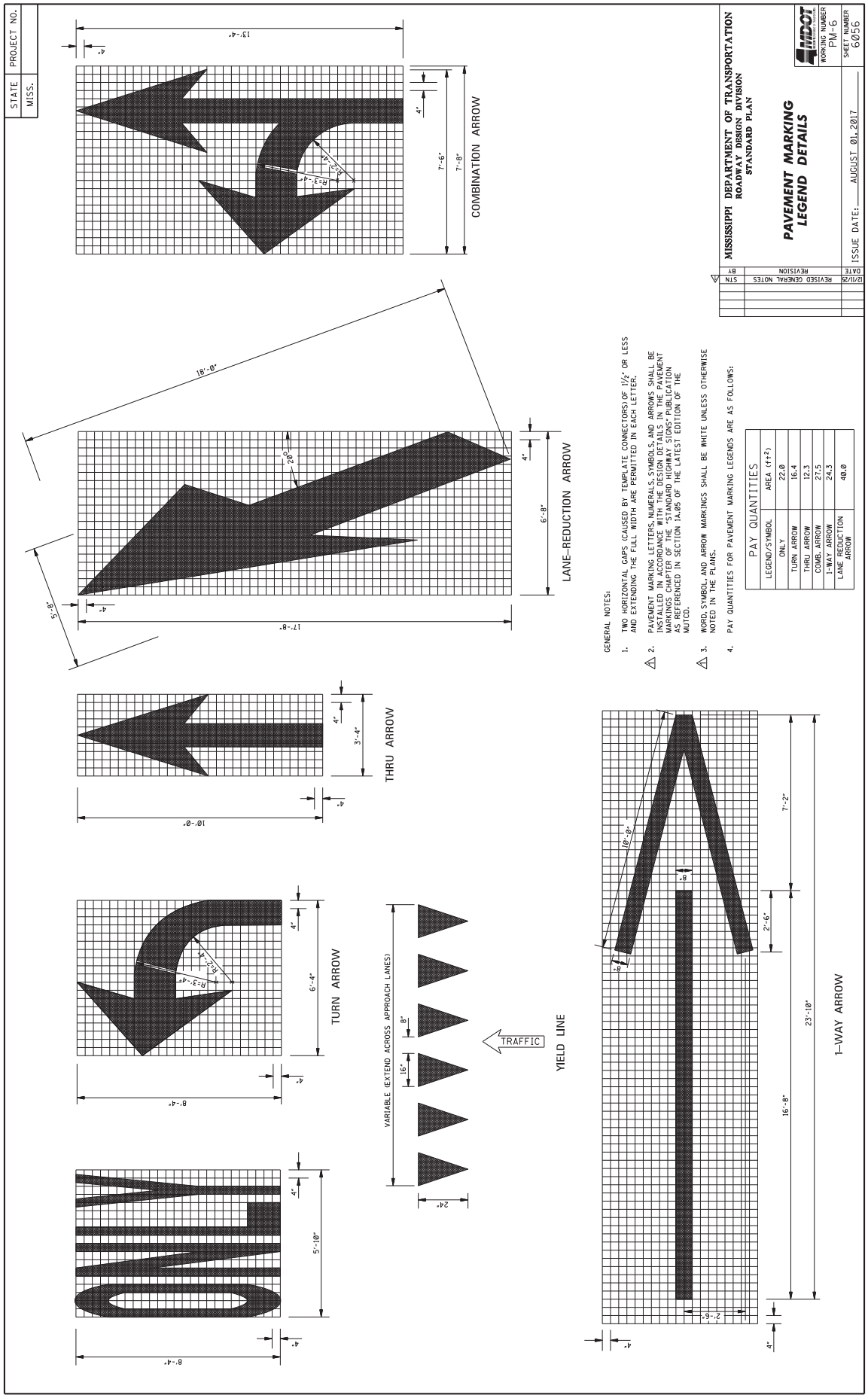

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS
WORKING NUMBER PM-1
SHEET NUMBER 6051
ISSUE DATE: AUGUST 01, 2017
REVISE RPMS AND TEXT
DATE 12/11/25
BY
STN
PAY LENGTH
OUTSIDE EDGE OF TRAVEL LANE
6" SKIP YELLOW (**)
6" CONTINUOUS YELLOW
6" CONTINUOUS WHITE EDGE STRIPE (**)
6" CONTINUOUS YELLOW (**)
6" CONTINUOUS WHITE EDGE STRIPE (**)
TWO-WAY RETROREFLECTIVE YELLOW RAISED PAVEMENT MARKERS
OMIT BROKEN LINE STRIPING
TRAFFIC
DETAIL "A"
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
DIRECTION OF TRAFFIC
NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDOT ROADWAY DESIGN MANUAL, SECTION 11-1.01.
GENERAL NOTES:
* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS. FOR STRIPING ON RUMBLE STRIP SECTIONS REFER TO WK. SHEETS RS-1, RS-2, AND RS-3.
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).
*** 3. SPACING OF RETROREFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:
URBAN AREA (ft-in) / RURAL AREA (ft-in)
TANGENT SECTIONS 40'-0" / 80'-0"
HORIZONTAL CURVES 40'-0" / 40'-0"
INTERCHANGE LIMITS 40'-0" / † 40'-0"
† NOTE: ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS SPACED AT 40'-0" CENTERS WILL BE REQUIRED ON LANE LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."
RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
6" CONTINUOUS WHITE EDGE STRIPE
6" SKIP WHITE
6" CONTINUOUS YELLOW EDGE STRIPE
OUTSIDE EDGE OF TRAVEL LANE
MEDIAN EDGE OF TRAVEL LANE
4-LANE WITH ONE-WAY TRAFFIC

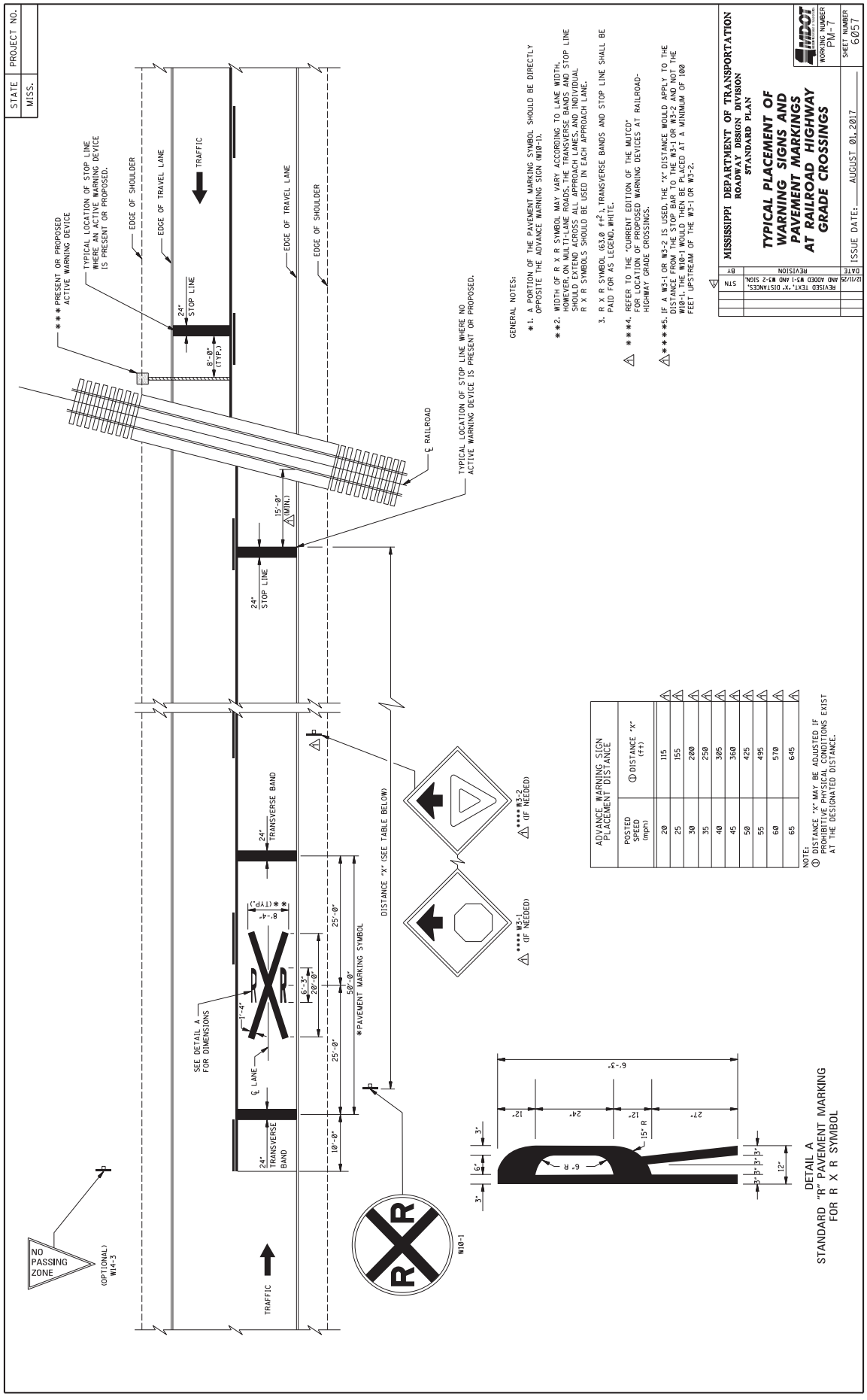

STATE MISS.
PROJECT NO.
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 3-LANE SECTION
TYPICAL TWO-WAY ARROW INSTALLATION
NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN EACH SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).
DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES
* NOTE: USE DETAIL STRIPING IF LENGTH < 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION
DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST".
STN
DATE
REVISION
BY
12/11/20 REVISE RPMS AND TEXT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 3-LANE 4-LANE AND 5-LANE UNDIVIDED ROADWAYS
ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER PM-2
SHEET NUMBER 6052

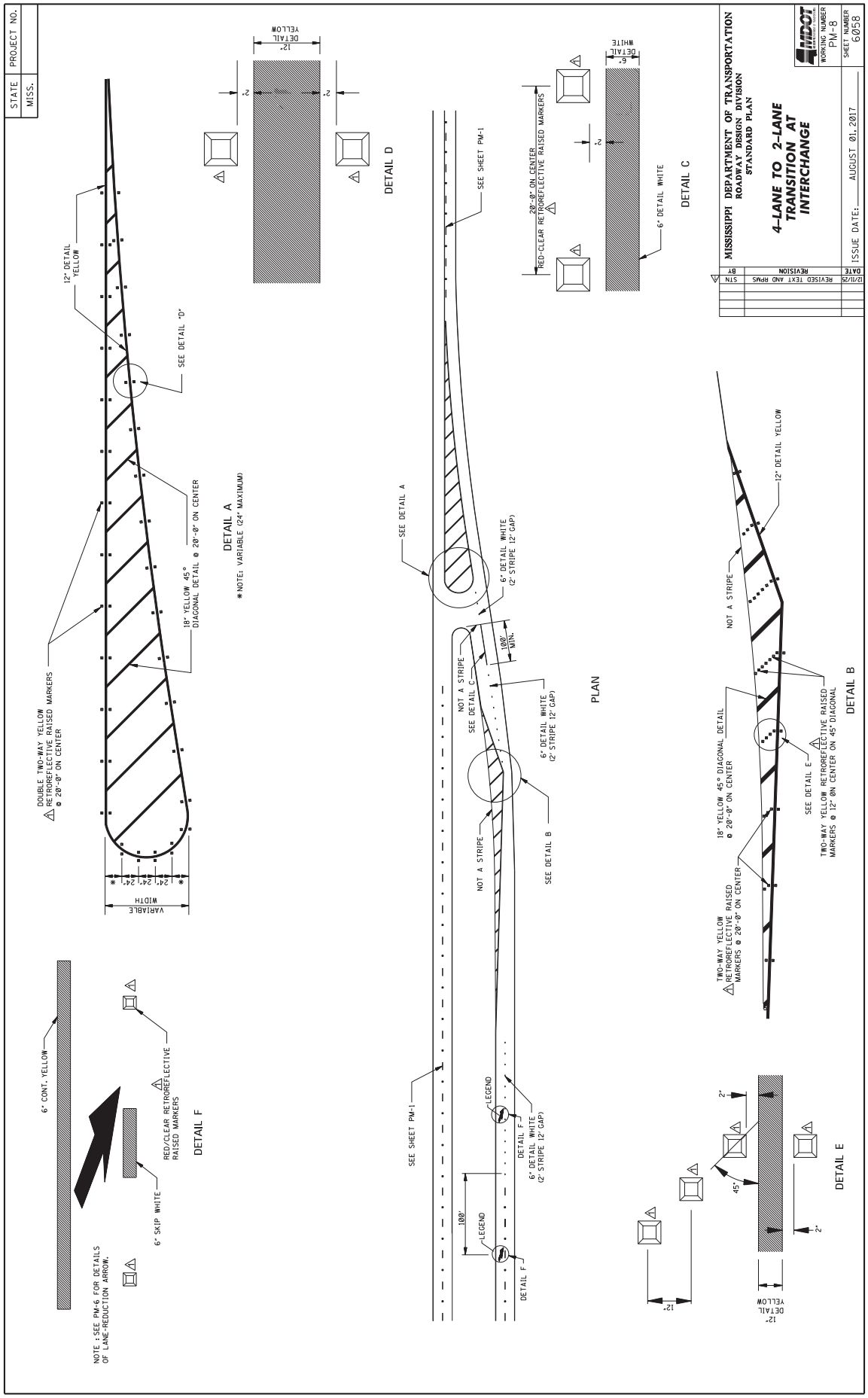

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPERED)
WORKING NUMBER PM-3
SHEET NUMBER 6053
ISSUE DATE: AUGUST 01, 2017
REVISION DATE BY
12/11/25 REVISE RPMS AND TEXT STN
PARALLEL ACCELERATION LANE ENTRANCE RAMP
TAPERED ACCELERATION LANE ENTRANCE RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
*1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
**2. ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."
NOTE: 2'-12' SKIP WHITE EXTENDS TO THE TERMINATION POINT OF THE ACCELERATION LANE.

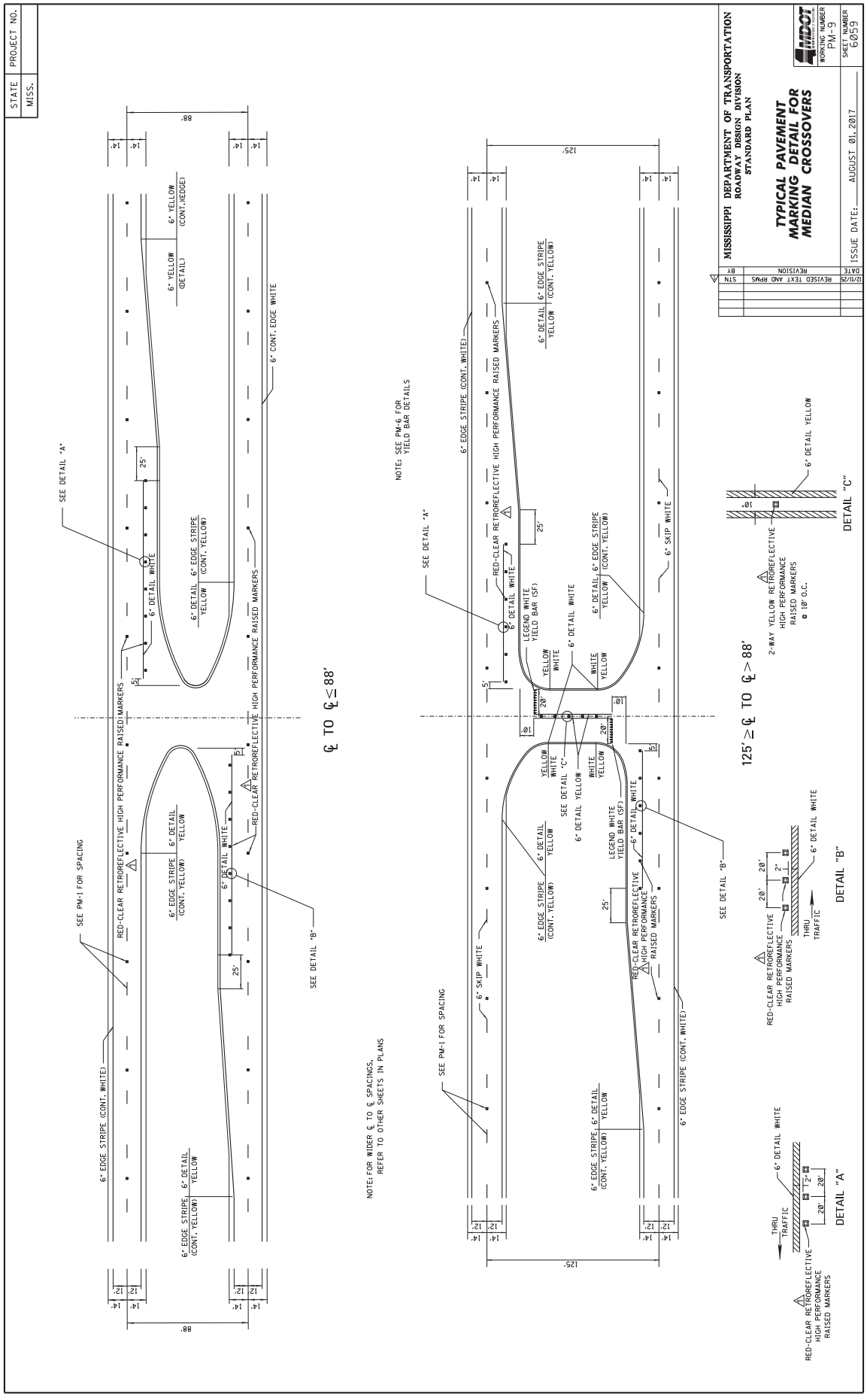

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS
(PARALLEL AND TAPERED)
WORKING NUMBER PM-4
SHEET NUMBER 6054
ISSUE DATE: AUGUST 01, 2017
DATE 12/11/23 BY STN REVISION REVISE RAMPS AND TEXT
TAPERED DECELERATION LANE EXIT RAMP
PARALLEL DECELERATION LANE EXIT RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
* * 2. ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST."

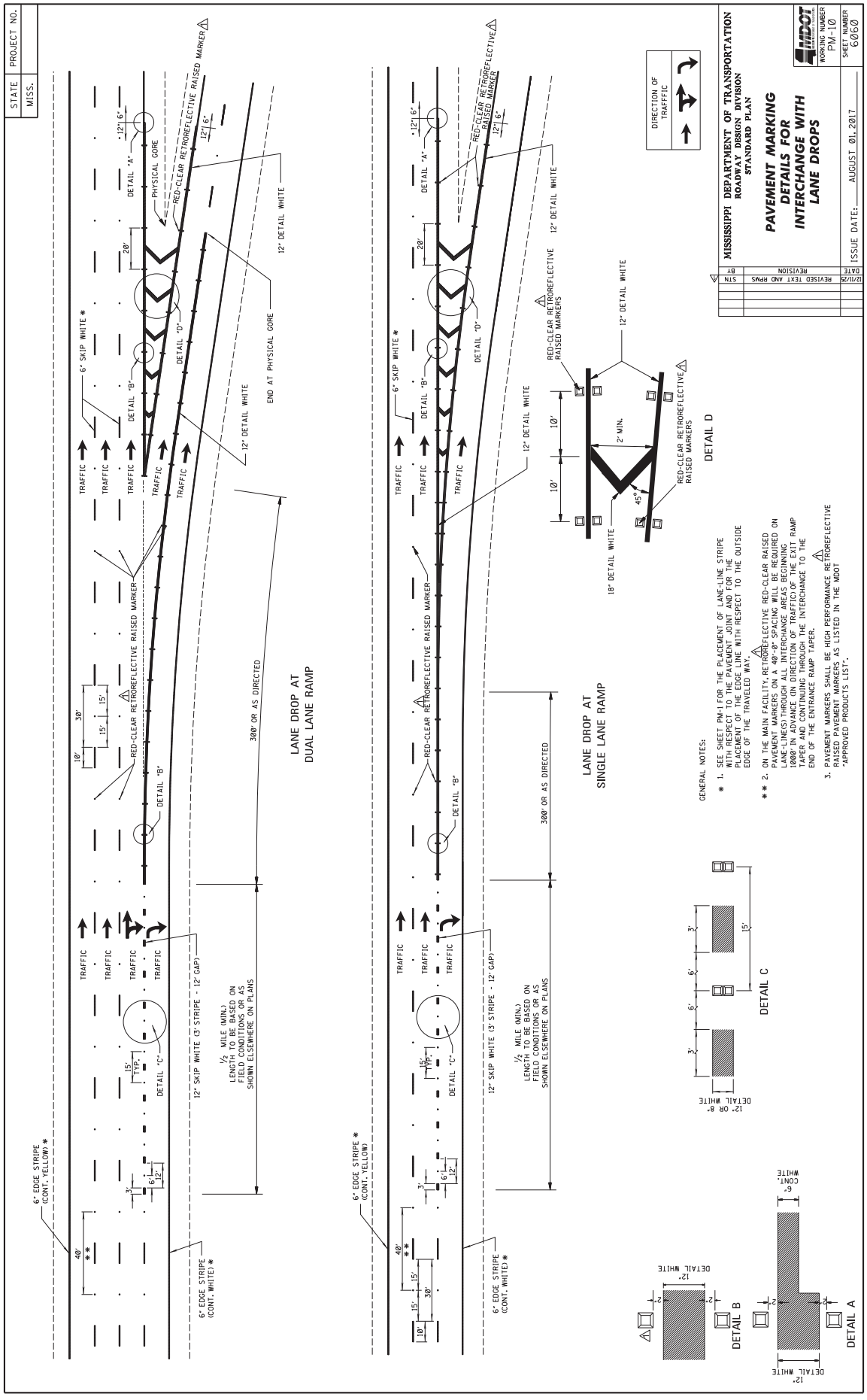

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
WORKING NUMBER PM-5
SHEET NUMBER 6055
ISSUE DATE: AUGUST 01, 2017
STN BY REVISION DATE
REVISED GENERAL NOTES 12/11/25
GENERAL NOTES:
1. TWO HORIZONTAL CAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. PAVEMENT MARKING LETTERS, NUMERALS, SYMBOLS, AND ARROWS SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN DETAILS IN THE PAVEMENT MARKINGS CHAPTER OF THE STANDARD HIGHWAY SIGNS PUBLICATION AS REFERENCED IN SECTION 1A.05 OF THE LATEST EDITION OF THE MUTCD.
3. WORD, SYMBOL, AND ARROW MARKINGS SHALL BE WHITE UNLESS OTHERWISE NOTED IN THE PLANS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:
PAY QUANTITIES
LEGEND AREA (FT²)
STOP 24.6
RIGHT 28.6
LEFT 19.5
TURN 27.3
LANE 22.7
AHEAD 32.3
YIELD 26.8
EXIT 18.5
SIGNAL 32.5
SCHOOL 35.5

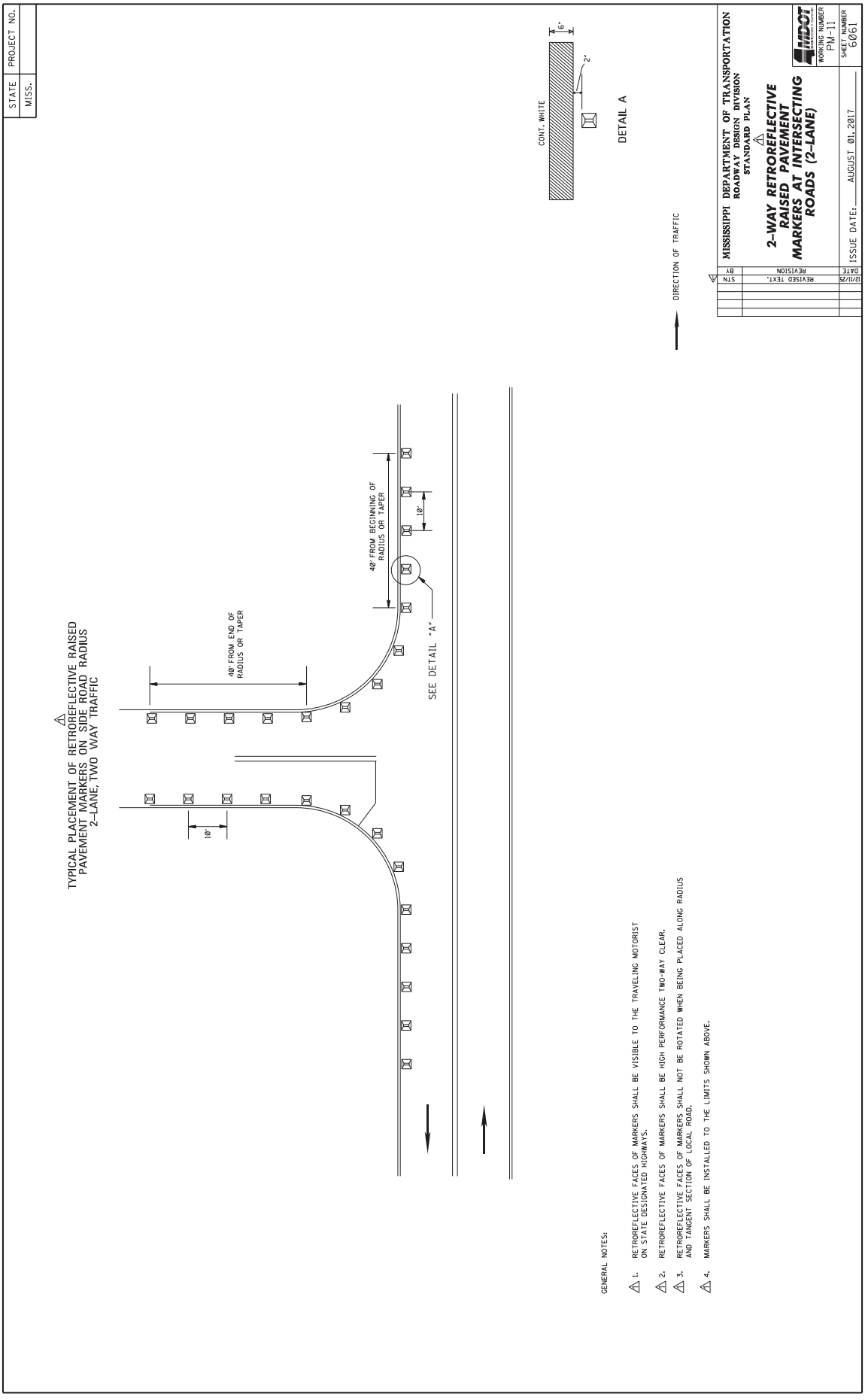

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING LEGEND DETAILS
WORKING NUMBER PM-6
SHEET NUMBER 6056
ISSUE DATE: AUGUST 01, 2017
REVISED GENERAL NOTES
REVISION
COMBINATION ARROW
LANE-REDUCTION ARROW
THRU ARROW
TURN ARROW
YIELD LINE
TRAFFIC
1-WAY ARROW
GENERAL NOTES:
1. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1½" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
2. PAVEMENT MARKING LETTERS, NUMERALS, SYMBOLS, AND ARROWS SHALL BE INSTALLED IN ACCORDANCE WITH THE DESIGN DETAILS IN THE PAVEMENT MARKINGS CHAPTER OF THE "STANDARD HIGHWAY SIGNS" PUBLICATION AS REFERENCED IN SECTION 1A.05 OF THE LATEST EDITION OF THE MUTCD.
3. WORD, SYMBOL AND ARROW MARKINGS SHALL BE WHITE UNLESS OTHERWISE NOTED IN THE PLANS.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:
PAY QUANTITIES
LEGEND/SYMBOL | AREA (ft²)
ONLY | 22.0
TURN ARROW | 16.4
THRU ARROW | 12.3
COMB. ARROW | 27.5
1-WAY ARROW | 24.3
LANE REDUCTION ARROW | 40.0

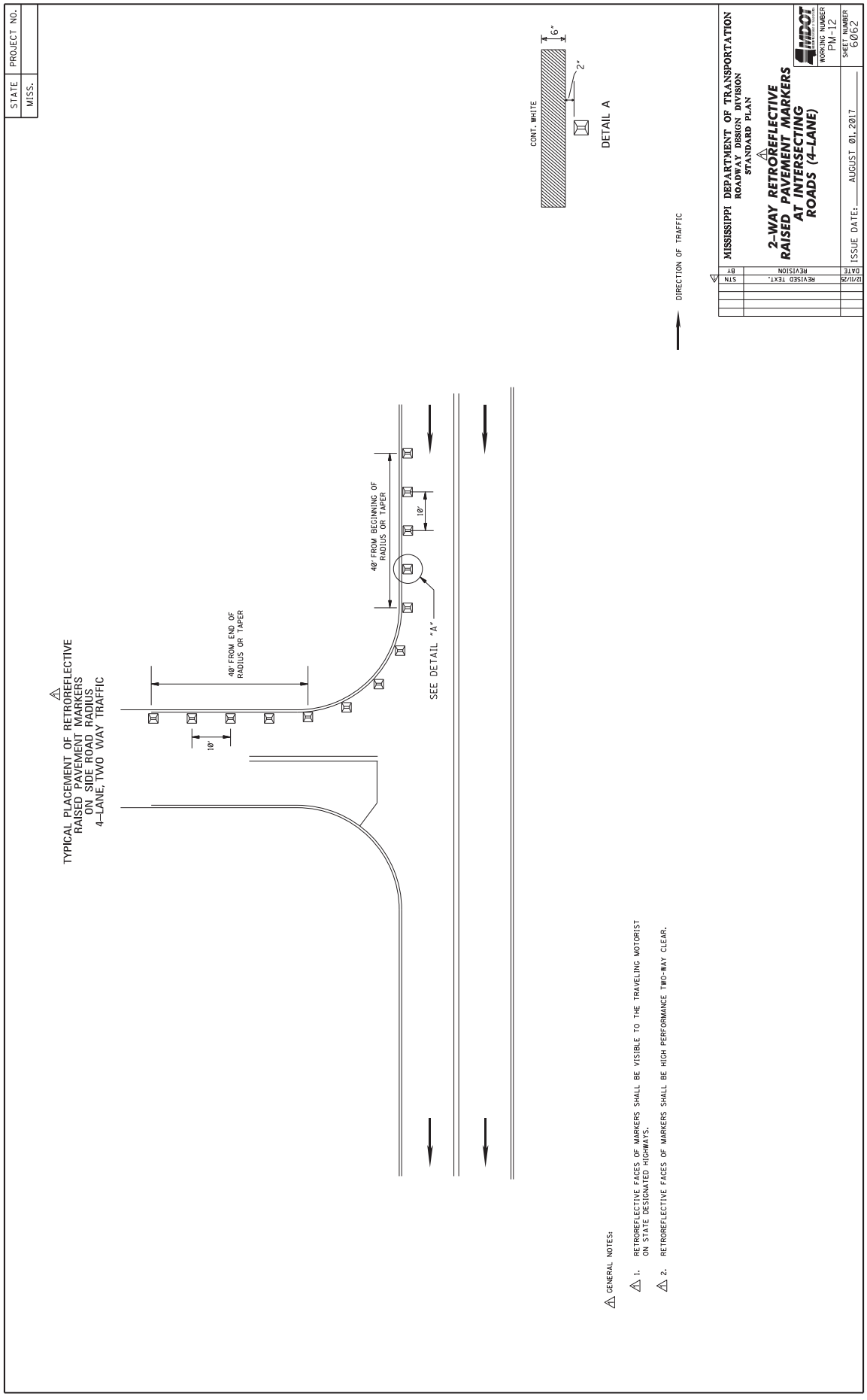

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PLACEMENT OF WARNING SIGNS AND PAVEMENT MARKINGS AT RAILROAD HIGHWAY GRADE CROSSINGS
WORKING NUMBER FM-1
SHEET NUMBER 6057
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT, 'X' DISTANCES, AND ADDED M3-1 AND M3-2 SIGN.
12/11/20
STN
DATE
REVISION
BY
GENERAL NOTES:
*1. A PORTION OF THE PAVEMENT MARKING SYMBOL SHOULD BE DIRECTLY OPPOSITE THE ADVANCE WARNING SIGN (W10-1).
**2. WIDTH OF R X R SYMBOL MAY VARY ACCORDING TO LANE WIDTH. HOWEVER, ON MULTI-LANE ROADS, THE TRANSVERSE BANDS AND STOP LINE SHOULD EXTEND ACROSS ALL APPROACH LANES, AND INDIVIDUAL R X R SYMBOLS SHOULD BE USED IN EACH APPROACH LANE.
3. R X R SYMBOL (63.0 ft²), TRANSVERSE BANDS AND STOP LINE SHALL BE PAID FOR AS LEGEND, WHITE.
△***4. REFER TO THE "CURRENT EDITION OF THE MUTCD" FOR LOCATION OF PROPOSED WARNING DEVICES AT RAILROAD-HIGHWAY GRADE CROSSINGS.
△*****5. IF A W3-1 OR W3-2 IS USED, THE "X" DISTANCE WOULD APPLY TO THE DISTANCE FROM THE STOP BAR TO THE W10-1 AND NOT TO THE W10-1. THE W10-1 WOULD THEN BE PLACED AT A MINIMUM OF 100 FEET UPSTREAM OF THE W3-1 OR W3-2.
*** PRESENT OR PROPOSED ACTIVE WARNING DEVICE
TYPICAL LOCATION OF STOP LINE WHERE AN ACTIVE WARNING DEVICE IS PRESENT OR PROPOSED.
EDGE OF SHOULDER
EDGE OF TRAVEL LANE
TRAFFIC
24" STOP LINE
8'-0" (TYP.)
℄ RAILROAD
TYPICAL LOCATION OF STOP LINE WHERE NO ACTIVE WARNING DEVICE IS PRESENT OR PROPOSED.
15'-0" △(MIN.)
24" TRANSVERSE BAND
SEE DETAIL A FOR DIMENSIONS
1'-4"
6'-3"
20'-0"
25'-0"
50'-0"
*PAVEMENT MARKING SYMBOL
DISTANCE "X" (SEE TABLE BELOW)
10'-0"
℄ LANE
△**** W3-2 (IF NEEDED)
△**** W3-1 (IF NEEDED)
W10-1
NO PASSING ZONE
(OPTIONAL) W14-3
ADVANCE WARNING SIGN PLACEMENT DISTANCE
POSTED SPEED (mph) | ① DISTANCE "X" (ft)
20 115
25 155
30 200
35 250
40 305
45 360
50 425
55 495
60 570
65 645
NOTE:
① DISTANCE "X" MAY BE ADJUSTED IF PROHIBITIVE PHYSICAL CONDITIONS EXIST AT THE DESIGNATED DISTANCE.
6'-3"
12"
24"
27"
15° R
6" R
3"
6"
DETAIL A
STANDARD "R" PAVEMENT MARKING FOR R X R SYMBOL

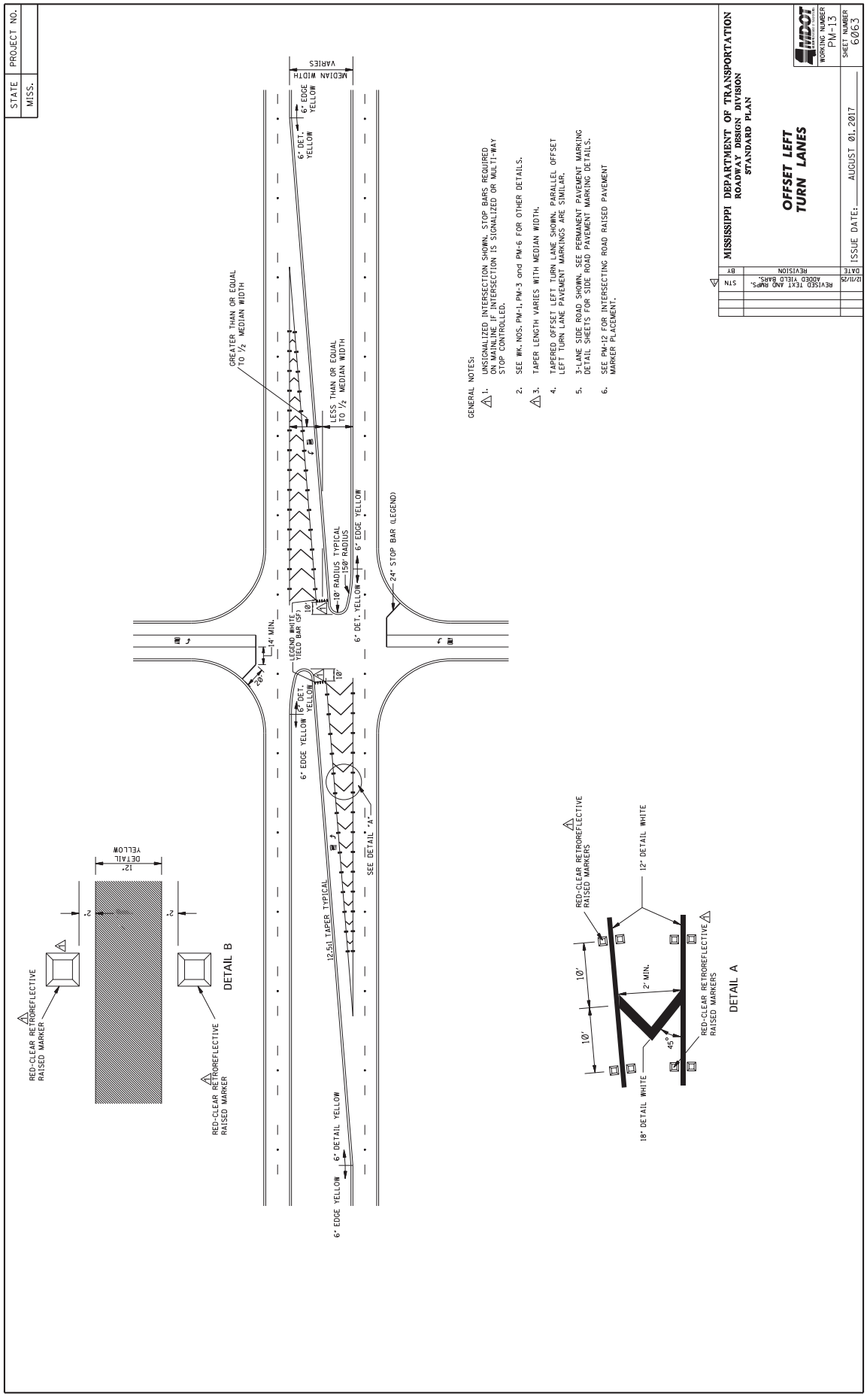

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
4-LANE TO 2-LANE TRANSITION AT INTERCHANGE
WORKING NUMBER PM-8
SHEET NUMBER 6058
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY STN
12/11/25 REVISED TEXT AND RPMS
DOUBLE TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 20'-0" ON CENTER
12" DETAIL YELLOW
SEE DETAIL "D"
18" YELLOW 45° DIAGONAL DETAIL @ 20'-0" ON CENTER
VARIABLE WIDTH
24" 24" 24" 24"
DETAIL A
*NOTE: VARIABLE (24" MAXIMUM)
DETAIL D
12" DETAIL YELLOW
2"
20'-0" ON CENTER
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
6" DETAIL WHITE
DETAIL C
6" CONT. YELLOW
RED/CLEAR RETROREFLECTIVE RAISED MARKERS
6" SKIP WHITE
NOTE : SEE PM-6 FOR DETAILS OF LANE-REDUCTION ARROW.
DETAIL F
SEE SHEET PM-1
SEE DETAIL A
6" DETAIL WHITE (2" STRIPE 12' GAP)
100' MIN.
NOT A STRIPE
SEE DETAIL C
SEE DETAIL B
LEGEND
DETAIL F
PLAN
NOT A STRIPE
12" DETAIL YELLOW
18" YELLOW 45° DIAGONAL DETAIL @ 20'-0" ON CENTER
SEE DETAIL E
TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 20'-0" ON CENTER
TWO-WAY YELLOW RETROREFLECTIVE RAISED MARKERS @ 12' ON CENTER ON 45° DIAGONAL
DETAIL B
45°
12" DETAIL YELLOW
DETAIL E

