MDOT Use Only
Checked _____
Loaded _____
Keyed _____

01 -

SM No. CMP1041580031

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF

01
Slide Repair on SR 41 approximately 550 feet North of the SR 41 & SR 15 Intersection, known as State Project No. MP-1041-58(003) / 307744302 in Pontotoc County.

Project Completion: 10/25/2021

(STATE DELEGATED)

NOTICE

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

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

SECTION 900

OF THE CURRENT 2017 STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION

JACKSON, MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TABLE OF CONTENTS

PROJECT: MP-1041-58(003)/307744302 - Pontotoc

PROJECT: MP-1041-58(003)/307744302 - Pontotoc

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

07/14/2021 09:37 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., Thursday, July 22, 2021, from Bid Express Service and shortly thereafter publicly read in the Construction Division for:

Slide Repair on SR 41 approximately 550 feet North of the SR 41 & SR 15 Intersection, known as State Project No. MP-1041-58(003) / 307744302 in Pontotoc County.

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

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

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

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

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

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

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

BRAD WHITE
EXECUTIVE DIRECTOR

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. 9 **CODE: (IS)**

DATE: 03/01/2017

SUBJECT: Federal Bridge Formula

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

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

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

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

or

http://www.ops.fhwa.dot.gov/Freight/publications/brdg_frm_wghts/bridge_formula_all_rev.pdf

An on line **BRIDGE FORMULA WEIGHTS CALCULATOR** is available at

http://ops.fhwa.dot.gov/freight/sw/brdgcalc/calc_page.htm

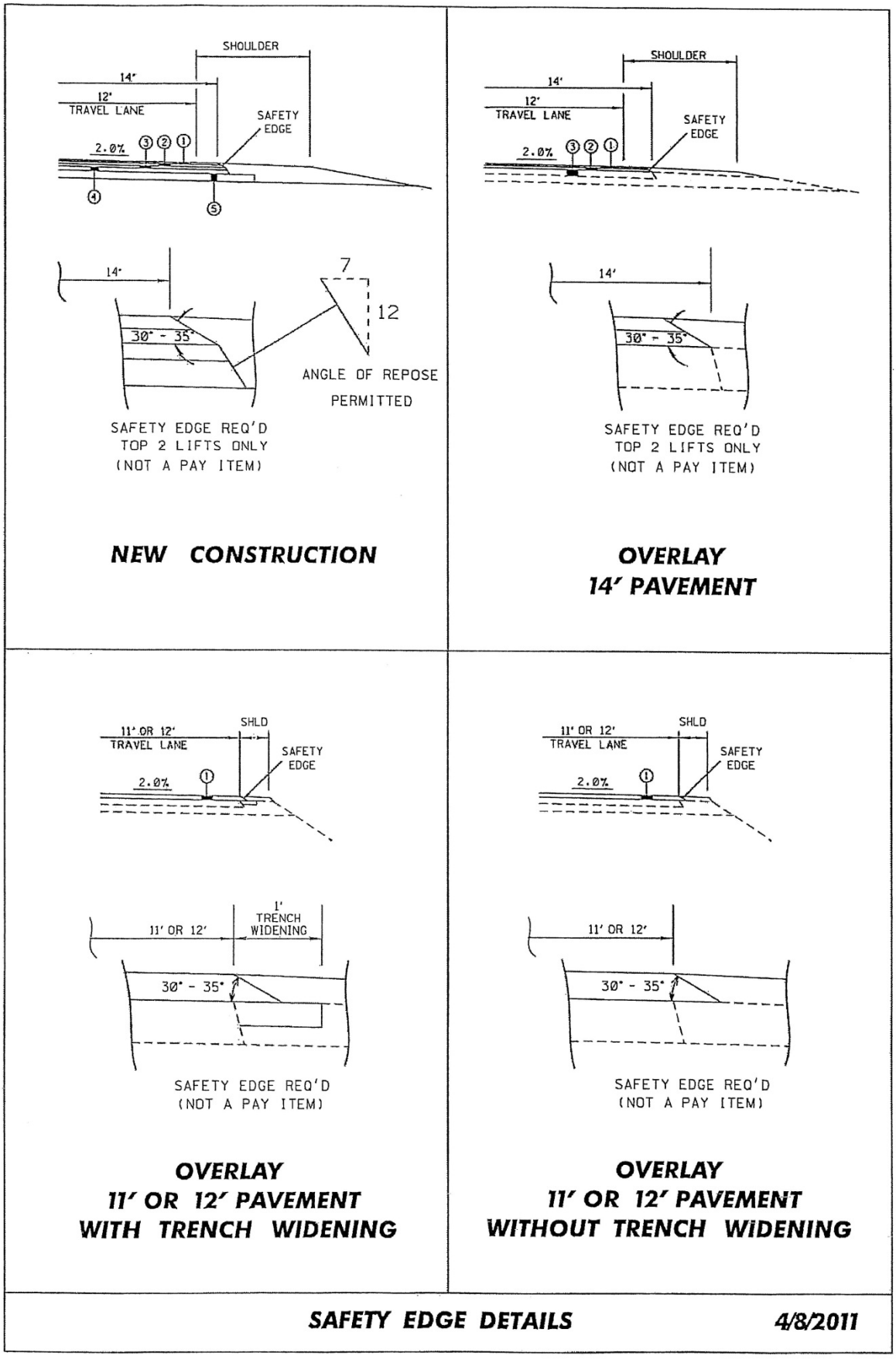
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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. 113 **CODE: (SP)**

DATE: 04/18/2017

SUBJECT: Tack Coat

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

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

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. 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. 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.

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.

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. 2954 **CODE: (SP)**

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. 3117 **CODE: (SP)**

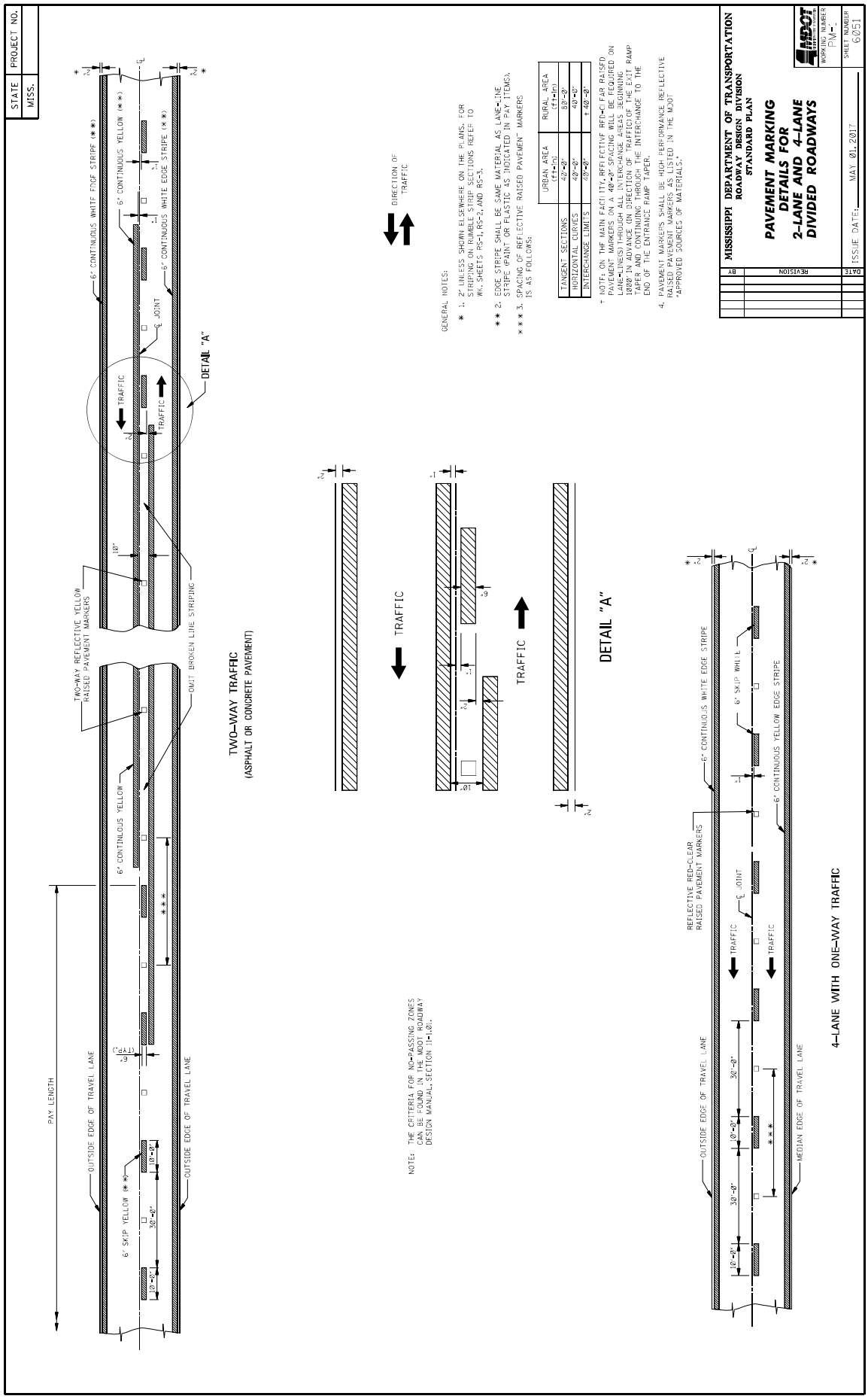
DATE: **02/23/2021**

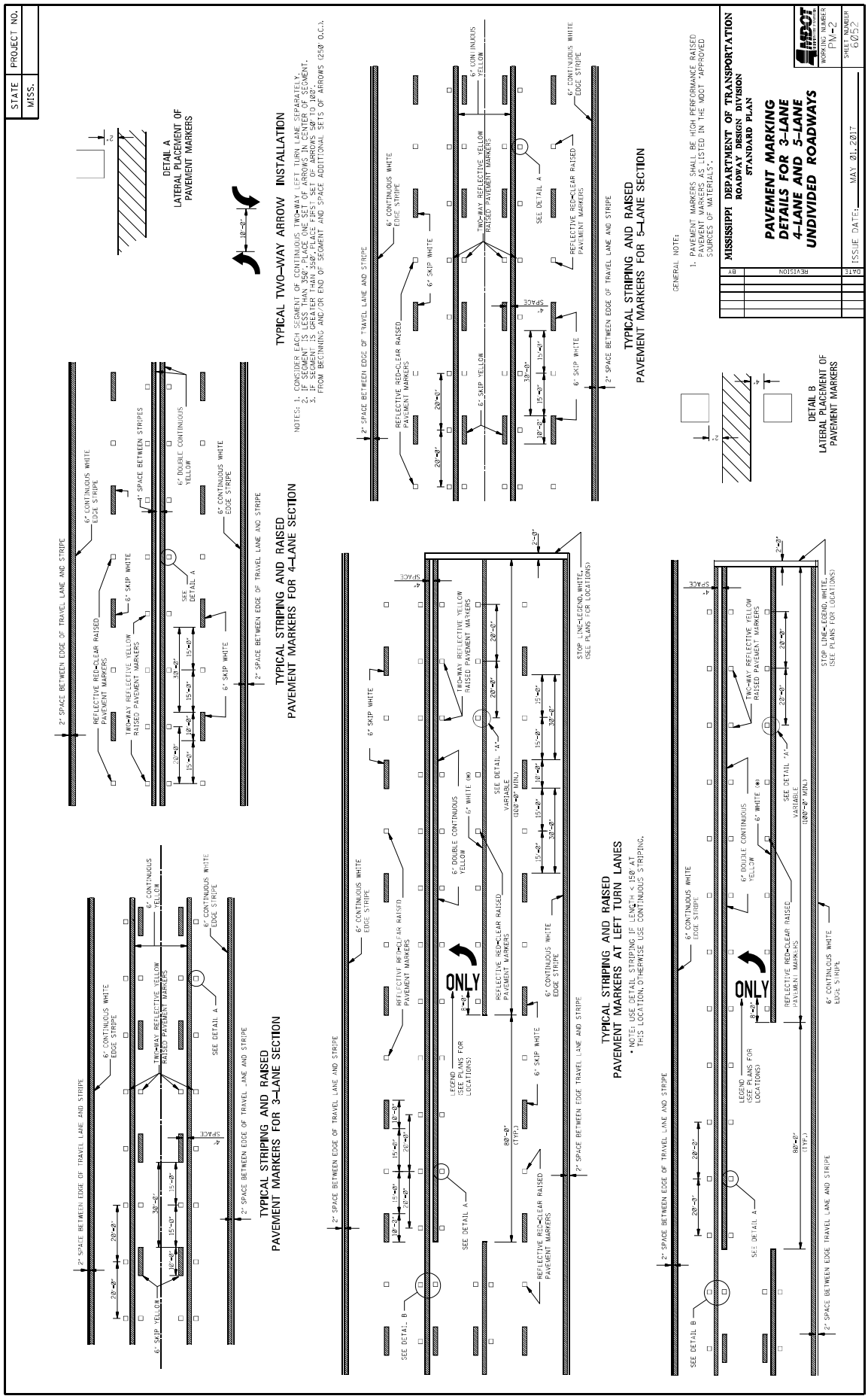
SUBJECT: **Standard Drawings**

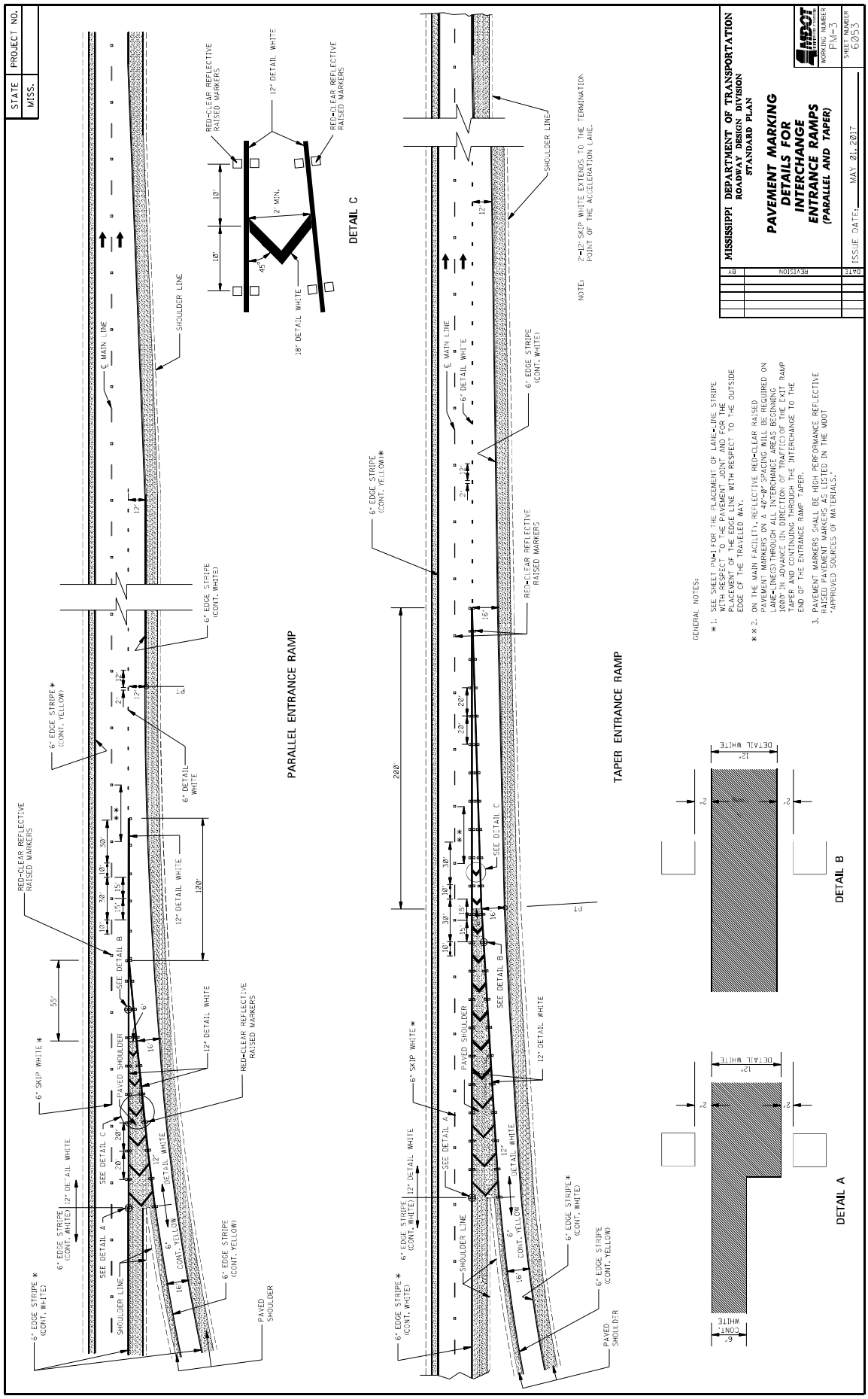
Standard Drawings attached hereto shall govern appropriate items of required work.

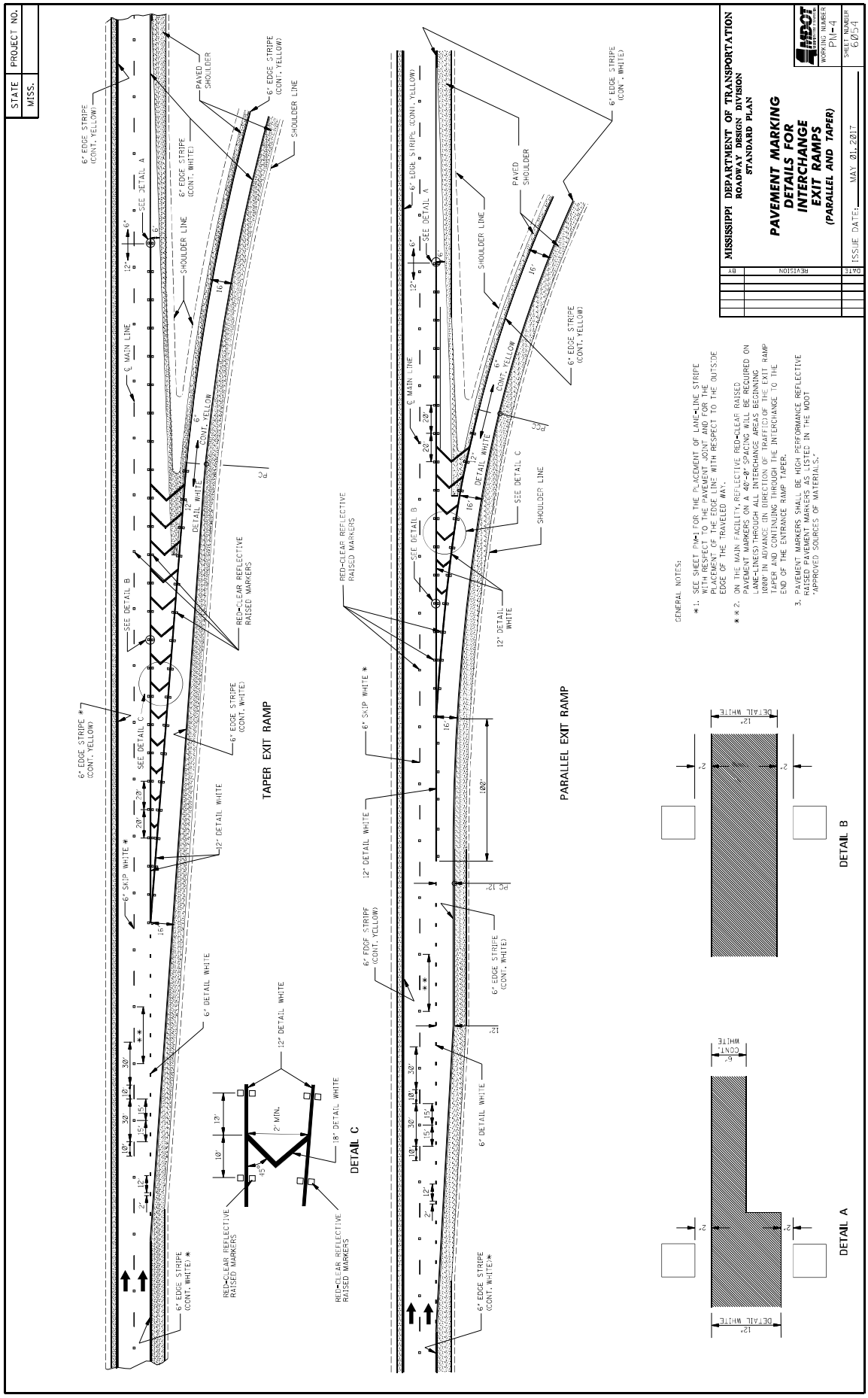
Larger copies of Standard Drawings may be purchased from:

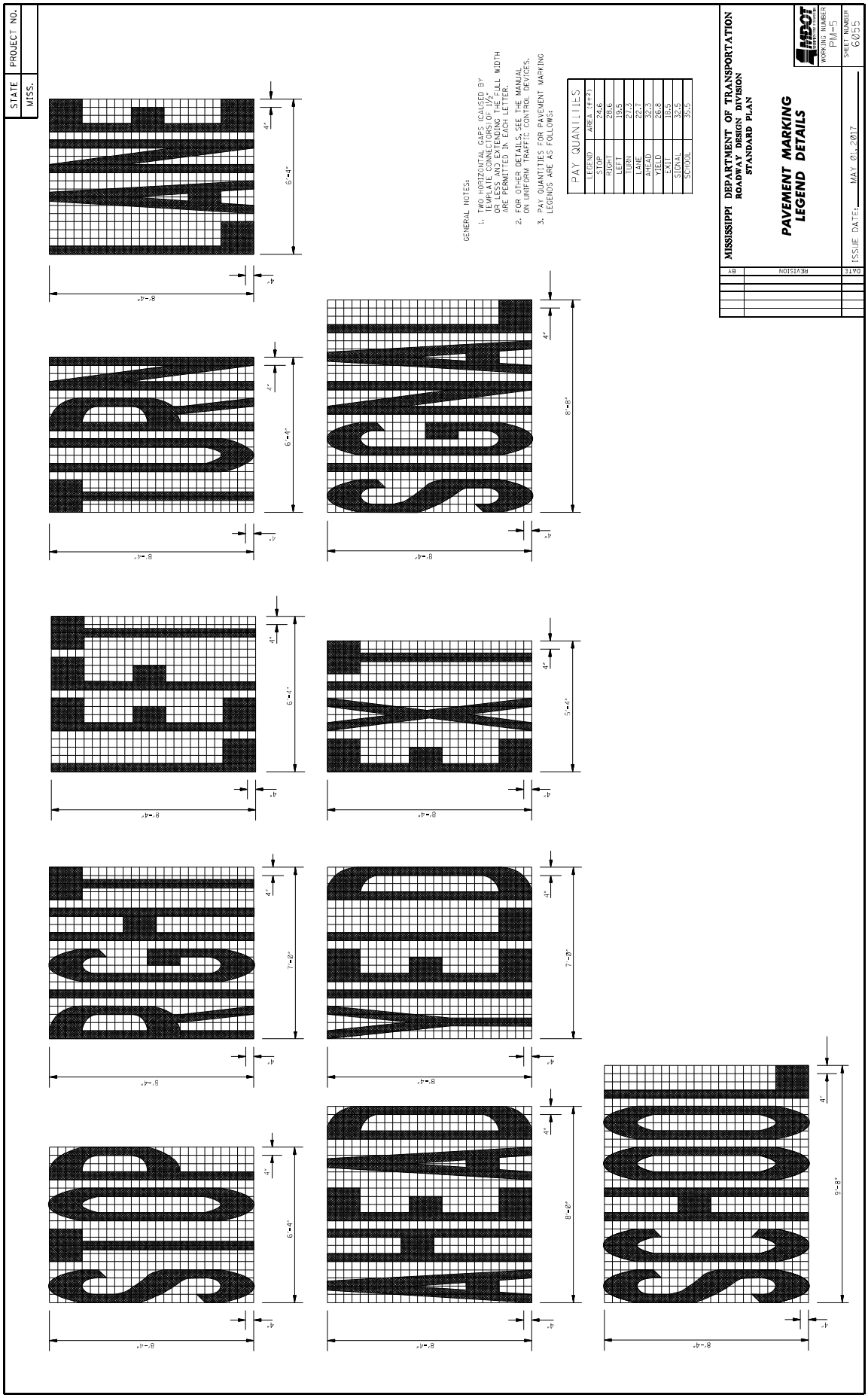
MDOT Plans Print Shop
MDOT Shop Complex, Building C, Room 114
2567 North West Street
P.O. Box 1850
Jackson, MS 39215-1850
Telephone: (601) 359-7460
or FAX: (601) 359-7461
or e-mail: plans@mdot.state.ms.us