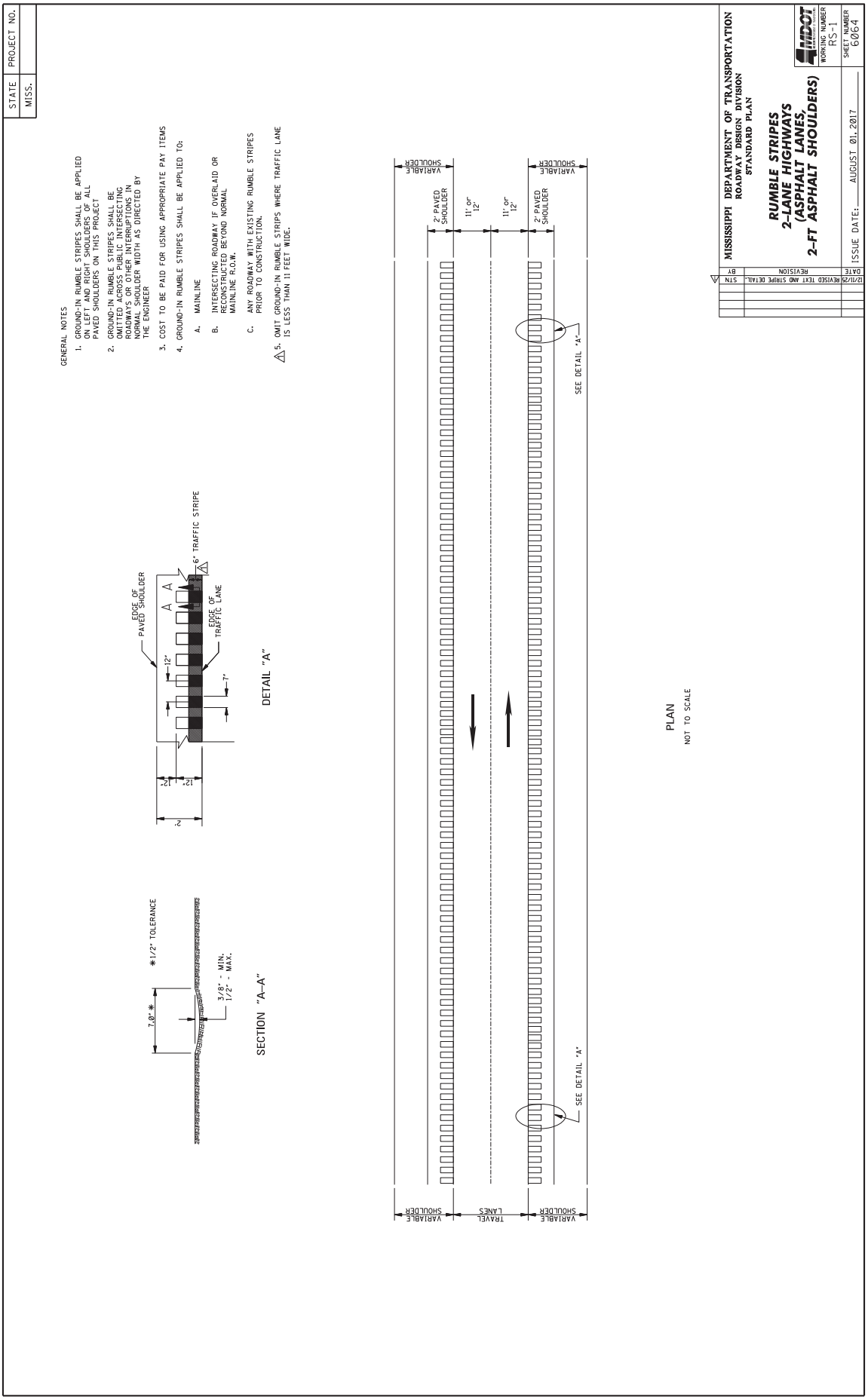

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TYPICAL PAVEMENT MARKING DETAIL FOR MEDIAN CROSSOVERS
WORKING NUMBER PM-9
SHEET NUMBER 6059
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT AND RPMS
SEE DETAIL "A"
SEE DETAIL "B"
SEE PM-1 FOR SPACING
RED-CLEAR RETROREFLECTIVE HIGH PERFORMANCE RAISED MARKERS
6" EDGE STRIPE (CONT. WHITE)
6" DETAIL WHITE
6" EDGE STRIPE (CONT. YELLOW)
6" DETAIL YELLOW
6" YELLOW (DETAIL)
6" YELLOW (CONT.XEDGE)
6" CONT. EDGE WHITE
℄ TO ℄≤88'
NOTE: FOR WIDER ℄ TO ℄ SPACINGS, REFER TO OTHER SHEETS IN PLANS
NOTE: SEE PM-6 FOR YIELD BAR DETAILS
6" SKIP WHITE
LEGEND WHITE YIELD BAR (SF)
SEE DETAIL "C"
125' ≥ ℄ TO ℄ > 88'
2-WAY YELLOW RETROREFLECTIVE HIGH PERFORMANCE RAISED MARKERS @ 10' O.C.
DETAIL "C"
DETAIL "A"
DETAIL "B"
THRU TRAFFIC

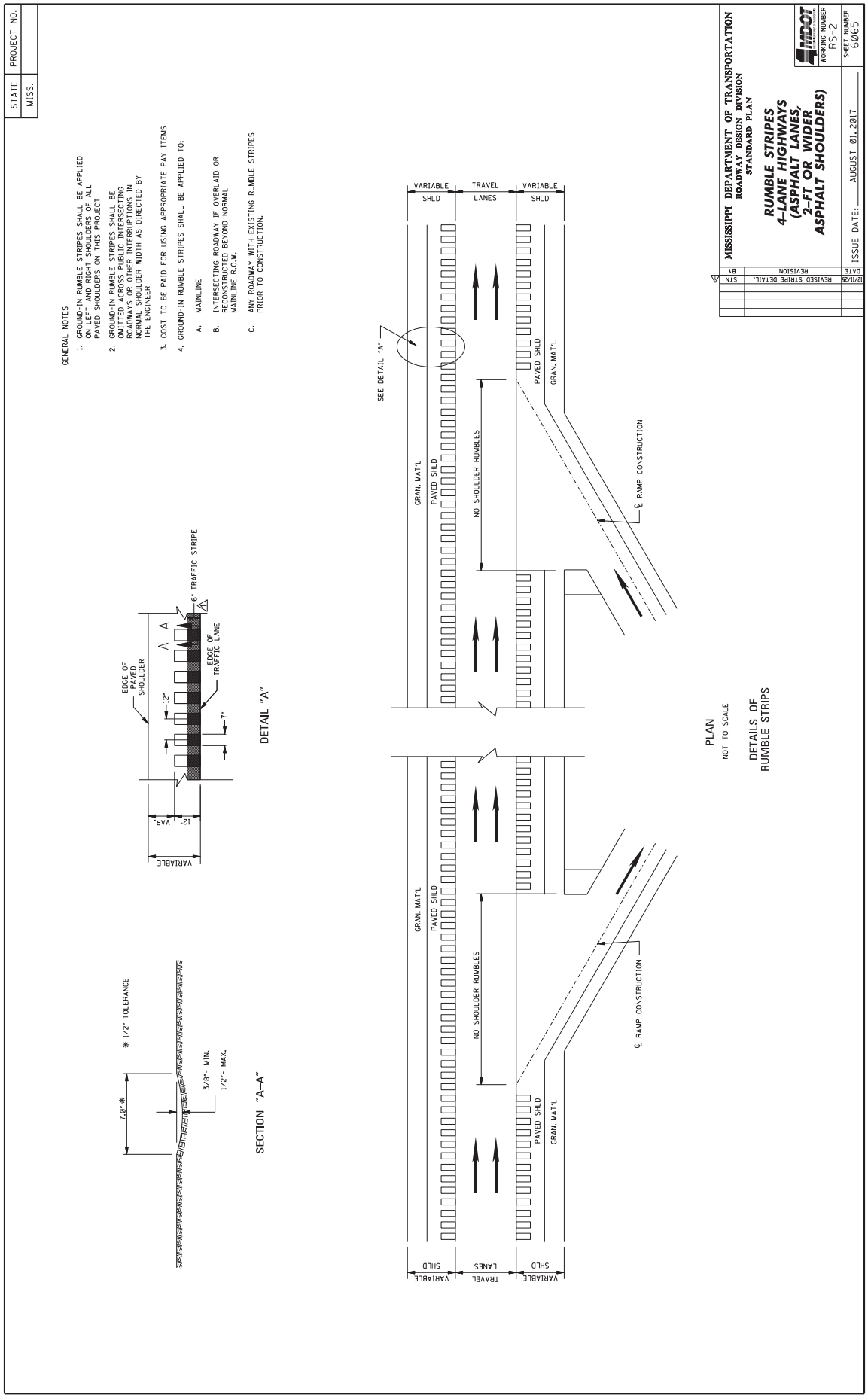

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE WITH LANE DROPS
WORKING NUMBER PM-10
SHEET NUMBER 6060
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT AND RPMS
LANE DROP AT DUAL LANE RAMP
LANE DROP AT SINGLE LANE RAMP
DETAIL D
DETAIL C
DETAIL B
DETAIL A
GENERAL NOTES:
* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
** 2. ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED PRODUCTS LIST".

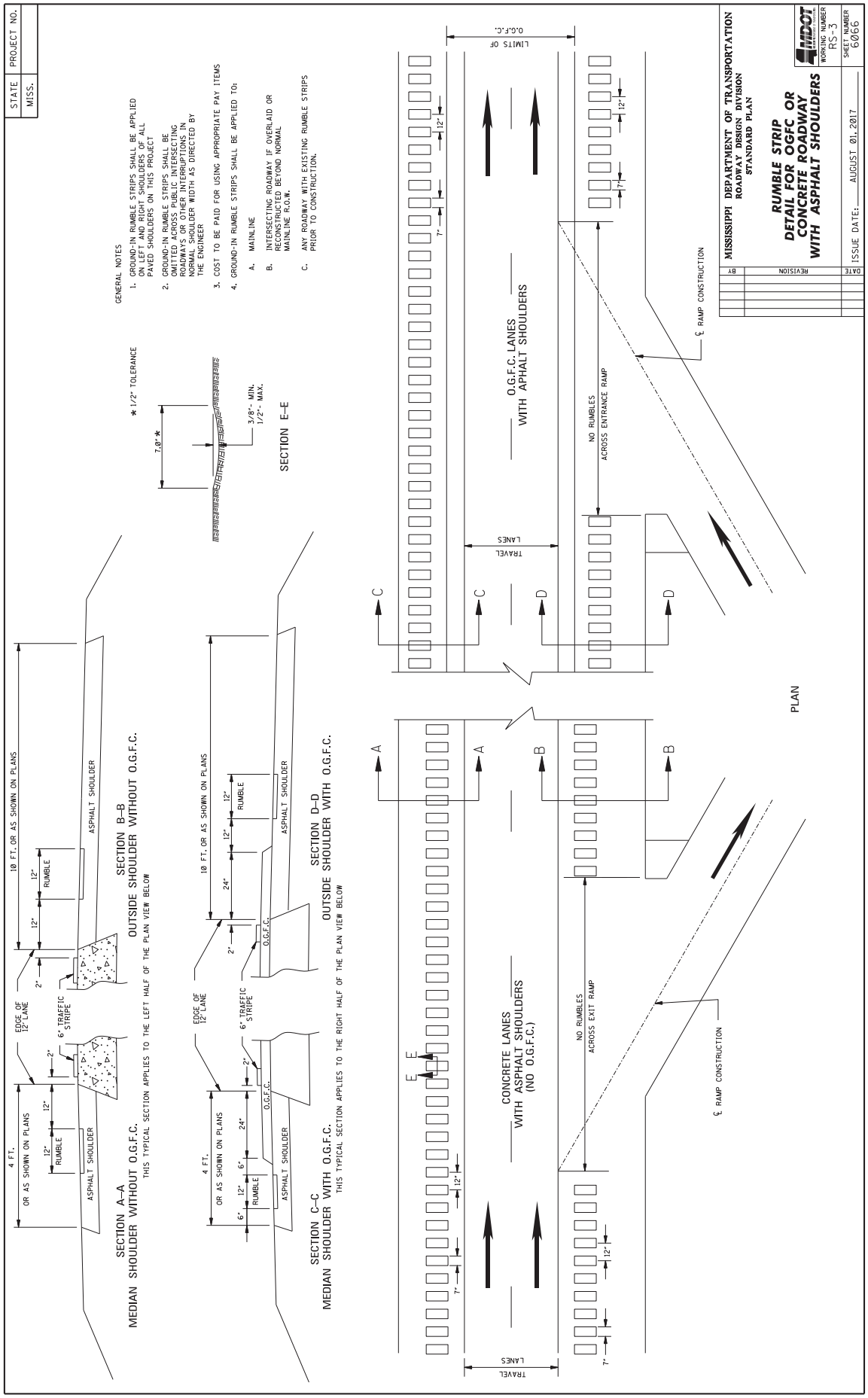

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RETROREFLECTIVE RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)
WORKING NUMBER PM-11
SHEET NUMBER 6061
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
12/11/20
REVISED TEXT.
STN
TYPICAL PLACEMENT OF RETROREFLECTIVE RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS 2-LANE, TWO WAY TRAFFIC
40' FROM END OF RADIUS OR TAPER
40' FROM BEGINNING OF RADIUS OR TAPER
10'
10'
SEE DETAIL "A"
DIRECTION OF TRAFFIC
CONT. WHITE
6"
2"
DETAIL A
GENERAL NOTES:
1. RETROREFLECTIVE FACES OF MARKERS SHALL BE VISIBLE TO THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. RETROREFLECTIVE FACES OF MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
3. RETROREFLECTIVE FACES OF MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTION OF LOCAL ROAD.
4. MARKERS SHALL BE INSTALLED TO THE LIMITS SHOWN ABOVE.

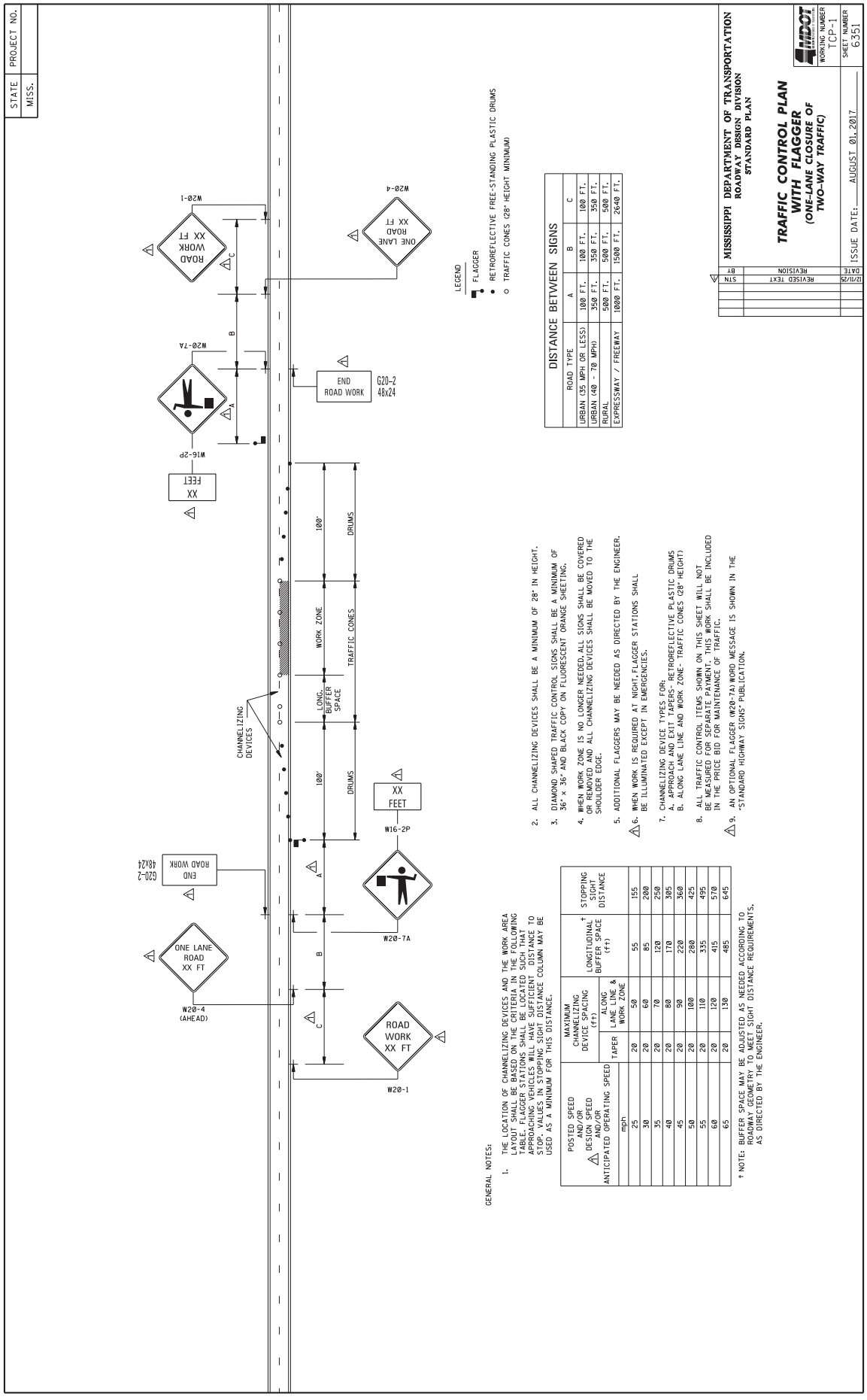

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
2-WAY RETROREFLECTIVE RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (4-LANE)
WORKING NUMBER PM-12
SHEET NUMBER 6062
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY
12/11/25
REVISED TEXT.
STN
TYPICAL PLACEMENT OF RETROREFLECTIVE RAISED PAVEMENT MARKERS ON SIDE ROAD RADIUS 4-LANE, TWO WAY TRAFFIC
40' FROM END OF RADIUS OR TAPER
40' FROM BEGINNING OF RADIUS OR TAPER
10'
10'
SEE DETAIL "A"
DIRECTION OF TRAFFIC
CONT. WHITE
6"
2"
DETAIL A
GENERAL NOTES:
1. RETROREFLECTIVE FACES OF MARKERS SHALL BE VISIBLE TO THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. RETROREFLECTIVE FACES OF MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.

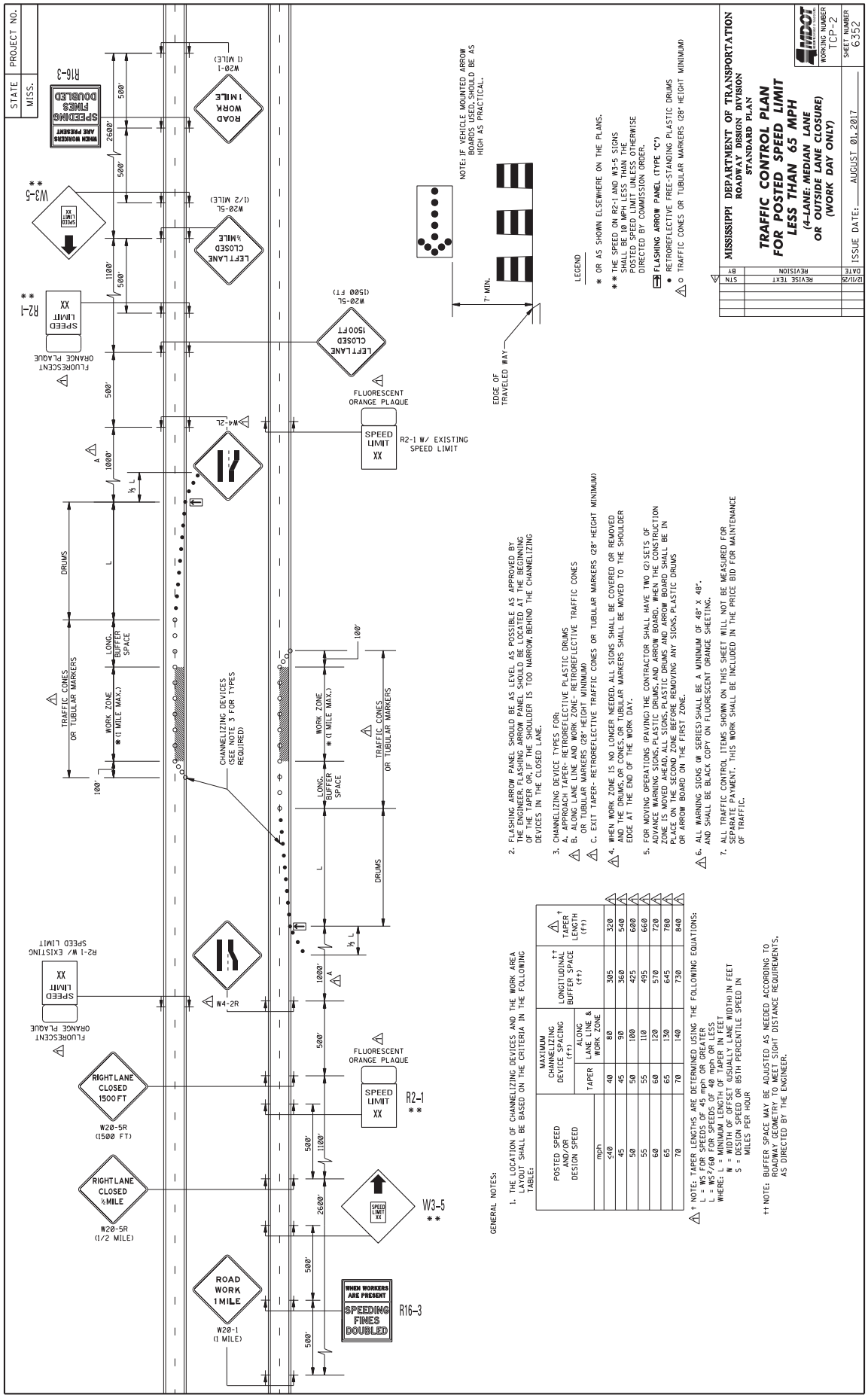

STATE MISS.
PROJECT NO.
MEDIAN WIDTH VARIES
6" EDGE YELLOW
6" DET. YELLOW
GREATER THAN OR EQUAL TO ½ MEDIAN WIDTH
LESS THAN OR EQUAL TO ½ MEDIAN WIDTH
10' RADIUS TYPICAL
150' RADIUS
6" EDGE YELLOW
24" STOP BAR (LEGEND)
6" DET. YELLOW
LEGEND WHITE YIELD BAR (SF) 10'
14' MIN.
20'
6" EDGE YELLOW
6" DET. YELLOW
10'
12.5% TAPER TYPICAL
SEE DETAIL "A"
6" EDGE YELLOW
6" DETAIL YELLOW
GENERAL NOTES:
1. UNSIGNALIZED INTERSECTION SHOWN. STOP BARS REQUIRED ONLY WHERE INTERSECTION IS SIGNALIZED OR MULTI-WAY STOP CONTROLLED.
2. SEE MK. NOS. PM-1, PM-3 and PM-6 FOR OTHER DETAILS.
3. TAPER LENGTH VARIES WITH MEDIAN WIDTH.
4. TAPERED OFFSET LEFT TURN LANE SHOWN. PARALLEL OFFSET LEFT TURN LANE PAVEMENT MARKINGS ARE SIMILAR.
5. 3-LANE SIDE ROAD SHOWN. SEE PERMANENT PAVEMENT MARKING DETAIL SHEETS FOR SIDE ROAD PAVEMENT MARKING DETAILS.
6. SEE PM-12 FOR INTERSECTING ROAD RAISED PAVEMENT MARKER PLACEMENT.
DETAIL B
12" DETAIL YELLOW
2"
2"
RED-CLEAR RETROREFLECTIVE RAISED MARKER
RED-CLEAR RETROREFLECTIVE RAISED MARKER
DETAIL A
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
12" DETAIL WHITE
10'
10'
2' MIN.
45°
18" DETAIL WHITE
RED-CLEAR RETROREFLECTIVE RAISED MARKERS
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
OFFSET LEFT TURN LANES
WORKING NUMBER PM-13
SHEET NUMBER 6063
ISSUE DATE: AUGUST 01, 2017
BY REVISION DATE
STN REVISED TEXT AND DWGS, ADDED YIELD BARS. 12/11/20


STATE
MISS.
PROJECT NO.
GENERAL NOTES
1. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPES SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
4. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO:
A. MAINLINE
B. INTERSECTING ROADWAY IF OVERLAID OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
C. ANY ROADWAY WITH EXISTING RUMBLE STRIPES PRIOR TO CONSTRUCTION.
5. OMIT GROUND-IN RUMBLE STRIPS WHERE TRAFFIC LANE IS LESS THAN 11 FEET WIDE.
EDGE OF PAVED SHOULDER
6" TRAFFIC STRIPE
EDGE OF TRAFFIC LANE
12"
7"
DETAIL "A"
7.0"*
*1/2" TOLERANCE
3/8" - MIN.
1/2" - MAX.
SECTION "A–A"
VARIABLE SHOULDER
2' PAVED SHOULDER
11' or 12'
TRAVEL LANES
SEE DETAIL "A"
PLAN
NOT TO SCALE
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIPES
2-LANE HIGHWAYS
(ASPHALT LANES,
2-FT ASPHALT SHOULDERS)
WORKING NUMBER
RS-1
SHEET NUMBER
6064
ISSUE DATE: AUGUST 01, 2017
STN
BY
REVISION
DATE
12/11/25 REVISED TEXT AND STRIPE DETAIL.


STATE
MISS.
PROJECT NO.
GENERAL NOTES
1. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPES SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
4. GROUND-IN RUMBLE STRIPES SHALL BE APPLIED TO:
A. MAINLINE
B. INTERSECTING ROADWAY IF OVERLAID OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
C. ANY ROADWAY WITH EXISTING RUMBLE STRIPES PRIOR TO CONSTRUCTION.
6" TRAFFIC STRIPE
EDGE OF PAVED SHOULDER
EDGE OF TRAFFIC LANE
12"
7"
12" VAR.
VARIABLE
DETAIL "A"
7.0"*
* 1/2" TOLERANCE
3/8"- MIN.
1/2"- MAX.
SECTION "A-A"
VARIABLE SHLD
TRAVEL LANES
VARIABLE SHLD
SEE DETAIL "A"
GRAN. MAT'L
PAVED SHLD
NO SHOULDER RUMBLES
℄ RAMP CONSTRUCTION
PLAN
NOT TO SCALE
DETAILS OF RUMBLE STRIPS
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIPES
4-LANE HIGHWAYS
(ASPHALT LANES,
2-FT OR WIDER
ASPHALT SHOULDERS)
WORKING NUMBER
RS-2
SHEET NUMBER
6065
ISSUE DATE: AUGUST 01, 2017
STN
REVISED STRIPE DETAIL.
DATE
BY
REVISION


STATE MISS.
PROJECT NO.
GENERAL NOTES
1. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPS SHALL BE OMITTED ACROSS PUBLIC INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR USING APPROPRIATE PAY ITEMS
4. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED TO:
A. MAINLINE
B. INTERSECTING ROADWAY IF OVERLAID OR RECONSTRUCTED BEYOND NORMAL MAINLINE R.O.W.
C. ANY ROADWAY WITH EXISTING RUMBLE STRIPS PRIOR TO CONSTRUCTION.
* 1/2" TOLERANCE
7.0"*
3/8"- MIN.
1/2"- MAX.
SECTION E–E
SECTION A–A
MEDIAN SHOULDER WITHOUT O.G.F.C.
THIS TYPICAL SECTION APPLIES TO THE LEFT HALF OF THE PLAN VIEW BELOW
4 FT.
OR AS SHOWN ON PLANS
EDGE OF 12' LANE
6" TRAFFIC STRIPE
2"
12" RUMBLE
ASPHALT SHOULDER
SECTION B–B
OUTSIDE SHOULDER WITHOUT O.G.F.C.
10 FT. OR AS SHOWN ON PLANS
12" RUMBLE
ASPHALT SHOULDER
SECTION C–C
MEDIAN SHOULDER WITH O.G.F.C.
THIS TYPICAL SECTION APPLIES TO THE RIGHT HALF OF THE PLAN VIEW BELOW
6" 12" RUMBLE
24"
O.G.F.C.
SECTION D–D
OUTSIDE SHOULDER WITH O.G.F.C.
PLAN
CONCRETE LANES
WITH ASPHALT SHOULDERS
(NO O.G.F.C.)
O.G.F.C. LANES
WITH APHALT SHOULDERS
NO RUMBLES
ACROSS EXIT RAMP
NO RUMBLES
ACROSS ENTRANCE RAMP
℄ RAMP CONSTRUCTION
TRAVEL LANES
LIMITS OF O.G.F.C.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIP
DETAIL FOR OGFC OR
CONCRETE ROADWAY
WITH ASPHALT SHOULDERS
MDOT
WORKING NUMBER RS-3
SHEET NUMBER 6066
ISSUE DATE: AUGUST 01, 2017
DATE
REVISION
BY


STATE
MISS.
PROJECT NO.
W20-1
ROAD WORK XX FT
W20-4
ONE LANE ROAD XX FT
W20-7A
W16-2P
XX FEET
G20-2
END ROAD WORK
CHANNELIZING DEVICES
LONG. BUFFER SPACE
WORK ZONE
TRAFFIC CONES
DRUMS
100'
A
B
C
LEGEND
FLAGGER
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TRAFFIC CONES (28" HEIGHT MINIMUM)
DISTANCE BETWEEN SIGNS
ROAD TYPE
A
B
C
URBAN (35 MPH OR LESS)
100 FT.
100 FT.
100 FT.
URBAN (40 - 70 MPH)
350 FT.
350 FT.
350 FT.
RURAL
500 FT.
500 FT.
500 FT.
EXPRESSWAY / FREEWAY
1000 FT.
1500 FT.
2640 FT.
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.
2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 28" IN HEIGHT.
3. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 36" x 36" AND BLACK COPY ON FLUORESCENT ORANGE SHEETING.
4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
5. ADDITIONAL FLAGGERS MAY BE NEEDED AS DIRECTED BY THE ENGINEER.
6. WHEN WORK IS REQUIRED AT NIGHT, FLAGGER STATIONS SHALL BE ILLUMINATED EXCEPT IN EMERGENCIES.
7. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH AND EXIT TAPERS- RETROREFLECTIVE PLASTIC DRUMS
B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)
8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
9. AN OPTIONAL FLAGGER (W20-7A) WORD MESSAGE IS SHOWN IN THE "STANDARD HIGHWAY SIGNS" PUBLICATION.
POSTED SPEED AND/OR DESIGN SPEED AND/OR ANTICIPATED OPERATING SPEED
MAXIMUM CHANNELIZING DEVICE SPACING (ft)
TAPER
ALONG LANE LINE & WORK ZONE
LONGITUDINAL† BUFFER SPACE (ft)
STOPPING SIGHT DISTANCE
mph
25 20 50 55 155
30 20 60 85 200
35 20 70 120 250
40 20 80 170 305
45 20 90 220 360
50 20 100 280 425
55 20 110 335 495
60 20 120 415 570
65 20 130 485 645
† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
WITH FLAGGER
(ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)
WORKING NUMBER TCP-1
SHEET NUMBER 6351
STN
REVISION
BY
DATE
12/1/25 REVISED TEXT
ISSUE DATE: AUGUST 01, 2017



GENERAL NOTES:

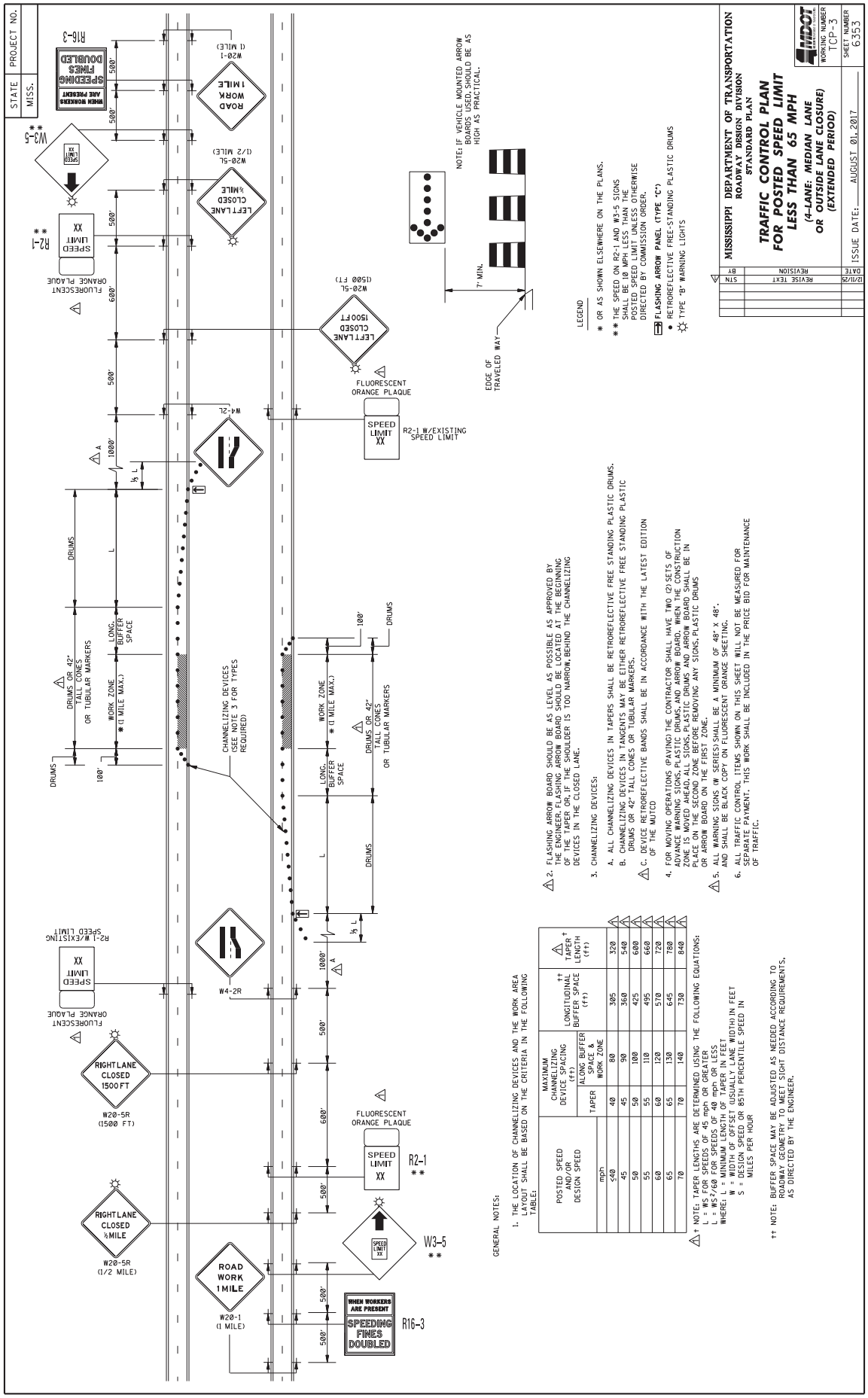
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft) ††	TAPER † LENGTH (ft)
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	305	320
45	45	90	360	540
50	50	100	425	600
55	55	110	495	660
60	60	120	570	720
65	65	130	645	780
70	70	140	730	840

△† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICE TYPES FOR:
△ A. APPROACH TAPER- RETROREFLECTIVE PLASTIC DRUMS
△ B. ALONG LANE LINE AND WORK ZONE- RETROREFLECTIVE TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
△ C. EXIT TAPER- RETROREFLECTIVE TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
△4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE CONES OR TUBULAR MARKERS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.
5. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE FOR THE SECOND MOVE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
△6. ALL WARNING SIGNS (W SERIES) SHALL BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
7. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.