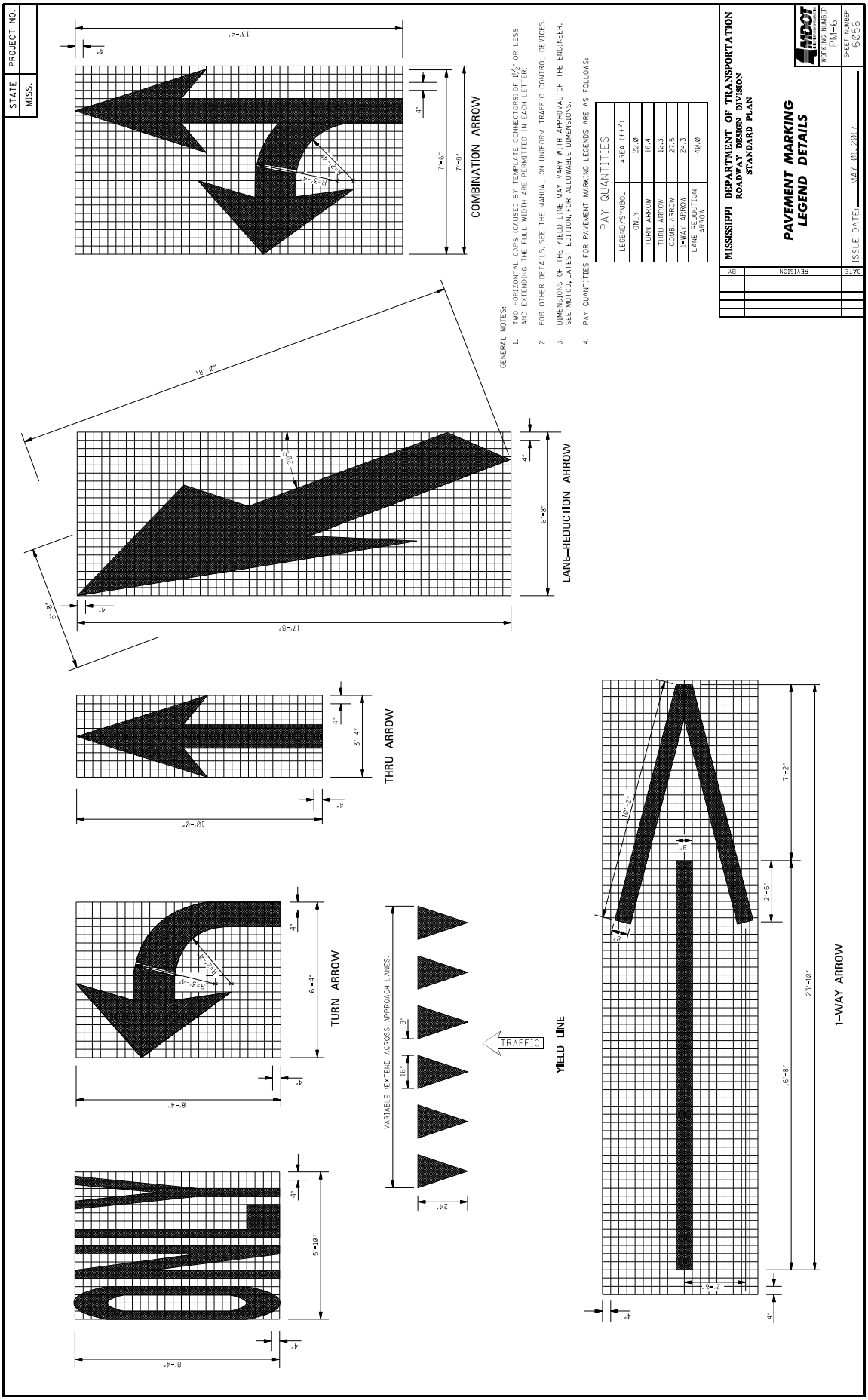

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED ROADWAYS
MDOT
WORKING NUMBER FW-_
SHEET NUMBER 6051
BY REVISION DATE
ISSUE DATE: MAY 01, 2017
TWO-WAY REFLECTIVE YELLOW RAISED PAVEMENT MARKERS
6" CONTINUOUS YELLOW
6" SKIP YELLOW (* *)
6" CONTINUOUS WHITE EDGE STRIPE (* *)
6" CONTINUOUS YELLOW (* *)
℄ JOINT
DETAIL "A"
TRAFFIC
OMIT BROKEN LINE STRIPING
OUTSIDE EDGE OF TRAVEL LANE
PAY LENGTH
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
DIRECTION OF TRAFFIC
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 REFLECTIVE 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 20'-0" † 40'-0"
† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS AT 40'-0" SPACING WILL BE REQUIRED ON LANE LINE THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE OF 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."
NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDOT ROADWAY DESIGN MANUAL, SECTION 1-1.01.
TRAFFIC
DETAIL "A"
REFLECTIVE 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.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING
DETAILS FOR 3-LANE
4-LANE AND 5-LANE
UNDIVIDED ROADWAYS
WORKING NUMBER PM-2
SHEET NUMBER 6052
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
GENERAL NOTE:
1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".
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 AT CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 340' TO 400' 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 3-LANE SECTION
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.
DETAIL B
LATERAL PLACEMENT OF PAVEMENT MARKERS

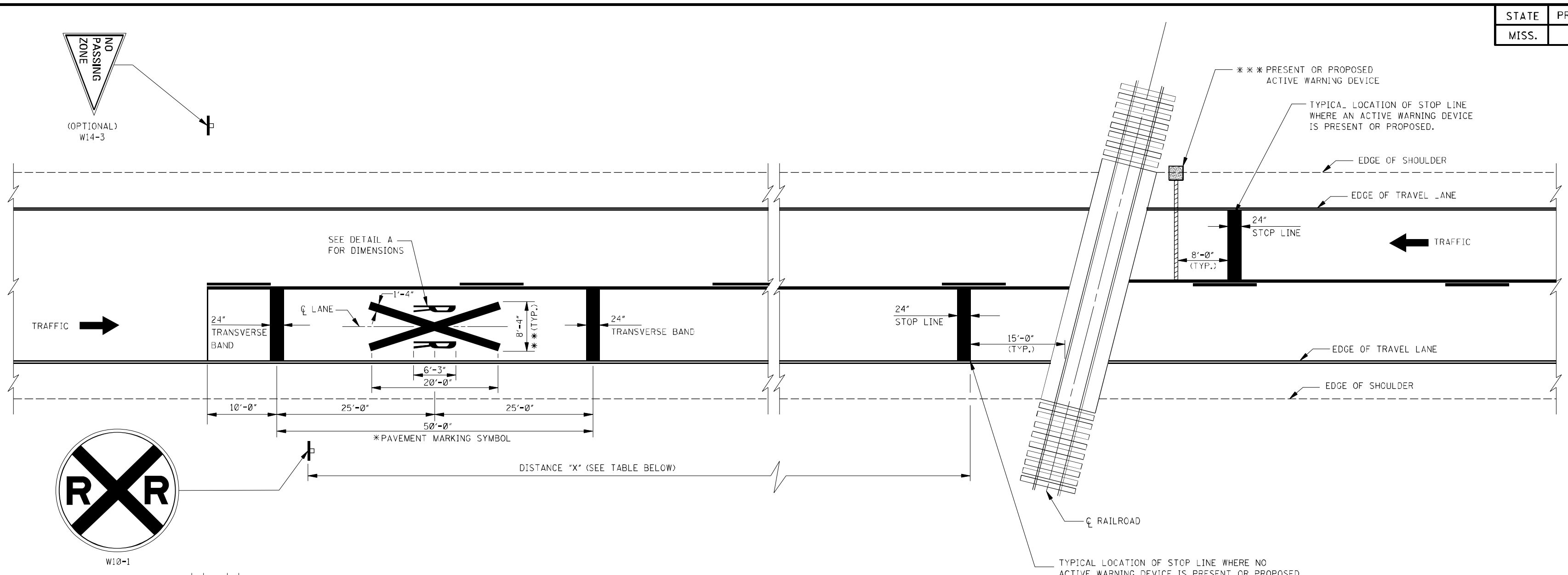

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPER)
WORKING NUMBER FM-3
SHEET NUMBER 6055
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
PARALLEL ENTRANCE RAMP
TAPER ENTRANCE RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
*1. SEE SHEET FM-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, REFLECTIVE 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."
NOTE: 2-12" SKIP WHITE EXTENDS TO THE TERMINATION POINT OF THE ACCELERATION LANE.

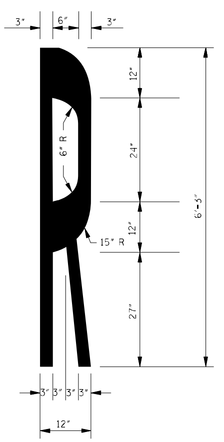

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS (PARALLEL AND TAPER)
WORKING NUMBER PIN-4
SHEET NUMBER 6054
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
TAPER EXIT RAMP
PARALLEL EXIT RAMP
DETAIL A
DETAIL B
DETAIL C
GENERAL NOTES:
* 1. SEE SHEET 6W-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND/OR TIE BAR PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
* * 2. ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINES) 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 REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."


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: MAY 01, 2017
DATE
REVISION
BY
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. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:
PAY QUANTITIES
LEGEND
AREA (SF)
STOP
24.6
RIGHT
28.6
LEFT
19.5
TURN
27.3
LANE
22.1
AHEAD
32.2
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: MAY 01, 2017
DATE
REVISION
BY
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. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
3. DIMENSIONS OF THE YIELD LINE MAY VARY WITH APPROVAL OF THE ENGINEER. SEE MUTCD, LATEST EDITION, FOR ALLOWABLE DIMENSIONS.
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 24.5
LANE REDUCTION ARROW 40.0
COMBINATION ARROW
LANE-REDUCTION ARROW
THRU ARROW
TURN ARROW
YIELD LINE
TRAFFIC
VARIABLE (EXTEND ACROSS APPROACH LANES)
1-WAY ARROW

STATE	PROJECT NO.
MISS.	





DETAIL A
STANDARD "R" PAVEMENT MARKING
FOR R X R SYMBOL

ADVANCE WARNING SIGN PLACEMENT DISTANCE	
POSTED SPEED (mph)	① DISTANCE "X" (ft)
20	100
25	100
30	100
35	100
40	125
45	175
50	250
55	325
60	400
65	475

NOTE:
① DISTANCE "X" MAY BE ADJUSTED IF PROHIBITIVE PHYSICAL CONDITIONS EXIST AT THE DESIGNATED DISTANCE.

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 ft^2), TRANSVERSE BANDS AND STOP LINE SHALL BE PAID FOR AS LEGEND, WHITE.

✱✱✱4. REFER TO THE "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" FOR LOCATION OF PROPOSED WARNING DEVICES AT RAILROAD-HIGHWAY GRADE CROSSINGS.