GENERAL NOTES:

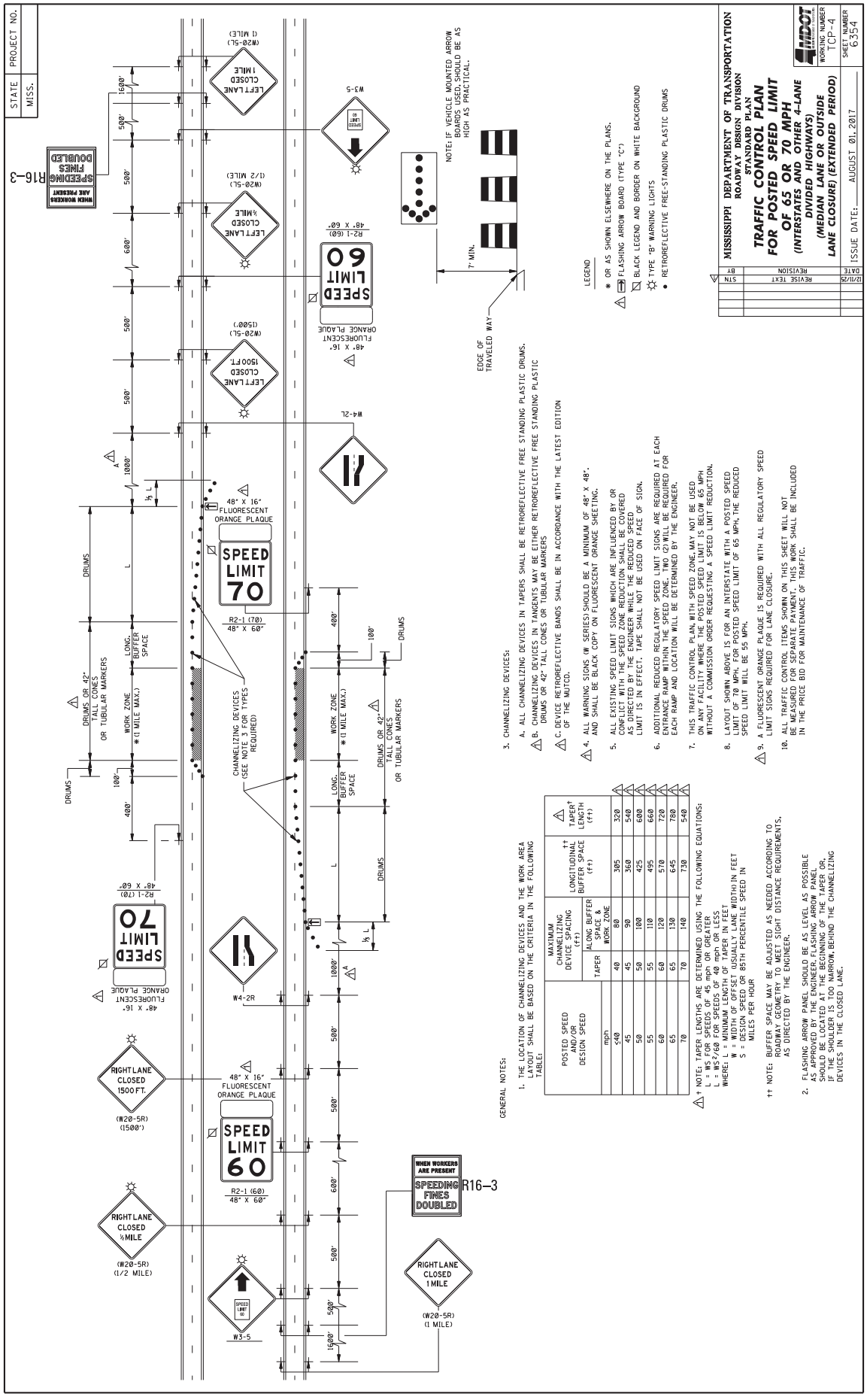
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

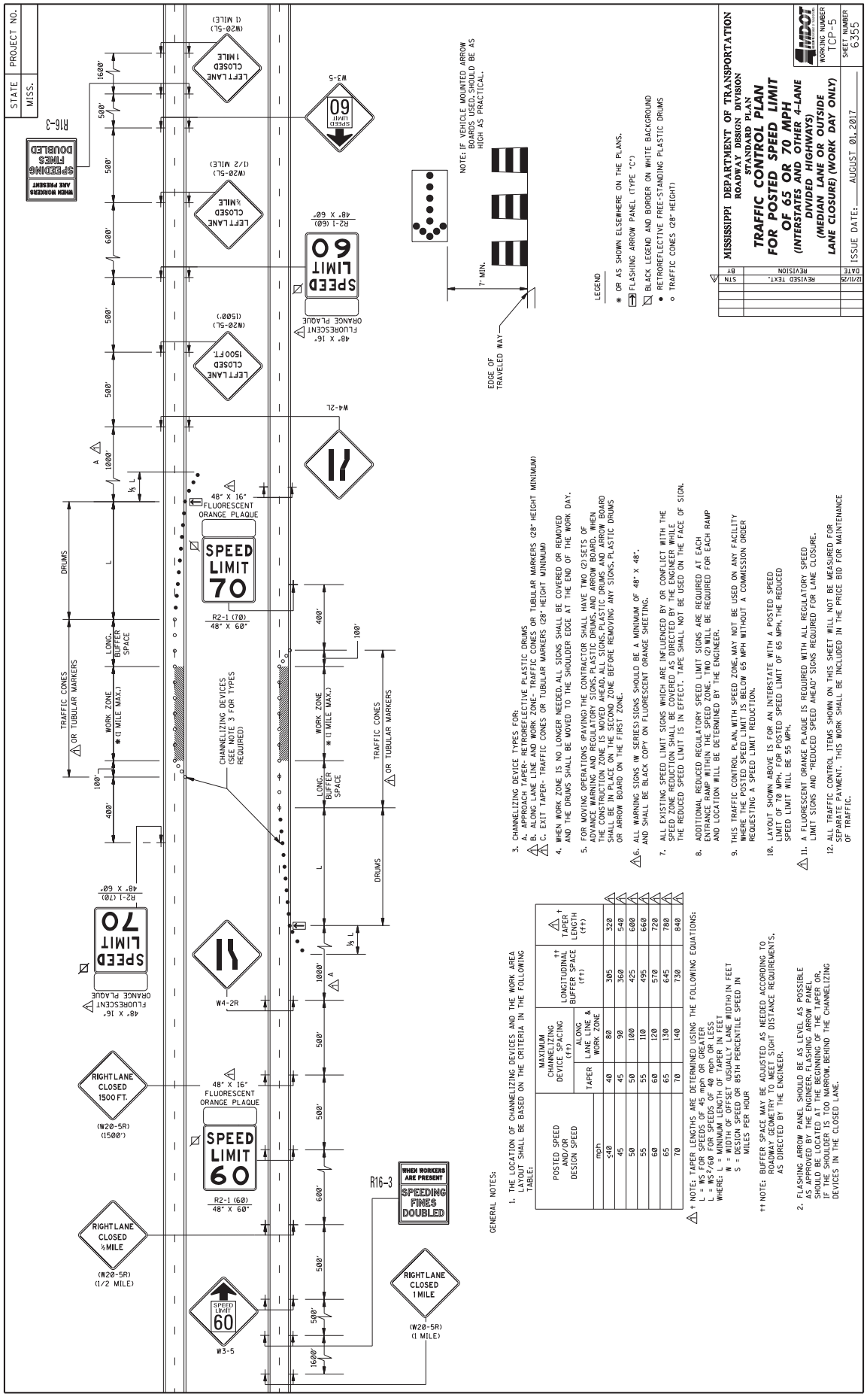
POSTED SPEED / DESIGN SPEED (mph)	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL BUFFER SPACE (ft)	TAPER LENGTH † (ft)
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
≤40	40	80	305	320
45	45	90	360	540
50	50	100	425	600
55	55	110	495	660
60	60	120	570	720
65	65	130	645	780
70	70	140	730	840

† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEED OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW BOARD SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW BOARD SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER ON THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICES:
   A. ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
   B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES OR TUBULAR MARKERS.
   C. DEVICE RETROREFLECTIVE BANDS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD
4. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
5. ALL WARNING SIGNS (W SERIES) SHALL BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
OF 65 OR 70 MPH
(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS)
(MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)
WORKING NUMBER TCP-4
SHEET NUMBER 6354
ISSUE DATE: AUGUST 01, 2017
REVISE TEXT STN 12/11/20
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
FLASHING ARROW BOARD (TYPE "C")
BLACK LEGEND AND BORDER ON WHITE BACKGROUND
TYPE "B" WARNING LIGHTS
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
POSTED SPEED AND/OR DESIGN SPEED
MAXIMUM CHANNELIZING DEVICE SPACING (FEET)
LONGITUDINAL BUFFER SPACE (ft)
TAPER† LENGTH (ft)
mph
TAPER
ALONG BUFFER SPACE & WORK ZONE
<40 40 80 305 320
45 45 90 360 540
50 50 100 425 600
55 55 110 495 660
60 60 120 570 720
65 65 130 645 780
70 70 140 730 540
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS2 / 60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRICS TO ENSURE SIGHT DISTANCE REQUIREMENTS AS DIRECTED BY THE ENGINEER.
2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF IT IS SHOULDER CLOSURE, TO THE NARROW BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. CHANNELIZING DEVICES:
A. ALL CHANNELIZING DEVICES IN TAPERS SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
B. CHANNELIZING DEVICES IN TANGENTS MAY BE EITHER RETROREFLECTIVE FREE STANDING PLASTIC DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
C. DEVICE RETROREFLECTIVE BANDS SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MUTCD.
4. ALL WARNING SIGNS (W SERIES) SHOULD BE A MINIMUM OF 48" X 48". AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
5. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER. WHEN THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON FACE OF SIGN.
6. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.
7. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.
8. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH AND A POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.
9. A FLUORESCENT ORANGE PLAQUE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.
10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
R16-3
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
W3-5
SPEED LIMIT 60
R2-1 (60)
48" X 60"
48" X 16" FLUORESCENT ORANGE PLAQUE
SPEED LIMIT 70
R2-1 (70)
W4-2R
W4-2L
LEFT LANE CLOSED 1 MILE
(W20-5L) (1 MILE)
LEFT LANE CLOSED ½ MILE
(W20-5L) (1/2 MILE)
LEFT LANE CLOSED 1500FT
(W20-5L) (1500')
RIGHT LANE CLOSED 1500 FT.
(W20-5R) (1500')
RIGHT LANE CLOSED ½ MILE
(W20-5R) (1/2 MILE)
RIGHT LANE CLOSED 1 MILE
(W20-5R) (1 MILE)
DRUMS OR 42" TALL CONES OR TUBULAR MARKERS
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
DRUMS
100'
400'
500'
600'
1000'
1500'
½ L
L
A



GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (††)		LONGITUDINAL BUFFER SPACE (††)	△† TAPER LENGTH (††)
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	305	320
45	45	90	360	540
50	50	100	425	600
55	55	110	495	660
60	60	120	570	720
65	65	130	645	780
70	70	140	730	840

△† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.

2. FLASHING ARROW PANEL SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.

3. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH TAPER- RETROREFLECTIVE PLASTIC DRUMS
B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)
△C. EXIT TAPER- TRAFFIC CONES OR TUBULAR MARKERS (28" HEIGHT MINIMUM)

4. WHEN WORK ZONE IS NO LONGER NEEDED, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE DRUMS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.

5. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING AND REGULATORY SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.

△6. ALL WARNING SIGNS (W SERIES) SIGNS SHOULD BE A MINIMUM OF 48" X 48", AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.

7. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER WHILE THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON THE FACE OF SIGN.

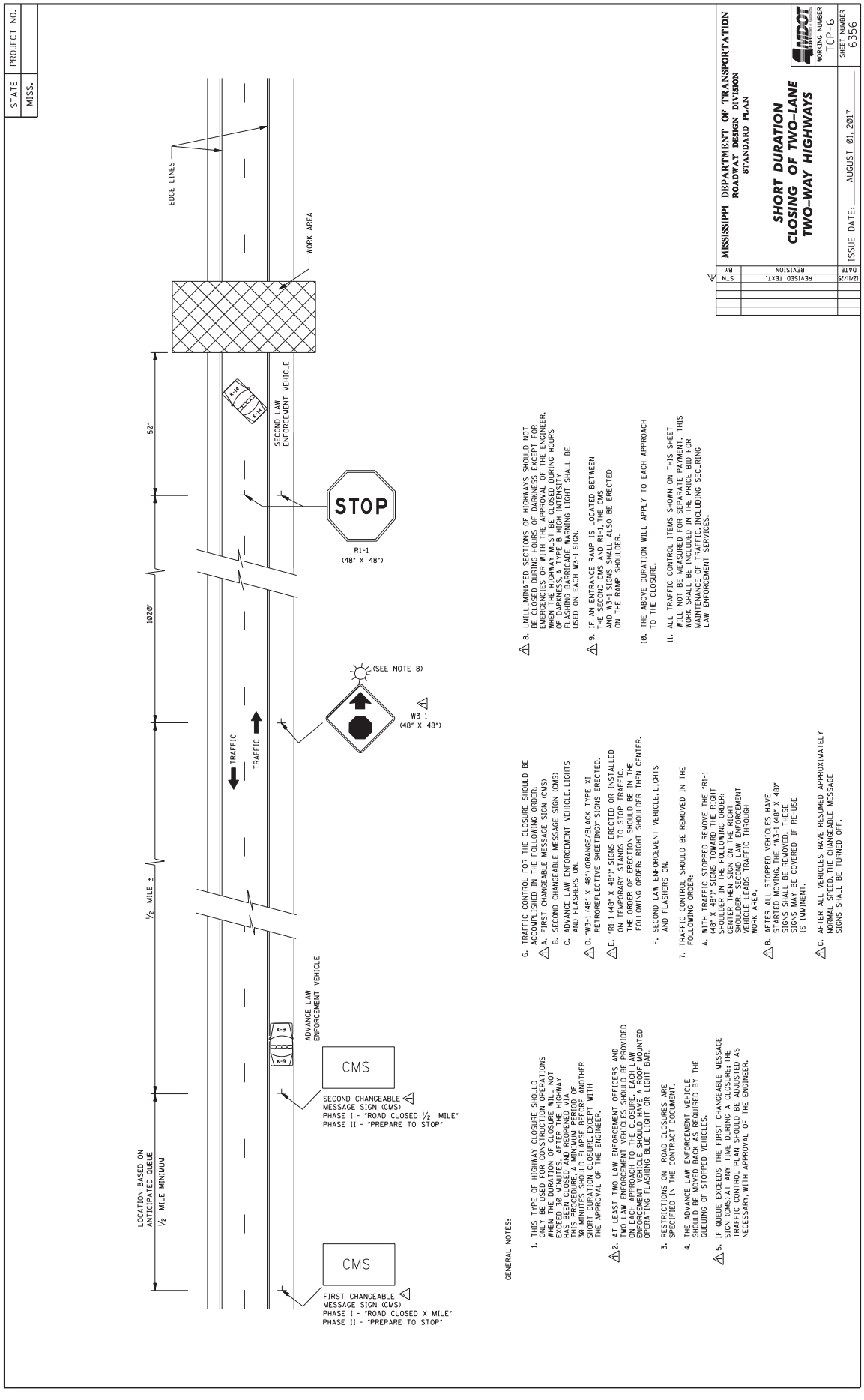
8. ADDITIONAL REDUCED REGULATORY SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. TWO (2) WILL BE REQUIRED FOR EACH RAMP AND LOCATION WILL BE DETERMINED BY THE ENGINEER.

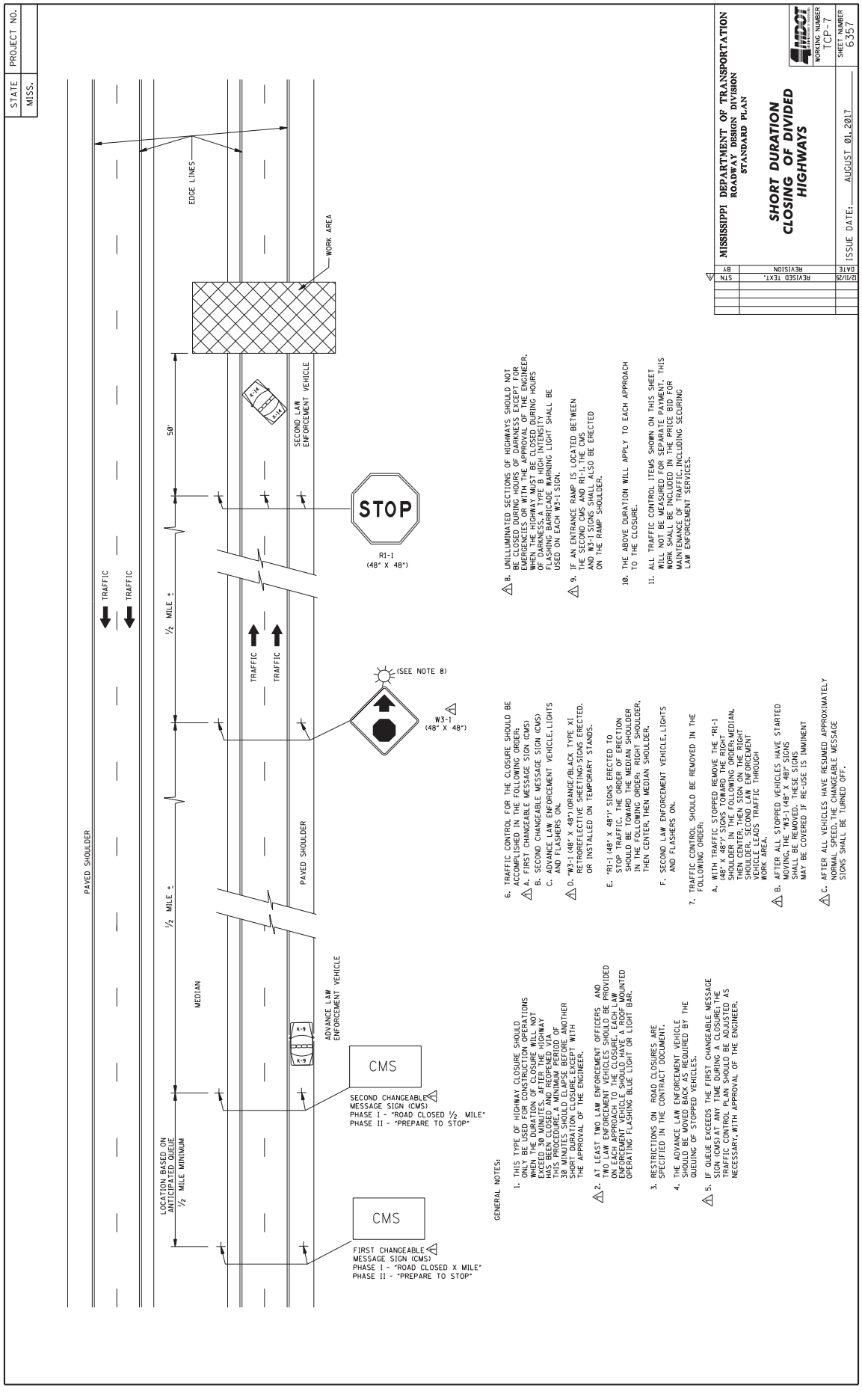
9. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.

10. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.

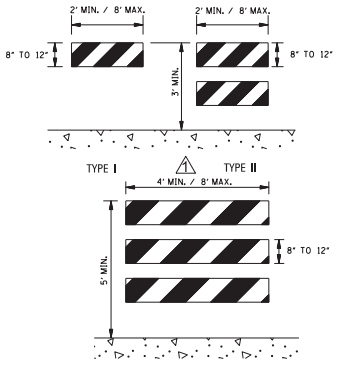
△11. A FLUORESCENT ORANGE PLAQUE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS AND "REDUCED SPEED AHEAD" SIGNS REQUIRED FOR LANE CLOSURE.

12. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.


STATE MISS.
PROJECT NO.
EDGE LINES
WORK AREA
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1 (48" X 48")
50'
1000'
½ MILE ±
TRAFFIC
TRAFFIC
(SEE NOTE 8)
W3-1 (48" X 48")
ADVANCE LAW ENFORCEMENT VEHICLE
CMS
SECOND CHANGEABLE MESSAGE SIGN (CMS) PHASE I - "ROAD CLOSED ½ MILE" PHASE II - "PREPARE TO STOP"
CMS
FIRST CHANGEABLE MESSAGE SIGN (CMS) PHASE I - "ROAD CLOSED X MILE" PHASE II - "PREPARE TO STOP"
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
GENERAL NOTES:
1. THIS TYPE OF HIGHWAY CLOSURE SHOULD ONLY BE USED FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 30 MINUTES. AFTER THE HIGHWAY HAS BEEN CLOSED AND ESCORTED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHOULD ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. AT LEAST TWO LAW ENFORCEMENT OFFICERS AND TWO LAW ENFORCEMENT VEHICLES SHOULD BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF-MOUNTED OPERATING FLASHING BLUE LIGHT OR LIGHT BAR.
3. RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.
4. THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
5. IF QUEUE EXCEEDS THE FIRST CHANGEABLE MESSAGE SIGN (CMS) AT ANY TIME DURING A CLOSURE, THE TRAFFIC CONTROL PLAN SHOULD BE ADJUSTED AS NECESSARY, WITH APPROVAL OF THE ENGINEER.
6. TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
A. FIRST CHANGEABLE MESSAGE SIGN (CMS)
B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
C. ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
D. W3-1 (48" X 48") ORANGE/BLACK TYPE XI RETROREFLECTIVE SHEETING" SIGNS ERECTED.
E. "R1-1 (48" X 48")" SIGNS ERECTED OR INSTALLED ON TEMPORARY STANDS TO STOP TRAFFIC, THE ORDER OF ERECTION SHOULD BE IN THE FOLLOWING ORDER: RIGHT SHOULDER THEN CENTER.
F. SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
7. TRAFFIC CONTROL SHOULD BE REMOVED IN THE FOLLOWING ORDER:
A. WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48")" SIGNS FROM THE ROADWAY; SHOULDER IN THE FOLLOWING ORDER; CENTER THEN SIGN ON THE RIGHT SHOULDER. SECOND LAW ENFORCEMENT VEHICLE LEADS TRAFFIC THROUGH WORK AREA.
B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING REMOVE W3-1 (48" X 48") SIGNS. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGEABLE MESSAGE SIGNS SHALL BE TURNED OFF.
8. UNILLUMINATED SECTIONS OF HIGHWAYS SHOULD NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN THE HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W3-1 SIGN.
9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS AND W3-1 SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.
10. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.
11. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT; THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING LAW ENFORCEMENT SERVICES.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SHORT DURATION CLOSING OF TWO-LANE TWO-WAY HIGHWAYS
WORKING NUMBER TCP-6
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6356
DATE REVISION BY
12/11/23 REVISED TEXT. STM

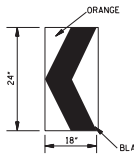

STATE
MISS.
PROJECT NO.
PAVED SHOULDER
TRAFFIC
TRAFFIC
½ MILE ±
EDGE LINES
WORK AREA
50'
SECOND LAW ENFORCEMENT VEHICLE
STOP
R1-1 (48" X 48")
(SEE NOTE 8)
W3-1 (48" X 48")
TRAFFIC
TRAFFIC
PAVED SHOULDER
MEDIAN
LOCATION BASED ON ANTICIPATED QUEUE
½ MILE MINIMUM
ADVANCE LAW ENFORCEMENT VEHICLE
CMS
SECOND CHANGEABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED ½ MILE"
PHASE II - "PREPARE TO STOP"
CMS
FIRST CHANGEABLE MESSAGE SIGN (CMS)
PHASE I - "ROAD CLOSED X MILE"
PHASE II - "PREPARE TO STOP"
GENERAL NOTES:
1. THIS TYPE OF HIGHWAY CLOSURE SHOULD ONLY BE USED FOR CONSTRUCTION OPERATIONS WHERE THE ROAD CLOSURE WILL NOT EXCEED 30 MINUTES, AFTER THE HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHOULD ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.
2. AT LEAST TWO LAW ENFORCEMENT OFFICERS AND TWO LAW ENFORCEMENT VEHICLES SHOULD BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH LAW ENFORCEMENT VEHICLE SHOULD HAVE A ROOF MOUNTED OPERATING FLASHING BLUE LIGHT OR LIGHT BAR.
3. RESTRICTIONS ON ROAD CLOSURES ARE SPECIFIED IN THE CONTRACT DOCUMENT.
4. THE ADVANCE LAW ENFORCEMENT VEHICLE SHOULD BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.
5. IF QUEUE EXCEEDS THE FIRST CHANGEABLE MESSAGE SIGN (CMS) AT ANY TIME DURING A CLOSURE, THE TRAFFIC CONTROL PLAN SHOULD BE ADJUSTED AS NECESSARY, WITH APPROVAL OF THE ENGINEER.
6. TRAFFIC CONTROL FOR THE CLOSURE SHOULD BE ACCOMPLISHED IN THE FOLLOWING ORDER:
A. FIRST CHANGEABLE MESSAGE SIGN (CMS)
B. SECOND CHANGEABLE MESSAGE SIGN (CMS)
C. ADVANCE LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
D. "W3-1 (48" X 48") ORANGE/BLACK TYPE XI RETROREFLECTIVE SHEETING) SIGNS ERECTED. OR INSTALLED ON TEMPORARY STANDS.
E. "R1-1 (48" X 48") " SIGNS ERECTED TO STOP TRAFFIC, THE ORDER OF ERECTION SHOULD BE TOWARD THE MEDIAN SHOULDER ON THE FOLLOWING ORDER: RIGHT SHOULDER, THEN CENTER, THEN MEDIAN SHOULDER.
F. SECOND LAW ENFORCEMENT VEHICLE, LIGHTS AND FLASHERS ON.
7. TRAFFIC CONTROL SHOULD BE REMOVED IN THE FOLLOWING ORDER:
A. WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48") SIGNS TOWARD THE RIGHT SHOULDER, THEN TOWARD THE MEDIAN, THEN CENTER, THEN SIGN ON THE RIGHT SHOULDER, SECOND LAW ENFORCEMENT VEHICLE LEADS TRAFFIC THROUGH WORK AREA.
B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE W3-1 (48" X 48" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT
C. AFTER ALL VEHICLES HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE CHANGEABLE MESSAGE SIGNS SHALL BE TURNED OFF.
8. UNILLUMINATED SECTIONS OF HIGHWAYS SHOULD NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN SUCH HIGHWAYS ARE CLOSED DURING HOURS OF DARKNESS, A TYPE 'B' HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W3-1 SIGN.
9. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE SECOND CMS AND R1-1, THE CMS AND W3-1 SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.
10. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.
11. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC INCLUDING SECURING LAW ENFORCEMENT SERVICES.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
SHORT DURATION CLOSING OF DIVIDED HIGHWAYS
WORKING NUMBER TCP-7
SHEET NUMBER 6357
ISSUE DATE: AUGUST 01, 2017
DATE 12/11/25
REVISION REVISED TEXT.
BY STM

STATE	PROJECT NO.
MISS.	



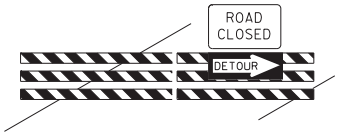
STANDARD BARRICADES

1. THE RETROREFLECTIVE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION THAT TRAFFIC IS TO PASS).
2. RAIL STRIPE SHOULD BE 6 INCHES, EXCEPT THAT 4-INCH WIDE STRIPES MAY BE USED IF RAIL LENGTHS ARE LESS THAN 36 INCHES.
3. DO NOT PLACE SANDBAGS OR OTHER DEVICES ON BARRICADE RAILS TO PROVIDE MASS SANDBAGS, HOWEVER, MAY BE PLACES AS BALLAST TO THE LOWER PARTS OF THE FRAME OR THE STAYS TO BARRICADES.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATEGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://highways.dot.gov/safety/RwD/reduce-crash-severity
6. WHERE ROAD USERS INCLUDE PEDESTRIANS, THE PROVISION OF SUPPLEMENTAL AUDIBLE INFORMATION OR DETECTABLE BARRIERS OR BARRICADES SHOULD BE PROVIDED FOR PEOPLE WITH VISION DISABILITIES.
7. BARRICADE RAIL SUPPORTS SHOULD NOT PROJECT INTO PEDESTRIAN CIRCULATION ROUTES MORE THAN 4 INCHES FOR THE SUPPORTS LOCATED BETWEEN 27 INCHES TO 80 INCHES ABOVE THE EXISTING SURFACE.



RETROREFLECTIVE CHEVRON ALIGNMENT SIGN DETAIL (W1–8)

1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON CRASHWORTHY SUPPORT.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHOULD BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.
4. CHEVRON SIGNS SHALL BE INSTALLED AT A MINIMUM HEIGHT OF 4 FEET MEASURED VERTICALLY FROM THE BOTTOM OF THE SIGN TO THE ELEVATION OF THE NEAR EDGE OF THE TRAVELWAY.



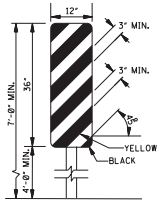
BARRICADE CLOSING A ROAD

BARRICADE CHARACTERISTICS

	I	II	III
WIDTH OF RAIL * *	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL * *	24" MIN. / 96" MAX.	24" MIN. /96" MAX.	48" MIN. / 96" MAX.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF RETROREFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS

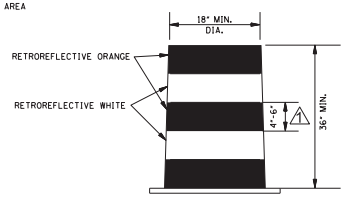
* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in^2 OF REFLECTIVE AREA FACING TRAFFIC.

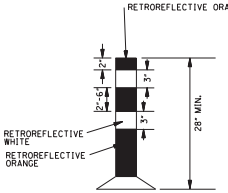


TYPE 3 OBJECT MARKER (OM3–R)

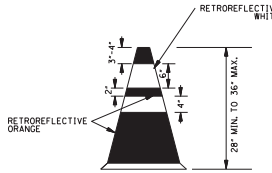
1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM3-R IS SHOWN. THE OM3-L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.
4. THE STRIPING SHALL CONSIST OF ALTERNATING BLACK AND RETOREFLECTIVE YELLOW SLOPING DOWNWARD TOWARD THE SIDE ON WHICH TRAFFIC IS THE PASS.



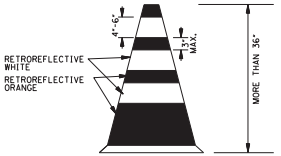
PLASTIC DRUM DETAIL



TUBULAR MARKER DETAIL



PLASTIC CONE DETAIL (28" – 36")



PLASTIC CONE DETAIL (36" OR GREATER)

1. PLASTIC DRUMS, TUBULAR MARKERS, OR PLASTIC CONES SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF THE DEVICE USED SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON THE DEVICE USED SHALL BE ORANGE WITH RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL WHITE STRIPES AS SHOWN ON THE DETAILS.
2. DRUMS, TUBULAR MARKERS, OR PLASTIC CONES SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS, TUBULAR MARKERS, OR PLASTIC CONES SHOULD BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.
4. BALLAST SHALL NOT BE PLACED ON THE TOP OF THE DRUM.

DATE	REVISION	BY
12/17/25	REVISED TEXT AND DETAILS.	STN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

MDOT

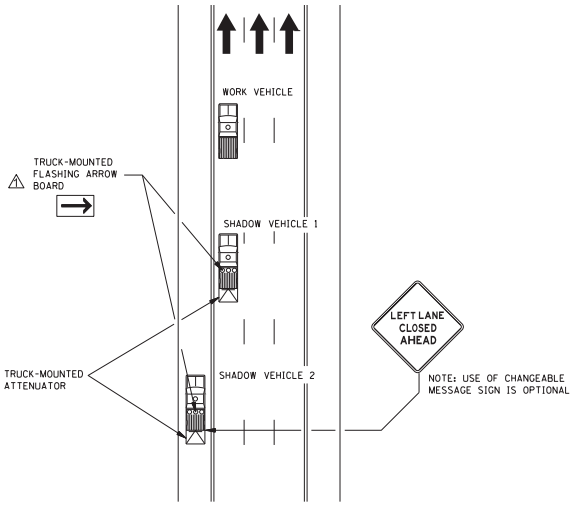
WORKING NUMBER TCP-8

ISSUE DATE: AUGUST 01, 2017

SHEET NUMBER 6358

STATE	PROJECT NO.
MISS.	

MOBILE OPERATIONS ON MULTILANE ROAD



MOBILE OPERATIONS ON MULTILANE ROAD

NOTES FOR MULTILANE LANE OPERATION:

⚠ 1. SHADOW AND WORK VEHICLES SHALL DISPLAY HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS. AN ARROW BOARD SHALL BE USED WHEN A FREEWAY LANE IS CLOSED. WHEN MORE THAN ONE FREEWAY LANE IS CLOSED, A SEPARATE ARROW BOARD SHALL BE USED FOR EACH CLOSED LANE.

⚠ 2. SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW BOARD AND TRUCK MOUNTED ATTENUATOR (TMA), AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON SHADOW VEHICLE 2 SO AS NOT TO OBSCURE THE ARROW BOARD.

⚠ 3. SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW BOARD AND TRUCK-MOUNTED ATTENUATOR (TMA).

4. SHADOW VEHICLE 2 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.

⚠ 5. THE SPACING BETWEEN THE WORK VEHICLES AND THE SHADOW VEHICLES, AND BETWEEN EACH SHADOW VEHICLE, SHOULD BE MINIMIZED TO DETER ROAD USERS FROM DRIVING IN BETWEEN.

⚠ 6. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE (NOT SHOWN) MAY BE USED WITH SHADOW VEHICLE 1 IN THE CLOSED LANE, SHADOW VEHICLE 2 STRADDLING THE EDGE LINE, AND SHADOW VEHICLE 3 ON THE SHOULDER.

⚠ 7. ARROW BOARD SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCD.

8. WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.

9. VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

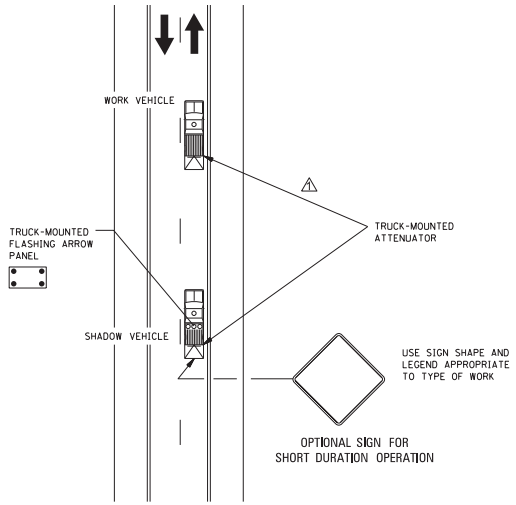
⚠ 10. WHEN THE WORK VEHICLE OCCUPIES AN INTERIOR LANE (A LANE OTHER THAN THE FAR RIGHT OR FAR LEFT) OF A DIRECTIONAL ROADWAY HAVING A RIGHT-HAND SHOULDER 10 FEET OR MORE IN WIDTH, SHADOW VEHICLE 2 SHOULD DRIVE ON THE RIGHT-HAND SHOULDER WITH A SIGN INDICATING THAT WORK IS TAKING PLACE IN THE INTERIOR LANE.

⚠ 11. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE (NOT SHOWN) MAY BE USED WITH SHADOW VEHICLE 1 IN THE CLOSED LANE, SHADOW VEHICLE 2 STRADDLING THE EDGE LINE, AND SHADOW VEHICLE 3 ON THE SHOULDER.

⚠ 12. WHERE ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 3 MAY ALSO STRADDLE THE EDGE LINE.

⚠ 13. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

MOBILE OPERATIONS ON TWO–LANE ROAD



MOBILE OPERATIONS ON TWO–LANE ROAD

NOTES FOR TWO-LANE OPERATION:

1. WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND SHADOW VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN NOT BE DONE FREQUENTLY, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LANE.

2. THE DISTANCE BETWEEN THE WORK AND SHADOW VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT DRYING TIME, AND OTHER FACTORS. SHADOW VEHICLES ARE USED TO WARN TRAFFIC OF THE OPERATION AHEAD. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE SHADOW VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE SHADOW VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.

3. ADDITIONAL SHADOW VEHICLES TO WARN AND REDUCE THE SPEED OF ONCOMING OR OPPOSING TRAFFIC MAY BE USED. POLICE PATROL CARS MAY BE USED FOR THIS PURPOSE.

4. A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE SHADOW VEHICLE AND MAY BE USED ON THE WORK VEHICLE.

5. THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE SHADOW VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. SHADOW AND WORK VEHICLES SHALL DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.

6. VEHICLE-MOUNTED SIGNS SHOULD BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT AND SHALL NOT BE OBSCURED BY EQUIPMENT OR SUPPLIES. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.

7. ARROW BOARD TO BE USED IN CAUTION MODE.

8. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

DATE	REVISION	BY
12/17/25	REVISED TEXT AND DETAILS	SYN

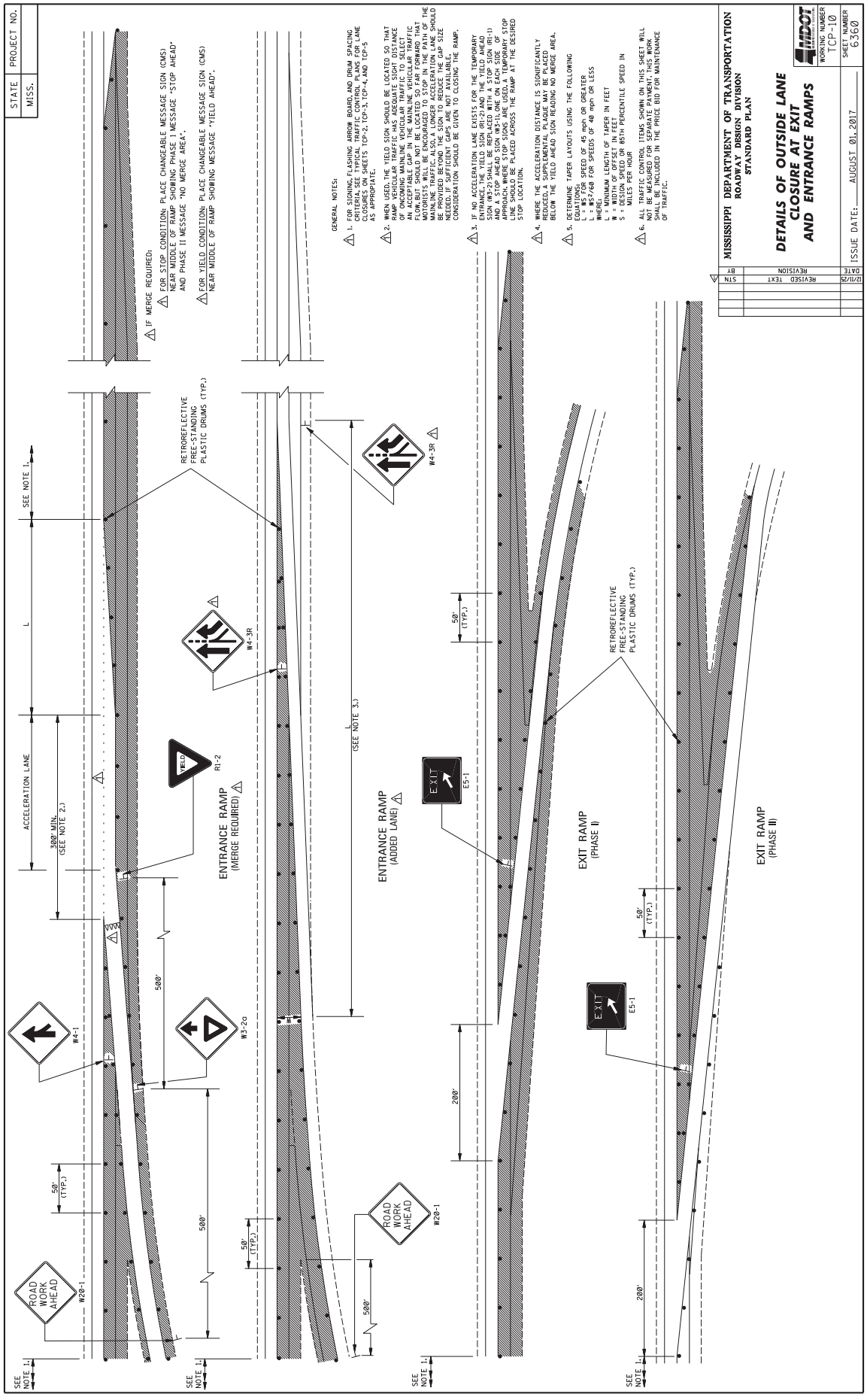
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

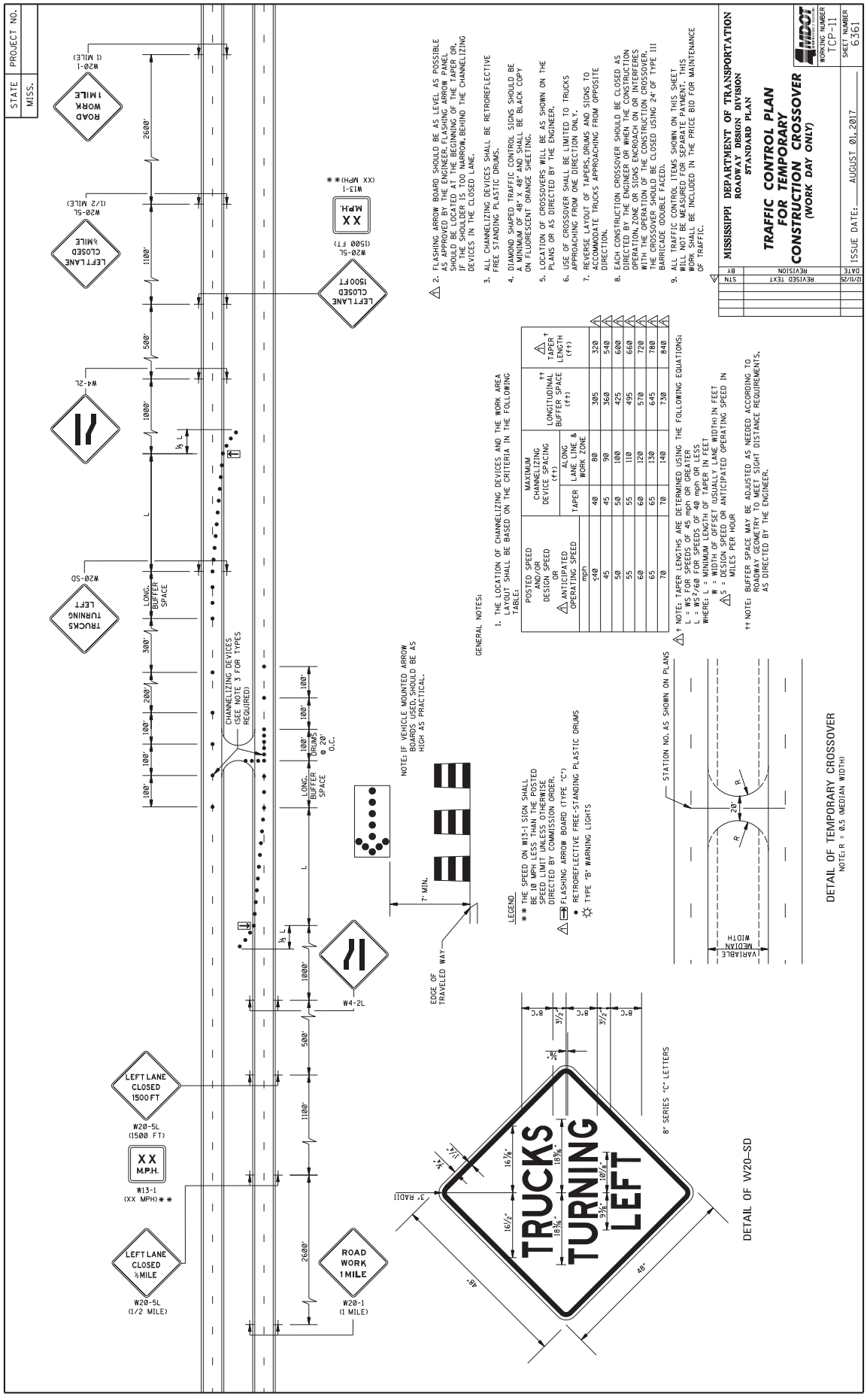
TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO–LANE ROADS

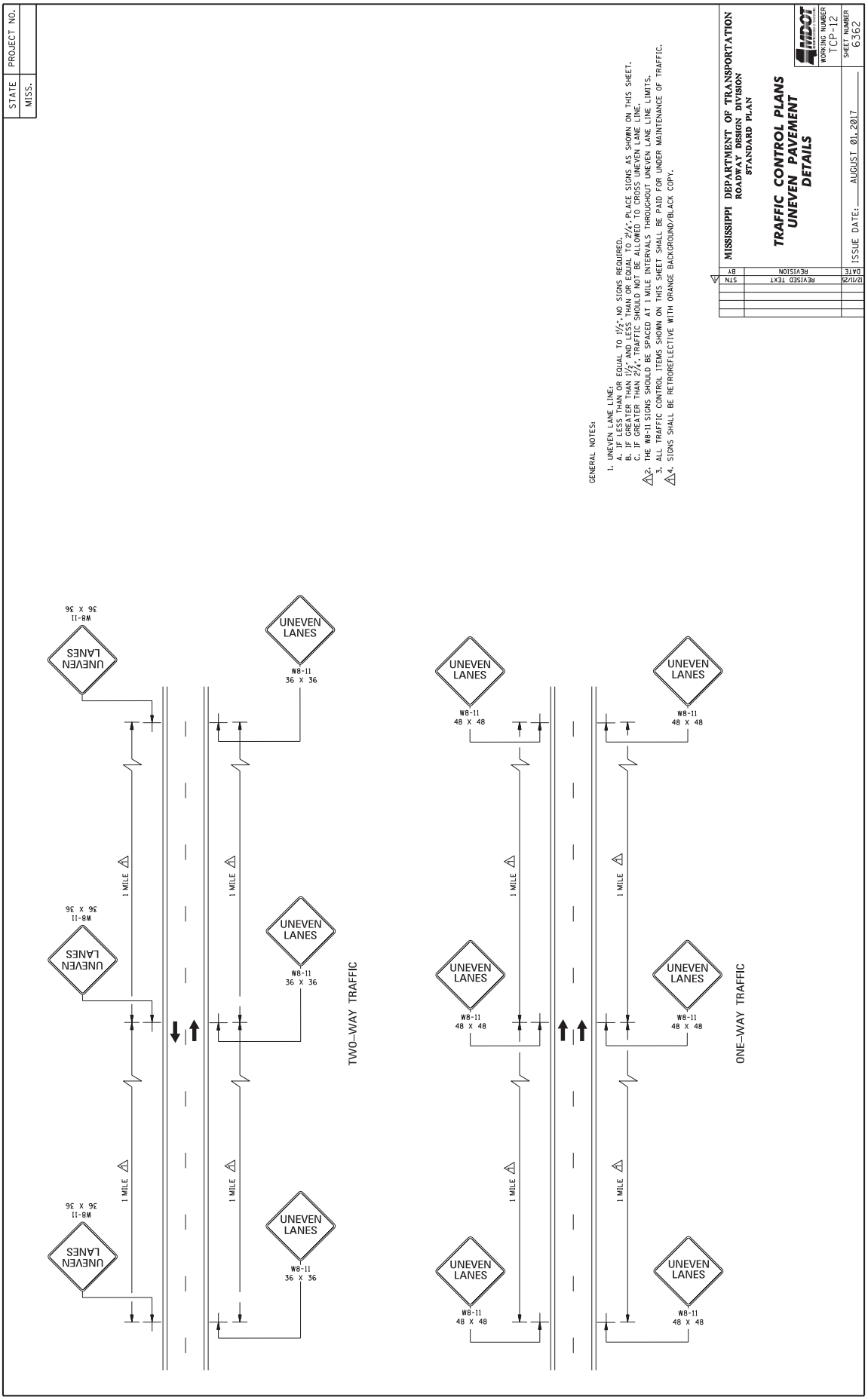
WORKING NUMBER TCP-9

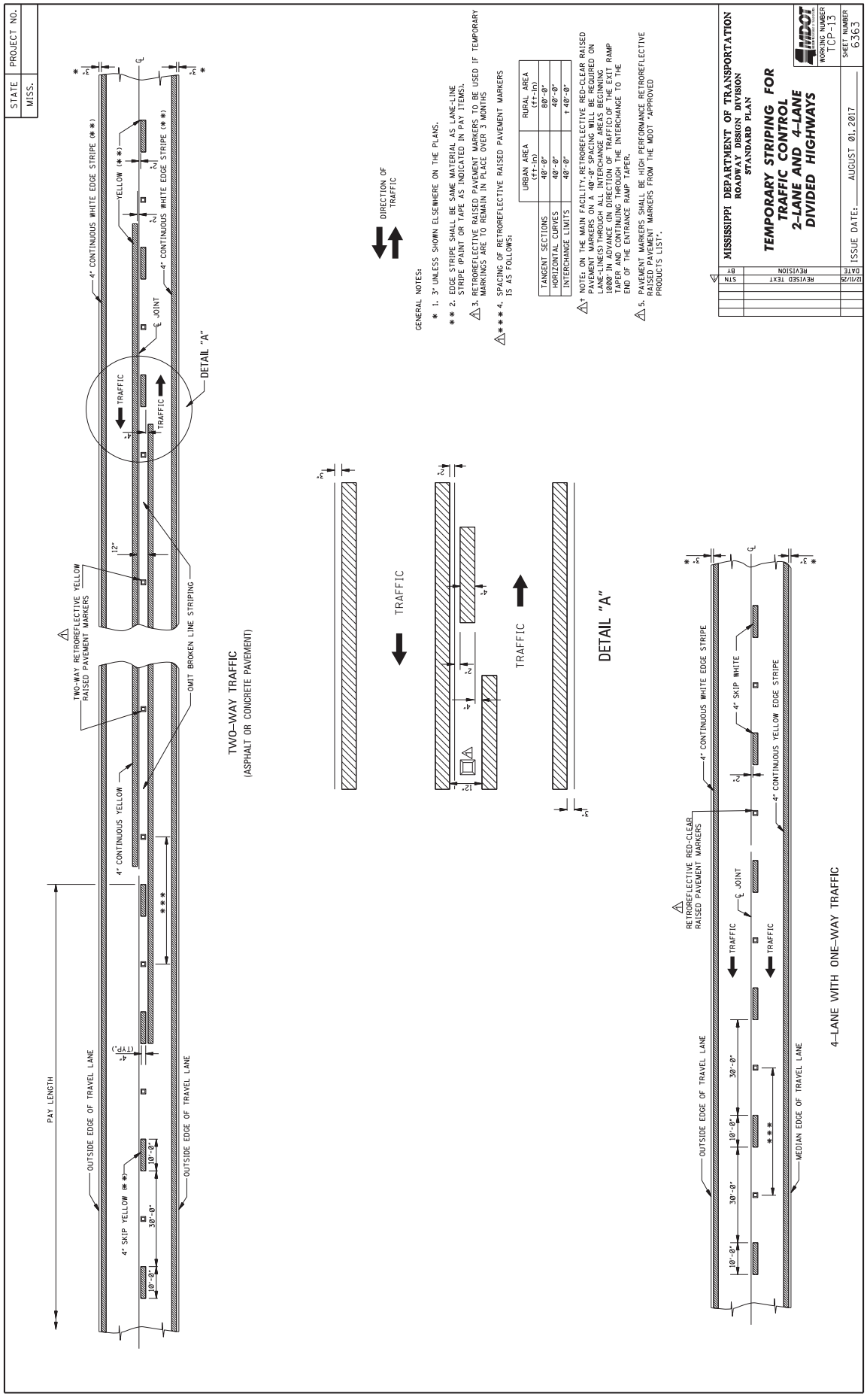
ISSUE DATE: AUGUST 01, 2017

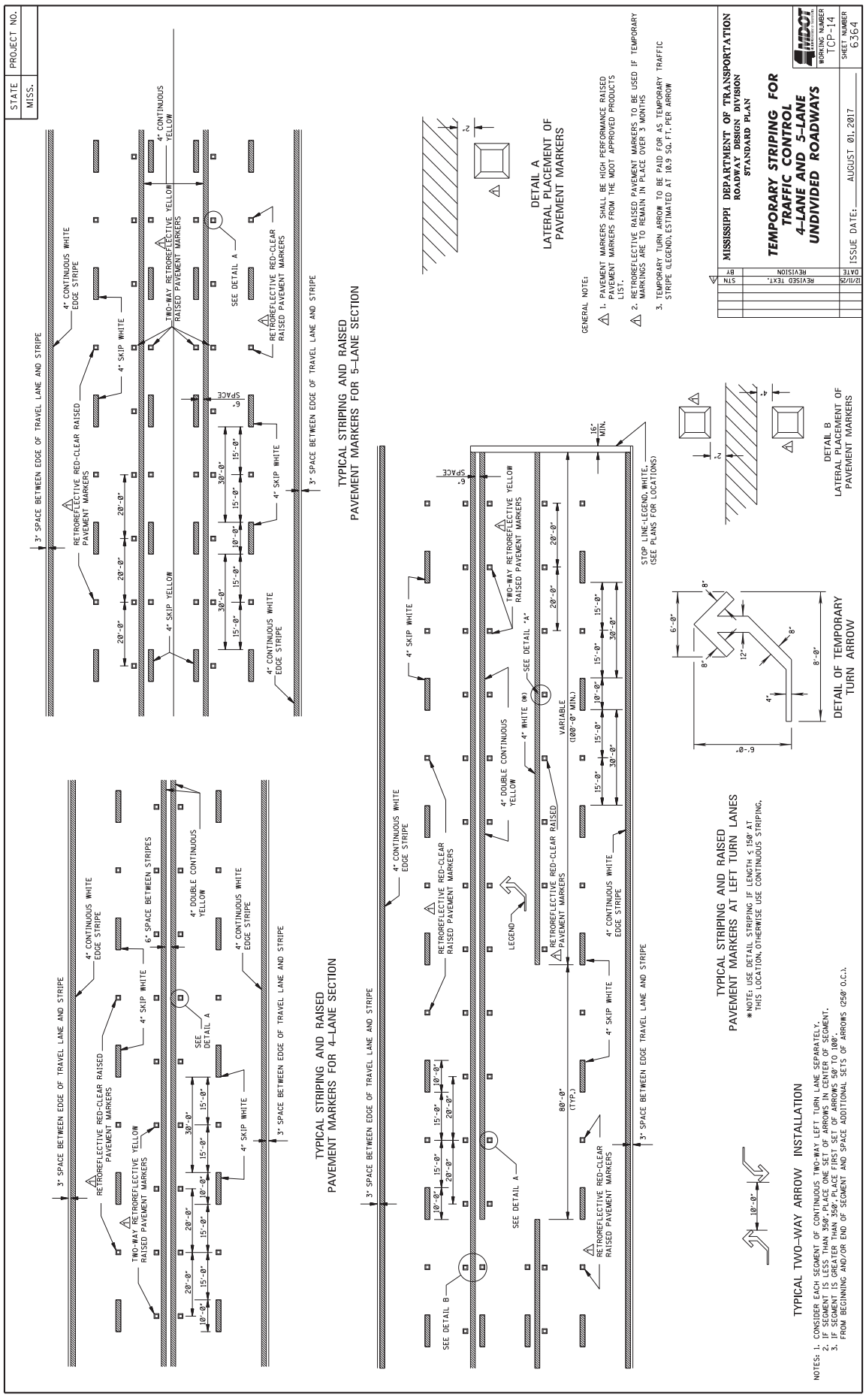
SHEET NUMBER 6359

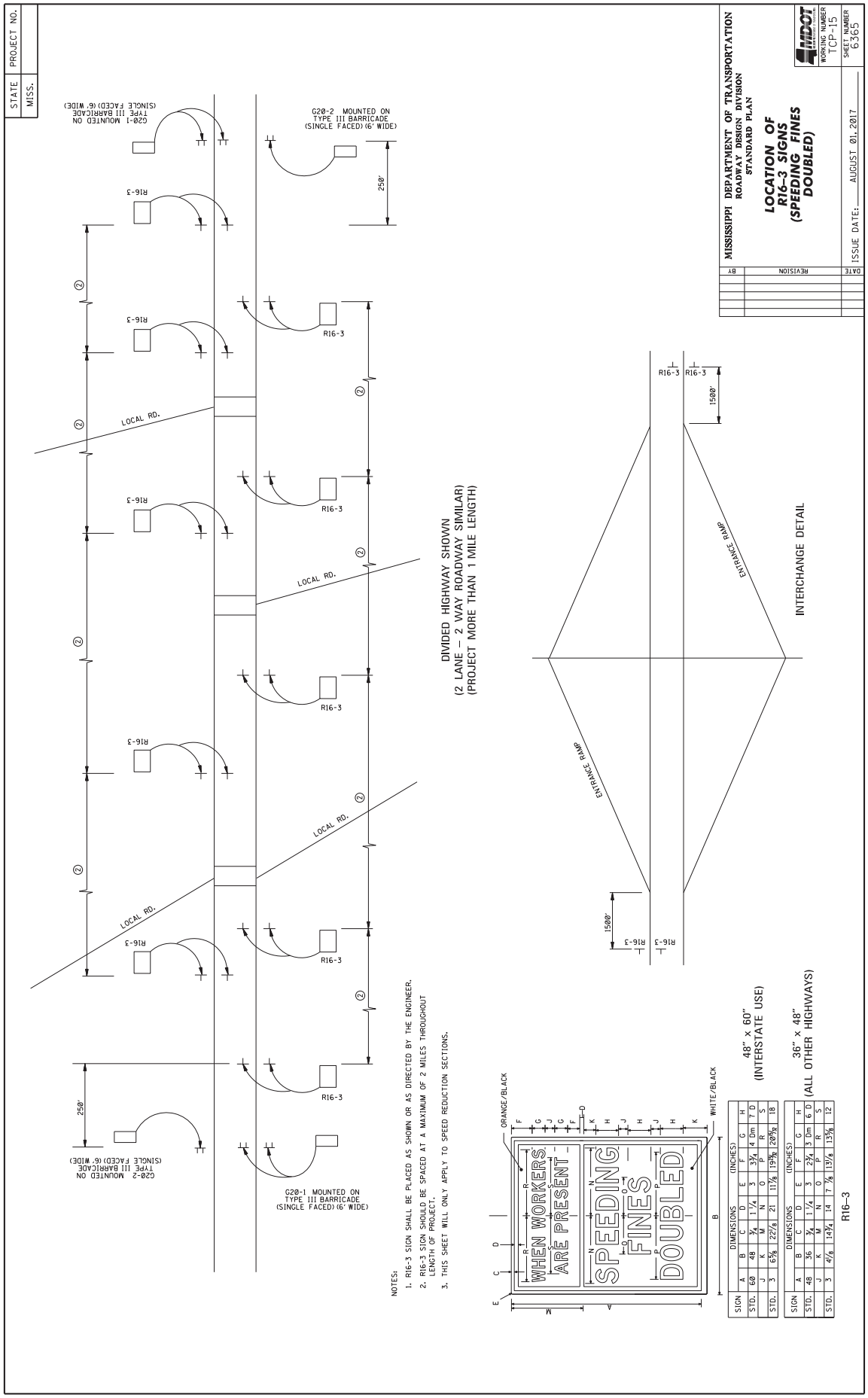

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS
WORKING NUMBER TCP-10
SHEET NUMBER 6360
ISSUE DATE: AUGUST 01, 2017
REVISED TEXT
GENERAL NOTES:
1. FOR SIGNING, FLASHING ARROW BOARD, AND DRUM SPACING CRITERIA SEE STANDARD TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5 AS APPROPRIATE.
2. WHEN USED, THE YIELD SIGN SHOULD BE LOCATED SO THAT RAMP VEHICULAR TRAFFIC HAS ADEQUATE SIGHT DISTANCE OF ONCOMING MAINLINE VEHICULAR TRAFFIC TO SELECT AN ACCEPTABLE GAP IN THE MAINLINE VEHICULAR TRAFFIC FLOW, BUT SHOULD NOT BE LOCATED SO FAR FORWARD THAT MOTORISTS WILL BE ENCOURAGED TO STOP IN THE PATH OF THE MAINLINE TRAFFIC. ALSO, A LONGER ACCELERATION LANE SHOULD BE PROVIDED BEYOND THIS POINT IF ADDITIONAL GAP SIZE NEEDED. IF SUFFICIENT GAPS ARE NOT AVAILABLE, CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP.
3. IF NO ACCELERATION LANE EXISTS FOR THE TEMPORARY ENTRANCE RAMP, THE YIELD AHEAD SIGN (W3-2) AND THE YIELD AHEAD SIGN (W3-2) SHALL BE REPLACED WITH A STOP SIGN (R1-1) AND A STOP AHEAD SIGN (W3-1), ONE ON EACH SIDE OF APPROACHING TRAFFIC. ALSO, A SUPPLEMENTAL STOP LINE SHOULD BE PLACED ACROSS THE RAMP AT THE DESIRED STOP LOCATION.
4. WHERE THE ACCELERATION DISTANCE IS SIGNIFICANTLY REDUCED, A SUPPLEMENTAL PLAQUE SHALL BE PLACED BELOW THE YIELD AHEAD SIGN READING NO MERGE AREA.
5. DETERMINE TAPER LAYOUTS USING THE FOLLOWING CRITERIA:
L = WS FOR SPEED OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE:
L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT; THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
IF MERGE REQUIRED:
FOR STOP CONDITION: PLACE CHANGEABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING PHASE I MESSAGE "STOP AHEAD" AND PHASE II MESSAGE "NO MERGE AREA".
FOR YIELD CONDITION: PLACE CHANGEABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING MESSAGE "YIELD AHEAD".
ENTRANCE RAMP (MERGE REQUIRED)
ENTRANCE RAMP (ADDED LANE)
EXIT RAMP (PHASE I)
EXIT RAMP (PHASE II)
ACCELERATION LANE
300' MIN. (SEE NOTE 2.)
L
(SEE NOTE 3.)
SEE NOTE 1.
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS (TYP.)
50' (TYP.)
500'
200'
W4-1
W3-2o
W4-3R
R1-2
E5-1
W20-1
ROAD WORK AHEAD
YIELD
EXIT


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN FOR TEMPORARY CONSTRUCTION CROSSOVER
(WORK DAY ONLY)
WORKING NUMBER TCP-11
SHEET NUMBER 6361
ISSUE DATE: AUGUST 01, 2017
REVISION
REVISED TEXT
GENERAL NOTES:
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:
2. FLASHING ARROW BOARD SHOULD BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR IF THERE IS NO TAPER, AT THE ARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.
3. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE FREE STANDING PLASTIC DRUMS.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD BE A MINIMUM OF 48" X 48" AND SHALL BE BLACK COPY ON FLUORESCENT ORANGE SHEETING.
5. LOCATION OF CROSSOVERS WILL BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
6. USE OF CROSSOVER SHALL BE LIMITED TO TRUCKS APPROACHING FROM ONE DIRECTION ONLY.
7. REVERSE LAYOUT OF TAPERS, DRUMS AND SIGNS TO ACCOMMODATE TRUCKS APPROACHING FROM OPPOSITE DIRECTION.
8. EACH CONSTRUCTION CROSSOVER SHOULD BE CLOSED AS DIRECTED BY THE ENGINEER OR WHEN THE CONSTRUCTION OPERATION, ZONE OR SIGNS ENCROACH ON OR INTERFERES WITH THE OPERATION OF THE CONSTRUCTION CROSSOVER. THE CROSSOVER SHOULD BE CLOSED USING 24' OF TYPE III BARRICADE, DOUBLE FACED.
9. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK SHALL BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
LEGEND
** THE SPEED ON W13-1 SIGN SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
FLASHING ARROW BOARD (TYPE "C")
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TYPE "B" WARNING LIGHTS
† NOTE: TAPER LENGTHS ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (EQUAL TO LANE WIDTH) IN FEET
S = DESIGN SPEED OR ANTICIPATED OPERATING SPEED IN MILES PER HOUR
†† NOTE: BUFFER SPACE MAY BE ADJUSTED AS NEEDED ACCORDING TO ROADWAY GEOMETRY TO MEET SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
DETAIL OF TEMPORARY CROSSOVER
NOTE: R = 0.5 MEDIAN WIDTH)
DETAIL OF W20-5D
8" SERIES "C" LETTERS
TRUCKS TURNING LEFT
LEFT LANE CLOSED 1500FT
W20-5L (1500 FT)
XX M.P.H.
W13-1 (XX MPH)**
LEFT LANE CLOSED ½MILE
W20-5L (1/2 MILE)
ROAD WORK 1 MILE
W20-1 (1 MILE)
TRUCKS TURNING LEFT
W20-5D
LONG. BUFFER SPACE
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
DRUMS @ 20' O.C.
W4-2L
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
STATION NO. AS SHOWN ON PLANS
VARIABLE MEDIAN WIDTH
W20-5L (1500 FT)
XX MPH
W13-1 (XX MPH)**
LEFT LANE CLOSED 1500FT
W20-5L (1500 FT)


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLANS
UNEVEN PAVEMENT
DETAILS
WORKING NUMBER TCP-12
SHEET NUMBER 6362
ISSUE DATE: AUGUST 01, 2017
DATE REVISION BY
12/1/25 REVISED TEXT STN
GENERAL NOTES:
1. UNEVEN LANE LINE:
A. IF LESS THAN OR EQUAL TO 1½", NO SIGNS REQUIRED.
B. IF GREATER THAN 1½" AND LESS THAN OR EQUAL TO 2¼", PLACE SIGNS AS SHOWN ON THIS SHEET.
C. IF GREATER THAN 2¼", TRAFFIC SHOULD NOT BE ALLOWED TO CROSS UNEVEN LANE LINE.
2. THE W8-11 SIGNS SHOULD BE SPACED AT 1 MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
4. SIGNS SHALL BE RETROREFLECTIVE WITH ORANGE BACKGROUND/BLACK COPY.
TWO-WAY TRAFFIC
ONE-WAY TRAFFIC
UNEVEN LANES
W8-11
36 X 36
48 X 48
1 MILE

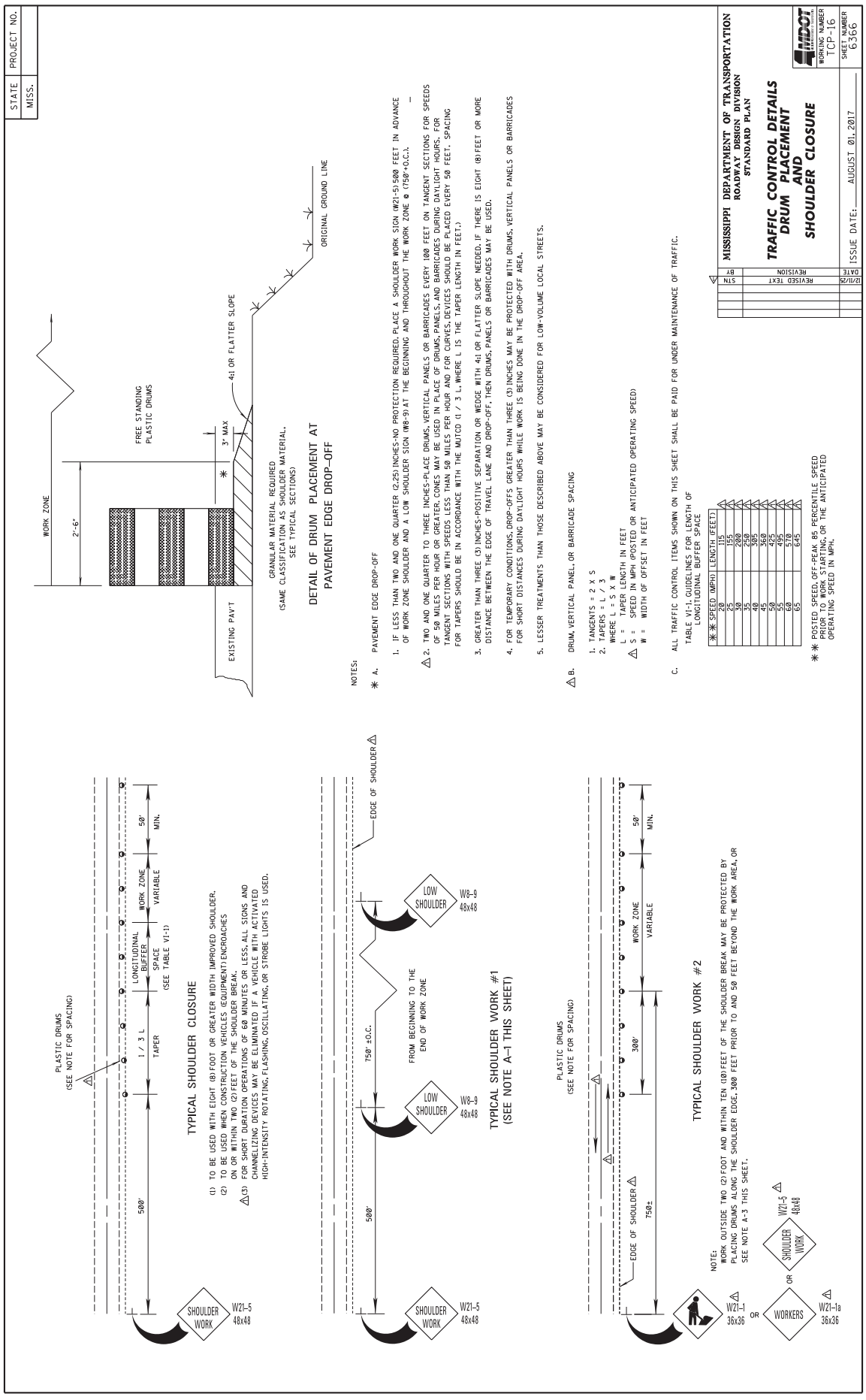

STATE MISS.
PROJECT NO.
PAY LENGTH
OUTSIDE EDGE OF TRAVEL LANE
4" SKIP YELLOW (**)
4" CONTINUOUS YELLOW
OUTSIDE EDGE OF TRAVEL LANE
TWO-WAY RETROREFLECTIVE YELLOW RAISED PAVEMENT MARKERS
OMIT BROKEN LINE STRIPING
4" CONTINUOUS WHITE EDGE STRIPE (**)
YELLOW (**)
4" CONTINUOUS WHITE EDGE STRIPE (**)
℄ JOINT
TRAFFIC
TRAFFIC
DETAIL "A"
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
DIRECTION OF TRAFFIC
TRAFFIC
TRAFFIC
DETAIL "A"
GENERAL NOTES:
* 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN PAY ITEMS).
3. RETROREFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
*** 4. SPACING OF RETROREFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:
URBAN AREA (ft-in) / RURAL AREA (ft-in)
TANGENT SECTIONS 40'-0" 80'-0"
HORIZONTAL CURVES 40'-0" 40'-0"
INTERCHANGE LIMITS 40'-0" † 40'-0"
† NOTE: ON THE MAIN FACILITY, RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINES THROUGH ALL INTERCHANGE AREAS BEGINNING (0000) FEET IN ADVANCE OF THE PAVEMENT GORE AREA AT THE RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RETROREFLECTIVE RAISED PAVEMENT MARKERS FROM THE MDOT "APPROVED PRODUCTS LIST".
STN BY REVISED TEXT 12/11/29
DATE REVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
WORKING NUMBER TCP-13
ISSUE DATE: AUGUST 01, 2017
SHEET NUMBER 6363
4-LANE WITH ONE-WAY TRAFFIC
RETROREFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
4" CONTINUOUS WHITE EDGE STRIPE
4" SKIP WHITE
4" CONTINUOUS YELLOW EDGE STRIPE
OUTSIDE EDGE OF TRAVEL LANE
MEDIAN EDGE OF TRAVEL LANE


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TEMPORARY STRIPING FOR TRAFFIC CONTROL 4-LANE AND 5-LANE UNDIVIDED ROADWAYS
WORKING NUMBER TCP-14
SHEET NUMBER 6364
ISSUE DATE: AUGUST 01, 2017
STN BY REVISION DATE
12/11/25 REVISED TEXT.
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES
* NOTE: USE DETAIL STRIPING IF LENGTH ≤ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.
TYPICAL TWO-WAY ARROW INSTALLATION
DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS
DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS
DETAIL OF TEMPORARY TURN ARROW
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS FROM THE MDOT APPROVED PRODUCTS LIST.
2. RETROREFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
3. TEMPORARY TURN ARROW TO BE PAID FOR AS TEMPORARY TRAFFIC STRIPE (LEGEND), ESTIMATED AT 10.9 SQ. FT. PER ARROW
NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS @250' O.C.).



SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H
STD.	60	48	¾	1 ¼	3	3¾	4 Dm	7 D
	J	K	M	N	O	P	R	S
STD.	3	6⅝	22⅛	21	11⅞	19⅜	20⅜	18

SIGN	DIMENSIONS (INCHES)								
	A	B	C	D	E	F	G	H
STD.	48	36	¾	1 ¼	3	2¾	3 Dm	6 D
	J	K	M	N	O	P	R	S
STD.	3	4⅛	14¾	14	7 ⅞	13⅛	13⅝	12


STATE MISS.
PROJECT NO.
WORK ZONE
2'-6"
FREE STANDING PLASTIC DRUMS
3" MAX
4:1 OR FLATTER SLOPE
EXISTING PAVT
GRANULAR MATERIAL REQUIRED (SAME CLASSIFICATION AS SHOULDER MATERIAL, SEE TYPICAL SECTIONS)
ORIGINAL GROUND LINE
DETAIL OF DRUM PLACEMENT AT PAVEMENT EDGE DROP-OFF
NOTES:
* A. PAVEMENT EDGE DROP-OFF
1. IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750'+O.C.).
△2. TWO AND ONE QUARTER TO THREE INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE MUTCD (1 / 3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
3. GREATER THAN THREE (3) INCHES-POSITIVE SEPARATION OR WEDGE WITH 4:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED.
4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN THREE (3) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
5. LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.
△B. DRUM, VERTICAL PANEL, OR BARRICADE SPACING
1. TANGENTS = 2 X S
2. TAPERS = L / 3
WHERE L = S X W
L = TAPER LENGTH IN FEET
△S = SPEED IN MPH (POSTED OR ANTICIPATED OPERATING SPEED)
W = WIDTH OF OFFSET IN FEET
C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
TABLE VI-1, GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE
** SPEED (MPH) | LENGTH (FEET)
20 | 115
25 | 155
30 | 200
35 | 245
40 | 305
45 | 360
50 | 425
55 | 495
60 | 570
65 | 645
** POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.
△ REVISED TEXT 12/11/25 STN
REVISION DATE BY
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL DETAILS
DRUM PLACEMENT AND
SHOULDER CLOSURE
ISSUE DATE: AUGUST 01, 2017
WORKING NUMBER TCP-16
SHEET NUMBER 6366
PLASTIC DRUMS (SEE NOTE FOR SPACING)
LONGITUDINAL BUFFER SPACE (SEE TABLE VI-1)
1 / 3 L
TAPER
WORK ZONE
VARIABLE
50' MIN.
500'
SHOULDER WORK
W21-5 48x48
TYPICAL SHOULDER CLOSURE
(1) TO BE USED WITH EIGHT (8) FOOT OR GREATER WIDTH IMPROVED SHOULDER.
(2) TO BE USED WHEN CONSTRUCTION VEHICLES (EQUIPMENT) ENCROACHES ON OR WITHIN TWO (2) FEET OF THE SHOULDER BREAK.
△(3) FOR SHORT DURATION OPERATIONS OF 60 MINUTES OR LESS, ALL SIGNS AND CHANNELIZING DEVICES MAY BE ELIMINATED IF A VEHICLE WITH ACTIVATED HIGH-INTENSITY ROTATING, FLASHING, OSCILLATING, OR STROBE LIGHTS IS USED.
EDGE OF SHOULDER △
750' ±O.C.
FROM BEGINNING TO THE END OF WORK ZONE
LOW SHOULDER
W8-9 48x48
500'
SHOULDER WORK
W21-5 48x48
TYPICAL SHOULDER WORK #1
(SEE NOTE A-1 THIS SHEET)
PLASTIC DRUMS (SEE NOTE FOR SPACING)
EDGE OF SHOULDER △
750±
300'
WORK ZONE
VARIABLE
50' MIN.
TYPICAL SHOULDER WORK #2
NOTE:
WORK OUTSIDE TWO (2) FOOT AND WITHIN TEN (10) FEET OF THE SHOULDER BREAK MAY BE PROTECTED BY PLACING DRUMS ALONG THE SHOULDER EDGE. 300 FEET PRIOR TO AND 50 FEET BEYOND THE WORK AREA, OR SEE NOTE A-3 THIS SHEET.
△ W21-1 36x36
OR
WORKERS
W21-1a 36x36
OR
SHOULDER WORK
△ W21-5 48x48

"General Decision Number: MS20260096 01/23/2026

Superseded General Decision Number: MS20250096

State: Mississippi

Construction Type: Highway

County: Lauderdale County in Mississippi.