BY	REVISION	DATE

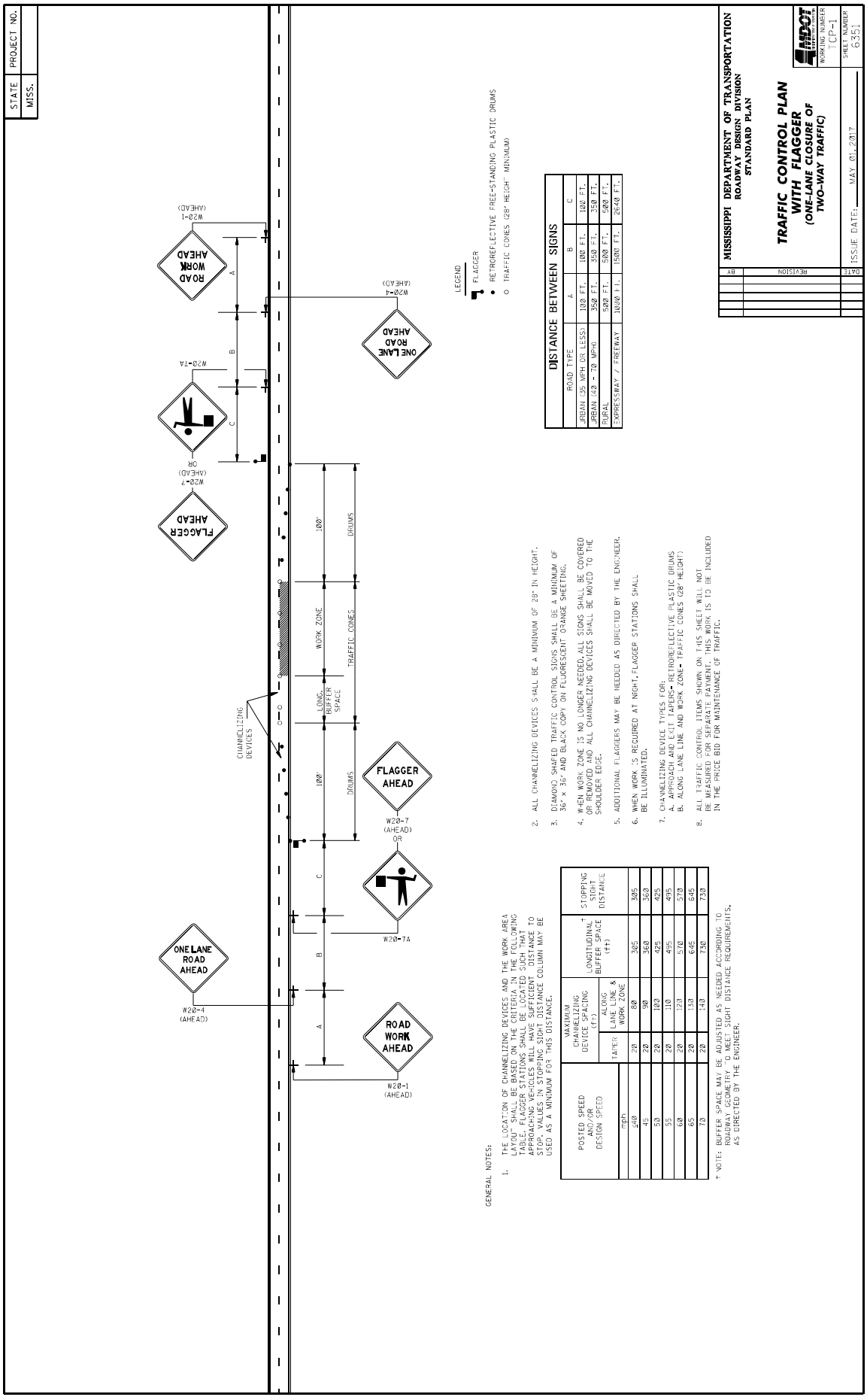
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL PLACEMENT OF WARNING SIGNS AND PAVEMENT MARKINGS AT RAILROAD HIGHWAY GRADE CROSSINGS

ISSUE DATE: MAY 01, 2017

WORKING NUMBER PM-7

SHEET NUMBER 6057



GENERAL NOTES:

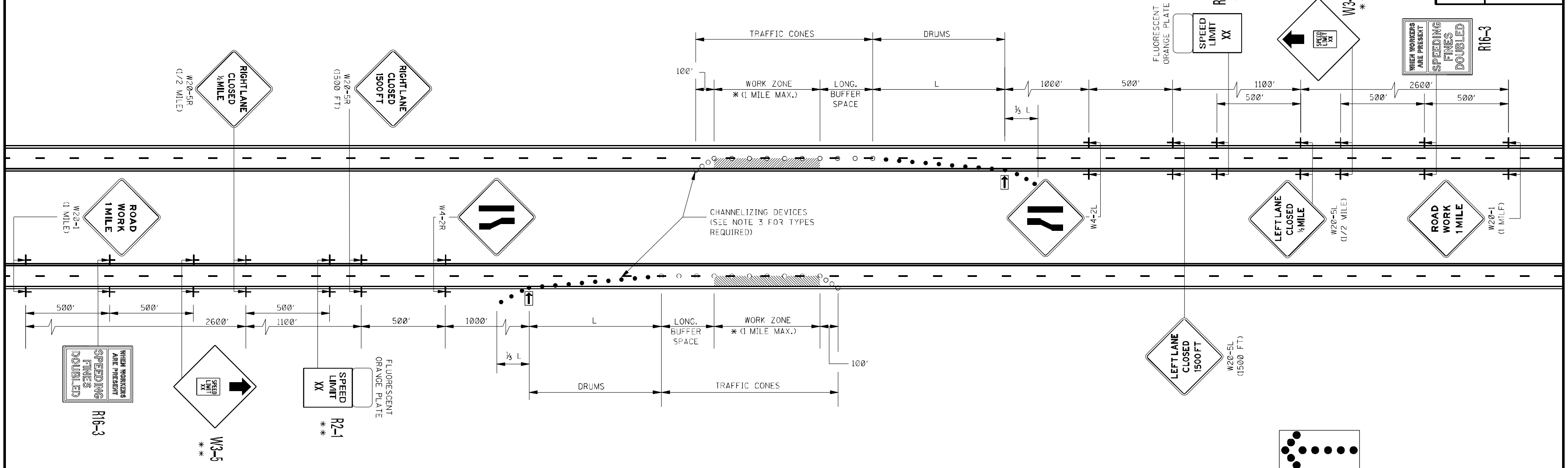
1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE. FLAGGER STATIONS SHALL BE LOCATED SUCH THAT APPROACHING VEHICLES WILL HAVE SUFFICIENT DISTANCE TO STOP. VALUES IN STOPPING SIGHT DISTANCE COLUMN MAY BE USED AS A MINIMUM FOR THIS DISTANCE.

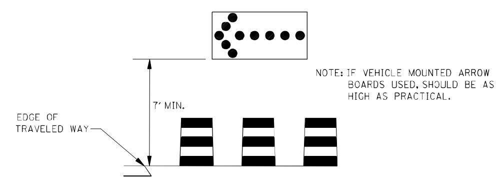
POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		LONGITUDINAL† BUFFER SPACE (ft)	STOPPING SIGHT DISTANCE
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	20	80	305	305
45	20	90	360	360
50	20	100	425	425
55	20	110	495	495
60	20	120	570	570
65	20	130	645	645
70	20	140	730	730

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

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.
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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

STATE	PROJECT NO.
MISS.	





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 RATES †
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = $WS^2/60$ 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 (28" HEIGHT MINIMUM)
   C. EXIT TAPER- TRAFFIC CONES (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 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. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

LEGEND

* OR AS SHOWN ELSEWHERE ON THE PLANS.

** THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.

⇨ FLASHING ARROW PANEL (TYPE "C")

● RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS

○ TRAFFIC CONES (28" HEIGHT MINIMUM)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT LESS THAN 65 MPH

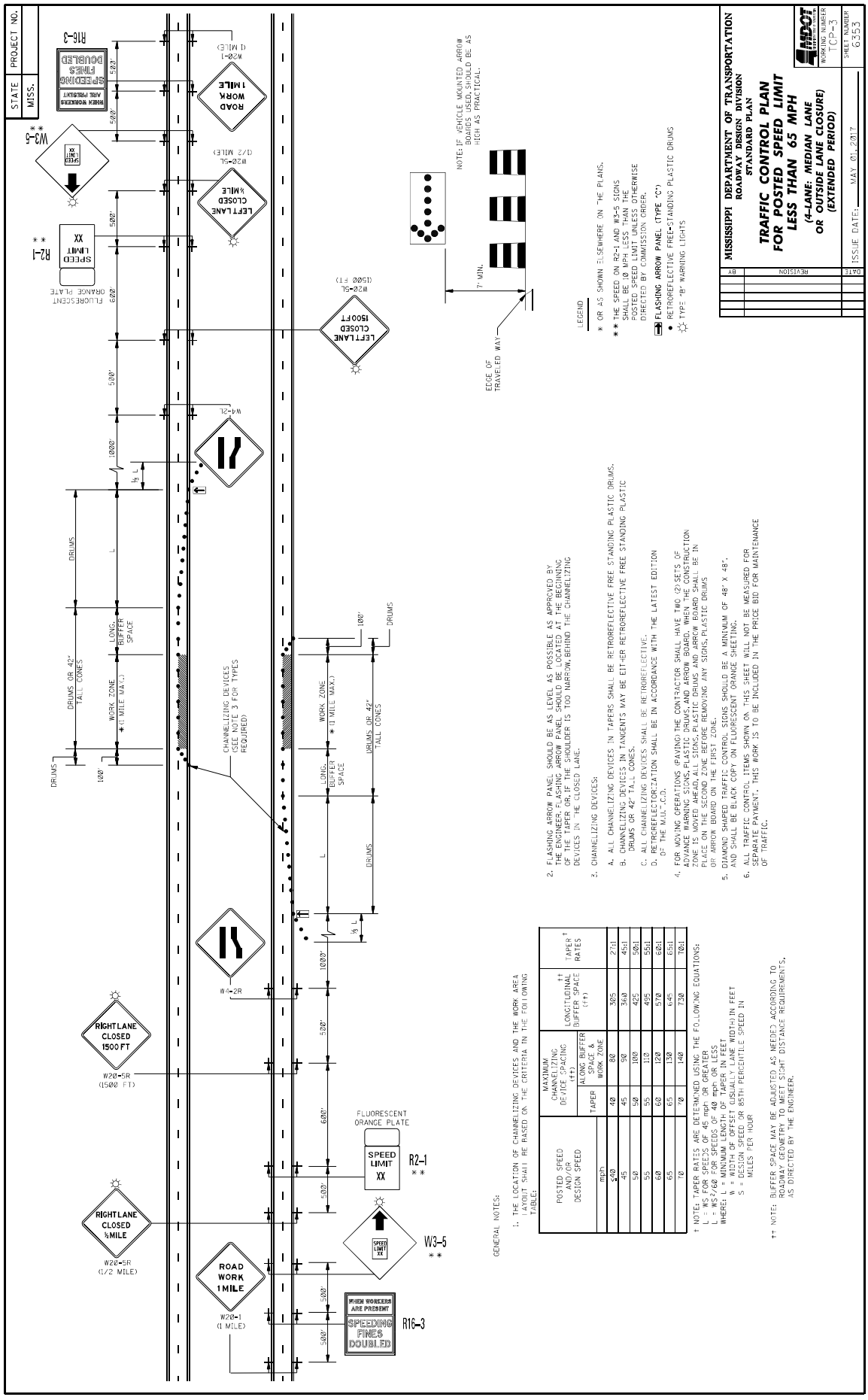
(4-LANE: MEDIAN LANE OR OUTSIDE LANE CLOSURE) (WORK DAY ONLY)