HIGHWAY CONSTRUCTION PROJECTS

Modification Number	Publication Date
0	01/02/2026
1	01/23/2026

* ELEC0917-006 12/01/2025

	Rates	Fringes
ELECTRICIAN	$ 33.30	11.63

SUMS2010-019 08/04/2014

	Rates	Fringes
CARPENTER (Form Work Only)	$ 13.12	0.00
CARPENTER, Excludes Form Work	$ 14.21	0.00
CEMENT MASON/CONCRETE FINISHER	$ 12.69	0.00
HIGHWAY/PARKING LOT STRIPING: Truck Driver (Line Striping Truck)	$ 11.50	0.00
INSTALLER - GUARDRAIL	$ 11.68	0.00
INSTALLER - SIGN	$ 12.32	0.00
IRONWORKER, REINFORCING	$ 13.50	0.00
LABORER: Asphalt, Includes Raker, Shoveler, Spreader and Distributor	$ 11.20	0.00
LABORER: Common or General	$ 10.30	0.00
LABORER: Flagger	$ 10.00	0.00
LABORER: Grade Checker	$ 13.56	0.00
LABORER: Mason Tender - Cement/Concrete	$ 11.30	0.00
LABORER: Pipelayer	$ 11.22	0.00
LABORER: Laborer-Cones/ Barricades/Barrels - Setter/Mover/Sweeper	$ 11.28	0.00
OPERATOR: Asphalt Spreader	$ 15.33	0.00
OPERATOR:		

Backhoe/Excavator/Trackhoe.....$ 14.80 0.00

OPERATOR: Broom/Sweeper.....$ 10.17 0.00

OPERATOR: Bulldozer.....$ 14.41 0.00

OPERATOR: Concrete Saw.....$ 14.37 0.00

OPERATOR: Crane.....$ 21.74 0.00

OPERATOR: Distributor.....$ 11.63 0.00

OPERATOR: Drill.....$ 19.22 0.00

OPERATOR: Grader/Blade.....$ 14.50 0.00

OPERATOR: Loader.....$ 15.01 0.00

OPERATOR: Mechanic.....$ 15.08 0.00

OPERATOR: Milling Machine.....$ 14.84 0.00

OPERATOR: Mixer.....$ 12.42 0.00

OPERATOR: Oiler.....$ 13.16 0.00

OPERATOR: Paver (Asphalt,
Aggregate, and Concrete).....$ 13.84 0.00

OPERATOR: Piledriver.....$ 15.13 0.00

OPERATOR: Roller (All Types)....$ 11.22 0.00

OPERATOR: Scraper.....$ 13.34 0.00

OPERATOR: Tractor.....$ 12.92 0.00

OPERATOR: Trencher.....$ 13.75 0.00

SURVEYOR (Staking, Marking
and Brush Clearing).....$ 12.34 0.00

TRUCK DRIVER: Flatbed Truck.....$ 13.29 0.00

TRUCK DRIVER: Lowboy Truck.....$ 11.00 0.00

TRUCK DRIVER: Mechanic.....$ 13.93 0.00

TRUCK DRIVER: Off the Road
Truck.....$ 12.31 0.00

TRUCK DRIVER: Water Truck.....$ 10.63 0.00

TRUCK DRIVER: Dump Truck (All
Types).....$ 11.96 0.00

TRUCK DRIVER: Semi/Trailer
Truck.....$ 12.50 0.00

WELDERS - Receive rate prescribed for craft performing
operation to which welding is incidental.

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Note: Executive Order (EO) 13706, Establishing Paid Sick Leave for Federal Contractors applies to all contracts subject to the Davis-Bacon Act for which the contract is awarded (and any solicitation was issued) on or after January 1, 2017. If this contract is covered by the EO, the contractor must provide employees with 1 hour of paid sick leave for every 30 hours they work, up to 56 hours of paid sick leave each year. Employees must be permitted to use paid sick leave for their own illness, injury or other health-related needs, including preventive care; to assist a family member (or person who is like family to the employee) who is ill, injured, or has other health-related needs, including preventive care; or for reasons resulting from, or to assist a family member (or person who is like family to the employee) who is a victim of, domestic violence, sexual assault, or stalking. Additional information on contractor requirements and worker protections under the EO is available at https://www.dol.gov/agencies/whd/government-contracts.

Note: Executive Order 13658 generally applies to contracts subject to the Davis-Bacon Act that were awarded on or between January 1, 2015 and January 29, 2022, and that have not been renewed or extended on or after January 30, 2022. Executive Order 13658 does not apply to contracts subject only to the Davis-Bacon Related Acts regardless of when they were awarded. If a contract is subject to Executive Order 13658, the contractor must pay all covered workers at least $13.30 per hour (or the applicable wage rate listed on this wage determination, if it is higher) for all hours spent performing on the contract in 2025. The applicable Executive Order minimum wage rate will be adjusted annually. Additional information on contractor requirements and worker protections under Executive Order 13658 is available at www.dol.gov/whd/govcontracts.

Unlisted classifications needed for work not included within the scope of the classifications listed may be added after award only as provided in the labor standards contract clauses (29CFR 5.5 (a) (1) (iii)).

The body of each wage determination lists the classifications and wage rates that have been found to be prevailing for the type(s) of construction and geographic area covered by the wage determination. The classifications are listed in alphabetical order under rate identifiers indicating whether the particular rate is a union rate (current union negotiated rate), a survey rate, a weighted union average rate, a state adopted rate, or a supplemental classification rate.

Union Rate Identifiers

A four-letter identifier beginning with characters other than ""SU"", ""UAVG"", ?SA?, or ?SC? denotes that a union rate was prevailing for that classification in the survey. Example: PLUM0198-005 07/01/2024. PLUM is an identifier of the union whose collectively bargained rate prevailed in the survey for this classification, which in this example would be Plumbers. 0198 indicates the local union number or district council number where applicable, i.e., Plumbers Local 0198. The next number, 005 in the example, is an internal number used in processing the wage determination. The date, 07/01/2024 in the example, is the effective date of the most current negotiated

rate.

Union prevailing wage rates are updated to reflect all changes over time that are reported to WHD in the rates in the collective bargaining agreement (CBA) governing the classification.

Union Average Rate Identifiers

The UAVG identifier indicates that no single rate prevailed for those classifications, but that 100% of the data reported for the classifications reflected union rates. EXAMPLE: UAVG-OH-0010 01/01/2024. UAVG indicates that the rate is a weighted union average rate. OH indicates the State of Ohio. The next number, 0010 in the example, is an internal number used in producing the wage determination. The date, 01/01/2024 in the example, indicates the date the wage determination was updated to reflect the most current union average rate.

A UAVG rate will be updated once a year, usually in January, to reflect a weighted average of the current rates in the collective bargaining agreements on which the rate is based.

Survey Rate Identifiers

The ""SU"" identifier indicates that either a single non-union rate prevailed (as defined in 29 CFR 1.2) for this classification in the survey or that the rate was derived by computing a weighted average rate based on all the rates reported in the survey for that classification. As a weighted average rate includes all rates reported in the survey, it may include both union and non-union rates. Example: SUFL2022-007 6/27/2024. SU indicates the rate is a single non-union prevailing rate or a weighted average of survey data for that classification. FL indicates the State of Florida. 2022 is the year of the survey on which these classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 6/27/2024 in the example, indicates the survey completion date for the classifications and rates under that identifier.

?SU? wage rates typically remain in effect until a new survey is conducted. However, the Wage and Hour Division (WHD) has the discretion to update such rates under 29 CFR 1.6(c)(1).

State Adopted Rate Identifiers

The ""SA"" identifier indicates that the classifications and prevailing wage rates set by a state (or local) government were adopted under 29 C.F.R 1.3(g)-(h). Example: SAME2023-007 01/03/2024. SA reflects that the rates are state adopted. ME refers to the State of Maine. 2023 is the year during which the state completed the survey on which the listed classifications and rates are based. The next number, 007 in the example, is an internal number used in producing the wage determination. The date, 01/03/2024 in the example, reflects the date on which the classifications and rates under the ?SA? identifier took effect under state law in the state from which the rates were adopted.

WAGE DETERMINATION APPEALS PROCESS

1) Has there been an initial decision in the matter? This can

be:

a) a survey underlying a wage determination
b) an existing published wage determination
c) an initial WHD letter setting forth a position on a wage determination matter
d) an initial conformance (additional classification and rate) determination

On survey related matters, initial contact, including requests for summaries of surveys, should be directed to the WHD Branch of Wage Surveys. Requests can be submitted via email to davisbaconinfo@dol.gov or by mail to:

Branch of Wage Surveys
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

Regarding any other wage determination matter such as conformance decisions, requests for initial decisions should be directed to the WHD Branch of Construction Wage Determinations. Requests can be submitted via email to BCWD-Office@dol.gov or by mail to:

Branch of Construction Wage Determinations
Wage and Hour Division
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

2) If an initial decision has been issued, then any interested party (those affected by the action) that disagrees with the decision can request review and reconsideration from the Wage and Hour Administrator (See 29 CFR Part 1.8 and 29 CFR Part 7). Requests for review and reconsideration can be submitted via email to dba.reconsideration@dol.gov or by mail to:

Wage and Hour Administrator
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210

The request should be accompanied by a full statement of the interested party's position and any information (wage payment data, project description, area practice material, etc.) that the requestor considers relevant to the issue.

3) If the decision of the Administrator is not favorable, an interested party may appeal directly to the Administrative Review Board (formerly the Wage Appeals Board). Write to:

Administrative Review Board
U.S. Department of Labor
200 Constitution Avenue, N.W.
Washington, DC 20210.

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END OF GENERAL DECISION"

SUPPLEMENT TO FORM FHWA-1273

DATE: 07/26/2022

SUBJECT: Federal Contract Provisions for Subcontracts

Federal Contract Provisions for Subcontracts

All subcontracts shall be in writing and contain all pertinent provisions and requirements of the prime contract.

Each "Request for Permission to Subcontract" (Mississippi Department of Transportation Form CAD-720) shall include a copy of the subcontract. The federal contract provisions (FHWA-1273, SUPPLEMENT TO FORM FHWA-1273, NOTICE OF REQUIREMENT FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246), DAVIS-BACON AND RELATED ACT PROVISIONS (WAGE RATES)) must be physically incorporated as part of the subcontract. A completed Mississippi Department of Transportation Form CAD-521 and Form CAD-725 must be attached to the CAD-720.

REQUIRED CONTRACT PROVISIONS
FEDERAL-AID CONSTRUCTION CONTRACTS

I. General
II. Nondiscrimination
III. Non-segregated Facilities
IV. Davis-Bacon and Related Act Provisions
V. Contract Work Hours and Safety Standards Act Provisions
VI. Subletting or Assigning the Contract
VII. Safety: Accident Prevention
VIII. False Statements Concerning Highway Projects
IX. Implementation of Clean Air Act and Federal Water Pollution Control Act
X. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion
XI. Certification Regarding Use of Contract Funds for Lobbying
XII. Use of United States-Flag Vessels:

ATTACHMENTS

A. Employment and Materials Preference for Appalachian Development Highway System or Appalachian Local Access Road Contracts (included in Appalachian contracts only)

I. GENERAL

1. Form FHWA-1273 must be physically incorporated in each construction contract funded under title 23, United States Code, as required in 23 CFR 633.102(b) (excluding emergency contracts solely intended for debris removal). The contractor (or subcontractor) must insert this form in each subcontract and further require its inclusion in all lower tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services). 23 CFR 633.102(e).

The applicable requirements of Form FHWA-1273 are incorporated by reference for work done under any purchase order, rental agreement or agreement for other services. The prime contractor shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider. 23 CFR 633.102(e).

Form FHWA-1273 must be included in all Federal-aid design-build contracts, in all subcontracts and in lower tier subcontracts (excluding subcontracts for design services, purchase orders, rental agreements and other agreements for supplies or services) in accordance with 23 CFR 633.102. The design-builder shall be responsible for compliance by any subcontractor, lower-tier subcontractor or service provider.

Contracting agencies may reference Form FHWA-1273 in solicitation-for-bids or request-for-proposals documents, however, the Form FHWA-1273 must be physically incorporated (not referenced) in all contracts, subcontracts and lower-tier subcontracts (excluding purchase orders, rental agreements and other agreements for supplies or services related to a construction contract). 23 CFR 633.102(b).

2. Subject to the applicability criteria noted in the following sections, these contract provisions shall apply to all work performed on the contract by the contractor's own organization and with the assistance of workers under the contractor's immediate superintendence and to all work performed on the contract by piecework, station work, or by subcontract. 23 CFR 633.102(d).

3. A breach of any of the stipulations contained in these Required Contract Provisions may be sufficient grounds for withholding of progress payments, withholding of final payment, termination of the contract, suspension / debarment or any other action determined to be appropriate by the contracting agency and FHWA.

4. Selection of Labor: During the performance of this contract, the contractor shall not use convict labor for any purpose within the limits of a construction project on a Federal-aid highway unless it is labor performed by convicts who are on parole, supervised release, or probation. 23 U.S.C. 114(b). The term Federal-aid highway does not include roadways functionally classified as local roads or rural minor collectors. 23 U.S.C. 101(a).

II. NONDISCRIMINATION (23 CFR 230.107(a); 23 CFR Part 230, Subpart A, Appendix A; EO 11246)

The provisions of this section related to 23 CFR Part 230, Subpart A, Appendix A are applicable to all Federal-aid construction contracts and to all related construction subcontracts of $10,000 or more. The provisions of 23 CFR Part 230 are not applicable to material supply, engineering, or architectural service contracts.

In addition, the contractor and all subcontractors must comply with the following policies: Executive Order 11246, 41 CFR Part 60, 29 CFR Parts 1625-1627, 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The contractor and all subcontractors must comply with: the requirements of the Equal Opportunity Clause in 41 CFR 60-1.4(b) and, for all construction contracts exceeding $10,000, the Standard Federal Equal Employment Opportunity Construction Contract Specifications in 41 CFR 60-4.3.

Note: The U.S. Department of Labor has exclusive authority to determine compliance with Executive Order 11246 and the policies of the Secretary of Labor including 41 CFR Part 60, and 29 CFR Parts 1625-1627. The contracting agency and the FHWA have the authority and the responsibility to ensure compliance with 23 U.S.C. 140, Section 504 of the Rehabilitation Act of 1973, as amended (29 U.S.C. 794), and Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d et seq.), and related regulations including 49 CFR Parts 21, 26, and 27; and 23 CFR Parts 200, 230, and 633.

The following provision is adopted from 23 CFR Part 230, Subpart A, Appendix A, with appropriate revisions to conform to the U.S. Department of Labor (US DOL) and FHWA requirements.

1. Equal Employment Opportunity: Equal Employment Opportunity (EEO) requirements not to discriminate and to take affirmative action to assure equal opportunity as set forth under laws, executive orders, rules, regulations (*see* 28 CFR Part 35, 29 CFR Part 1630, 29 CFR Parts 1625-1627, 41 CFR Part 60 and 49 CFR Part 27) and orders of the Secretary of Labor as modified by the provisions prescribed herein, and imposed pursuant to 23 U.S.C. 140, shall constitute the EEO and specific affirmative action standards for the contractor's project activities under this contract. The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) set forth under 28 CFR Part 35 and 29 CFR Part 1630 are incorporated by reference in this contract. In the execution of this contract, the contractor agrees to comply with the following minimum specific requirement activities of EEO:

a. The contractor will work with the contracting agency and the Federal Government to ensure that it has made every good faith effort to provide equal opportunity with respect to all of its terms and conditions of employment and in their review of activities under the contract. 23 CFR 230.409 (g)(4) & (5).

b. The contractor will accept as its operating policy the following statement:

"It is the policy of this Company to assure that applicants are employed, and that employees are treated during employment, without regard to their race, religion, sex, sexual orientation, gender identity, color, national origin, age or disability. Such action shall include: employment, upgrading, demotion, or transfer; recruitment or recruitment advertising; layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship, pre-apprenticeship, and/or on-the-job training."

2. EEO Officer: The contractor will designate and make known to the contracting officers an EEO Officer who will have the responsibility for and must be capable of effectively administering and promoting an active EEO program and who must be assigned adequate authority and responsibility to do so.

3. Dissemination of Policy: All members of the contractor's staff who are authorized to hire, supervise, promote, and discharge employees, or who recommend such action or are substantially involved in such action, will be made fully cognizant of and will implement the contractor's EEO policy and contractual responsibilities to provide EEO in each grade and classification of employment. To ensure that the above agreement will be met, the following actions will be taken as a minimum:

a. Periodic meetings of supervisory and personnel office employees will be conducted before the start of work and then not less often than once every six months, at which time the contractor's EEO policy and its implementation will be reviewed and explained. The meetings will be conducted by the EEO Officer or other knowledgeable company official.

b. All new supervisory or personnel office employees will be given a thorough indoctrination by the EEO Officer, covering all major aspects of the contractor's EEO obligations within thirty days following their reporting for duty with the contractor.

c. All personnel who are engaged in direct recruitment for the project will be instructed by the EEO Officer in the contractor's procedures for locating and hiring minorities and women.

d. Notices and posters setting forth the contractor's EEO policy will be placed in areas readily accessible to employees, applicants for employment and potential employees.

e. The contractor's EEO policy and the procedures to implement such policy will be brought to the attention of employees by means of meetings, employee handbooks, or other appropriate means.

4. Recruitment: When advertising for employees, the contractor will include in all advertisements for employees the notation: "An Equal Opportunity Employer." All such advertisements will be placed in publications having a large circulation among minorities and women in the area from which the project work force would normally be derived.

a. The contractor will, unless precluded by a valid bargaining agreement, conduct systematic and direct recruitment through public and private employee referral sources likely to yield qualified minorities and women. To meet this requirement, the contractor will identify sources of potential minority group employees and establish with such identified sources procedures whereby minority and women applicants may be referred to the contractor for employment consideration.

b. In the event the contractor has a valid bargaining agreement providing for exclusive hiring hall referrals, the contractor is expected to observe the provisions of that agreement to the extent that the system meets the contractor's compliance with EEO contract provisions. Where implementation of such an agreement has the effect of discriminating against minorities or women, or obligates the contractor to do the same, such implementation violates Federal nondiscrimination provisions.

c. The contractor will encourage its present employees to refer minorities and women as applicants for employment. Information and procedures with regard to referring such applicants will be discussed with employees.

5. Personnel Actions: Wages, working conditions, and employee benefits shall be established and administered, and personnel actions of every type, including hiring, upgrading, promotion, transfer, demotion, layoff, and termination, shall be taken without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age or disability. The following procedures shall be followed:

a. The contractor will conduct periodic inspections of project sites to ensure that working conditions and employee facilities do not indicate discriminatory treatment of project site personnel.

b. The contractor will periodically evaluate the spread of wages paid within each classification to determine any evidence of discriminatory wage practices.

c. The contractor will periodically review selected personnel actions in depth to determine whether there is evidence of discrimination. Where evidence is found, the contractor will promptly take corrective action. If the review indicates that the discrimination may extend beyond the actions reviewed, such corrective action shall include all affected persons.

d. The contractor will promptly investigate all complaints of alleged discrimination made to the contractor in connection with its obligations under this contract, will attempt to resolve such complaints, and will take appropriate corrective action

within a reasonable time. If the investigation indicates that the discrimination may affect persons other than the complainant, such corrective action shall include such other persons. Upon completion of each investigation, the contractor will inform every complainant of all of their avenues of appeal.

6. Training and Promotion:

a. The contractor will assist in locating, qualifying, and increasing the skills of minorities and women who are applicants for employment or current employees. Such efforts should be aimed at developing full journey level status employees in the type of trade or job classification involved.

b. Consistent with the contractor's work force requirements and as permissible under Federal and State regulations, the contractor shall make full use of training programs (i.e., apprenticeship and on-the-job training programs for the geographical area of contract performance). In the event a special provision for training is provided under this contract, this subparagraph will be superseded as indicated in the special provision. The contracting agency may reserve training positions for persons who receive welfare assistance in accordance with 23 U.S.C. 140(a).

c. The contractor will advise employees and applicants for employment of available training programs and entrance requirements for each.

d. The contractor will periodically review the training and promotion potential of employees who are minorities and women and will encourage eligible employees to apply for such training and promotion.

7. Unions: If the contractor relies in whole or in part upon unions as a source of employees, the contractor will use good faith efforts to obtain the cooperation of such unions to increase opportunities for minorities and women. 23 CFR 230.409. Actions by the contractor, either directly or through a contractor's association acting as agent, will include the procedures set forth below:

a. The contractor will use good faith efforts to develop, in cooperation with the unions, joint training programs aimed toward qualifying more minorities and women for membership in the unions and increasing the skills of minorities and women so that they may qualify for higher paying employment.

b. The contractor will use good faith efforts to incorporate an EEO clause into each union agreement to the end that such union will be contractually bound to refer applicants without regard to their race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability.

c. The contractor is to obtain information as to the referral practices and policies of the labor union except that to the extent such information is within the exclusive possession of the labor union and such labor union refuses to furnish such information to the contractor, the contractor shall so certify to the contracting agency and shall set forth what efforts have been made to obtain such information.

d. In the event the union is unable to provide the contractor with a reasonable flow of referrals within the time limit set forth in the collective bargaining agreement, the contractor will, through independent recruitment efforts, fill the employment vacancies without regard to race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability; making full efforts to obtain qualified and/or qualifiable minorities and women. The failure of a union to provide sufficient referrals (even though it is obligated to provide exclusive referrals under the terms of a collective bargaining agreement) does not relieve the contractor from the requirements of this paragraph. In the event the union referral practice prevents the contractor from meeting the obligations pursuant to Executive Order 11246, as amended, and these special provisions, such contractor shall immediately notify the contracting agency.

8. Reasonable Accommodation for Applicants / Employees with Disabilities: The contractor must be familiar with the requirements for and comply with the Americans with Disabilities Act and all rules and regulations established thereunder. Employers must provide reasonable accommodation in all employment activities unless to do so would cause an undue hardship.

9. Selection of Subcontractors, Procurement of Materials and Leasing of Equipment: The contractor shall not discriminate on the grounds of race, color, religion, sex, sexual orientation, gender identity, national origin, age, or disability in the selection and retention of subcontractors, including procurement of materials and leases of equipment. The contractor shall take all necessary and reasonable steps to ensure nondiscrimination in the administration of this contract.

a. The contractor shall notify all potential subcontractors, suppliers, and lessors of their EEO obligations under this contract.

b. The contractor will use good faith efforts to ensure subcontractor compliance with their EEO obligations.

10. Assurances Required:

a. The requirements of 49 CFR Part 26 and the State DOT's FHWA-approved Disadvantaged Business Enterprise (DBE) program are incorporated by reference.

b. The contractor, subrecipient or subcontractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. The contractor shall carry out applicable requirements of 49 CFR part 26 in the award and administration of DOT-assisted contracts. 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 the recipient deems appropriate, which may include, but is not limited to:
(1) Withholding monthly progress payments;
(2) Assessing sanctions;
(3) Liquidated damages; and/or
(4) Disqualifying the contractor from future bidding as non-responsible.

c. The Title VI and nondiscrimination provisions of U.S. DOT Order 1050.2A at Appendixes A and E are incorporated by reference. 49 CFR Part 21.

11. Records and Reports: The contractor shall keep such records as necessary to document compliance with the EEO requirements. Such records shall be retained for a period of three years following the date of the final payment to the contractor for all contract work and shall be available at reasonable times and places for inspection by authorized representatives of the contracting agency and the FHWA.

a. The records kept by the contractor shall document the following:

(1) The number and work hours of minority and non-minority group members and women employed in each work classification on the project;

(2) The progress and efforts being made in cooperation with unions, when applicable, to increase employment opportunities for minorities and women; and

(3) The progress and efforts being made in locating, hiring, training, qualifying, and upgrading minorities and women.

b. The contractors and subcontractors will submit an annual report to the contracting agency each July for the duration of the project indicating the number of minority, women, and non-minority group employees currently engaged in each work classification required by the contract work. This information is to be reported on Form FHWA-1391. The staffing data should represent the project work force on board in all or any part of the last payroll period preceding the end of July. If on-the-job training is being required by special provision, the contractor will be required to collect and report training data. The employment data should reflect the work force on board during all or any part of the last payroll period preceding the end of July.

III. NONSEGREGATED FACILITIES

This provision is applicable to all Federal-aid construction contracts and to all related construction subcontracts of more than $10,000. 41 CFR 60-1.5.

As prescribed by 41 CFR 60-1.8, the contractor must ensure that facilities provided for employees are provided in such a manner that segregation on the basis of race, color, religion, sex, sexual orientation, gender identity, or national origin cannot result. The contractor may neither require such segregated use by written or oral policies nor tolerate such use by employee custom. The contractor's obligation extends further to ensure that its employees are not assigned to perform their services at any location under the contractor's control where the facilities are segregated. The term "facilities" includes waiting rooms, work areas, restaurants and other eating areas, time clocks, restrooms, washrooms, locker rooms and other storage or dressing areas, parking lots, drinking fountains, recreation or entertainment areas, transportation, and housing provided for employees. The contractor shall provide separate or single-user restrooms and necessary dressing or sleeping areas to assure privacy between sexes.

IV. DAVIS-BACON AND RELATED ACT PROVISIONS

This section is applicable to all Federal-aid construction projects exceeding $2,000 and to all related subcontracts and lower-tier subcontracts (regardless of subcontract size), in accordance with 29 CFR 5.5. The requirements apply to all projects located within the right-of-way of a roadway that is functionally classified as Federal-aid highway. 23 U.S.C. 113. This excludes roadways functionally classified as local roads or rural minor collectors, which are exempt. 23 U.S.C. 101. Where applicable law requires that projects be treated as a project on a Federal-aid highway, the provisions of this subpart will apply regardless of the location of the project. Examples include: Surface Transportation Block Grant Program projects funded under 23 U.S.C. 133 [excluding recreational trails projects], the Nationally Significant Freight and Highway Projects funded under 23 U.S.C. 117, and National Highway Freight Program projects funded under 23 U.S.C. 167.

The following provisions are from the U.S. Department of Labor regulations in 29 CFR 5.5 “Contract provisions and related matters” with minor revisions to conform to the FHWA-1273 format and FHWA program requirements.

1. Minimum wages (29 CFR 5.5)

a. *Wage rates and fringe benefits.* All laborers and mechanics employed or working upon the site of the work (or otherwise working in construction or development of the project under a development statute), will be paid unconditionally and not less often than once a week, and without subsequent deduction or rebate on any account (except such payroll deductions as are permitted by regulations issued by the Secretary of Labor under the Copeland Act (29 CFR part 3)), the full amount of basic hourly wages and bona fide fringe benefits (or cash equivalents thereof) due at time of payment computed at rates not less than those contained in the wage determination of the Secretary of Labor which is attached hereto and made a part hereof, regardless of any contractual relationship which may be alleged to exist between the contractor and such laborers and mechanics. As provided in paragraphs (d) and (e) of 29 CFR 5.5, the appropriate wage determinations are effective by operation of law even if they have not been attached to the contract. Contributions made or costs reasonably anticipated for bona fide fringe benefits under the Davis-Bacon Act (40 U.S.C. 3141(2)(B)) on behalf of laborers or mechanics are considered wages paid to such laborers or mechanics, subject to the provisions of paragraph 1.e. of this section; also, regular contributions made or costs incurred for more than a weekly period (but not less often than quarterly) under plans, funds, or programs which cover the particular weekly period, are deemed to be constructively made or incurred during such weekly period. Such laborers and mechanics must be paid the appropriate wage rate and fringe benefits on the wage determination for the classification(s) of work actually performed, without regard to skill, except as provided in paragraph 4. of this section. Laborers or mechanics performing work in more than one classification may be compensated at the rate specified for each classification for the time actually worked therein: *Provided,* That the employer's payroll records accurately set forth the time spent in each classification in which work is performed. The wage determination (including any additional classifications and wage rates conformed under paragraph 1.c. of this section) and the Davis-Bacon poster (WH–1321) must be posted at all times by the contractor and its subcontractors at the site of the work in a prominent and accessible place where it can be easily seen by the workers.

b. *Frequently recurring classifications.* (1) In addition to wage and fringe benefit rates that have been determined to be prevailing under the procedures set forth in 29 CFR part 1, a wage determination may contain, pursuant to § 1.3(f), wage and fringe benefit rates for classifications of laborers and mechanics for which conformance requests are regularly submitted pursuant to paragraph 1.c. of this section, provided that:

(i) The work performed by the classification is not performed by a classification in the wage determination for which a prevailing wage rate has been determined;

(ii) The classification is used in the area by the construction industry; and

(iii) The wage rate for the classification bears a reasonable relationship to the prevailing wage rates contained in the wage determination.

(2) The Administrator will establish wage rates for such classifications in accordance with paragraph 1.c.(1)(iii) of this section. Work performed in such a classification must be paid at no less than the wage and fringe benefit rate listed on the wage determination for such classification.

c. *Conformance.* (1) The contracting officer must require that any class of laborers or mechanics, including helpers, which is not listed in the wage determination and which is to be employed under the contract be classified in conformance with the wage determination. Conformance of an additional classification and wage rate and fringe benefits is appropriate only when the following criteria have been met:

(i) The work to be performed by the classification requested is not performed by a classification in the wage determination; and

(ii) The classification is used in the area by the construction industry; and

(iii) The proposed wage rate, including any bona fide fringe benefits, bears a reasonable relationship to the wage rates contained in the wage determination.

(2) The conformance process may not be used to split, subdivide, or otherwise avoid application of classifications listed in the wage determination.

(3) If the contractor and the laborers and mechanics to be employed in the classification (if known), or their representatives, and the contracting officer agree on the classification and wage rate (including the amount designated for fringe benefits where appropriate), a report of the action taken will be sent by the contracting officer by email to *DBAconformance@dol.gov*. The Administrator, or an authorized representative, will approve, modify, or disapprove every additional classification action within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(4) In the event the contractor, the laborers or mechanics to be employed in the classification or their representatives, and the contracting officer do not agree on the proposed classification and wage rate (including the amount designated for fringe benefits, where appropriate), the contracting officer will, by email to *DBAconformance@dol.gov*, refer the questions, including the views of all interested parties and the recommendation of the contracting officer, to the Administrator for determination. The Administrator, or an authorized representative, will issue a determination within 30 days of receipt and so advise the contracting officer or will notify the contracting officer within the 30–day period that additional time is necessary.

(5) The contracting officer must promptly notify the contractor of the action taken by the Wage and Hour Division under paragraphs 1.c.(3) and (4) of this section. The contractor must furnish a written copy of such determination to each affected worker or it must be posted as a part of the wage determination. The wage rate (including fringe benefits where appropriate) determined pursuant to paragraph 1.c.(3) or (4) of this section must be paid to all workers performing work in the classification under this contract from the first day on which work is performed in the classification.

d. *Fringe benefits not expressed as an hourly rate.* Whenever the minimum wage rate prescribed in the contract for a class of laborers or mechanics includes a fringe benefit which is not expressed as an hourly rate, the contractor may either pay the benefit as stated in the wage determination or may pay another bona fide fringe benefit or an hourly cash equivalent thereof.

e. *Unfunded plans.* If the contractor does not make payments to a trustee or other third person, the contractor may consider as part of the wages of any laborer or mechanic the amount of any costs reasonably anticipated in providing bona fide fringe benefits under a plan or program, *Provided,* That the Secretary of Labor has found, upon the written request of the contractor, in accordance with the criteria set forth in § 5.28, that the applicable standards of the Davis-Bacon Act have been met. The Secretary of Labor may require the contractor to set aside in a separate account assets for the meeting of obligations under the plan or program.

f. *Interest.* In the event of a failure to pay all or part of the wages required by the contract, the contractor will be required to pay interest on any underpayment of wages.

2. Withholding (29 CFR 5.5)

a. *Withholding requirements.* The contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for the full amount of wages and monetary relief, including interest, required by the clauses set forth in this section for violations of this contract, or to satisfy any such liabilities required by any other Federal contract, or federally assisted contract subject to Davis-Bacon labor standards, that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to Davis-Bacon labor standards requirements and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld. In the event of a contractor's failure to pay any laborer or mechanic, including any apprentice or helper working on the site of the work all or part of the wages required by the contract, or upon the contractor's failure to submit the required records as discussed in paragraph 3.d. of this section, the contracting agency may on its own initiative and after written notice to the contractor, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds until such violations have ceased.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with paragraph

2.a. of this section or Section V, paragraph 3.a., or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

3. Records and certified payrolls (29 CFR 5.5)

a. *Basic record requirements* (1) *Length of record retention.* All regular payrolls and other basic records must be maintained by the contractor and any subcontractor during the course of the work and preserved for all laborers and mechanics working at the site of the work (or otherwise working in construction or development of the project under a development statute) for a period of at least 3 years after all the work on the prime contract is completed.

(2) *Information required.* Such records must contain the name; Social Security number; last known address, telephone number, and email address of each such worker; each worker's correct classification(s) of work actually performed; hourly rates of wages paid (including rates of contributions or costs anticipated for bona fide fringe benefits or cash equivalents thereof of the types described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act); daily and weekly number of hours actually worked in total and on each covered contract; deductions made; and actual wages paid.

(3) *Additional records relating to fringe benefits.* Whenever the Secretary of Labor has found under paragraph 1.e. of this section that the wages of any laborer or mechanic include the amount of any costs reasonably anticipated in providing benefits under a plan or program described in 40 U.S.C. 3141(2)(B) of the Davis-Bacon Act, the contractor must maintain records which show that the commitment to provide such benefits is enforceable, that the plan or program is financially responsible, and that the plan or program has been communicated in writing to the laborers or mechanics affected, and records which show the costs anticipated or the actual cost incurred in providing such benefits.

(4) *Additional records relating to apprenticeship.* Contractors with apprentices working under approved programs must maintain written evidence of the registration of apprenticeship programs, the registration of the apprentices, and the ratios and wage rates prescribed in the applicable programs.

b. *Certified payroll requirements* (1) *Frequency and method of submission.* The contractor or subcontractor must submit weekly, for each week in which any DBA- or Related Acts-covered work is performed, certified payrolls to the contracting agency. The prime contractor is responsible for the submission of all certified payrolls by all subcontractors. A contracting agency or prime contractor may permit or require contractors to submit certified payrolls through an electronic system, as long as the electronic system requires a legally valid electronic signature; the system allows the contractor, the contracting agency, and the Department of Labor to access the certified payrolls upon request for at least 3 years after the work on the prime contract has been completed; and the contracting agency or prime contractor permits other methods of submission in situations where the contractor is unable or limited in its ability to use or access the electronic system.

(2) *Information required.* The certified payrolls submitted must set out accurately and completely all of the information required to be maintained under paragraph 3.a.(2) of this section, except that full Social Security numbers and last known addresses, telephone numbers, and email addresses must not be included on weekly transmittals. Instead, the certified payrolls need only include an individually identifying number for each worker (*e.g.,* the last four digits of the worker's Social Security number). The required weekly certified payroll information may be submitted using Optional Form WH–347 or in any other format desired. Optional Form WH–347 is available for this purpose from the Wage and Hour Division website at *https://www.dol.gov/sites/dolgov/files/WHD/legacy/files/wh347/.pdf* or its successor website. It is not a violation of this section for a prime contractor to require a subcontractor to provide full Social Security numbers and last known addresses, telephone numbers, and email addresses to the prime contractor for its own records, without weekly submission by the subcontractor to the contracting agency.

(3) *Statement of Compliance.* Each certified payroll submitted must be accompanied by a "Statement of Compliance," signed by the contractor or subcontractor, or the contractor's or subcontractor's agent who pays or supervises the payment of the persons working on the contract, and must certify the following:

(i) That the certified payroll for the payroll period contains the information required to be provided under paragraph 3.b. of this section, the appropriate information and basic records are being maintained under paragraph 3.a. of this section, and such information and records are correct and complete;

(ii) That each laborer or mechanic (including each helper and apprentice) working on the contract during the payroll period has been paid the full weekly wages earned, without rebate, either directly or indirectly, and that no deductions have been made either directly or indirectly from the full wages earned, other than permissible deductions as set forth in 29 CFR part 3; and

(iii) That each laborer or mechanic has been paid not less than the applicable wage rates and fringe benefits or cash equivalents for the classification(s) of work actually performed, as specified in the applicable wage determination incorporated into the contract.

(4) *Use of Optional Form WH–347.* The weekly submission of a properly executed certification set forth on the reverse side of Optional Form WH–347 will satisfy the requirement for submission of the "Statement of Compliance" required by paragraph 3.b.(3) of this section.

(5) *Signature.* The signature by the contractor, subcontractor, or the contractor's or subcontractor's agent must be an original handwritten signature or a legally valid electronic signature.

(6) *Falsification.* The falsification of any of the above certifications may subject the contractor or subcontractor to civil or criminal prosecution under 18 U.S.C. 1001 and 31 U.S.C. 3729.

(7) *Length of certified payroll retention.* The contractor or subcontractor must preserve all certified payrolls during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

c. *Contracts, subcontracts, and related documents.* The contractor or subcontractor must maintain this contract or subcontract and related documents including, without limitation, bids, proposals, amendments, modifications, and extensions. The contractor or subcontractor must preserve these contracts, subcontracts, and related documents during the course of the work and for a period of 3 years after all the work on the prime contract is completed.

d. *Required disclosures and access* (1) *Required record disclosures and access to workers.* The contractor or subcontractor must make the records required under paragraphs 3.a. through 3.c. of this section, and any other documents that the contracting agency, the State DOT, the FHWA, or the Department of Labor deems necessary to determine compliance with the labor standards provisions of any of the applicable statutes referenced by § 5.1, available for inspection, copying, or transcription by authorized representatives of the contracting agency, the State DOT, the FHWA, or the Department of Labor, and must permit such representatives to interview workers during working hours on the job.

(2) *Sanctions for non-compliance with records and worker access requirements.* If the contractor or subcontractor fails to submit the required records or to make them available, or refuses to permit worker interviews during working hours on the job, the Federal agency may, after written notice to the contractor, sponsor, applicant, owner, or other entity, as the case may be, that maintains such records or that employs such workers, take such action as may be necessary to cause the suspension of any further payment, advance, or guarantee of funds. Furthermore, failure to submit the required records upon request or to make such records available, or to permit worker interviews during working hours on the job, may be grounds for debarment action pursuant to § 5.12. In addition, any contractor or other person that fails to submit the required records or make those records available to WHD within the time WHD requests that the records be produced will be precluded from introducing as evidence in an administrative proceeding under 29 CFR part 6 any of the required records that were not provided or made available to WHD. WHD will take into consideration a reasonable request from the contractor or person for an extension of the time for submission of records. WHD will determine the reasonableness of the request and may consider, among other things, the location of the records and the volume of production.

(3) *Required information disclosures.* Contractors and subcontractors must maintain the full Social Security number and last known address, telephone number, and email address of each covered worker, and must provide them upon request to the contracting agency, the State DOT, the FHWA, the contractor, or the Wage and Hour Division of the Department of Labor for purposes of an investigation or other compliance action.

4. Apprentices and equal employment opportunity (29 CFR 5.5)

a. *Apprentices* (1) *Rate of pay.* Apprentices will be permitted to work at less than the predetermined rate for the work they perform when they are employed pursuant to and individually registered in a bona fide apprenticeship program registered with the U.S. Department of Labor, Employment and Training Administration, Office of Apprenticeship (OA), or with a State Apprenticeship Agency recognized by the OA. A person who is not individually registered in the program, but who has been certified by the OA or a State Apprenticeship Agency (where appropriate) to be eligible for probationary employment as an apprentice, will be permitted to work at less than the predetermined rate for the work they perform in the first 90 days of probationary employment as an apprentice in such a program. In the event the OA or a State Apprenticeship Agency recognized by the OA withdraws approval of an apprenticeship program, the contractor will no longer be permitted to use apprentices at less than the applicable predetermined rate for the work performed until an acceptable program is approved.

(2) *Fringe benefits.* Apprentices must be paid fringe benefits in accordance with the provisions of the apprenticeship program. If the apprenticeship program does not specify fringe benefits, apprentices must be paid the full amount of fringe benefits listed on the wage determination for the applicable classification. If the Administrator determines that a different practice prevails for the applicable apprentice classification, fringe benefits must be paid in accordance with that determination.

(3) *Apprenticeship ratio.* The allowable ratio of apprentices to journeyworkers on the job site in any craft classification must not be greater than the ratio permitted to the contractor as to the entire work force under the registered program or the ratio applicable to the locality of the project pursuant to paragraph 4.a.(4) of this section. Any worker listed on a payroll at an apprentice wage rate, who is not registered or otherwise employed as stated in paragraph 4.a.(1) of this section, must be paid not less than the applicable wage rate on the wage determination for the classification of work actually performed. In addition, any apprentice performing work on the job site in excess of the ratio permitted under this section must be paid not less than the applicable wage rate on the wage determination for the work actually performed.

(4) *Reciprocity of ratios and wage rates.* Where a contractor is performing construction on a project in a locality other than the locality in which its program is registered, the ratios and wage rates (expressed in percentages of the journeyworker's hourly rate) applicable within the locality in which the construction is being performed must be observed. If there is no applicable ratio or wage rate for the locality of the project, the ratio and wage rate specified in the contractor's registered program must be observed.

b. *Equal employment opportunity.* The use of apprentices and journeyworkers under this part must be in conformity with

the equal employment opportunity requirements of Executive Order 11246, as amended, and 29 CFR part 30.

c. Apprentices and Trainees (programs of the U.S. DOT).

Apprentices and trainees working under apprenticeship and skill training programs which have been certified by the Secretary of Transportation as promoting EEO in connection with Federal-aid highway construction programs are not subject to the requirements of paragraph 4 of this Section IV. 23 CFR 230.111(e)(2). The straight time hourly wage rates for apprentices and trainees under such programs will be established by the particular programs. The ratio of apprentices and trainees to journeyworkers shall not be greater than permitted by the terms of the particular program.

5. Compliance with Copeland Act requirements. The contractor shall comply with the requirements of 29 CFR part 3, which are incorporated by reference in this contract as provided in 29 CFR 5.5.

6. Subcontracts. The contractor or subcontractor must insert FHWA-1273 in any subcontracts, along with the applicable wage determination(s) and such other clauses or contract modifications as the contracting agency may by appropriate instructions require, and a clause requiring the subcontractors to include these clauses and wage determination(s) in any lower tier subcontracts. The prime contractor is responsible for the compliance by any subcontractor or lower tier subcontractor with all the contract clauses in this section. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and may be subject to debarment, as appropriate. 29 CFR 5.5.

7. Contract termination: debarment. A breach of the contract clauses in 29 CFR 5.5 may be grounds for termination of the contract, and for debarment as a contractor and a subcontractor as provided in 29 CFR 5.12.

8. Compliance with Davis-Bacon and Related Act requirements. All rulings and interpretations of the Davis-Bacon and Related Acts contained in 29 CFR parts 1, 3, and 5 are herein incorporated by reference in this contract as provided in 29 CFR 5.5.

9. Disputes concerning labor standards. As provided in 29 CFR 5.5, disputes arising out of the labor standards provisions of this contract shall not be subject to the general disputes clause of this contract. Such disputes shall be resolved in accordance with the procedures of the Department of Labor set forth in 29 CFR parts 5, 6, and 7. Disputes within the meaning of this clause include disputes between the contractor (or any of its subcontractors) and the contracting agency, the U.S. Department of Labor, or the employees or their representatives.

10. Certification of eligibility. a. By entering into this contract, the contractor certifies that neither it nor any person or firm who has an interest in the contractor's firm is a person or firm ineligible to be awarded Government contracts by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

b. No part of this contract shall be subcontracted to any person or firm ineligible for award of a Government contract by virtue of 40 U.S.C. 3144(b) or § 5.12(a).

c. The penalty for making false statements is prescribed in the U.S. Code, Title 18 Crimes and Criminal Procedure, 18 U.S.C. 1001.

11. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under the DBA, Related Acts, this part, or 29 CFR part 1 or 3;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under the DBA, Related Acts, this part, or 29 CFR part 1 or 3; or

d. Informing any other person about their rights under the DBA, Related Acts, this part, or 29 CFR part 1 or 3.

V. CONTRACT WORK HOURS AND SAFETY STANDARDS ACT

Pursuant to 29 CFR 5.5(b), the following clauses apply to any Federal-aid construction contract in an amount in excess of $100,000 and subject to the overtime provisions of the Contract Work Hours and Safety Standards Act. These clauses shall be inserted in addition to the clauses required by 29 CFR 5.5(a) or 29 CFR 4.6. As used in this paragraph, the terms laborers and mechanics include watchpersons and guards.

1. Overtime requirements. No contractor or subcontractor contracting for any part of the contract work which may require or involve the employment of laborers or mechanics shall require or permit any such laborer or mechanic in any workweek in which he or she is employed on such work to work in excess of forty hours in such workweek unless such laborer or mechanic receives compensation at a rate not less than one and one-half times the basic rate of pay for all hours worked in excess of forty hours in such workweek. 29 CFR 5.5.

2. Violation; liability for unpaid wages; liquidated damages. In the event of any violation of the clause set forth in paragraph 1. of this section the contractor and any subcontractor responsible therefor shall be liable for the unpaid wages and interest from the date of the underpayment. In addition, such contractor and subcontractor shall be liable to the United States (in the case of work done under contract for the District of Columbia or a territory, to such District or to such territory), for liquidated damages. Such liquidated damages shall be computed with respect to each individual laborer or

mechanic, including watchpersons and guards, employed in violation of the clause set forth in paragraph 1. of this section, in the sum currently provided in 29 CFR 5.5(b)(2)* for each calendar day on which such individual was required or permitted to work in excess of the standard workweek of forty hours without payment of the overtime wages required by the clause set forth in paragraph 1. of this section.

* $31 as of January 15, 2023 (See 88 FR 88 FR 2210) as may be adjusted annually by the Department of Labor, pursuant to the Federal Civil Penalties Inflation Adjustment Act of 1990.

3. Withholding for unpaid wages and liquidated damages

a. *Withholding process.* The FHWA or the contracting agency may, upon its own action, or must, upon written request of an authorized representative of the Department of Labor, withhold or cause to be withheld from the contractor so much of the accrued payments or advances as may be considered necessary to satisfy the liabilities of the prime contractor or any subcontractor for any unpaid wages; monetary relief, including interest; and liquidated damages required by the clauses set forth in this section on this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract subject to the Contract Work Hours and Safety Standards Act that is held by the same prime contractor (as defined in § 5.2). The necessary funds may be withheld from the contractor under this contract, any other Federal contract with the same prime contractor, or any other federally assisted contract that is subject to the Contract Work Hours and Safety Standards Act and is held by the same prime contractor, regardless of whether the other contract was awarded or assisted by the same agency, and such funds may be used to satisfy the contractor liability for which the funds were withheld.

b. *Priority to withheld funds.* The Department has priority to funds withheld or to be withheld in accordance with Section IV paragraph 2.a. or paragraph 3.a. of this section, or both, over claims to those funds by:

(1) A contractor's surety(ies), including without limitation performance bond sureties and payment bond sureties;

(2) A contracting agency for its reprocurement costs;

(3) A trustee(s) (either a court-appointed trustee or a U.S. trustee, or both) in bankruptcy of a contractor, or a contractor's bankruptcy estate;

(4) A contractor's assignee(s);

(5) A contractor's successor(s); or

(6) A claim asserted under the Prompt Payment Act, 31 U.S.C. 3901–3907.

4. Subcontracts. The contractor or subcontractor must insert in any subcontracts the clauses set forth in paragraphs 1. through 5. of this section and a clause requiring the subcontractors to include these clauses in any lower tier subcontracts. The prime contractor is responsible for compliance by any subcontractor or lower tier subcontractor with the clauses set forth in paragraphs 1. through 5. In the event of any violations of these clauses, the prime contractor and any subcontractor(s) responsible will be liable for any unpaid wages and monetary relief, including interest from the date of the underpayment or loss, due to any workers of lower-tier subcontractors, and associated liquidated damages and may be subject to debarment, as appropriate.

5. Anti-retaliation. It is unlawful for any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, or to cause any person to discharge, demote, intimidate, threaten, restrain, coerce, blacklist, harass, or in any other manner discriminate against, any worker or job applicant for:

a. Notifying any contractor of any conduct which the worker reasonably believes constitutes a violation of the Contract Work Hours and Safety Standards Act (CWHSSA) or its implementing regulations in this part;

b. Filing any complaint, initiating or causing to be initiated any proceeding, or otherwise asserting or seeking to assert on behalf of themselves or others any right or protection under CWHSSA or this part;

c. Cooperating in any investigation or other compliance action, or testifying in any proceeding under CWHSSA or this part; or

d. Informing any other person about their rights under CWHSSA or this part.

VI. SUBLETTING OR ASSIGNING THE CONTRACT

This provision is applicable to all Federal-aid construction contracts on the National Highway System pursuant to 23 CFR 635.116.

1. The contractor shall perform with its own organization contract work amounting to not less than 30 percent (or a greater percentage if specified elsewhere in the contract) of the total original contract price, excluding any specialty items designated by the contracting agency. Specialty items may be performed by subcontract and the amount of any such specialty items performed may be deducted from the total original contract price before computing the amount of work required to be performed by the contractor's own organization (23 CFR 635.116).

a. The term “perform work with its own organization” in paragraph 1 of Section VI refers to workers employed or leased by the prime contractor, and equipment owned or rented by the prime contractor, with or without operators. Such term does not include employees or equipment of a subcontractor or lower tier subcontractor, agents of the prime contractor, or any other assignees. The term may include payments for the costs of hiring leased employees from an employee leasing firm meeting all relevant Federal and State regulatory requirements. Leased employees may only be included in this term if the prime contractor meets all of the following conditions: (based on longstanding interpretation)

(1) the prime contractor maintains control over the supervision of the day-to-day activities of the leased employees;
(2) the prime contractor remains responsible for the quality of the work of the leased employees;

(3) the prime contractor retains all power to accept or exclude individual employees from work on the project; and

(4) the prime contractor remains ultimately responsible for the payment of predetermined minimum wages, the submission of payrolls, statements of compliance and all other Federal regulatory requirements.

b. "Specialty Items" shall be construed to be limited to work that requires highly specialized knowledge, abilities, or equipment not ordinarily available in the type of contracting organizations qualified and expected to bid or propose on the contract as a whole and in general are to be limited to minor components of the overall contract. 23 CFR 635.102.

2. Pursuant to 23 CFR 635.116(a), the contract amount upon which the requirements set forth in paragraph (1) of Section VI is computed includes the cost of material and manufactured products which are to be purchased or produced by the contractor under the contract provisions.

3. Pursuant to 23 CFR 635.116(c), the contractor shall furnish (a) a competent superintendent or supervisor who is employed by the firm, has full authority to direct performance of the work in accordance with the contract requirements, and is in charge of all construction operations (regardless of who performs the work) and (b) such other of its own organizational resources (supervision, management, and engineering services) as the contracting officer determines is necessary to assure the performance of the contract.

4. No portion of the contract shall be sublet, assigned or otherwise disposed of except with the written consent of the contracting officer, or authorized representative, and such consent when given shall not be construed to relieve the contractor of any responsibility for the fulfillment of the contract. Written consent will be given only after the contracting agency has assured that each subcontract is evidenced in writing and that it contains all pertinent provisions and requirements of the prime contract. (based on long-standing interpretation of 23 CFR 635.116).

5. The 30-percent self-performance requirement of paragraph (1) is not applicable to design-build contracts; however, contracting agencies may establish their own self-performance requirements. 23 CFR 635.116(d).

VII. SAFETY: ACCIDENT PREVENTION

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

1. In the performance of this contract the contractor shall comply with all applicable Federal, State, and local laws governing safety, health, and sanitation (23 CFR Part 635). The contractor shall provide all safeguards, safety devices and protective equipment and take any other needed actions as it determines, or as the contracting officer may determine, to be reasonably necessary to protect the life and health of employees on the job and the safety of the public and to protect property in connection with the performance of the work covered by the contract. 23 CFR 635.108.

2. It is a condition of this contract, and shall be made a condition of each subcontract, which the contractor enters into pursuant to this contract, that the contractor and any subcontractor shall not permit any employee, in performance of the contract, to work in surroundings or under conditions which are unsanitary, hazardous or dangerous to his/her health or safety, as determined under construction safety and health standards (29 CFR Part 1926) promulgated by the Secretary of Labor, in accordance with Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704). 29 CFR 1926.10.

3. Pursuant to 29 CFR 1926.3, it is a condition of this contract that the Secretary of Labor or authorized representative thereof, shall have right of entry to any site of contract performance to inspect or investigate the matter of compliance with the construction safety and health standards and to carry out the duties of the Secretary under Section 107 of the Contract Work Hours and Safety Standards Act (40 U.S.C. 3704).

VIII. FALSE STATEMENTS CONCERNING HIGHWAY PROJECTS

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts.

In order to assure high quality and durable construction in conformity with approved plans and specifications and a high degree of reliability on statements and representations made by engineers, contractors, suppliers, and workers on Federal-aid highway projects, it is essential that all persons concerned with the project perform their functions as carefully, thoroughly, and honestly as possible. Willful falsification, distortion, or misrepresentation with respect to any facts related to the project is a violation of Federal law. To prevent any misunderstanding regarding the seriousness of these and similar acts, Form FHWA-1022 shall be posted on each Federal-aid highway project (23 CFR Part 635) in one or more places where it is readily available to all persons concerned with the project:

18 U.S.C. 1020 reads as follows:

"Whoever, being an officer, agent, or employee of the United States, or of any State or Territory, or whoever, whether a person, association, firm, or corporation, knowingly makes any false statement, false representation, or false report as to the character, quality, quantity, or cost of the material used or to be used, or the quantity or quality of the work performed or to be performed, or the cost thereof in connection with the submission of plans, maps, specifications, contracts, or costs of construction on any highway or related project submitted for approval to the Secretary of Transportation; or

Whoever knowingly makes any false statement, false representation, false report or false claim with respect to the character, quality, quantity, or cost of any work performed or to be performed, or materials furnished or to be furnished, in connection with the construction of any highway or related project approved by the Secretary of Transportation; or

Whoever knowingly makes any false statement or false representation as to material fact in any statement, certificate, or report submitted pursuant to provisions of the Federal-aid Roads Act approved July 11, 1916, (39 Stat. 355), as amended and supplemented;

Shall be fined under this title or imprisoned not more than 5 years or both."

IX. IMPLEMENTATION OF CLEAN AIR ACT AND FEDERAL WATER POLLUTION CONTROL ACT (42 U.S.C. 7606; 2 CFR 200.88; EO 11738)

This provision is applicable to all Federal-aid construction contracts in excess of $150,000 and to all related subcontracts. 48 CFR 2.101; 2 CFR 200.327.

By submission of this bid/proposal or the execution of this contract or subcontract, as appropriate, the bidder, proposer, Federal-aid construction contractor, subcontractor, supplier, or vendor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401-7671q) and the Federal Water Pollution Control Act, as amended (33 U.S.C. 1251-1387). Violations must be reported to the Federal Highway Administration and the Regional Office of the Environmental Protection Agency. 2 CFR Part 200, Appendix II.

The contractor agrees to include or cause to be included the requirements of this Section in every subcontract, and further agrees to take such action as the contracting agency may direct as a means of enforcing such requirements. 2 CFR 200.327.

X. CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, consultant contracts or any other covered transaction requiring FHWA approval or that is estimated to cost $25,000 or more – as defined in 2 CFR Parts 180 and 1200. 2 CFR 180.220 and 1200.220.

1**. Instructions for Certification – First Tier Participants:**

a. By signing and submitting this proposal, the prospective first tier participant is providing the certification set out below.

b. The inability of a person to provide the certification set out below will not necessarily result in denial of participation in this covered transaction. The prospective first tier participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective first tier participant to furnish a certification or an explanation shall disqualify such a person from participation in this transaction. 2 CFR 180.320.

c. The certification in this clause is a material representation of fact upon which reliance was placed when the contracting agency determined to enter into this transaction. If it is later determined that the prospective participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the contracting agency may terminate this transaction for cause of default. 2 CFR 180.325.

d. The prospective first tier participant shall provide immediate written notice to the contracting agency to whom this proposal is submitted if any time the prospective first tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances. 2 CFR 180.345 and 180.350.

e. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900-180.1020, and 1200. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

f. The prospective first tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction. 2 CFR 180.330.

g. The prospective first tier participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transactions," provided by the department or contracting agency, entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 180.300.

h. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. 2 CFR 180.300; 180.320, and 180.325. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. 2 CFR 180.335. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/). 2 CFR 180.300, 180.320, and 180.325.

i. Nothing contained in the foregoing shall be construed to require the establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of the prospective participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

j. Except for transactions authorized under paragraph (f) of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default. 2 CFR 180.325.

* * * * *

2. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion – First Tier Participants:

a. The prospective first tier participant certifies to the best of its knowledge and belief, that it and its principals:

(1) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.335;.

(2) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State, or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property, 2 CFR 180.800;

(3) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (a)(2) of this certification, 2 CFR 180.700 and 180.800; and

(4) Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default. 2 CFR 180.335(d).

(5) Are not a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(6) Are not a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability (USDOT Order 4200.6 implementing appropriations act requirements).

b. Where the prospective participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal. 2 CFR 180.335 and 180.340.

* * * * *

3. **Instructions for Certification - Lower Tier Participants:**

(Applicable to all subcontracts, purchase orders, and other lower tier transactions requiring prior FHWA approval or estimated to cost $25,000 or more - 2 CFR Parts 180 and 1200). 2 CFR 180.220 and 1200.220.

a. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.

b. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department, or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.

c. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous by reason of changed circumstances. 2 CFR 180.365.

d. The terms "covered transaction," "debarred," "suspended," "ineligible," "participant," "person," "principal," and "voluntarily excluded," as used in this clause, are defined in 2 CFR Parts 180, Subpart I, 180.900 – 180.1020, and 1200. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations. “First Tier Covered Transactions” refers to any covered transaction between a recipient or subrecipient of Federal funds and a participant (such as the prime or general contract). “Lower Tier Covered Transactions” refers to any covered transaction under a First Tier Covered Transaction (such as subcontracts). “First Tier Participant” refers to the participant who has entered into a covered transaction with a recipient or subrecipient of Federal funds (such as the prime or general contractor). “Lower Tier Participant” refers any participant who has entered into a covered transaction with a First Tier Participant or other Lower Tier Participants (such as subcontractors and suppliers).

e. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated. 2 CFR 1200.220 and 1200.332.

f. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions exceeding the $25,000 threshold. 2 CFR 180.220 and 1200.220.

g. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant is responsible for ensuring that its principals are not suspended, debarred, or otherwise ineligible to participate in covered transactions. To verify the eligibility of its principals, as well as the eligibility of any lower tier prospective participants, each participant may, but is not required to, check the System for Award Management website (https://www.sam.gov/), which is compiled by the General Services Administration. 2 CFR 180.300, 180.320, 180.330, and 180.335.

h. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.

i. Except for transactions authorized under paragraph e of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily

excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment. 2 CFR 180.325.

* * * * *

4. Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Participants:

a. The prospective lower tier participant certifies, by submission of this proposal, that neither it nor its principals:

(1) is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participating in covered transactions by any Federal department or agency, 2 CFR 180.355;

(2) is a corporation that has been convicted of a felony violation under any Federal law within the two-year period preceding this proposal (USDOT Order 4200.6 implementing appropriations act requirements); and

(3) is a corporation with any unpaid Federal tax liability that has been assessed, for which all judicial and administrative remedies have been exhausted, or have lapsed, and that is not being paid in a timely manner pursuant to an agreement with the authority responsible for collecting the tax liability. (USDOT Order 4200.6 implementing appropriations act requirements)

b. Where the prospective lower tier participant is unable to certify to any of the statements in this certification, such prospective participant should attach an explanation to this proposal.

* * * * *

XI. CERTIFICATION REGARDING USE OF CONTRACT FUNDS FOR LOBBYING

This provision is applicable to all Federal-aid construction contracts and to all related subcontracts which exceed $100,000. 49 CFR Part 20, App. A.

1. The prospective participant certifies, by signing and submitting this bid or proposal, to the best of his or her knowledge and belief, that:

a. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

b. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

2. This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by 31 U.S.C. 1352. Any person who fails to file the required certification shall be subject to a civil penalty of not less than $10,000 and not more than $100,000 for each such failure.

3. The prospective participant also agrees by submitting its bid or proposal that the participant shall require that the language of this certification be included in all lower tier subcontracts, which exceed $100,000 and that all such recipients shall certify and disclose accordingly.

XII. USE OF UNITED STATES-FLAG VESSELS:

This provision is applicable to all Federal-aid construction contracts, design-build contracts, subcontracts, lower-tier subcontracts, purchase orders, lease agreements, or any other covered transaction. 46 CFR Part 381.

This requirement applies to material or equipment that is acquired for a specific Federal-aid highway project. 46 CFR 381.7. It is not applicable to goods or materials that come into inventories independent of an FHWA funded-contract.

When oceanic shipments (or shipments across the Great Lakes) are necessary for materials or equipment acquired for a specific Federal-aid construction project, the bidder, proposer, contractor, subcontractor, or vendor agrees:

1. To utilize privately owned United States-flag commercial vessels to ship at least 50 percent of the gross tonnage (computed separately for dry bulk carriers, dry cargo liners, and tankers) involved, whenever shipping any equipment, material, or commodities pursuant to this contract, to the extent such vessels are available at fair and reasonable rates for United States-flag commercial vessels. 46 CFR 381.7.

2. To furnish within 20 days following the date of loading for shipments originating within the United States or within 30 working days following the date of loading for shipments originating outside the United States, a legible copy of a rated, ‘on-board’ commercial ocean bill-of-lading in English for each shipment of cargo described in paragraph (b)(1) of this section to both the Contracting Officer (through the prime contractor in the case of subcontractor bills-of-lading) and to the Office of Cargo and Commercial Sealift (MAR-620), Maritime Administration, Washington, DC 20590. (MARAD requires copies of the ocean carrier's (master) bills of lading, certified onboard, dated, with rates and charges. These bills of lading may contain business sensitive information and therefore may be submitted directly to MARAD by the Ocean Transportation Intermediary on behalf of the contractor). 46 CFR 381.7.

ATTACHMENT A - EMPLOYMENT AND MATERIALS PREFERENCE FOR APPALACHIAN DEVELOPMENT HIGHWAY SYSTEM OR APPALACHIAN LOCAL ACCESS ROAD CONTRACTS (23 CFR 633, Subpart B, Appendix B)
This provision is applicable to all Federal-aid projects funded under the Appalachian Regional Development Act of 1965.

1. During the performance of this contract, the contractor undertaking to do work which is, or reasonably may be, done as on-site work, shall give preference to qualified persons who regularly reside in the labor area as designated by the DOL wherein the contract work is situated, or the subregion, or the Appalachian counties of the State wherein the contract work is situated, except:

a. To the extent that qualified persons regularly residing in the area are not available.

b. For the reasonable needs of the contractor to employ supervisory or specially experienced personnel necessary to assure an efficient execution of the contract work.

c. For the obligation of the contractor to offer employment to present or former employees as the result of a lawful collective bargaining contract, provided that the number of nonresident persons employed under this subparagraph (1c) shall not exceed 20 percent of the total number of employees employed by the contractor on the contract work, except as provided in subparagraph (4) below.

2. The contractor shall place a job order with the State Employment Service indicating (a) the classifications of the laborers, mechanics and other employees required to perform the contract work, (b) the number of employees required in each classification, (c) the date on which the participant estimates such employees will be required, and (d) any other pertinent information required by the State Employment Service to complete the job order form. The job order may be placed with the State Employment Service in writing or by telephone. If during the course of the contract work, the information submitted by the contractor in the original job order is substantially modified, the participant shall promptly notify the State Employment Service.

3. The contractor shall give full consideration to all qualified job applicants referred to him by the State Employment Service. The contractor is not required to grant employment to any job applicants who, in his opinion, are not qualified to perform the classification of work required.

4. If, within one week following the placing of a job order by the contractor with the State Employment Service, the State Employment Service is unable to refer any qualified job applicants to the contractor, or less than the number requested, the State Employment Service will forward a certificate to the contractor indicating the unavailability of applicants. Such certificate shall be made a part of the contractor's permanent project records. Upon receipt of this certificate, the contractor may employ persons who do not normally reside in the labor area to fill positions covered by the certificate, notwithstanding the provisions of subparagraph (1c) above.

5. The provisions of 23 CFR 633.207(e) allow the contracting agency to provide a contractual preference for the use of mineral resource materials native to the Appalachian region.

6. The contractor shall include the provisions of Sections 1 through 4 of this Attachment A in every subcontract for work which is, or reasonably may be, done as on-site work.

NOTICE OF REQUIREMENTS FOR AFFIRMATIVE ACTION TO ENSURE EQUAL EMPLOYMENT OPPORTUNITY (EXECUTIVE ORDER 11246)

1. The Offeror's or Bidder's attention is called to the "Equal Opportunity Clause" and the "Standard Federal Equal Employment Opportunity Construction Contract Specifications" set forth herein.

2. The goal for female participation, expressed in percentage terms for the Contractor's aggregate workforce in each trade on all construction work, is 6.9%.

Until further notice	Goals for minority participation for each trade (percent)
SHSA Cities:	
Pascagoula - Moss Point	16.9
Biloxi - Gulfport	19.2
Jackson	30.3
SMSA Counties:	
Desoto	32.3
Hancock, Harrison, Stone	19.2
Hinds, Rankin	30.3
Jackson	16.9
Non-SMSA Counties:	
George, Greene	26.4
Alcorn, Benton, Bolivar, Calhoun, Carroll, Chickasaw, Clay, Coahoma, Grenada, Itawamba, Lafayette, Lee, Leflore, Marshall, Monroe, Montgomery, Panola, Pontotoc, Prentiss, Quitman, Sunflower, Tallahatchie, Tate, Tippah, Tishomingo, Tunica, Union, Washington, Webster, Yalobusha	26.5
Attala, Choctaw, Claiborne, Clarke, Copiah, Covington, Franklin, Holmes, Humphreys, Issaquena, Jasper, Jefferson, Jefferson Davis, Jones Kemper, Lauderdale, Lawrence, Leake, Lincoln, Lowndes, Madison, Neshoba, Newton, Noxubee, Oktibbeha, Scott, Sharkey, Simpson, Smith, Warren, Wayne, Winston, Yazoo	32.0
Forrest, Lamar, Marion, Pearl River, Perry, Pike, Walthall	27.7
Adams, Amite, Wilkinson	30.4

These goals are applicable to all the Contractor's construction work (whether or not it is Federal or federally assisted) performed in the covered area. If the contractor performs construction work in a geographical area located outside of the covered area, it shall apply the goals established for such geographical area where the work is actually performed. With regard to this second area, the contractor also is subject to the goals for both its federally involved and nonfederally involved construction.

The Contractor's compliance with the Executive Order and the regulations in 41 CFR Part 60-4 shall be based on its implementation of the Equal Opportunity clause, specific affirmative action obligations required by the specifications set forth in 41 CFR 60-4.3(a), and its efforts to meet the goals. The hours of minority and female employment and training must be substantially uniform throughout the length of the contract, and in each trade, and the Contractor shall make a good faith effort to employ minorities and women evenly on each of its projects. The transfer of minority or female employees or trainees from Contractor to Contractor or from project to project for the sole purpose of meeting the Contractor's goals shall be a violation of the contract, the Executive Order and the regulations in 41 CFR Part 60-4.2(d). Compliance with the goals will be measured against the total work hours performed.

3. The Contractor shall provide written notification to the Director of the Office of Federal Contract Compliance Programs within 10 working days of award of any construction subcontract in excess of $10,000 at any tier for construction work under the contract resulting from this solicitation. The notification shall list the name, address and telephone number of the subcontractor, employer identification number of the subcontractor, estimated dollar amount of the subcontract; estimated starting and completion dates of the subcontract; and the geographical area in which the subcontract is to be performed.

4. As used in this Notice, and in the contract resulting from this solicitation, the "covered area" is to the county and city (if any), stated in the advertisement.

5. The notification required in Paragraph 3 shall be addressed to the following:

Contract Compliance Officer
Mississippi Department of Transportation
P.O. Box 1850
Jackson, Mississippi 39215-1850

(12/04/2018)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-101-1 **CODE: (IS)**

DATE: 07/20/2023

SUBJECT: Definitions and Terms

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

907-101.01--Abbreviations. After the abbreviation API on page 1, add the following.

APL Approved Products List

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

AWPA American Wood Protection Association

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-102-2 **CODE: (IS)**

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.

907-102.01--Prequalification of Bidders. 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.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-104-2 **CODE: (SP)**

DATE: 06/17/2025

SUBJECT: Minor Alteration to the Contract

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

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

907-104.02.3--Minor Alteration to the Contract. In the first paragraph of Subsection 104.02.3 on page 25, change $10,000.00 to $25,000.00.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-2 **CODE: (IS)**

DATE: 07/20/2023

SUBJECT: Control of Work

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

907-105.01--Authority of the Engineer. 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.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-106-3 **CODE: (IS)**

DATE: **03/19/2025**

SUBJECT: **Control of Materials**

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

After Subsection 106.13 on page 47, add the following.

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

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

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

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-4 **CODE: (SP)**

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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-6 **CODE: (SP)**

DATE: 03/11/2025

SUBJECT: Default and Termination of Contract

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-5 **CODE: (IS)**

DATE: 11/14/2023

SUBJECT: Measurement and Payment

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

907-109.01--Measurement of Quantities. 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.

907-109.04.1--Supplemental Agreement. Delete the second paragraph of Subsection 109.04.1 on page 90.

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

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

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

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

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

are determined as follows:

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

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

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

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

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

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

907-109.06--Partial Payment.

907-109.06.2--Advancement on Materials.
Delete the next to last paragraph of Subsection 109.06.2 on page 95, and substitute the following.

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

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

https://mdot.ms.gov/portal/current_letting

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-401-2 **CODE: (SP)**

DATE: **01/06/2025**

SUBJECT: **Asphalt Pavement - General**

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

907-401.02--Materials.

907-401.02.6--Standards of Acceptance.

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

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

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

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

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

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

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

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

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

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

907-401.02.6.9--Inertial Profiling System.

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

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

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

Project_County_Route

All profiler runs must be named in the following format for acceptance by the Project Engineer:

Direction_Lane_BeginStation_EndStation

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

907-401.03--Construction Requirements.

907-401.03.1--Specific Requirements.

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-4 **CODE: (SP)**

DATE: **03/19/2025**

SUBJECT: **Asphalt Pavements**

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

907-403.03--Construction Requirements.

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

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

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

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

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

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

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

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

A 50% improvement in MRI from the existing surface
or
80 inches per mile (whichever value is higher)

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

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

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

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

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

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

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

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

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

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

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

907-403.05--Basis of Payment.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-407-1 **CODE: (SP)**

DATE: **01/16/2026**

SUBJECT: **Tack Coat**

Section 407, Tack Coat, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-407.03—Construction Requirements.

907-407.03.3—Application of Bituminous Material.

Delete the second sentence of the first paragraph of Subsection 407.03.3 and substitute the following.

A hand wand will only be allowed for applying tack coat on irregular areas as defined in Subsection 907-401.02.6.4.4.

907-407-05-- Basis of Payment.

Add the "907" prefix to the pay item listed on page 309.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-411-1 **CODE: (IS)**

DATE: 06/13/2018

SUBJECT: Material Transfer Equipment

Section 411, Ultra-Thin Asphalt Pavement, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-411.03--Construction Requirements. After Subsection 411.03.10 on page 327, add the following.

907-411.03.11--Material Transfer Equipment. Excluding the areas mentioned below, the material transferred from the hauling unit shall be remixed prior to being placed in the paver hopper or insert by using an approved Materials Transfer Device. Information on approved devices can be obtained from the State Construction Engineer. Areas excluded from this requirement include: temporary work of short duration, detours, bridge replacement projects having less than 1,000 feet of pavement on each side of the structure, acceleration and deceleration lanes less than 1,000 feet in length, tapered sections, transition sections (for width), shoulders less than 10 feet in width, crossovers, ramps, side street returns and other areas designated by the Engineer.

907-411.05--Basis of Payment. Add the "907" prefix to the pay item listed on page 328.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-414-2 **CODE: (SP)**

DATE: **01/14/2025**

SUBJECT: **Polymer Modified Asphalt Rejuvenating Scrub Seal**

Section 907-414, Scrub Seal, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-414 -- POLYMER MODIFIED ASPHALT REJUVENATING SCRUB SEAL

907-414.01--Description. This work shall consist of, but not be limited to, furnishing all labor, materials, equipment and transportation for the application of a polymer modified asphalt rejuvenating scrub seal. All ingredients shall be properly proportioned, mixed, and spread on the paved surface in accordance with this Specification and as directed by the Engineer. The application rates of asphalt material and aggregates will vary with aggregate size and existing roadway conditions but, for bid purposes only, the bituminous material and cover material shall be estimated by the Contractor. The rates in the below table are provided as guidance for the Contractor if desired with ranges in parentheses. The Engineer will review the actual application rates.

Seal Aggregate Gradation	Seal Aggregate Estimated Application Rate[1], ft^3 / yd^2	Bituminous Material	Bituminous Material Estimated Application Rate[1], gal/yd^1
Size No. 7	0.30 (0.28-0.32)	Emulsified Asphalt	0.33 (0.30-0.36)
Size No. 8 or 89	0.25 (0.23-0.27)	Emulsified Asphalt	0.30 (0.27-0.33)

[1] Values shown are the best estimate followed by the range that could occur on the actual project.

907-414.02--Materials.

907-414.02.1--Aggregate. Cover aggregate shall meet the applicable requirements of Subsection 703.14, but in any instance the cover material requirements listed below govern. The kind and type will be specified in the contract. The sampling location for cover material testing is the project stockpile(s).

- The maximum allowable passing the #200 sieve will be 1.5% for any cover material used.
- For the Size No. 89 aggregate the range for passing the #8 sieve shall be 0-20%.

Only one type of aggregate or combination of aggregates shall be used on a particular project except with written permission of the Engineer.

Sites for stockpiles of materials shall be grubbed and cleaned prior to storing the aggregates, and the ground shall be firm, smooth, and well drained.

907-414.02.2--Asphalt Emulsion for Scrub Seal. The asphalt emulsion for scrub seal shall meet the requirements of the following table and shall be composed of a polymer modifier, a petroleum based rejuvenating agent, and asphalt.

Test on Emulsion	Method	Specification (min)	(max)
Viscosity @77 (SFS)	AASHTO T 59	50	350
Residue, w% (1)	AASHTO T 59	60	-
Storage Stability, 24 h, %	AASHTO T 59	-	1.0
Sieve, w%	AASHTO T 59		0.1
Oil distillate, w%	AASHTO T 59		0.5
Test on Residue(1)			
Viscosity @ 140°F, P	AASHTO T 202	-	3000
Penetration @ 4°C (39.2°F), 200 g, 60 sec	AASHTO T 59	30	-
Test on Polymer Modifier			
Swelling in rejuvenating agent, %; 48 hours exposure @ 104°F	ASTM D 471(2) Modified	-	40% intact film
Test on Rejuvenating Agent			
Flash point, COC , °F	AASHTO T 48	380	-
Viscosity @ 140°F, CST	AASHTO T 201	15	300
Saturate, % by weight	ASTM D 2007	-	30
Asphaltenes	ASTM D 2007	-	1.0
Test on Residue			
Weight Change, %			6.5
Viscosity Ratio			3

(1) Exception to AASHTO T59: Bring the temperature on the lower thermometer slowly to 350ºF plus or minus 10ºF. Maintain at this temperature for 20 minutes. Complete total distillation in 60 plus or minus 5 minutes from first application of heat.