BY | REVISION | DATE

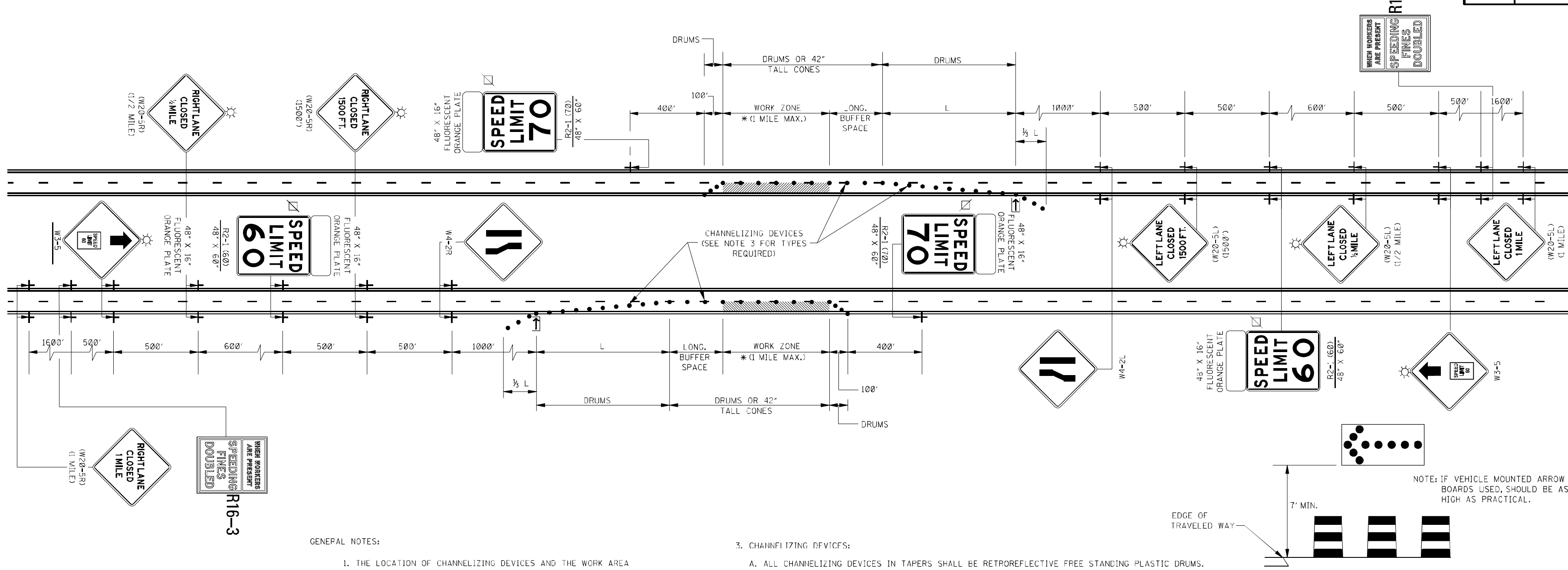
ISSUE DATE: MAY 01, 2017

WORKING NUMBER TCP-2

SHEET NUMBER 6352


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TRAFFIC CONTROL PLAN
FOR POSTED SPEED LIMIT
LESS THAN 65 MPH
(4-LANE: MEDIAN LANE
OR OUTSIDE LANE CLOSURE)
(EXTENDED PERIOD)
WORKING NUMBER TCP-3
SHEET NUMBER 6353
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
ROAD WORK 1 MILE
W20-1 (1 MILE)
LEFT LANE CLOSED ½MILE
W20-5L (1/2 MILE)
LEFT LANE CLOSED 1500FT
W20-5L (1500 FT)
SPEEDING FINES DOUBLED WHEN WORKERS ARE PRESENT
R16-3
SPEED LIMIT XX
R2-1
FLUORESCENT ORANGE PLATE
W3-5
RIGHT LANE CLOSED ½MILE
W20-5R (1/2 MILE)
RIGHT LANE CLOSED 1500 FT
W20-5R (1500 FT)
W4-2R
W4-2L
DRUMS
DRUMS OR 42" TALL CONES
LONG. BUFFER SPACE
WORK ZONE * (1 MILE MAX.)
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
100'
500'
600'
1000'
½ L
L
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
LEGEND
* OR AS SHOWN ELSEWHERE ON THE PLANS.
** THE SPEED ON R2-1 AND W3-5 SIGNS SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT UNLESS OTHERWISE DIRECTED BY COMMISSION ORDER.
FLASHING ARROW PANEL (TYPE "C")
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TYPE "B" WARNING LIGHTS
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 (++)
TAPER
ALONG BUFFER SPACE & WORK ZONE
LONGITUDINAL BUFFER SPACE (++)
TAPER † RATES
mph
40 80 305 2:1
45 90 360 4.5:1
50 100 425 5.0:1
55 110 495 5.5:1
60 120 570 6.0:1
65 130 645 6.5:1
70 140 730 7.0:1
† NOTE: TAPER RATES 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. ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR THE BUFFER 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.
C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE MAS.C.O.
4. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING SIGNS, PLASTIC DRUMS, AND ARROW BOARD, WHEN THE CONSTRUCTION ZONES MOVES 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. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHOULD 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

STATE	PROJECT NO.
MISS.	



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 RATES †
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
mph				
≤40	40	80	305	27:1
45	45	90	360	45:1
50	50	100	425	50:1
55	55	110	495	55:1
60	60	120	570	60:1
65	65	130	645	65:1
70	70	140	730	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = $WS^2/60$ 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 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.
   C. ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
   D. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS 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 WHILE 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. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.

9. A FLUORESCENT ORANGE PLATE 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

LEGEND

✱ OR AS SHOWN ELSEWHERE ON THE PLANS.
⇨ FLASHING ARROW PANEL (TYPE "C")
☒ BLACK LEGEND AND BORDER ON WHITE BACKGROUND
☼ TYPE "B" WARNING LIGHTS
● RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS

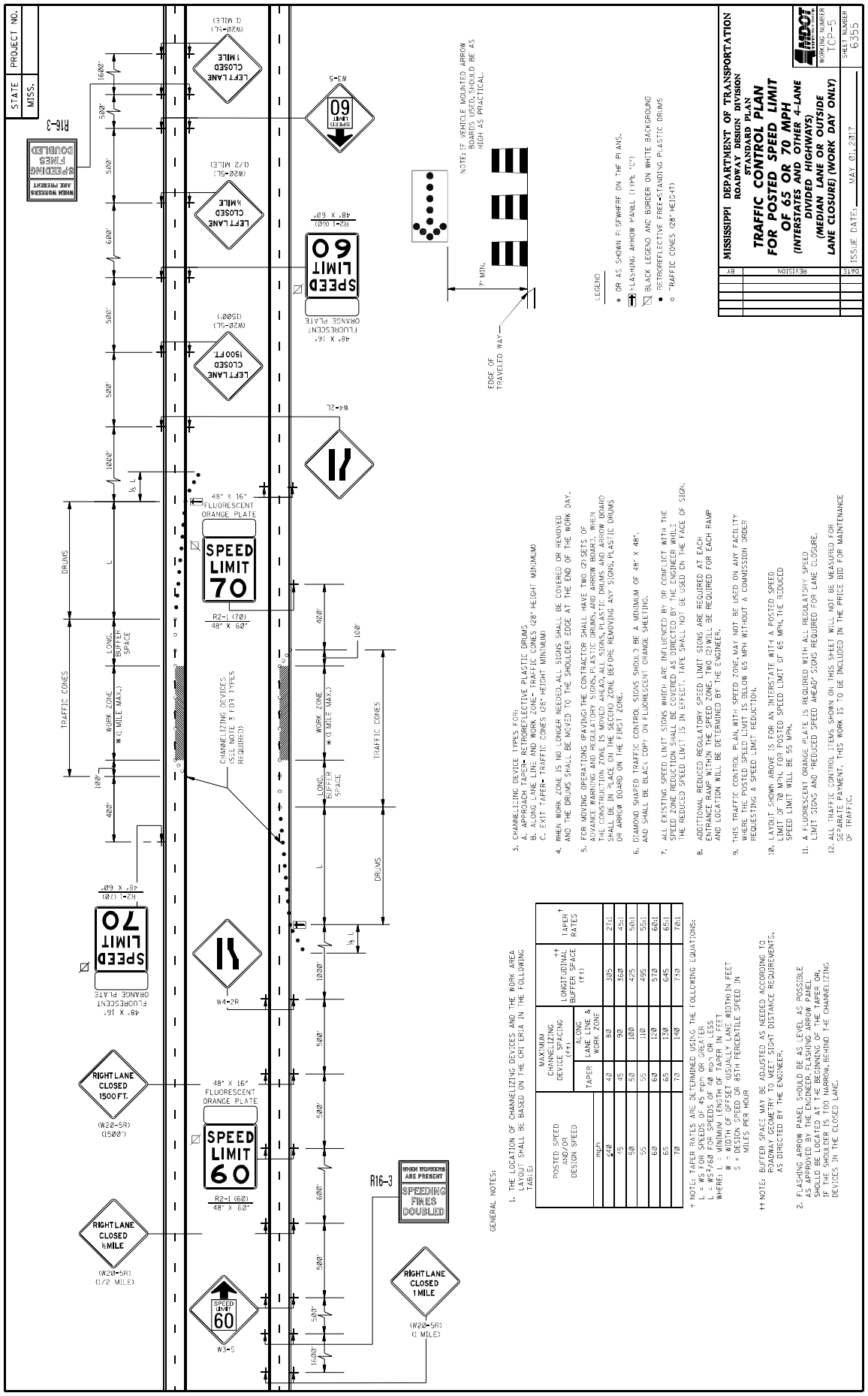
DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

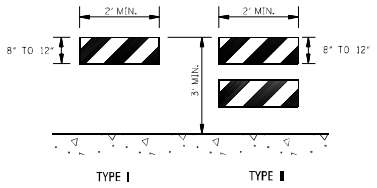
TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT OF 65 OR 70 MPH
(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS) (MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)

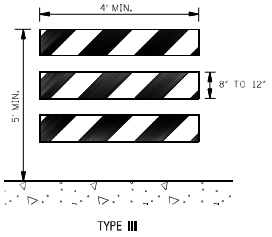
ISSUE DATE: MAY 01, 2017

MDOT
WORKING NUMBER TCP-4
SHEET NUMBER 6354


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) (WORK DAY ONLY)
WORKING NUMBER TCP-5
SHEET NUMBER 6355
ISSUE DATE: MAY 01, 2017
REVISION
BY
DATE
LEGEND
* OR AS SHOWN FSFWHFRF ON THE PLANS.
FLASHING ARROW PANEL (TYPE "C")
BLACK LEGEND AND BORDER ON WHITE BACKGROUND
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TRAFFIC CONES (28" HEIGHT)
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
7' MIN.
EDGE OF TRAVELED WAY
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)
TAPER
ALONG LANE LINE & WORK ZONE
LONGITUDINAL BUFFER SPACE (ft)
TAPER† RATES
mph
40 40 80 305 2:1
45 45 90 360 4.5:1
50 50 100 425 5.0:1
55 55 110 495 5.5:1
60 60 120 570 6.0:1
65 65 130 645 6.5:1
70 70 140 730 7.0:1
† NOTE: TAPER RATES 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 (28" HEIGHT MINIMUM)
C. EXIT TAPER- TRAFFIC CONES (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. DIAMOND SHAPED TRAFFIC CONTROL 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 PLATE 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
R16-3
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
W3-5
SPEED LIMIT 60
R2-1 (60) 48" X 60"
W4-2L
W4-2R
SPEED LIMIT 70
R2-1 (70) 48" X 60"
48" X 16" FLUORESCENT ORANGE PLATE
LEFT LANE CLOSED 1 MILE (1 MILE)
LEFT LANE CLOSED ½MILE (½ MILE)
LEFT LANE CLOSED 1500 FT (1500')
RIGHT LANE CLOSED 1500 FT. (W20-5R) (1500')
RIGHT LANE CLOSED ½MILE (W20-5R) (1/2 MILE)
RIGHT LANE CLOSED 1 MILE (W20-5R) (1 MILE)
TRAFFIC CONES
DRUMS
WORK ZONE * (1 MILE MAX.)
LONG. BUFFER SPACE
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
100'
400'
500'
600'
1000'
1600'
½ L
L
W

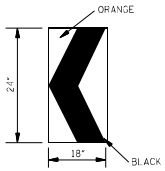
STATE	PROJECT NO.
MISS.	





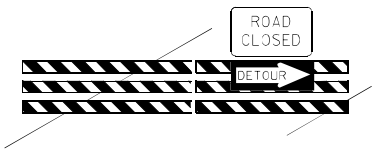
STANDARD BARRICADES

1. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
2. RAIL STRIPE SHALL 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 TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
4. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.
5. BARRICADES ARE CLASSIFIED BY FHWA AS CATEGORY II WORK ZONE DEVICES WHICH REQUIRE CRASHWORTHINESS ACCEPTANCE LETTERS. TO DATE, 2-IN. THICK TIMBER RAILS HAVE NOT BEEN SUCCESSFULLY CRASH TESTED. A LIST OF CRASHWORTHY BARRICADES AND OTHER CATAGORY II DEVICES CAN BE FOUND ON FHWA'S WEBSITE: http://safety.fhwa.dot.gov/roadway_dept/policy.guide/road_hardware/cat2.cfm



CHEVRON SIGN DETAIL

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.



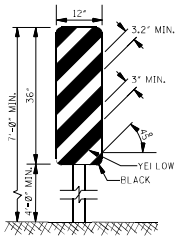
BARRICADE CLOSING A ROAD

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.	24" MIN.	48" MIN.
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

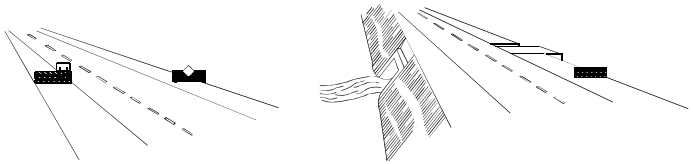
* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in² OF REFLECTIVE AREA FACING TRAFFIC.



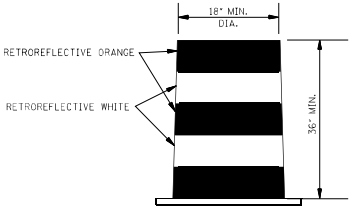
TYPE 3 OBJECT MARKER (OM-3R)

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 OM-3R IS SHOWN. THE OM-3L 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.



WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
   A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
   B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) RETROREFLECTIVE, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHOULD BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

BY | DATE | REVISION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

MDOT

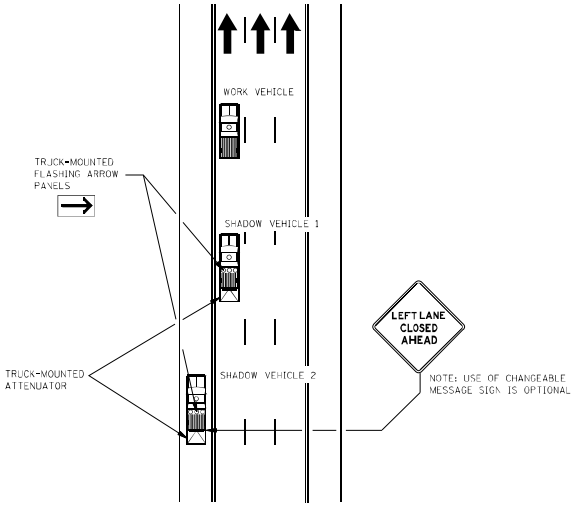
WORKING NUMBER: TCP-8

ISSUE DATE: MAY 31, 2017

SHEET NUMBER: 6358

STATE	PROJECT NO.
MISS.	

MOBILE OPERATIONS ON MULTILANE ROAD

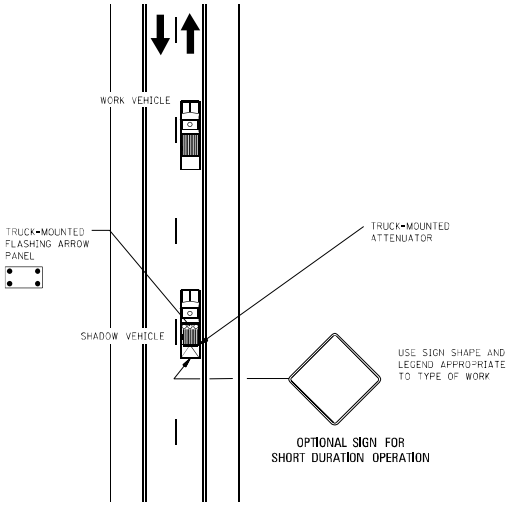


MOBILE OPERATIONS ON MULTILANE ROAD

NOTES FOR MULTILANE LANE OPERATION:

1. VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
2. SHADOW VEHICLE 2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK MOUNTED ATTENUATOR (TMA). AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON SHADOW VEHICLE 2 SO AS NOT TO OBSCURE THE ARROW PANEL.
3. SHADOW VEHICLE 1 SHOULD BE EQUIPPED WITH AN ARROW PANEL 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. WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, SHADOW VEHICLE 2 SHOULD BE ELIMINATED.
6. ON HIGH-SPEED ROADWAYS, A THIRD SHADOW VEHICLE SHOULD BE USED (i.e., VEHICLE 3 ON THE SHOULDER (IF PRACTICAL), VEHICLE 2 IN THE CLOSED LANE, AND VEHICLE 1 IN THE CLOSED LANE).
7. ARROW PANELS 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. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO 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 IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

DATE	REVISION	BY

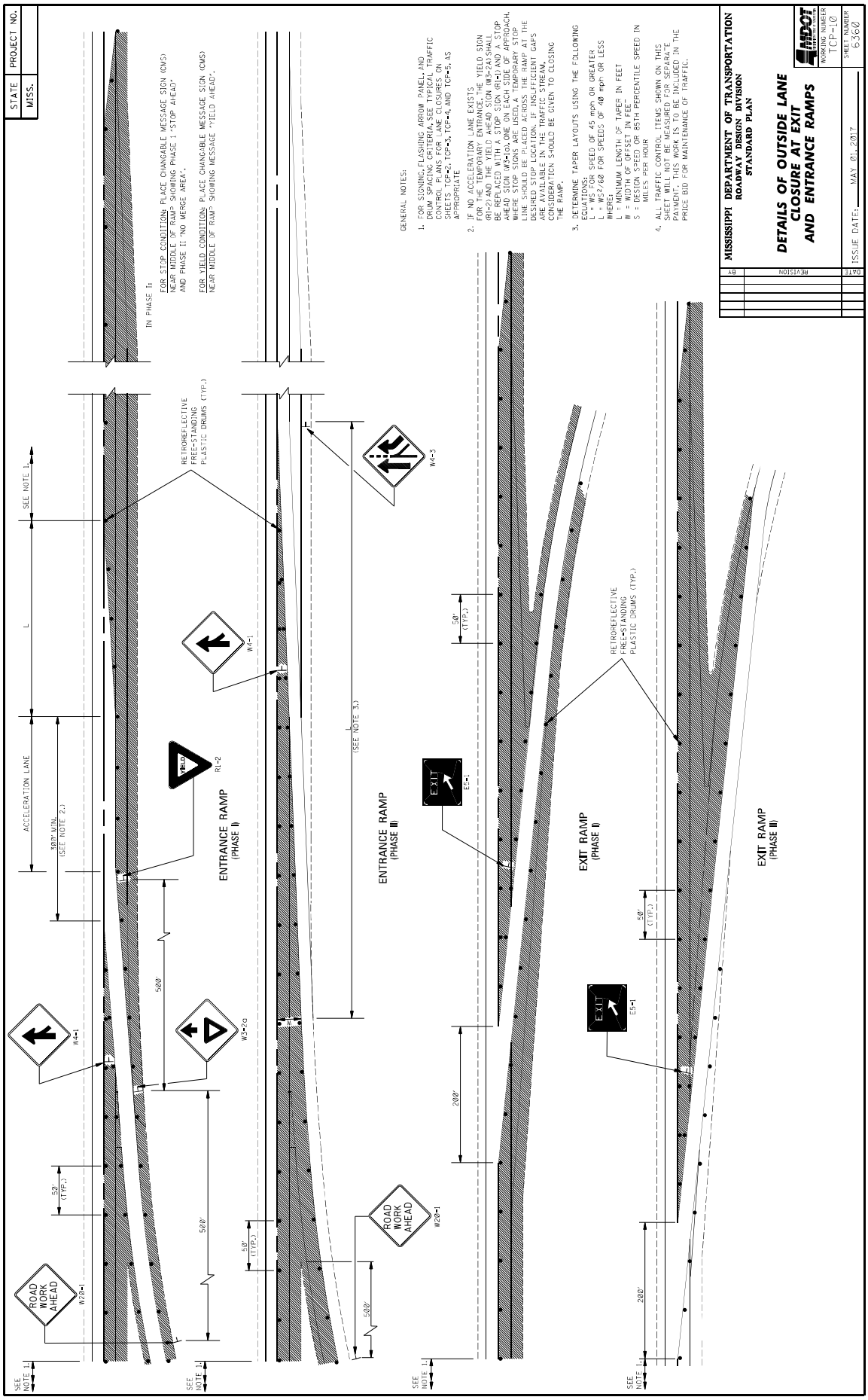
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

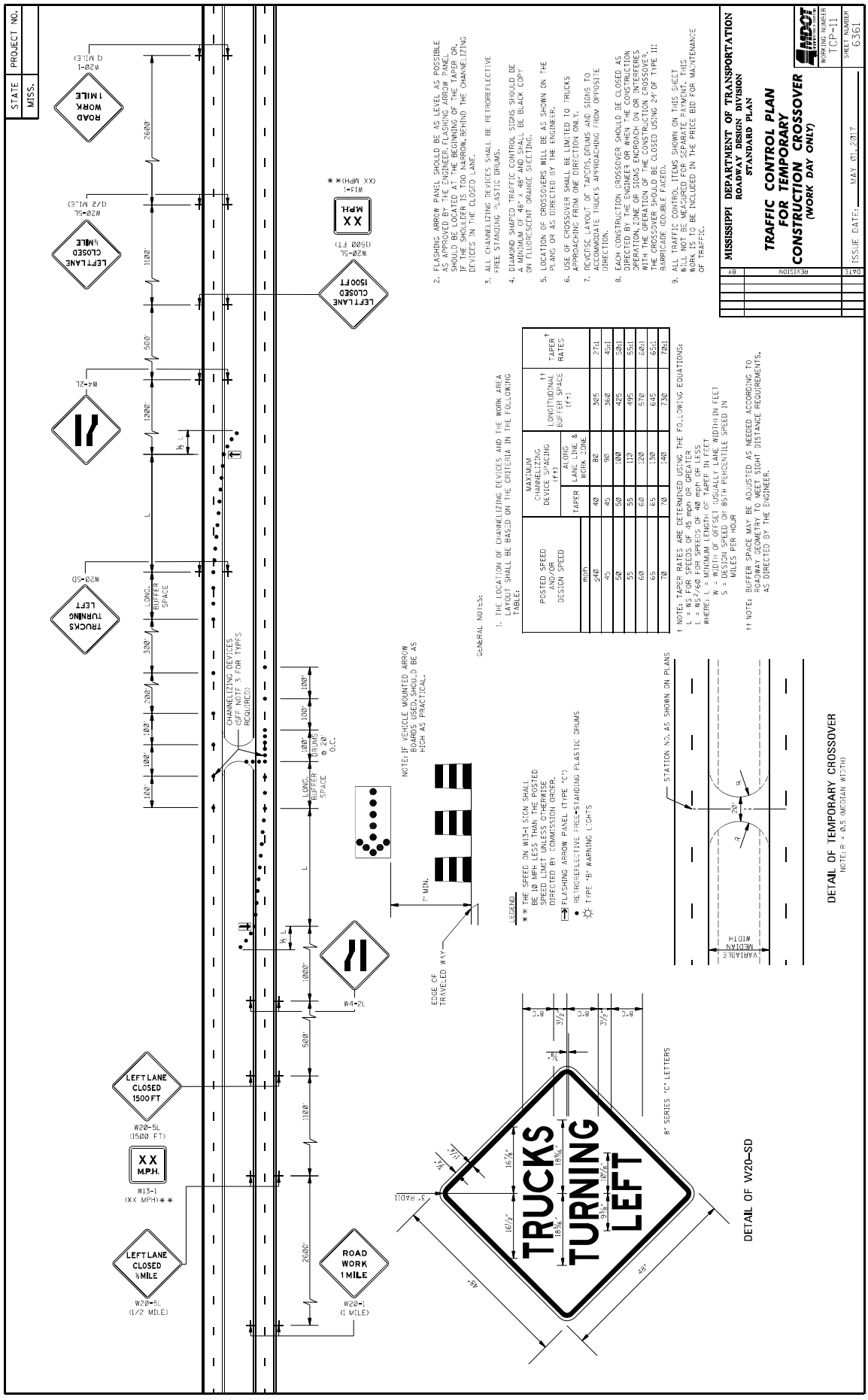
TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO–LANE ROADS