(2) Polymer Modifier Testing: Suitable substrate for film formation shall be polyethylene boards, silicone rubber sheeting, glass, or any substrate which produces a cured film of uniform cross-section. Polymer film shall be prepared from latex as follows:

Resistance to Swelling: Polymer films shall be formed by using a 50 mil drawdown bar and drawing down 50 mils of the latex on polyethylene boards. Films shall be cured for 14 days at 75°F and 50% humidity. Samples for resistance to swelling in rejuvenating agent shall be 1" by 2" rectangles cut from the cured film. Cut at least 3 specimens for each sample to be tested for swelling. Fill 3- 8 oz ointment tins with at least a ½" deep of rejuvenating agent. Swelling samples shall be weighed and then placed in the ointment tins on top of the rejuvenating agent. Then, add at least another ½" deep of rejuvenating agent over each of the latex samples. The ointment tins shall be covered and placed in an oven at 104°F for the specified 48 hours +/- 15 minutes. The ointment tins are allowed to cool to 75°F and then the latex films are removed from the tins. Unabsorbed rejuvenating agent is removed from the intact latex film by scraping with a rubber policeman and blotting with paper towels. If the latex film does not remain intact during removal from the tins or while removing the

unabsorbed rejuvenating agent the sample shall be rejected. After the rejuvenating agent is removed from the samples they are then weighed. Percent swelling is reported as weight increase of the polymer film; report mass increase as a percent by weight of the original latex film mass upon exposure of films to the rejuvenating agent.

When a fog seal is required, the asphalt emulsion shall meet the requirements of Subsection 702.07.

907-414.02.2.1--Certification and Acceptance. The Emulsion supplier shall submit a certification that the polymer modified rejuvenating emulsion meets the requirements of the specification. The certification shall be submitted to the Engineer prior to starting the work. The Engineer will sample the polymer-modified rejuvenating emulsion according to Department procedures. Final acceptance of the emulsion for scrub seal will be based on the Manufacturer's Certification and testing conducted by the Department.

907-410.02.3--Mix Design. The Contractor shall submit to the Engineer for approval the application rates for the cover material and bituminous material using a design method such as that described by AASHTO R 107. This design must be performed at a minimum of one time per construction season and can be required more frequently by the Engineer. This mix design provides the project a target, or design, application rate for bituminous material in gal/yd^2 and cover material in lbs/yd^2.

907-414.03--Construction Requirements.

907-414.03.1--General. Prime coats, when specified, shall meet the requirements of Section 408. After the application of a prime coat, the primed surface shall be kept in continuous repair. All holes, raveled areas, and areas deficient in prime shall be patched and repaired with approved materials.

The attached sign drawings shall be used during scrub seal operations. Prior to any sealing operation, the rectangular "Loose Rock" signs shall be installed and remain in place until all sealing operations are complete. Prior to any daily sealing operation, the portable "Loose Rock" signs shall be installed in accordance with the attached drawings. Portable signs shall be installed and remain in place on a daily basis in the active sealing area. Payment for signs shown on the sign detail drawings shall be made under pay item no. 618-A, Maintenance of Traffic.

907-414.03.2--Seasonal and Weather Limitations. Emulsified asphalt and cut-back asphalt shall be applied only when both the air and pavement temperatures are above 70°F. Asphalt cement shall be applied only when both the air and surface temperatures are above 75°F.

Cut-back asphalt shall not be placed during the period between October 15 and March 1. No prime shall be placed when soil and weather conditions would prevent the proper placement and retention of the materials.

Bituminous materials for surface treatment shall not be placed during the period between November 1 and March 1, nor when weather conditions otherwise prevent the proper placement and retention of the materials.

On projects where completion of seal coats between November 1 and March 1 is determined to be in the public interest, the Engineer may permit variations from the above under the condition that all the following requirements are met:

(a) The air and pavement temperature is 70°F or higher.
(b) Asphalt cement used is cut back with naphtha of the type that will yield from 5-10 percent off at 680°F when tested by method AASHTO T 78 and the naphtha is added at the refinery.
(c) As an alternate to (b), the Contractor substitutes a rapid setting cationic emulsified asphalt meeting the requirements of AASHTO M 208.
(d) Aggregate is satisfactorily air dried in covered storage, or mechanically dried.
(e) The sun is shining.
(f) Aggregate is applied immediately behind the distributor.
(g) No shot is made after mid-afternoon, and rolling is increased as directed for shots made after noon.
(h) The Contractor retains full responsibility for the acceptable quality of the work within the intent of the contract, these conditions notwithstanding.
(i) The work is performed under these modifications at no additional cost to the State.

Blanket authorization will not be given for use of the above modification but will be given only when completion of the surface treatment would make the facility available for use by public traffic, or for subsequent construction.

Prior to November 1 and after March 1, when the requirements of these specifications are being met, but conditions are less than good for the adhesion of cover aggregate to the bituminous material, the Engineer may permit or require, at no additional cost to the State that the asphalt cement be cut back with naphtha as previously indicated. Less than good placement conditions shall be understood to include, but not limited to: lower than desirable temperature; higher than desirable humidity; surface dampness; or coolness of the foundation or aggregate.

907-414.03.3--Equipment. All equipment used on the project shall be evaluated by the Engineer. The following or equivalent equipment shall be furnished.

907-414.03.3.1--Asphalt Distributor. The asphalt distributor for application of the emulsion shall have a full circulation spray bar that is adjustable to at least sixteen feet (16') wide in two (2) feet increments and capable of heating and circulating the emulsion simultaneously. It must have computerized rate control for adjusting and controlling the application from the cab within 0.01 gallons per square yard increments. The distributor shall also be equipped with a volume measuring device and a thermometer for measuring the emulsion temperature in the tank.

907-414.03.3.2--Scrub Broom. A scrub broom as described herein shall be used to scrub the emulsion after application. The scrub broom frame shall be constructed of metal. The scrub broom shall be attached to and pulled by the distributor truck. The scrub broom must be equipped with a means of raising and lowering the scrub broom at desired points. It shall be towable in the elevated position to the next area of construction. The weight of the broom assembly shall be such that it does not squeegee the emulsion off the roadway surface.

The main body of the scrub broom shall have a frame size as shown in the drawing at the end of this special provision. The nearest and furthest members, paralleling the back of the distributor truck, and diagonal members shall be equipped with street brooms. The leading member and the trailing member shall have broom heads angled at 10 to 15 degrees off the centerline of the supporting member. The diagonal members shall have broom heads attached in line with the centerline of the supporting member. Each individual street broom attached to the scrub broom assembly shall be 3.5 inches wide x 6.5 inches high x 16 inches long and have stiff nylon bristles. Bristle height is to be maintained at a minimum of five inches (5"). The scrub broom shall be equipped with hinged wing assemblies attached to the main body not to exceed 4.5 feet per side, with diagonals and equipped with street brooms. The purpose of the maximum rigid frame width and the hinged wing extensions is not only for maximum width of 16 feet but to maintain the scrubbing process evenly as contours and cross-sections change across the existing road surface.

The Contractor is responsible for maintaining street broom heads in good condition to produce satisfactory performance during scrub sealing operations. Prior to starting scrub seal operations, all street broom heads shall be inspected and approved for use by the Engineer. At any point during construction, if a street broom head is observed to be in poor condition, the broom head shall be replaced, as directed by the Engineer.

907-414.03.3.3--Aggregate Spreader. A self-propelled mechanical type aggregate spreader with a computerized spread control, capable of distributing the aggregate uniformly to the required width and at the designed rate shall be used.

907-414.03.3.4--Pneumatic-Tire Rollers. Multiple self- propelled pneumatic-tire rollers capable of ballast loading, either with water or sand to allow the weight of the machine to be varied from 6 to 8 tons to achieve a minimum contact pressure of 80 lb/in.^{2} shall be used. The alignment of the axles shall be such the rear axle tires, when inflated to the proper pressure, can compact the voids untouched by the front-axle tire. All tires shall be as supplied by the roller manufacturer. Width of the rollers shall exceed 60 in.

Steel wheel rollers will not be allowed.

907-414.03.3.5--Brooms. Two (2) mechanically powered kick-brooms or vacuum type brooms. Rotary brooms shall be constructed to permit the revolutions of the broom to be adjusted to its progression and to permit adjustment of the broom in relation to the surface. The broom bristles shall be stiff enough to sweep clean without injury to the surface.

907-414.03.3.6--Trucks. Trucks of sufficient number and size to adequately supply the material shall be furnished.

907-414.03.4--Preparation of Surface. The entire surface to be treated and at least one foot (1') on each side shall be cleaned by sweeping, blowing, or other methods until all dust, mud, clay lumps, and foreign material is removed. A primed base shall be properly cured and approved prior to application of bituminous material.

Prior to the scrub seal operation, the Contractor shall remove any and all vegetation within the

limits of the scrub seal installation. The use of herbicides will be allowed at the discretion of the Engineer.

If used, the herbicide shall be applied at least 10 days prior to the scrub seal operation, or as directed by the manufacturer of the approved herbicide. The application of the herbicide shall be performed in accordance with all applicable regulations. Any and all fines or clean-up costs for unlawful misuse or discarding of herbicides shall be the sole responsibility of the Contractor. Mixtures and spread rates for the herbicides shall be determined by the manufacturer's specifications. Wash down of equipment or discarding of herbicides shall not enter catch basins or positive drainage facilities.

907-410.03.4.1--Cleaning Pavement. The roadway surface shall be cleaned by sweeping no more than 30 minutes prior to application of the emulsified asphalt and aggregate. However, this 30-minute window may be extended if authorized by the Engineer in cases where extending the time does not jeopardize a clean surface prior to scrub seal operations. The pavement shall be swept with a motorized broom to remove loose material. Depressions not reached by the motorized broom shall be cleaned with a hand broom. The outer edges of the pavement to be sealed including an adjacent paved shoulder shall be cleaned.

907-414.03.4.2--Protecting Accessories. Utility castings (manholes, gate valve covers, catch basins, sensors, etc.) shall be covered to prevent coating with emulsified asphalt. Suitable covering includes plywood disks, Kraft paper, roofing felt or other approved methods. The protective coverings shall be removed before opening the road to traffic.

907-414.03.4.3--Stripe Removal. Prior to the scrub seal operations, the Contractor shall remove all existing thermoplastic striping, thermoplastics legends, and raised pavement markers within the scrub seal limits. Such removal shall be performed to the satisfaction of the Engineer.

907-414.03.5--Application. The scrub seal shall be applied from edge of pavement to edge of pavement. The edges of the scrub seal application shall be maintained in a neat and uniform line. Scrub seal shall not be applied on concrete gutters or pads unless directed by the Engineer.

907-414.03.5.1--Application of Bituminous Material. Bituminous material shall not be applied until the prepared surface has been approved by the Engineer and any application rate adjustments must be approved by the Engineer. Where practicable, shots shall be at least 500 feet in length, and longer shots are desirable. No shot shall be in excess of a length which can be covered with aggregate before the bitumen hardens.

The bituminous material shall be uniformly heated and maintained within the specified temperature range during application. All material damaged by heating shall be rejected, and if a section has been treated with damaged material it shall be removed and replaced by the Contractor without additional compensation.

The asphalt emulsion for scrub seal temperature when applied shall be a minimum of 140º to 180ºF. For smaller areas, the emulsion may be applied with a wand. The emulsion scrub broom shall be as described below.

The application rate of the bituminous material shall result in complete and uniform coverage of the pavement receiving the bituminous surface treatment. If the application of the bituminous material does not result in complete coverage, the Contractor shall cease operations and adjust the distributor bar height and/or nozzle(s) such that complete coverage is attained. At a minimum, the application rate of the bituminous material should be verified daily by the Department.

The type and condition of the surface being covered and the size of the aggregate being used, will affect the required application rate of asphalt material. The Contractor shall begin with application rates as recommended by the mix design and accepted by the Engineer. Actual rates shall be established during the first application of bituminous material/aggregate and adjusted to field condition changes as required.

The application shall be stopped before the distributor is completely empty, and the length of shots shall be computed so that the application is stopped before it begins to run light. At the beginning of the application, including joints with preceding applications, intersections, and junctions with all pavements, etc., the distributor nozzles shall be operating at full force when the application begins. Building paper or other suitable material shall be used to receive the initial application from the nozzles before the asphalt reaches the road surface at the joint. The material shall be removed immediately after use without spilling asphalt on the road surface.

Spray bar nozzles shall be kept clean at all times, and should one become blocked during application of the bituminous material, the distributor shall be stopped immediately, and the nozzle cleaned before proceeding. Bare or light areas shall be immediately made uniform by use of a hand hose or pouring pot.

Due to possible spillage, the transfer of material from the delivery truck to the distributor shall be outside the limits of the roadway. Bituminous material shall not be discharged on the right-of-way when cleaning out the distributor. Any spillage shall be removed from the roadway and right-of-way.

During application of bituminous material, the Contractor shall provide adequate protection to prevent marring or discoloration of pavements, structures, curbs, trees, etc., adjacent to the area being treated.

Longitudinal joints, when permitted, shall be reasonably true to line and parallel to the centerline. The overlap in the application of the bituminous material shall be the minimum to assure complete coverage.

At construction joints, the treatment of the edges shall be blended so that there are no gaps, the elevations are the same, and the joints are free from ridges and depressions.

Immediately following the application of the emulsion to the road surface, the material shall be scrubbed with a scrub broom for the purpose of forcing the emulsion into the existing surface and distributing the emulsion evenly over variable road surface contours.

The application of the asphalt emulsion for scrub seal and scrub broom operation shall cease 40 feet prior to the end of the application. The remaining asphalt emulsion for scrub seal shall be dragged out by the scrub broom, and the remaining emulsified material required to complete the pass shall be applied only by the distributor truck, at the specified rate.

907-414.03.5.2--Application of Cover Coat Material. The application of cover material shall immediately follow the application of bituminous material. Adhesion of the cover aggregate to the bitumen is the Contractor's responsibility. Application rate adjustments must be approved by the Engineer.

Aggregate shall be spread directly from approved spreaders. Trucks or spreaders shall not drive on the uncovered bituminous material.

Aggregate shall be placed at the design application rate. If necessary, the rate of application may be adjusted so that some emulsified asphalt can be seen between the aggregate chips, but not so much that aggregate chips adhere to the pneumatic rollers. If needed, additional adjustments may be made to the rate of application during the project, at the discretion of the Engineer.

During the first day of production and at least once a week thereafter, the application rate of the aggregate shall be verified by the Department to assure that the appropriate application rate of the aggregate is applied. The rate can be verified by placing a tarp of at least 1.0 yd^2 area on the roadway surface. After allowing the aggregate spreader to pass over the tarp, the aggregate on the tarp should be collected and weighed to determine the weight of aggregate. The measured weight should then be compared to the target weight calculated using the following formula.

$$W = 0.85(G_{sb})(U_w)(R)(A)(e)$$

Where:
W = target weight of aggregate in lbs.
G_{sb} = bulk specific gravity of aggregate
U_w = Unit weight of water at 70°F = 62.3 lbs./ft^3
R = target application rate in ft^3/yd^2
A = area of tarp in yd^2
e = air voids in loose aggregate = 0.4

G_{sb} for gravel = 2.650
G_{sb} for limestone = 2.700

Note: Bulk specific gravities of expanded clay and steel slag should be obtained from the seal aggregate supplier.

Upon determining the target weight, it should be compared to the actual measured weight. If the difference in the target weight and the actual measured weight is over 2.5 pounds, the aggregate distributor should be adjusted such that the spread rate is within the above tolerance. The above procedure shall be repeated until the spread rate is within the allowable tolerance.

If at any point during production, excessive aggregate is noted, the aggregate application rate should be verified and the spread rate adjusted. The intent is to minimize the amount of excess aggregate. Excess aggregate removed from the roadway surface after brooming shall be removed from the job site and should not be reused in the seal aggregate operation.

The dry aggregate shall be spread uniformly to cover the bituminous material with the quantity of mineral aggregate specified by the Engineer. All deficient areas shall be covered by additional material.

If needed, approved drag brooms and hand brooms shall be used to distribute the aggregate uniformly before and while the rolling operations are in progress.

The entire application of aggregate shall be rolled as soon as possible after application. Rolling shall be continued and repeated as often as necessary to key the cover material thoroughly into the bituminous material over the entire surface.

Pneumatic rollers shall be used in the sequence that will provide the rolling pattern that results in the best adhesion of the aggregate to the bituminous material and the best surface qualities.

Subsequent to the initial application of the aggregate the Contractor shall distribute, as many times as is deemed necessary, loose aggregate over the surface to absorb free bituminous material and to cover areas deficient in aggregate. Immediately following each distribution, the Contractor shall roll the entire surface treatment or seal with a pneumatic-tire roller until the maximum quantity of aggregate is embedded in the bitumen. Rolling in each case shall be at least one complete coverage and as many additional coverages as necessary to properly embed the aggregate. All rolling shall be performed while the temperature is favorable for sealing the aggregate into the bitumen.

In all cases, there shall be at least five complete coverages of the entire surface of the treatment with a pneumatic-tire roller.

If specified, a fog seal will be placed at a rate of 0.11 gallons per square yard, or as directed by the Project Engineer. The fog seal shall not be placed until after final brooming.

907-414.03.6-- Control of Traffic. Unless otherwise advised, the Contractor's operations shall be scheduled such that all lanes of traffic are open to the traveling public at the end of each day. Considering time needed for curing and preparation prior to opening traffic, the Contractor should not apply bituminous material two (2) hours before dusk, or later, to allow sufficient time for bonding of the aggregates.

After the scrub seal has been rolled and the bituminous material has cured a minimum of one (1) hour, or longer if necessary to sufficiently hold the aggregate in place, the Contractor shall perform an initial brooming operation consisting of lightly sweeping excess aggregate material from the surface. After the initial brooming has been completed, public traffic will be allowed on the roadway.

Immediately the next morning, a final brooming shall be performed to remove any remaining

excess aggregate material from the previous day's seal operation.

907-414.03.7--Quality Control. The Contractor shall be responsible for quality control (QC) sampling and testing and shall submit a written Quality Control Plan (QCP) acceptable to the Engineer.

907-414.03.7.1--Personnel. The Contractor shall be responsible for staffing their project with qualified personnel.

907-414.03.7.2--Testing Facilities and Equipment. The Contractor shall supply any testing and equipment needed to comply with their approved QCP.

907-414.03.7.3--Materials Testing. The Contractor shall test the materials utilized in a manner to comply with their approved QCP and as required by the Engineer.

907-414.03.7.4--Compliance with Specifications. The Contractor shall attest in writing to the Department that the scrub seal has been constructed in accordance with and meets the requirements of the specifications and their approved QCP at the conclusion of the project.

907-414.03.7.5--Department Acceptance. The Department will conduct acceptance sampling, testing, and inspection activities according to TMD-20-04-00-000 to ensure material quality, correct application rates, rolling, sweeping, and traffic control are within specification requirements.

907-414.04--Method of Measurement. Scrub seal shall be measured by the square yard. Accepted quantities for asphalt for fog seal will be measured by the gallon as prescribed in Subsection 109.01. Unless otherwise specified, distributor tank measurement will be used. The volume of material over five percent (5%) above the quantity ordered for each shot will be deducted from measured quantities, except that 15 percent will be allowed for irregular areas where hand spraying is necessary.

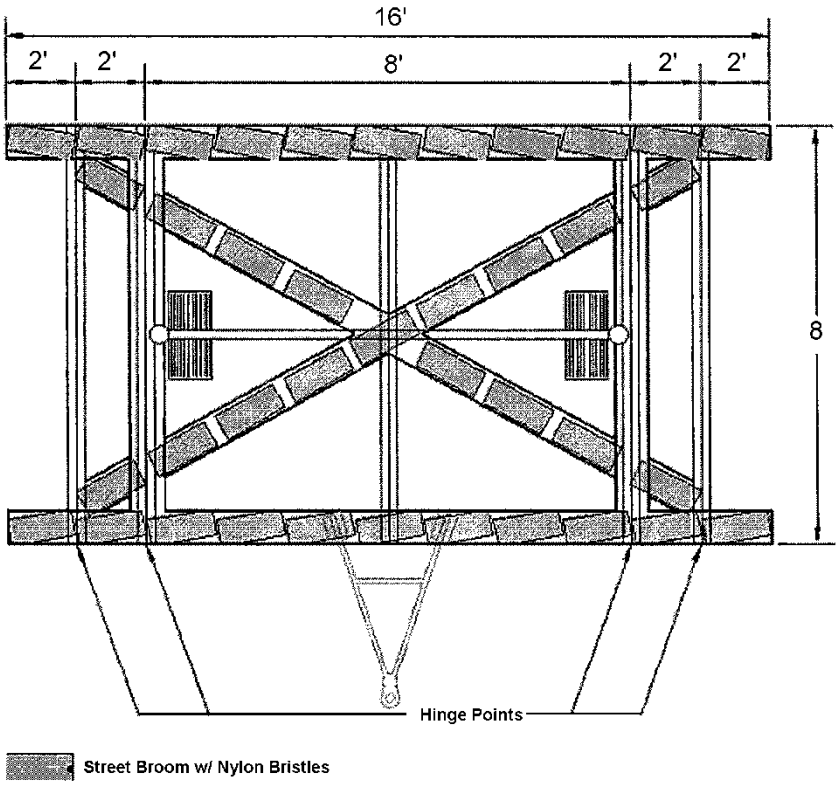
907-414.05--Basis of Payment. Scrub seal, measured as prescribed above, will be paid for at the contract bid price per square yard, which shall be full compensation for furnishing all labor, materials, equipment, temporary markers, vegetation removal, cleaning of the surface, pre-sweeping, post-sweeping, doing all the work involved in mixing, applying and protecting the polymer modified asphaltic rejuvenating scrub seal, and all incidentals necessary to complete the work.

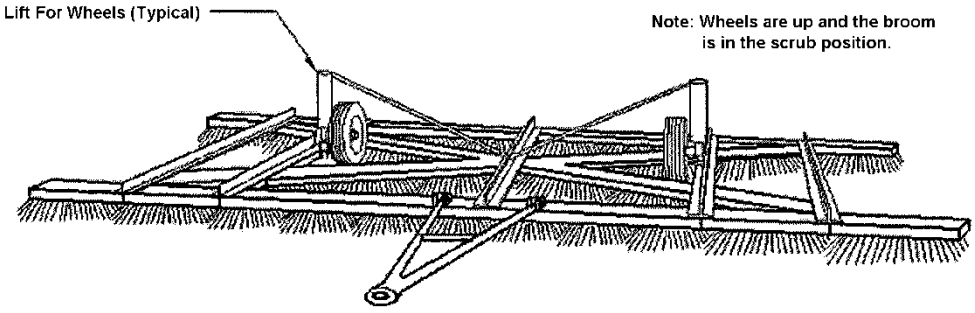
Asphalt for fog seal will be paid for at the contract unit price per gallon, which shall be full compensation for furnishing all labor, materials, equipment, applying and protecting the fog seal, and all incidentals necessary to complete the work.

Payment will be made under:

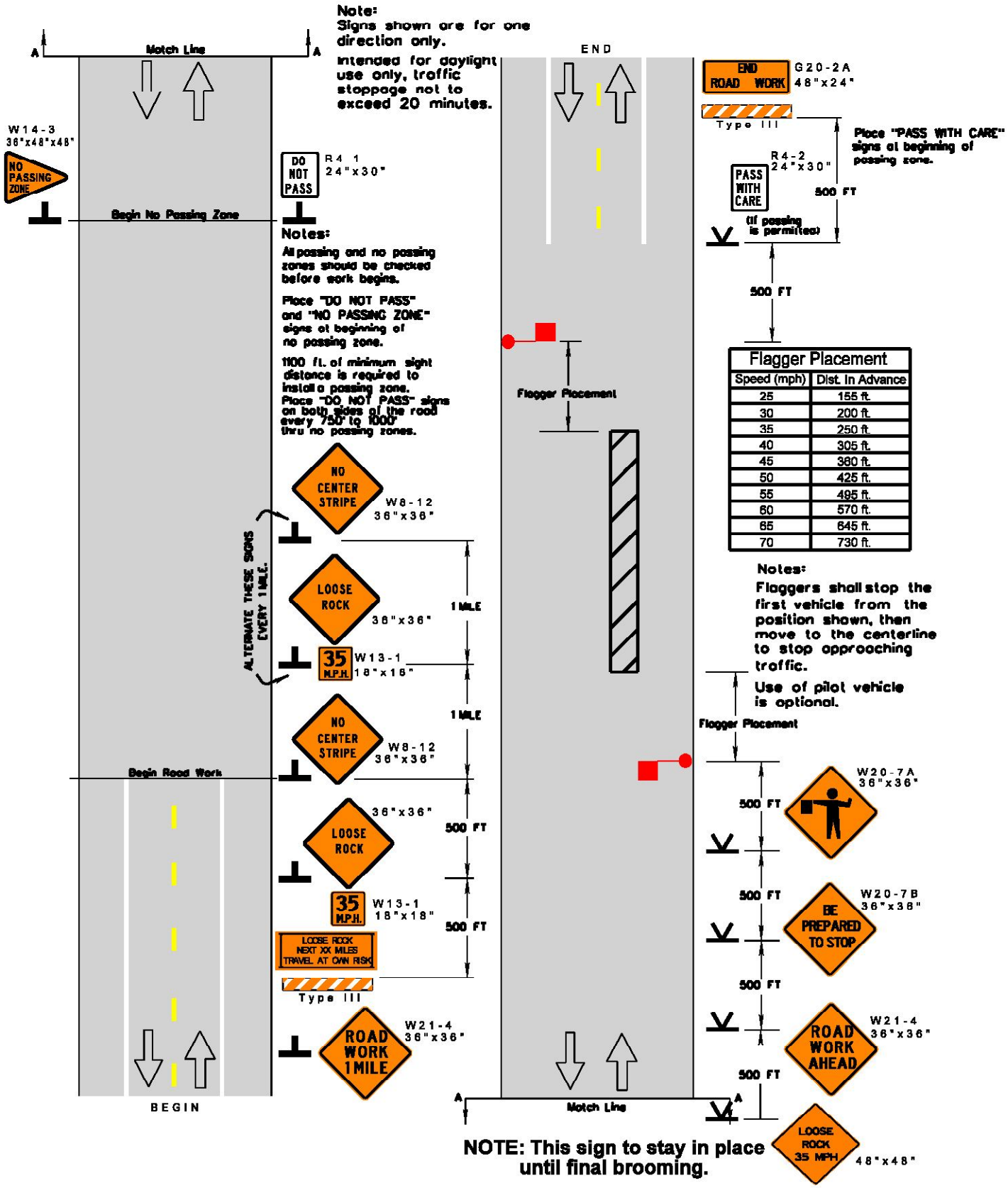
907-414-A: Scrub Seal - per square yard

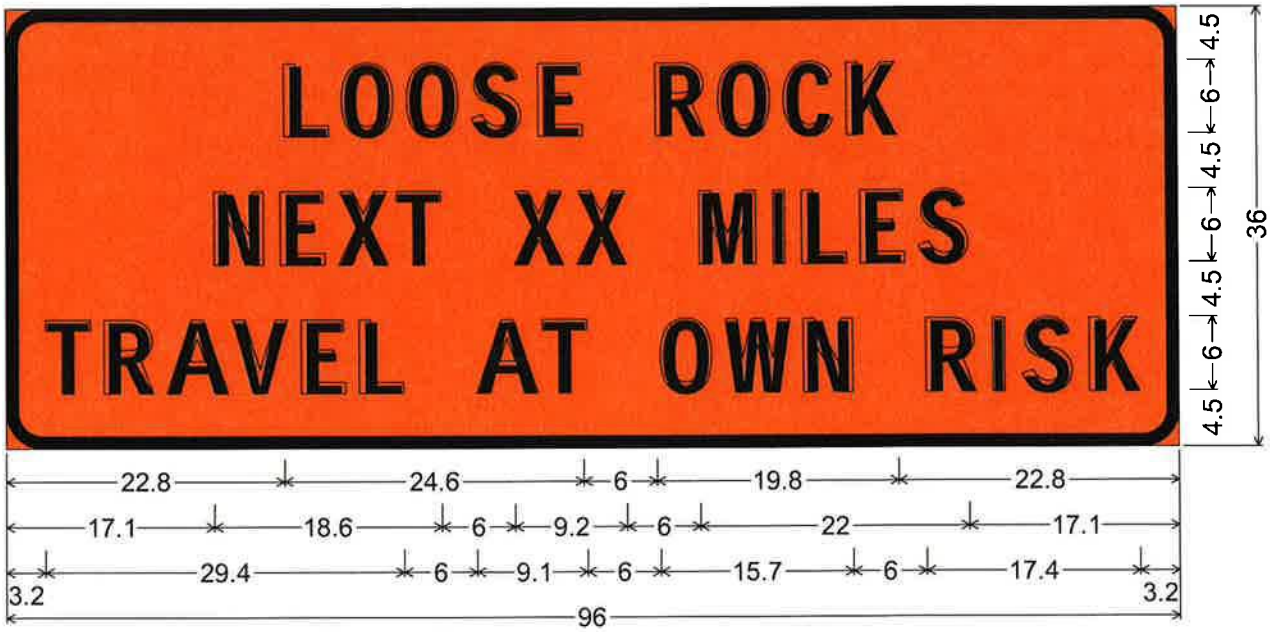
907-414-B: Asphalt for Fog Seal - per gallon


16'
2'
2'
8'
2'
2'
8
Hinge Points
Street Broom w/ Nylon Bristles


Lift For Wheels (Typical)
Note: Wheels are up and the broom is in the scrub position.

Scrub Broom


Note:
Signs shown are for one direction only.
Intended for daylight use only, traffic stoppage not to exceed 20 minutes.
Match Line
A
A
W14-3
36"x48"x48"
NO PASSING ZONE
Begin No Passing Zone
DO NOT PASS
R4-1
24"x30"
Notes:
All passing and no passing zones should be checked before work begins.
Place "DO NOT PASS" and "NO PASSING ZONE" signs at beginning of no passing zone.
1100 ft. of minimum sight distance is required to install a passing zone.
Place "DO NOT PASS" signs on both sides of the road every 750' to 1000' thru no passing zones.
NO CENTER STRIPE
W8-12
36"x36"
LOOSE ROCK
36"x36"
35 M.P.H.
W13-1
18"x18"
ALTERNATE THESE SIGNS EVERY 1 MILE.
1 MILE
1 MILE
NO CENTER STRIPE
W8-12
36"x36"
Begin Road Work
LOOSE ROCK
36"x36"
500 FT
35 M.P.H.
W13-1
18"x18"
500 FT
LOOSE ROCK NEXT XX MILES TRAVEL AT OWN RISK
Type III
ROAD WORK 1 MILE
W21-4
36"x36"
BEGIN
END
Flagger Placement
END ROAD WORK
G20-2A
48"x24"
Type III
Place "PASS WITH CARE" signs at beginning of passing zone.
R4-2
24"x30"
PASS WITH CARE
500 FT
(if passing is permitted)
500 FT
Flagger Placement
Speed (mph) | Dist. In Advance
25 | 155 ft.
30 | 200 ft.
35 | 250 ft.
40 | 305 ft.
45 | 380 ft.
50 | 425 ft.
55 | 495 ft.
60 | 570 ft.
65 | 645 ft.
70 | 730 ft.
Notes:
Flaggers shall stop the first vehicle from the position shown, then move to the centerline to stop approaching traffic.
Use of pilot vehicle is optional.
Flagger Placement
500 FT
W20-7A
36"x36"
500 FT
BE PREPARED TO STOP
W20-7B
36"x36"
500 FT
ROAD WORK AHEAD
W21-4
36"x36"
500 FT
Match Line
A
A
LOOSE ROCK 35 MPH
48"x48"
NOTE: This sign to stay in place until final brooming.

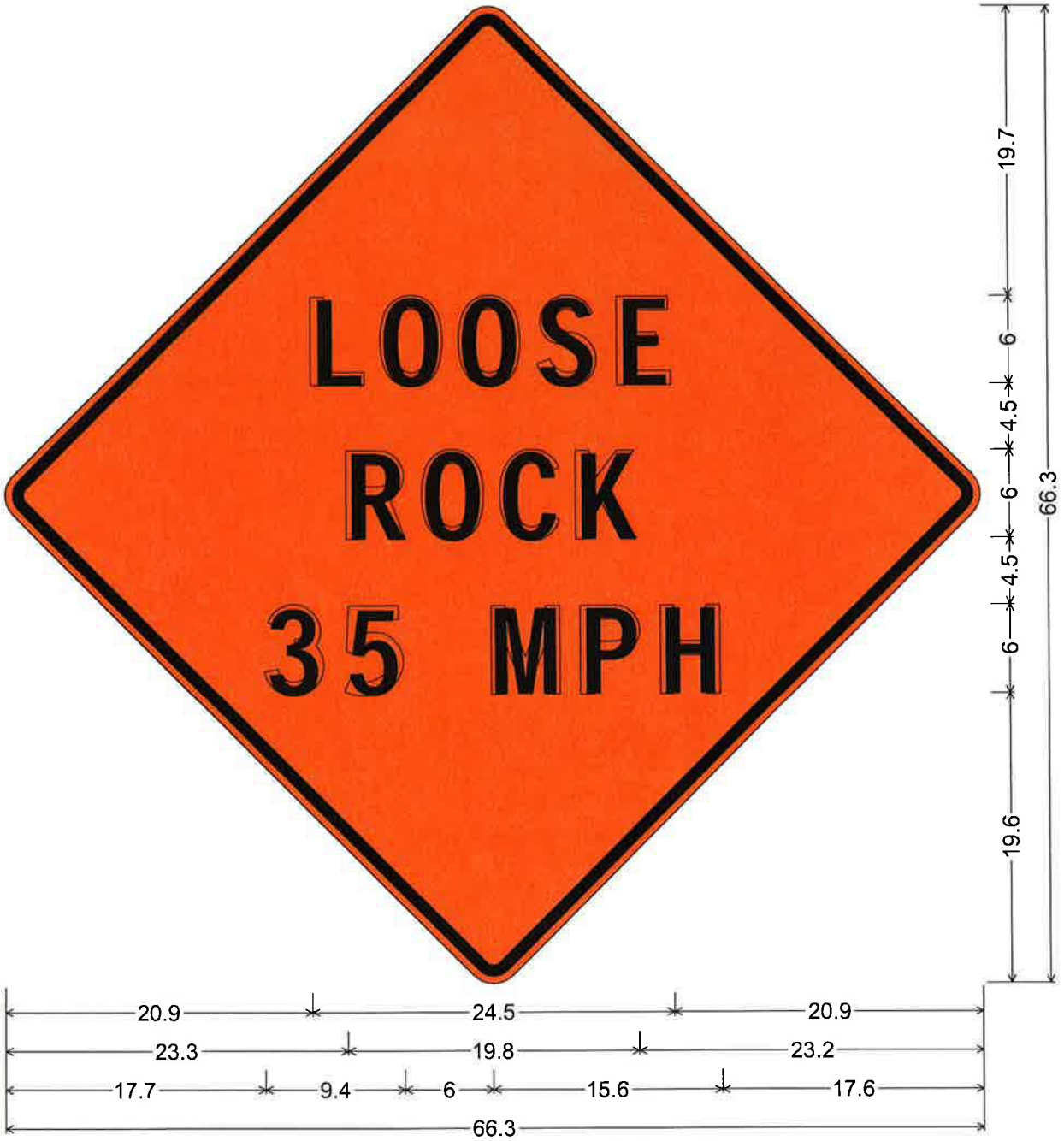


3.0" Radius, 1.0" Border, Black on Orange;
"LOOSE ROCK" D; "NEXT XX MILES" D; "TRAVEL AT OWN RISK" D;
Table of letter and object lefts.

L 22.8	O 27.6	O 33.0	S 38.3	E 43.7	R 53.4	O 58.5	C 63.9	K 69.0

N 17.1	E 22.5	X 27.3	T 32.1	X 41.7	X 46.9	M 56.9	I 63.0	L 65.3	E 70.1	S 74.9

T 3.2	R 8.0	A 13.2	V 18.6	E 24.2	L 29.0	A 38.6	T 44.0	O 53.7	W 59.0	N 65.4	R 75.4	I 80.9	S 83.2	K 88.6



48.0" across sides 1.9" Radius, 0.8" Border, 0.5" Indent, Black on Orange;
"LOOSE" D; "ROCK" D; "35 MPH" D;
Table of letter and object lefts.

L 20.9	**O** 25.7	**O** 31.0	**S** 36.4	**E** 41.8
R 23.3	**O** 28.4	**C** 33.8	**K** 38.9	
3 17.7	**5** 23.1	**M** 33.1	**P** 39.2	**H** 44.6

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-605-1 **CODE: (IS)**

DATE: 11/21/2023

SUBJECT: Underdrains

Section 605, Underdrains, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-605.02--Materials.

907-605.02.4--Edge Drain Pipe and Fittings.

907-605.02.4.4--Miscellaneous. Delete the first paragraph of Subsection 605.02.4.4 on page 398, and substitute the following.

Concrete for aprons shall be Class "C" concrete meeting the requirements of Section 907-799.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-618-12 **CODE: (SP)**

DATE: 05/03/2024

SUBJECT: Traffic Control Management

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-618.01--Description.

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-12 **CODE: (IS)**

DATE: 06/17/2025

SUBJECT: Thermoplastic Traffic Markings

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

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

SECTION 626 - THERMOPLASTIC TRAFFIC MARKINGS

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

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

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

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

All pavement marking material, excluding lines over rumble strips, shall be applied using the extrusion/ribbon method. Lines placed over rumble strips shall be applied using the atomization/spray method, unless the extrusion/ribbon method can be demonstrated to perform adequately and is approved by the Engineer.

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

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

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

907-626.02--Materials. All pavement marking materials shall meet the requirements of Special Provision 907-720.

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

Audible bumps shall be at least 0.45 inches above the pavement surface at the highest point of the bump. The height shall be measured after the application of drop-on material. The bumps shall have a minimum dimension of two and one-half inches (2½") in both transverse and longitudinal directions. The bumps may have a drainage channel. The width of each drainage channel shall not exceed one-quarter of an inch (¼") at the bottom of the channel.

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

Transverse bars on centerline shall have a length of 10 inches, a width of three inches (3"), and a height of 350 mils. Transverse bars on centerline shall be placed on 2-foot centers through no-passing zones and 5-foot centers through passing zones. Transverse bars on centerline shall be placed in advance of permanent thermoplastic markings.

Transverse bars on edge lines shall have a length of six inches (6"), a width of three inches (3"), and a height of 350 mils. Transverse bars on edge lines shall be placed on 2-foot centers. Tolerance for the longitudinal and transverse measurements shall be one quarter of an inch (¼") and the tolerance for height shall be 50 mils. The above dimensions are based on 6-inch strip application.

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

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

907-626.03--Construction Requirements.

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

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

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

Optics applied to the surface of the completed stripe shall be applied by an automatic dispenser attached to the pavement marking equipment in such a manner that the optics are immediately dispensed upon the completed line. The dispenser shall be equipped with an automatic cutoff control, synchronized with the cutoff of the pavement marking equipment. The double-drop optics as defined in 907-720 shall be automatically applied at a uniform rate to achieve the minimum retroreflectivity requirements of 907-626.

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

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

Immediately before application, all areas to be marked shall be thoroughly cleaned. Cleaning may be done by rotary brooms, air blast, scrapers, or whatever combination of equipment is necessary to clean the pavement thoroughly without damage to the pavement surface. On areas of pavement

cured with compound, the membrane shall be removed completely by shot blasting, sand blasting or other approved method. Before edge striping, particular care shall be taken to remove all vegetation, loose soil, and the like from the area to be marked. Should other methods fail, the surface shall be wetted with a water jet and scrubbed as necessary to dislodge all foreign material. After washing, the surface shall be allowed to dry thoroughly, and all films of dried mud apparent after surface drying shall be removed before application of markings. Marking shall follow as closely as practicable after the surface has been cleaned and dried, but no markings shall be applied until the surface has been inspected and permission given to proceed. The cost for preparing the surface shall be included in the contract unit prices for the marking items.

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

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

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

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

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

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

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

replaced.

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

Table 1. Minimum Dry Retroreflectivity

Color	All Stripe without Rumble mcd/m²/lx	Rumble Stripe mcd/m²/lx
White	375	250
Yellow	225	150

For projects with less than two miles between the BOP and EOP, retroreflectivity measurements will not be required.

907-626.03.3.1--Measuring Devices. Retroreflectivity measurements are required to be taken using a vehicle mounted mobile retroreflectometer using 30-meter geometry with video and mapping capabilities as per AASHTO T-398. The retroreflectometer and operator shall be certified by the manufacturer, authorized representative of the manufacturer, or an MDOT approved program such as the Texas A&M Transportation Institute (TTI) Mobile Retroreflectometer Certification Program. The Contractor shall provide copies of current certifications for the operator(s) and the device(s) to the Engineer.

907-626.03.3.2--Acceptance Procedure. Averages of the mobile measurements shall be provided for every 0.1 miles unless otherwise specified or approved. Take measurements on each section of roadway for each series of markings (i.e., edge line, center skip line, each line of a double line, etc.) and for each direction of traffic flow. Measure each line in both directions for centerlines on two-way roadways (i.e., measure both double solid line in both directions and measure all center skip lines in both directions). Furnish measurements in compliance with the below requirements. Use all equipment in accordance with the manufacturer's recommendations and directions. Inform the Engineer at least 24 hours before taking any measurements.

A marking meets the retroreflectivity requirements if:

- The combined average retroreflectivity value for a one-mile segment meets the minimum retroreflectivity values specified, and
- Within the one-mile segment, no more than three consecutive 0.1 mile intervals shall have an average retroreflectivity value below the minimum required value.

The one-mile segment will start from the beginning of the data collection and end after a mile worth of measurements have been taken; each subsequent mile of measurements will be a new segment. If the remainder is 0.5 miles or less, it shall be included in the previous mile segment, otherwise the remaining segment of greater than 0.5 mile shall be its own segment. Centerlines with 2 stripes (either solid or broken) will result in 2 miles of data for each mile segment. Each centerline stripe must be tested for compliance as a stand-alone stripe.

The Contractor may elect to restripe with a minimum of 0.060 in. (60 mils) at no cost to the Department each one-mile segment that failed to meet the minimum retroreflectivity requirements.

Measurements shall be retaken within 10 to 30 calendar days after the second application for the mile segment for that series of markings. If the markings do not meet minimum retroreflectivity after the second application, the Engineer may require removal of all existing markings, a new application as initially specified, and a repeat of the application process until minimum retroreflectivity requirements are met.

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

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

- Date;
- District;
- County;
- Name of mobile retroreflectometer operator;
- Route number with reference markers or other reference information provided by the Engineer to indicate the location of beginning and end data collection points on that roadway;
- Cardinal direction;
- Line type (single solid, single broken, double solid, etc.);
- Line color;
- File name corresponding to video;
- Data for each centerline listed separately;
- Average reading taken for each 0.1-mi. interval (or interval designated by the Engineer);
- Accurate GPS coordinates (within 20 ft.) for each interval;
- Color-coding for each interval indicating passing or failing, unless otherwise directed by the Engineer (passing and failing thresholds provided by the Engineer);
- Graphical representation of the MRDC (y-axis showing retroreflectivity and x-axis showing intervals) corresponding with each data file;
- Distance in miles driven while measuring the pavement markings;
- Event codes (pre-approved by the Engineer) indicating problems with measurement;
- Upper validation threshold (may be included separately with the raw data but must be clearly identified with the data collected using that threshold).

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

- Date;
- District number;
- County;

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

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

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

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

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

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

Detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where

skips are specified. Stripes more than six inches (6") in width will be converted to equivalent lengths of 6-inch stripe.

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

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

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

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

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

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

Payment will be made under:

907-626-A:	6" Thermoplastic Traffic Stripe, Skip White	- per linear foot or mile
907-626-B:	6" Thermoplastic Traffic Stripe, Continuous White	- per linear foot or mile
907-626-C:	6" Thermoplastic Edge Stripe, Continuous White	- per linear foot or mile
907-626-D:	6" Thermoplastic Traffic Stripe, Skip Yellow	- per linear foot or mile
907-626-E:	6" Thermoplastic Traffic Stripe, Continuous Yellow	- per linear foot or mile

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-627-1 **CODE: (IS)**

DATE: 06/24/2024

SUBJECT: Raised Pavement Markers

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-700-1 **CODE: (IS)**

DATE: 10/25/2022

SUBJECT: Materials and Tests

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

After Subsection 700.01 on page 713, add the following.

907-700.01.1--Buy America Materials Sourcing Requirements for Construction Materials. As related to the requirements in Subsection 907-106.14, Construction Materials shall include an article or material that is or consists primarily of non-ferrous metals; plastic and polymer-based products (including polyvinylchloride, composite building materials, and polymers used in fiber optic cables); glass (including optic glass); lumber; or drywall. Construction Materials which are exempt from the requirements in Subsection 907-106.14 include the following: cement or cementitious materials; aggregates such as stone, sand, or gravel; or aggregate binding agents or additives.

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-701-4

DATE: 11/05/2024

SUBJECT: Hydraulic Cement

907-701.04--Blended Hydraulic Cement.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-701-4 **CODE: (IS)**

DATE: 11/21/2023

SUBJECT: Hydraulic Cement

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

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

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

907-701.02--Portland Cement.

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

907-701.02.1.1--Types of Portland Cement. Portland cement shall be either Type I, Type II, or Type III conforming to AASHTO M85 or Type III (MS). Type III (MS) is defined as a Type III cement conforming to AASHTO M85 having a maximum tricalcium aluminate (C_3A) content of 8%.

907-701.02.2--Blank.

907-701.02.2.1--Blank.

907-701.02.2.2--Blank.

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

907-701.04--Blended Hydraulic Cement.

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

Type IL – Portland-limestone cement
Type IP – Portland-pozzolan cement
Type IS – Portland blast-furnace slag cement

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-702-4 **CODE: (IS)**

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.

907-702.04--Sampling. 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.

907-702.07--Emulsified Asphalt. 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.

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

TABLE V
SPECIFICATION FOR FOG SEAL

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-703-2 **CODE: (SP)**

DATE: 11/29/2022

SUBJECT: Gradation

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

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

907-703.03.2--Detail Requirements.

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

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

Note [2] – 100 percent shall pass the 1-inch sieve for Size 67 used in Class F and Class FX concrete.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-705-1 **CODE: (IS)**

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.

907-705.04--Stone Riprap. 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 pre-approved source and be visually approved prior to use.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-707-3 **CODE: (IS)**

DATE: **10/27/2021**

SUBJECT: **Joint Materials**

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

907-707.02--Joint Filler.

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-2 **CODE: (IS)**

DATE: 09/11/2018

SUBJECT: Plain Steel Wire

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

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

907-711.02.3--Steel Welded and Non-Welded Wire Reinforcement, Plain and Deformed, for Concrete.

907-711.02.3.1--Plain Steel Wire. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-712-1 **CODE: (SP)**

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.

907-712.02--Barbed Wire. 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.

907-712.03--Metallic-Coated, Steel Woven Wire Fence Fabric. 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.

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

907-712.04.1--Fabric. 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.

907-712.04.3--Tension Wire. 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 III, Type IV, or Type I Classes 1, 2, or 3 tension wires shall be furnished.

907-712.04.4--Posts Rails, Gate Frames, and Expansion Sleeves. 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.

907-712.04.5--Miscellaneous Fittings and Hardware. 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.

907-712.05.1.1--General. 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.

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

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

907-712.05.1.4--Sawed Braces. 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.

907-712.05.2.1--Round Steel Pipe. 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.

907-712.05.2.5--Aluminum-Alloy Posts and Assemblies. 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.

907-712.05.2.6--Formed Steel Section Posts. 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.

907-712.06.2.1--Square Posts. 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 ±3/8" of the dimensions shown on the plans.

907-712.06.2.2--Round Posts. 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.

907-712.06.5--Treated Wood Blocks for Use with Metal Guardrail Posts. 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 ±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.

907-712.16--Hardware. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-4 **CODE: (SP)**

DATE: **07/28/2025**

SUBJECT: **Miscellaneous Materials**

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

907-714.01--Water.

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

907-714.01.2--Water for Use in Concrete. 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.

907-714.01.3--Water for Use in Chemically Stabilized Based. 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.

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

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

907-714.06--Slag Cement.

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

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

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

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

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

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

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

907-714.13--Geotextiles.

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

Table 1 - Geotextiles

Type Designation	I[1]	II[1]	III	IV	V	VI		VII		VIII	IX	
	Sediment Control		Drainage	Paving	Separation & Drainage	Separation, Stabilization & Reinforcement				High Strength		
Physical Property[2]						Woven	Non-Woven	Woven	Non-Woven			**Test Method**
Grab Strength (lb)	50	90	110	90	200	280	180	450	280	----	----	ASTM D 4632
Elongation (%)	----	50% max @ 45 lb	20% min	50% min @ break	50% min	50% max	50% Min	50% max	50% Min	----	----	ASTM D 4632
Seam Strength (lb)	----	----	70	----	180	240	160	400	240	----	----	ASTM D 4632
Puncture Strength (lb)	----	----	40	----	80	110	75	180	115	----	----	ASTM D 6241
Trapezoidal Tear (lb)	----	----	40	----	80	100	70	150	100	----	----	ASTM D 4533
Asphalt Retention (gal/yd^2)	----	----	----	0.2	----	----	----	----	----	----	----	ASTM D 6140
Permittivity (sec^{-1}) min	0.05	0.05	0.5	----	0.2	0.2	0.2	0.2	0.2	----	----	ASTM D 4491
AOS Woven (mm) max	0.60	0.60	0.6	----	0.6	0.43	----	0.43	----	----	----	ASTM D 4751
AOS Non-Woven (mm) max	0.84	0.84	0.43	----	0.43	----	0.43	----	0.43	----	----	
Tensile Strength after UV (% Retained)	70% @ 500 hr	70% @ 500 hr	50% @ 500 hr	----	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	50% @ 500 hr	----	----	ASTM D 4355
Melting Point °(F)	----	----	----	325	----	----	----	----	----	----	----	ASTM D 276
Minimum Ultimate Tensile Strength[3] (lb/in)	----	----	----	----	----	----	----	----	----	660	2000	ASTM D 4595

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

Delete Subsec

907-714.15--Geogrids.

907-714.15.1–General. 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.

907-714.15.1.2--Geogrid for Subgrade Stabilization. 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.

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

907-714.15.4--Acceptance Sampling and Testing. Final acceptance of each shipment will be

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

TABLE II
GEOGRIDS

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

[1] Minimum design criteria requirement.
[2] Minimum Average Roll Value (MARV).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-718-1 **CODE: (SP)**

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.

907-718.01--General. 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.

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

907-718.03--Treated Timber and Dimension Lumber. 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.

907-718.03.2.1--General. 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.

907-718.03.2.3--Inspection. 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.

907-718.03.4--Storage of Treated Material. 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.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-4 **CODE: (IS)**

DATE: **06/17/2025**

SUBJECT: **Pavement Marking Materials**

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

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

SECTION 720 - PAVEMENT MARKING MATERIALS

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

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

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

907-720.03.1--Glass Beads. The manufacturer shall furnish the Engineer with a certified test report indicating that the glass beads meet AASHTO M 247. AASHTO Type 4 beads shall be applied to the newly placed stripe first, followed by the application of AASHTO Type 1 or Type 2 beads. Type 1, 2, and 4 glass beads shall be transparent, clean, colorless glass, smooth and spherically shaped, free from milkiness, pits, or excessive air bubbles. Type 1, 2, and 4 glass beads shall be coated with a bead coating that is compatible with the traffic marking material to which the glass beads will be applied and will provide adequate moisture proofing, increased adhesion, and optimum embedment of the glass beads.

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

Acceptance sampling and testing will be in accordance with the Materials Division Inspection, Testing, and Certification Manual (Materials Manual).

907-720.03.2--Advanced Optics. Advanced optics are materials that do not meet the specific requirements of AASHTO M 247 but produce a final drop-on optics system that meets or exceeds the reflectivity requirements in Special Provision 907-626. Advanced optics shall be a double-

drop system that is pre-approved and listed on the Department's Approved Products List.

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

Acceptance sampling and testing may be conducted at the request of the Engineer.

907-720.04--Thermoplastic Marking Material. Thermoplastic marking material shall meet the color requirements of Subsection 907-720.02.

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

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

907-720.04.1--Extruded Thermoplastic Material. Extruded thermoplastic pavement marking material shall meet the requirements of AASHTO M 249, and shall meet the requirements of 907-720.04 with the following exceptions:

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

907-720.04.2--Spray-Applied Thermoplastic Material. Spray-applied thermoplastic pavement marking material shall meet the requirements of AASHTO M 249 and shall meet the requirements of 907-720.04.

907-720.04.3--Pre-formed Thermoplastic Material. Heat-fused, pre-formed thermoplastic pavement marking material shall meet the color requirements of 907-720.02.

907-720.04.4—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

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

907-720.05.1—Cold Plastic Pavement Markings (Permanent Pavement Marking Tape). Pavement marking tape for use in roadway applications shall be designated on the Department's Approved Lists as permanent.

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

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

907-720.05.1.1--Specific Requirements. Unless otherwise indicated on the plans, the patterned material without adhesive shall have a minimum caliper of 0.065 inch at the thickest portion of the patterned cross-section and a minimum caliper of 0.020 inch at the thinnest portion of the cross-section. The material shall be a pliant polymer film with 50±15% of the surface are raised and presenting a near vertical face angle of 0° to 60° to traffic from any direction. The channels between the raised areas shall be substantially free of exposed optics or particles.

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

907-720.05.1.2--Conformability and Resealing. The marking shall be capable of conforming to pavement contours, breaks, faults, etc. through the action of traffic at normal pavement temperatures.

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

907-720.05.1.3--Tensile Strength and Elongation. The material shall have a minimum tensile strength of 40 pounds per square inch of cross section when tested according to ASTM D 638. A 6-inch x 1-inch x 0.06-inch sample shall be tested at a temperature between 70°F and 80°F using a jaw speed of 12 inches per minute.

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

907-720.05.1.4--Skid Resistance. The surface of the material shall provide a minimum skid resistance value of 45 BPN when tested according to ASTM E 303 except values will be taken at

downweb and at a 45-degree angle from downweb. These two values will then be averaged to find the skid resistance of the patterned surface.

907-720.05.1.5--Effective Performance Life and Warranty. When applied according to the recommendations of the manufacturer the pavement marking tape shall provide a neat and durable marking that will not flow or distort due to temperature if the pavement surface remains stable. The film shall be weather resistant and through normal traffic wear shall show no appreciable fading, lifting, or shrinkage throughout the useful life of the marking, nor shall it show significant tearing, roll back, or other signs of poor adhesion.

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

907-720.05.1.6—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

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

907-720.05.2--Preformed Pavement Markings for Construction Zones. Preformed pavement markings for construction zones shall be designated Department's Approved Lists as temporary. Retroreflective preformed pavement markings for construction zones shall be as specified on the plans or in the contract documents.

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

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

907-720.05.2.1--Specific Requirements. Preformed markings shall consist of retroreflective materials on a conformable backing and shall meet the performance requirements of Subsection 907-720.02. The markings shall consist of a mixture of high-quality polymeric materials, pigments, and optics with a reflective layer of optics bonded to the top surface. The markings shall be pre-coated with a pressure sensitive adhesive capable of adhering to pavement in accordance with the manufacturer's instructions without the use of heat, solvents, or other additional adhesives. The markings and/or adhesive shall not require any curing time after application. A coated non-metallic medium shall be incorporated with the pressure sensitive adhesive to facilitate removal.

907-720.05.2.2—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

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

907-720.06.1--Packaging. Shipments shall be made in containers acceptable to common carriers and packaged in such a manner as to ensure delivery in perfect condition. All damaged shipments shall be replaced by the Contractor. Each package shall be clearly marked as to the name of the manufacturer, type, quantity enclosed, lot number, and date of manufacture.

907-720.06.2--Non-Reflective Pavement Markers. Non-reflective pavement markers are occasionally referred to as "jiggle markers". Non-reflective markers consisting of a heat-fired, vitreous, ceramic base, and a heat-fired, opaque, glazed surface are permitted for use; the bottom of the marker shall not be glazed. Ceramic markers shall be produced from any suitable combination of intimately mixed clays, shales, talcs, flints, feldspars, or other inorganic material. Ceramic markers shall be thoroughly and evenly matured, and all non-reflective pavement markers shall be free from defects which affect appearance or serviceability.

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

Table 2

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

907-720.06.3—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

907-720.07--Adhesive for Pavement Markers. The adhesive shall be listed on the Department's Approved Lists and shall be an asphaltic material suitable for bonding pavement markers to surfaces when the road surface and marker temperatures are in the range of 50°F to 160°F. The composition of the adhesive must be such that its properties will not deteriorate when heated to and applied at temperatures up to 425°F. Samples may be submitted in the form of an adhesive

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

907-720.07.1--Packaging and Labeling. The adhesive shall be packaged in self-releasing cardboard containers that will stack properly. The label shall show the manufacturer, quantity, and lot or batch number. "Adhesive for Pavement Markers" or "Adhesive for Traffic Markers" shall be printed in bold lettering on the label.

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

907-720.07.2.1--Flexible Bituminous Adhesive. Flexible bituminous adhesive shall be designated on the Department's Approved Lists as flexible and shall comply with requirements of Table 3 below.

Table 3

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

907-720.07.3—Acceptance Procedure. The Contractor shall furnish the Engineer with a copy of the manufacturer's certified test reports for the lot(s) of materials from which the shipment originated. The test report shall show all the test results for the material properties and characteristics as specified herein. The test report shall state that the material represented by the test results meets all the requirements of the contract. It shall be the Contractor's responsibility to furnish the manufacturer's test report to the Engineer for each shipment of material to the project.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-4 **CODE: (IS)**

DATE: **04/19/2022**

SUBJECT: **Materials for Signing**

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

907-721.06--Reflective Sheeting.

907-721.06.2--Performance Requirements. 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/ft^2)
Per ASTM Designation D4956

TABLE 4
Type IX Sheeting

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

TABLE 5
Type XI Sheeting

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

After Subsection 721.10 on page 864, add the following.

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

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

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

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

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

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

Table 1
Retroreflective Film Minimum Durability Requirements

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-824-4 **CODE: (SP)**

DATE: **09/09/2025**

SUBJECT: **Routine Bridge Repair**

Section 907-824, Routine Bridge Repair, is hereby added to and made a part of the 2017 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-824 – ROUTINE BRIDGE REPAIR

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

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

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

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

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

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

907-824.02--Materials.

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

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

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

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

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

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

907-824.03--Construction Requirements.

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

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

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

Acetone alcohol may be used to clean and lubricate trowels.

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

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

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

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

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

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

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

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

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

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

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

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

907-824.03.4--Bearing Replacements. All bearings should be removed and replaced according to Bearing Assembly Details. All structural steel shall conform to ASTM A709, Grade 50. All steel shall be new. Extreme care shall be exercised in removing the existing bearing plates that are welded to the anchor plates embedded in the prestressed beams. Existing anchor bolts shall be ground to ¼" below the concrete surface and grouted with epoxy mortar.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Payment will made under:

907-824-A:	General Epoxy Repair	- per square foot
907-824-B:	FRP Wrap, *	- per linear foot or square foot
907-824-C:	Cap Cleaning	- per each
907-824-D:	Bearing Replacements **	- per each
907-824-E:	Epoxy Injection	- per linear foot
907-824-F:	Encapsulating Field Painting	- per square foot

* Indicate Bi-directional, Uni-directional, etc.

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

S E C T I O N 9 0 5 - P R O P O S A L

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.

1. 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 **five percent (5%) of total bid** 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.

For Informational Purposes Only

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

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

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

_____
President Address

_____
Secretary Address

_____
Treasurer Address

The following is my (our) itemized proposal.

For Informational Purposes Only

Mill & Overlay approximately 3.4 miles of SR 854 from SR 39 to the Naval Air Station, known as Federal Aid Project No. STP-0456-00(006) / 109783301 in Lauderdale County.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
			Roadway Items		
0010	201-D001		280	Station	Random Clearing
0020	202-B063		27	Square Yard	Removal of Concrete Paved Ditch
0030	202-B096		285	Linear Feet	Removal of Debris and Sand From Box Culvert, 10-foot and Greater Width
0040	202-B158		1,380	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends
0050	202-B240		720	Linear Feet	Removal of Traffic Stripe
0060	202-B276		43	Linear Feet	Removal of Debris from Drainage Channel
0070	203-G002	(E)	100	Cubic Yard	Excess Excavation, LVM, AH
0080	209-A005		550	Square Yard	Geotextile Stabilization, Type V, Non-Woven
0090	221-A001	(S)	4	Cubic Yard	Concrete Paved Ditch
0100	304-D002	(GT)	1,100	Ton	Granular Material, Crushed Stone
0110	406-D001		3,500	Square Yard	Fine Milling of Bituminous Pavement, All Depths
0120	406-D001		108,702	Square Yard	Fine Milling of Bituminous Pavement, All Depths Profile Milling
0130	606-B003		1,038	Linear Feet	Guard Rail, Class A, Type 1, 'W' Beam, Metal Post
0140	606-C001		3	Each	Guard Rail, Cable Anchor Type 1, Metal Post
0150	606-D003		2	Each	Guard Rail, Bridge End Section, Special Design
0160	606-D005		2	Each	Guard Rail, Bridge End Section, Type A
0170	606-D012		2	Each	Guard Rail, Bridge End Section, Type D Modified
0180	606-E005		7	Each	Guard Rail, Terminal End Section, Flared
0190	619-A1001		13	Mile	Temporary Traffic Stripe, Continuous White
0200	619-A2001		11	Mile	Temporary Traffic Stripe, Continuous Yellow
0210	619-A3001		14	Mile	Temporary Traffic Stripe, Skip White
0220	619-A5001		38,500	Linear Feet	Temporary Traffic Stripe, Detail
0230	619-A6001		115	Square Feet	Temporary Traffic Stripe, Legend
0240	619-A6002		1,460	Linear Feet	Temporary Traffic Stripe, Legend
0250	619-D1001		32	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet
0260	619-D2001		184	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More
0270	619-G4005		48	Linear Feet	Barricades, Type III, Single Faced
0280	620-A001		1	Lump Sum	Mobilization
0290	630-F003		22	Each	Delineators, Flexible Post Mounted, Crossover, Type II
0300	630-F006		26	Each	Delineators, Guard Rail, White
0310	630-F007		20	Each	Delineators, Guard Rail, Yellow
0320	630-G003		3	Each	Type 3 Object Markers, OM-3L, Post Mounted
0330	630-G007		4	Each	Type 3 Object Markers, OM-3R, Post Mounted
0340	907-403-A003	(BA1)	1,800	Ton	12.5-mm, ST, Asphalt Pavement
0350	907-407-A001	(A2)	13,364	Gallon	Asphalt for Tack Coat

For Informational Purposes Only

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
0360	907-411-A001	(BA1)	6,343	Ton	Ultra Thin Asphalt Pavement
0370	907-414-A001		112,816	Square Yard	Scrub Seal
0380	907-414-B001	(A2)	5	Gallon	Asphalt for Fog Seal
0390	907-618-A001		1	Lump Sum	Maintenance of Traffic
0400	907-626-A010		7	Mile	6" Thermoplastic Traffic Stripe, Skip White
0410	907-626-C010		12	Mile	Thermoplastic Audible Bump Edge Stripe
0420	907-626-C014		7	Mile	6" Thermoplastic Edge Stripe, Continuous White
0430	907-626-F005		6	Mile	6" Thermoplastic Edge Stripe, Continuous Yellow
0440	907-626-G004		9,000	Linear Feet	Thermoplastic Detail Stripe, White
0450	907-626-G005		10,250	Linear Feet	Thermoplastic Detail Stripe, Yellow
0460	907-626-H009		115	Square Feet	Thermoplastic Legend, White
0470	907-626-H010		2,200	Linear Feet	Thermoplastic Legend, White
0480	907-627-J001		145	Each	Two-Way Clear Reflective High Performance Raised Markers
0490	907-627-K001		615	Each	Red-Clear Reflective High Performance Raised Markers
0500	907-627-L001		115	Each	Two-Way Yellow Reflective High Performance Raised Markers
0510	907-824-A003		40	Square Feet	General Epoxy Repair

For Informational Purposes Only

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.

* * * *

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

For Informational Purposes Only

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
9. _____	_____ _____	_____ _____	_____ _____	_____ _____	
10. _____	_____ _____	_____ _____	_____ _____	_____ _____	

(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 $ _____.

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

For Informational Purposes Only

Certification with regard to the Performance of Previous Contracts or Subcontracts subject to the Equal Opportunity Clause and the filing of Required Reports

The Bidder hereby certifies that he has ____, has not ____, participated in a previous contract or subcontract subject to the Equal Opportunity Clause, as required by Executive Orders 10925, 11114, or 11246, and that he has ____, has not ____, filed with the Joint Reporting Committee, the Director of the Office of Federal Contract Compliance, a Federal Government contracting or administering agency, or the former President's Committee on Equal Employment Opportunity, all reports due under the applicable filing requirements.

_____
(COMPANY)

DATE: _____

NOTE: The above certification is required by the Equal Employment Opportunity Regulations of the Secretary of Labor (41 CFR 60-1.7 (b) (1)), and must be submitted by bidders and proposed subcontractors only in connection with contracts and subcontracts which are subject to the Equal Opportunity Clause. Contracts and Subcontracts which are exempt from the Equal Opportunity Clause are set forth in 41 CFR 60-1.5. (Generally only contracts or subcontracts of $10,000 or under are exempt.)

Currently, Standard Form 100 (EEO-1) is the only report required by the Executive Orders or their implementing regulations.

Proposed prime Contractors and Subcontractors who have participated in a previous contract or subcontract subject to the Executive orders and have not filed the required reports should note that 41 CFR 60-1.7 (b) (1) prevents the award of contracts and subcontracts unless such Contractors submit a report covering the delinquent period or such other period specified by the Federal Highway Administration or by the Director, Office of Federal Contract Compliance, U. S. Department of Labor.

For Informational Purposes Only

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION

I,_____,
(Name of person signing bid)

individually, and in my capacity as_____ of
(Title of person signing bid)

_____do hereby certify under
(Name of Firm, partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that_____

_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **STP-0456-00(006)/ 109783301000**

in **Lauderdale** 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:

a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;

b) Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;

c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in (b) above; and

d) Have not within a three-year period preceding this application/ proposal had one or more public transactions (Federal, State or local) terminated for cause or default.

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.

For Informational Purposes Only

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.

The bidder further certifies that the certification requirements contained in Section XI of Form FHWA 1273, will be or have been included in all subcontracts, material supply agreements, purchase orders, etc. except those procurement contracts for goods or services that are expected to be less than the Federal procurement small purchase threshold fixed at 10 U.S.C. 2304(g) and 41 U.S.C. 253(g) (currently $25,000) which are excluded from the certification requirements.

The bidder further certifies, to the best of his or her knowledge and belief, that:

1) No Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.

2) If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this contract, Standard Form-LLL, Disclosure Form to Report Lobbying, in accordance with its instructions will be completed and submitted.

The certification contained in (1) and (2) above is a material representation of fact upon which reliance is placed and a prerequisite imposed by Section 1352, Title 31, U.S. Code prior to entering into this contract. Failure to comply shall be subject to a civil penalty of not less than $10,000 and not more than $100,000. The bidder shall include the language of the certification in all subcontracts exceeding $100,000 and all subcontractors shall certify and disclose accordingly.

All of the foregoing is true and correct.

Executed on _____ _____

Signature

(01/2016 F)

For Information Purposes Only

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SAM.GOV Registration and Unique Entity ID

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

Bidders are advised that prior to the award of this contract, they MUST be registered in the System for Award Management.

I (We) acknowledge that this contract cannot be awarded if I (We) are not registered in the System for Award Management prior to the award of this contract. _____ (Yes / No)

I (We) have a SAM Unique Entity ID. _____ (Yes / No)

SAM Unique Entity ID: _____

Company Name: _____

Company e-mail address: _____

For Informational Purposes Only

SECTION 902

CONTRACT FOR _____
LOCATED IN THE COUNTY(IES) OF _____

STATE OF MISSISSIPPI
COUNTY OF HINDS

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

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

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

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

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

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

For Informational Purposes Only

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

Witness our signatures, this the _____ day of _____, 20___.

_____
Contractor

By: _____
Title: _____

_____
Signed and sealed in the presence of: (name and address of witness)

_____
_____

MISSISSIPPI TRANSPORTATION COMMISSION

_____
Executive Director

_____
Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____, _____, Minute Book No._____, Page No. _____.

For Informational Purposes Only

SECTION 903
PERFORMANCE BOND

PERFORMANCE BOND FOR THE FOLLOWING CONTRACT:
Project No.: _____

For the construction of: _____

Contract date: _____ Contract Price: _____

FOR OWNER: MISSISSIPPI TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON, MISSISSIPPI 39201.

CONTRACTOR (full legal name, contact person, phone number and address):
_____
_____
_____
_____

SURETY (legal name, phone number, principal place of business and address ***for notice purposes***):
_____
_____
_____

Second Surety (if applicable):
_____
_____
_____

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

1. If the Contractor fully and faithfully performs the Contract, the Surety and the Contractor shall have no obligation under this Bond.

2. The Surety's obligation under this Bond shall arise after:
   (a) the Owner first provides notice to the Contractor and the Surety that termination is imminent, pursuant to the current edition of the Mississippi Standard Specifications for Road and Bridge Construction, which is a part of the Contract; and
   (b) the Owner declares a Contractor Default, terminates the Contract, and notifies the Surety.

3. Within 20 calendar days as set forth in Section 108.08 of the current edition of the Mississippi Standard Specifications for Road and Bridge Construction, the Surety shall, after discussions with and consent from the Owner, and at the Surety's expense, elect to take one of the following actions:
   (a) Arrange for the Contractor, with the consent of the Owner, to perform and complete the Contract;
   (b) Undertake to perform and complete the Contract itself, through its agents or independent contractors;
   (c) Waive its right to perform and complete, arrange for completion, or obtain a new contractor, and after investigation, determine the amount for which it may be liable to the Owner (subject to the consent of the Owner) and as soon as practicable after the amount is determined, make payment to the Owner.

For Informational Purposes Only

4. If the Surety does not proceed, within a reasonable time frame, to enact and carry out the election made in Paragraph 3, then the Surety shall be deemed to be in default on this Bond, and the Owner shall be entitled to enforce any remedy available to it under the Contract and applicable law.

5. Subject to the commitment by the Owner to pay the Balance of the Contract Price, the Surety is obligated, without duplication, for
   (a) the responsibilities of the Contractor for correction of defective work and completion of the Contract;
   (b) additional legal, design professional and delay costs resulting from the Contractor's Default, and resulting from the actions or failure to act of the Surety under Paragraph 3; and
   (c) liquidated damages, or if no liquidated damages are specified in the Contract, actual damages caused by delayed performance or non-performance of the Contractor.

6. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

7. The penal sum of the Bond shall be equal to the Contract Price; however, the penal sum may be increased or decreased as the result of any subsequent Supplemental Agreements and/or final contract quantities.

8. Notice to the Surety, the Owner or the Contractor shall be mailed or delivered to the address listed for notice purposes on the first page of this Bond.

CONTRACTOR AS PRINCIPAL
Company: _____

Signature: _____
Name: _____
Title: _____
Address: _____
_____

SURETY
Company: _____

Signature: _____ MS Insurance ID # _____
Name: _____
Title: _____
Address: _____
_____

SURETY (if applicable)
Company: _____

Signature: _____ MS Insurance ID # _____
Name: _____
Title: _____
Address: _____
_____

For Informational Purposes Only

SECTION 903
PAYMENT BOND

PAYMENT BOND FOR THE FOLLOWING CONTRACT:
Project No.: _____

For the construction of: _____

Contract date: _____ Contract Price: _____

FOR OWNER: MISSISSIPPI TRANSPORTATION COMMISSION, 401 N. WEST STREET, JACKSON, MISSISSIPPI 39201.

CONTRACTOR (full legal name, contact person, phone number and address):
_____
_____
_____

SURETY (legal name, phone number, principal place of business and address ***for notice purposes***):
_____
_____
_____
Second Surety (if applicable):
_____
_____
_____

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

1. If the Contractor promptly makes payment of all sums due to any and all subcontractors, sub-subcontractors, suppliers to the Contractor, suppliers to subcontractors and/or laborers who have performed work on the project site, and defends, indemnifies and holds harmless the Owner from claims, demands, liens or suits by any person or entity seeking payment for labor, materials or equipment furnished for use in the performance of the Contract, then the Surety and the Contractor shall have no obligation under this Bond.

2. The Owner shall provide notice to the Surety of any claims, demands, liens or suits against the Owner or the Owner's property that it receives from any person or entity ("Claimants") seeking payment for labor, materials or equipment furnished for use in the performance of the Contract.

3. Upon notice of any claims, demands, liens or suits provided by the Owner or Contractor or given to the Surety by a Claimant, the Surety shall promptly and at the Surety's expense, defend, indemnify and hold harmless the Owner against said claim, demand, lien or suit and shall take the following additional actions:
    (a) Send an answer to the Claimant, with a copy to the Owner, within sixty (60) days after receipt of the Claim, stating the amounts that are undisputed and the basis for challenging any amounts that are disputed; and
    (b) Pay or arrange for payment of any undisputed amounts.

For Informational Purposes Only

4. The Surety shall not be liable to the Owner, Claimants or others for obligations of the Contractor that are unrelated to the Contract. The Owner shall not be liable for the payment of any costs or expenses of any Claimant under this Bond and shall have no obligation under this Bond to make payments to, or give notice on behalf of, Claimants, or otherwise have any obligations to Claimants under this Bond.

5. The Surety hereby waives notice of any change, including changes of time, to the Contract or to related subcontracts, purchase orders and other obligations.

6. The penal sum of the Bond shall be equal to the Contract Price; however, the penal sum may be increased or decreased as the result of any subsequent Supplemental Agreements and/or final contract quantities.

CONTRACTOR AS PRINCIPAL
Company: _____

Signature: _____
Name: _____
Title: _____
Address: _____
_____

SURETY
Company: _____

Signature: _____ MS Insurance ID # _____
Name: _____
Title: _____
Address: _____
_____

SURETY (if applicable)
Company: _____

Signature: _____ MS Insurance ID # _____
Name: _____
Title: _____
Address: _____
_____

For Informational Purposes Only

BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we_____
Contractor

_____
Address

_____
City, State ZIP

As principal, hereinafter called the Principal, and _____
Surety

a corporation duly organized under the laws of the state of _____

as Surety, hereinafter called the Surety, are held and firmly bound unto **State of Mississippi, Jackson, Mississippi**

As Obligee, hereinafter called Obligee, in the sum of **Five Per Cent (5%) of Amount Bid**

Dollars($_____)

for the payment of which sum will and truly to be made, the said Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for **Mill & Overlay approximately 3.4 miles of SR 854 from SR 39 to the Naval Air Station, known as Federal Aid Project No. STP-0456-00(006) / 109783301 in Lauderdale County.**

NOW THEREFORE, the condition of this obligation is such that if the aforesaid Principal shall be awarded the contract, the said Principal will, within the time required, enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this obligation to be void; otherwise the Principal and Surety will pay unto the Obligee the difference in money between the amount of the bid of the said Principal and the amount for which the Obligee legally contracts with another party to perform the work if the latter amount be in excess of the former, but in no event shall liability hereunder exceed the penal sum hereof.

Signed and sealed this _____day of _____, 20___

_____
(Principal) (Seal)

_____ By:_____
(Witness) (Name) (Title)

_____
(Surety) (Seal)

_____ By:_____
(Witness) (Attorney-in-Fact)

_____
(MS Agent)

_____
Mississippi Insurance ID Number

FORM CSD-612
Rev. 1 / 2015

YEAR 2026 PROGRESS SCHEDULE YEAR 2027

PROJECT NUMBER STP-0456-00(006) / 109783-301
COUNTY Lauderdale

WORK PHASE NO.	DESCRIPTION	LINE NUMBERS	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	
1	Miscellaneous	20-100,140-190,260-340,390, 510				0				80																	
2	Clearing	10				5		33																			
3	Milling & Pavement	110-130,350-380						33		77																	
4	Pavement Markings	200-250,400-500								77	80																
	LET:	2/24/2026																									
	NOA:	3/10/2026																									
	NTP/BCT:	4/9/2026																									
	W.D.:	80																									

MONTH	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	JAN	FEB	MAR	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOV	DEC	172 WORKING DAYS PER YEAR
ANTICIPATED WORKING DAYS PER MONTH	6	7	11	15	19	20	21	21	20	16	11	5	6	7	11	15	19	20	21	21	20	16	11	5	

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.