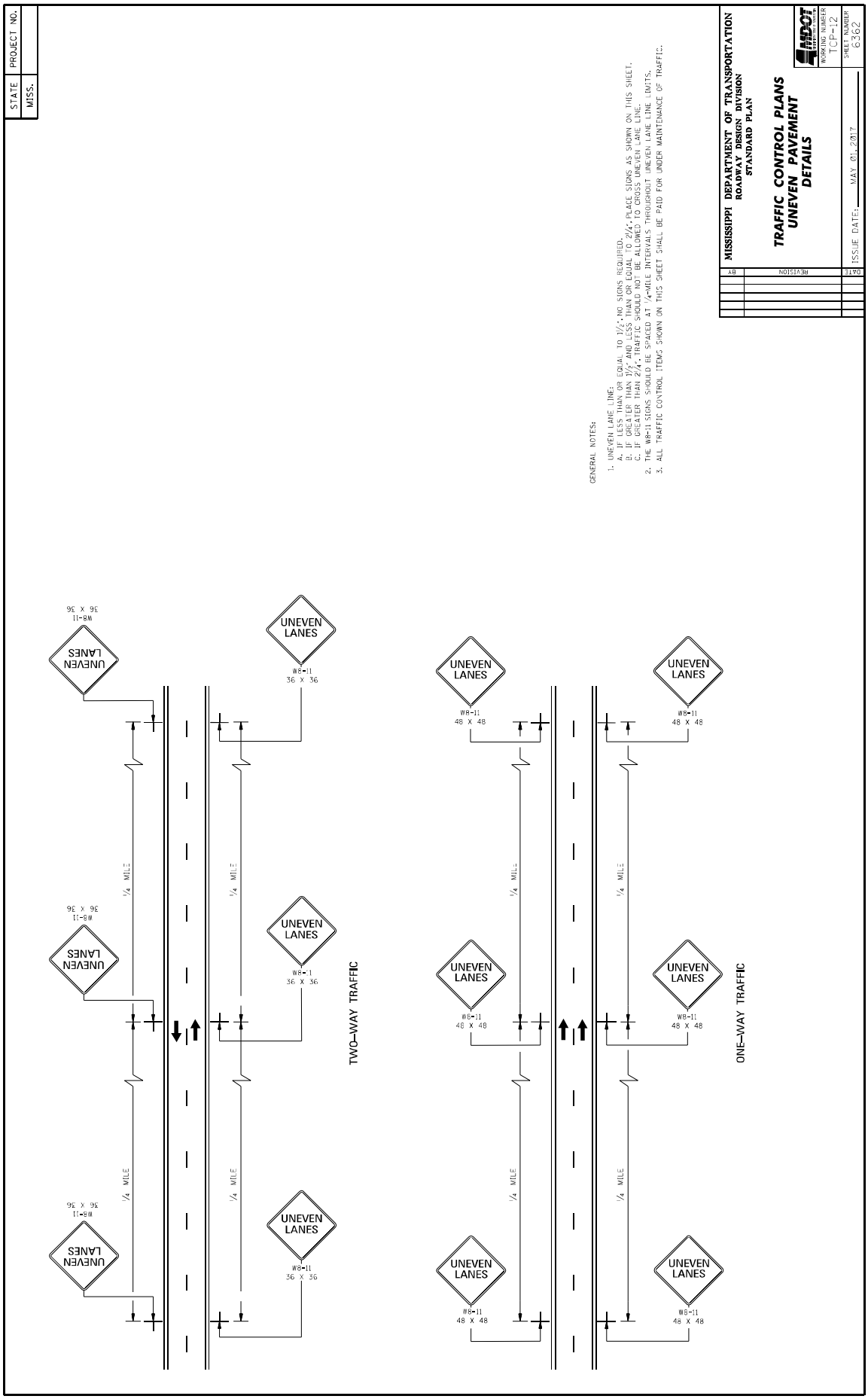
ISSUE DATE: MAY 01, 2017

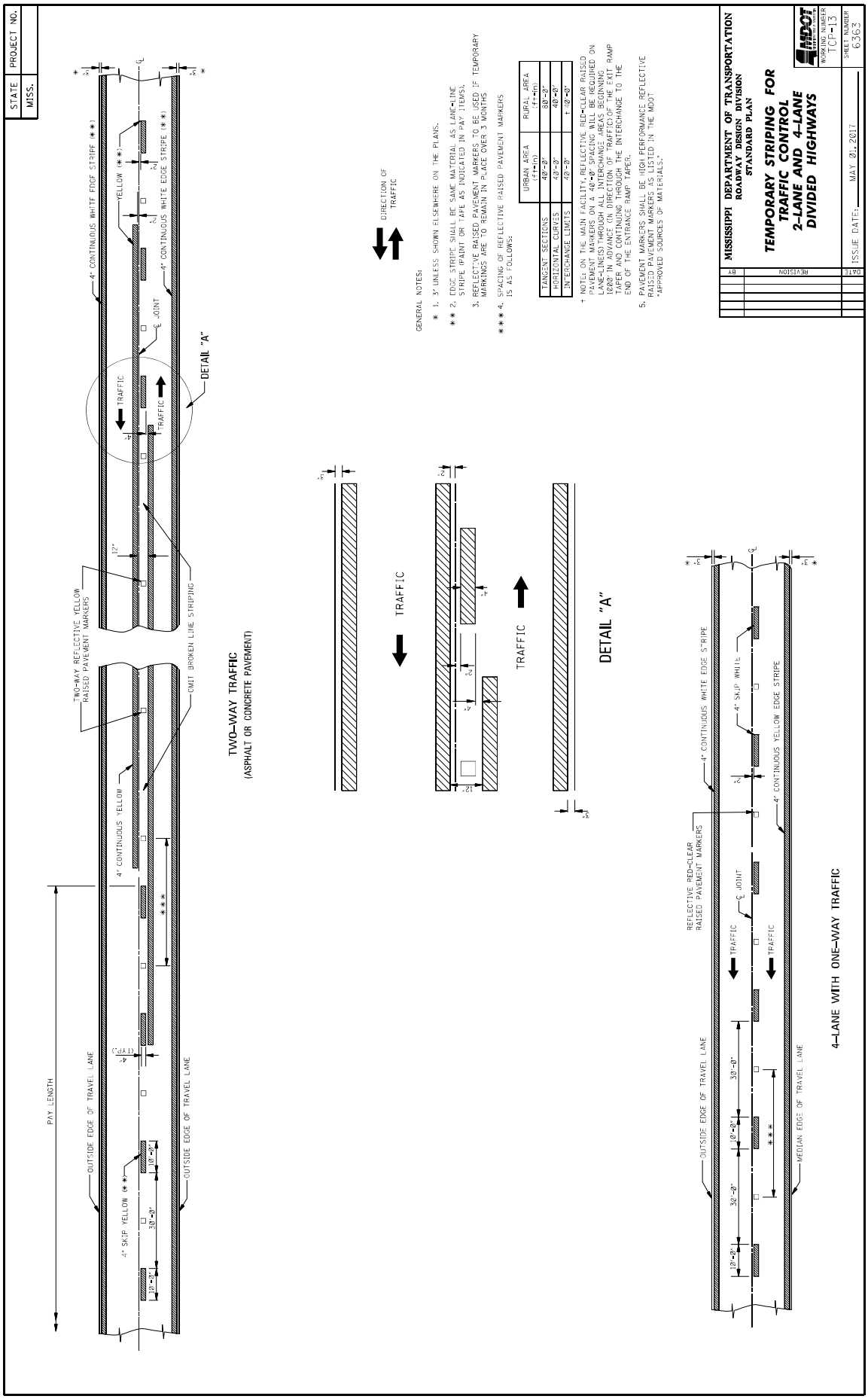
WORKING NUMBER: TCP-9

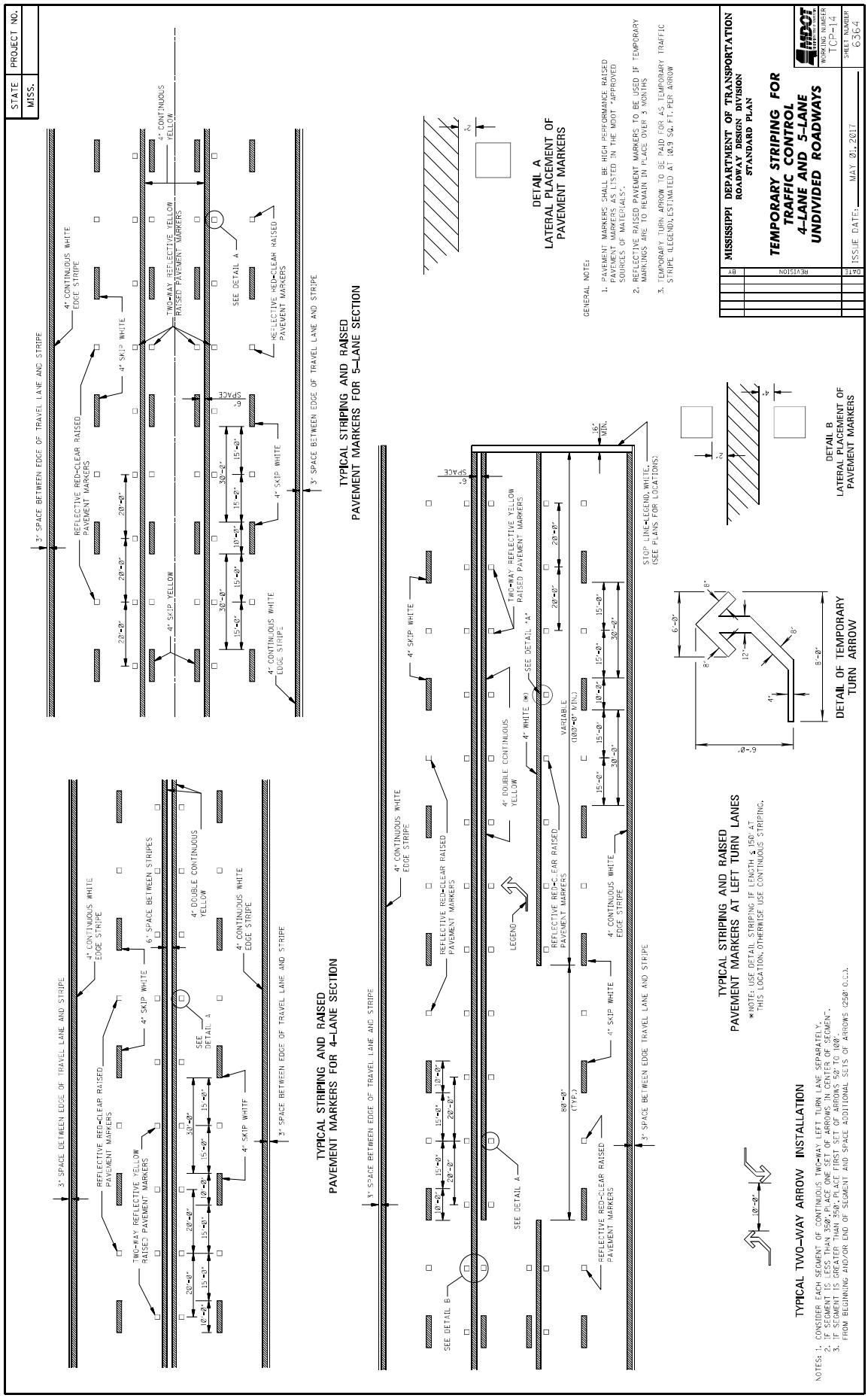
SHEET NUMBER: 6359

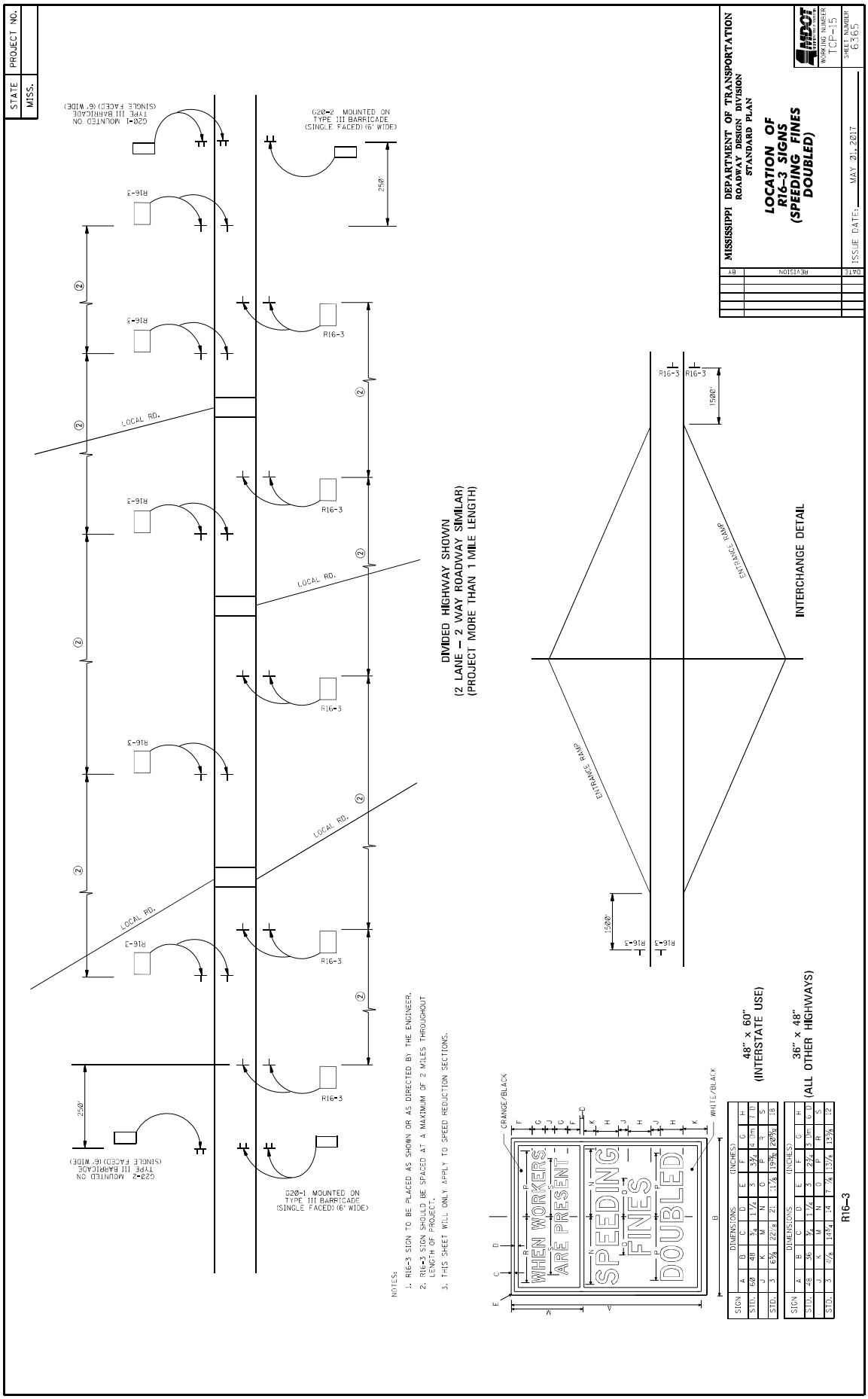

STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS
WORKING NUMBER TCP-10
SHEET NUMBER 6360
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
GENERAL NOTES:
1. FOR SIGNING, FLASHING ARROW PANEL AND DRUM SPACING CRITERIA, SEE TYPICAL TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5, AS APPROPRIATE
2. IF NO ACCELERATION LANE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN (R1-2) AND THE YIELD AHEAD SIGN (W3-2A) SHALL BE REPLACED WITH A STOP SIGN (R1-1) AND A STOP AHEAD SIGN (W3-1), ONE ON EACH SIDE OF APPROACH. WHERE STOPPING IS USED, A STANDARD STOP BAR LINE SHOULD BE PLACED ACROSS THE RAMP AT THE DESIRED STOP LOCATION. IF INSUFFICIENT GAPS ARE AVAILABLE IN THE TRAFFIC STREAM, CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP.
3. DETERMINE TAPER LAYOUTS 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 IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
4. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
IN PHASE I:
FOR STOP CONDITION: PLACE CHANGABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING PHASE 1 "STOP AHEAD" AND PHASE II "NO MERGE AREA".
FOR YIELD CONDITION: PLACE CHANGABLE MESSAGE SIGN (CMS) NEAR MIDDLE OF RAMP SHOWING MESSAGE "YIELD AHEAD".
ENTRANCE RAMP (PHASE I)
ENTRANCE RAMP (PHASE II)
EXIT RAMP (PHASE I)
EXIT RAMP (PHASE II)
ACCELERATION LANE
L
300' MIN. (SEE NOTE 2.)
SEE NOTE 1.
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS (TYP.)
W4-1
W4-3
R1-2
W3-2a
W20-1
E5-1
EXIT
ROAD WORK AHEAD
500'
50' (TYP.)
200'
(SEE NOTE 3.)


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: MAY 01, 2017
DATE REVISION BY
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 DEVICES SPACING (FT)
TAPER
ALONG LANE LINE & WORK ZONE
LONGITUDINAL BUFFER SPACE (FT)
TAPER RATES
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 NO TAPER IS USED, AT THE ARROW BOARD 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 OR EQUIVALENT FACING.
9. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET ARE NOT INCLUDED FOR SEPARATE PAYMENT. THIS WORK IS TO 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 PANEL (TYPE 'C')
RETROREFLECTIVE FREE-STANDING PLASTIC DRUMS
TYPE 'B' WARNING LIGHTS
† NOTE: TAPER RATES 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 USED, 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, OBJECTS, SIGHT DISTANCE REQUIREMENTS, AS DIRECTED BY THE ENGINEER.
NOTE: IF VEHICLE MOUNTED ARROW BOARDS USED, SHOULD BE AS HIGH AS PRACTICAL.
EDGE OF TRAVELED WAY
7' MIN.
CHANNELIZING DEVICES (SEE NOTE 3 FOR TYPES REQUIRED)
LONG. BUFFER SPACE
BUMPS @ 20' O.C.
STATION NO. AS SHOWN ON PLANS
VARIABLE MEDIAN WIDTH
DETAIL OF TEMPORARY CROSSOVER
NOTE: R = 0.5 MEDIAN WIDTH
8" SERIES "C" LETTERS
TRUCKS TURNING LEFT
DETAIL OF W20-5D
W20-5D TRUCKS TURNING LEFT
W4-2L
W20-5L LEFT LANE CLOSED 1500 FT
W13-1 XX M.P.H. (XX MPH)**
W20-5L LEFT LANE CLOSED ½ MILE (1/2 MILE)
W20-1 ROAD WORK 1 MILE (1 MILE)
W13-1 XX MPH (XX MPH)**
W20-5L LEFT LANE CLOSED 1500 FT
W20-5L LEFT LANE CLOSED ½ MILE (1/2 MILE)
W20-1 ROAD WORK 1 MILE (1 MILE)


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: MAY 01, 2017
BY REVISION DATE
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 ¼-MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
UNEVEN LANES
W8-11
36 X 36
¼ MILE
TWO-WAY TRAFFIC
UNEVEN LANES
W8-11
48 X 48
¼ MILE
ONE-WAY TRAFFIC

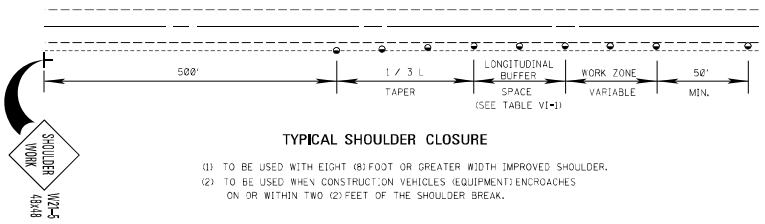

STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS
WORKING NUMBER TCP-13
SHEET NUMBER 636.2
ISSUE DATE: MAY 01, 2017
DATE
REVISION
BY
GENERAL NOTES:
* 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN "PAY" ITEMS).
3. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS
*** 4. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:
TANGENT SECTIONS 40'-0" 80'-0"
HORIZONTAL CURVES 40'-0" 40'-0"
INTERCHANGE LIMITS 40'-0" † 40'-0"
† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 100'-0" IN ADVANCE OF THE BEGINNING OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.
5. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."
URBAN AREA (FT-HR) RURAL AREA (FT-HR)
DIRECTION OF TRAFFIC
TRAFFIC
DETAIL "A"
TWO-WAY REFLECTIVE YELLOW RAISED PAVEMENT MARKERS
4" CONTINUOUS YELLOW
4" SKIP YELLOW (**)
4" CONTINUOUS WHITE EDGE STRIPE (**)
OMIT BROKEN LINE STRIPING
OUTSIDE EDGE OF TRAVEL LANE
PAY LENGTH
TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)
4" SKIP WHITE
4" CONTINUOUS YELLOW EDGE STRIPE
REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS
MEDIAN EDGE OF TRAVEL LANE
4-LANE WITH ONE-WAY TRAFFIC


STATE MISS.
PROJECT NO.
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
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.
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 AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".
2. REFLECTIVE 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
BY REVISION DATE
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
ISSUE DATE: MAY 01, 2017
SHEET NUMBER 6364


STATE MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
LOCATION OF R16-3 SIGNS (SPEEDING FINES DOUBLED)
WORKING NUMBER TCP-15
SHEET NUMBER 6365
ISSUE DATE: MAY 01, 2017
DATE REVISION BY
G20-1 MOUNTED ON TYPE III BARRICADE (SINGLE FACED) (6' WIDE)
G20-2 MOUNTED ON TYPE III BARRICADE (SINGLE FACED) (6' WIDE)
R16-3
LOCAL RD.
250'
DIVIDED HIGHWAY SHOWN
(2 LANE – 2 WAY ROADWAY SIMILAR)
(PROJECT MORE THAN 1 MILE LENGTH)
1500'
EXCHANGE RAMP
INTERCHANGE DETAIL
NOTES:
1. R16-3 SIGN TO BE PLACED AS SHOWN OR AS DIRECTED BY THE ENGINEER.
2. R16-3 SIGN SHOULD BE SPACED AT A MAXIMUM OF 2 MILES THROUGHOUT LENGTH OF PROJECT.
3. THIS SHEET WILL ONLY APPLY TO SPEED REDUCTION SECTIONS.
WHEN WORKERS ARE PRESENT
SPEEDING FINES DOUBLED
ORANGE/BLACK
WHITE/BLACK
48" x 60" (INTERSTATE USE)
36" x 48" (ALL OTHER HIGHWAYS)
R16-3

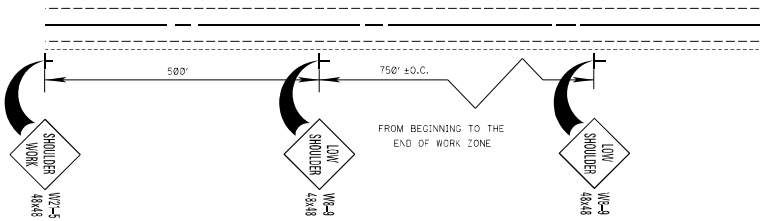
STATE	PROJECT NO.
MISS.	

PLASTIC DRUMS
(SEE NOTE FOR SPACING)



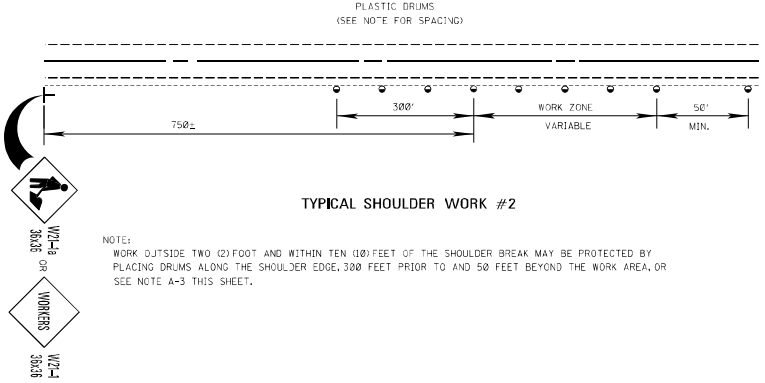
TYPICAL SHOULDER CLOSURE

(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.



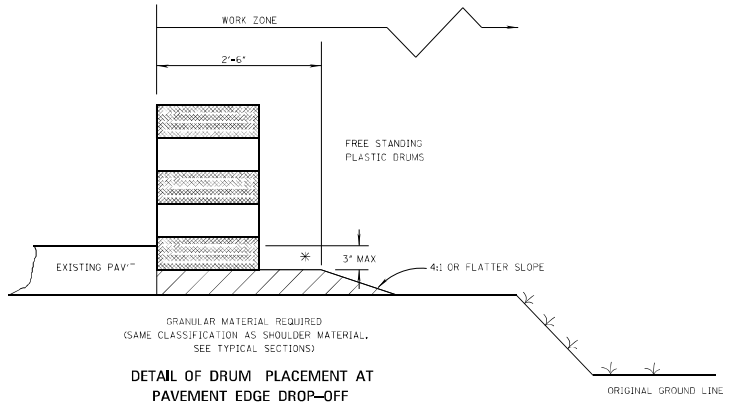
TYPICAL SHOULDER WORK #1
(SEE NOTE A-1 THIS SHEET)

PLASTIC DRUMS
(SEE NOTE FOR SPACING)



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.



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'+C.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 M.U.T.C.D. (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 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 85 PERCENTILE)
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	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

✳✳ POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL DETAILS DRUM PLACEMENT AND SHOULDER CLOSURE

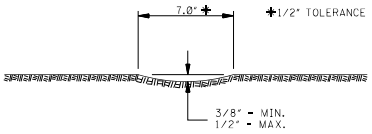
MDOT

WORKING NUMBER
TCP-16

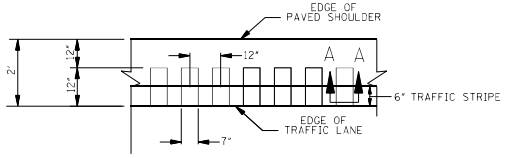
ISSUE DATE: MAY 31, 2017

SHEET NUMBER
6366

STATE	PROJECT NO.
MISS.	



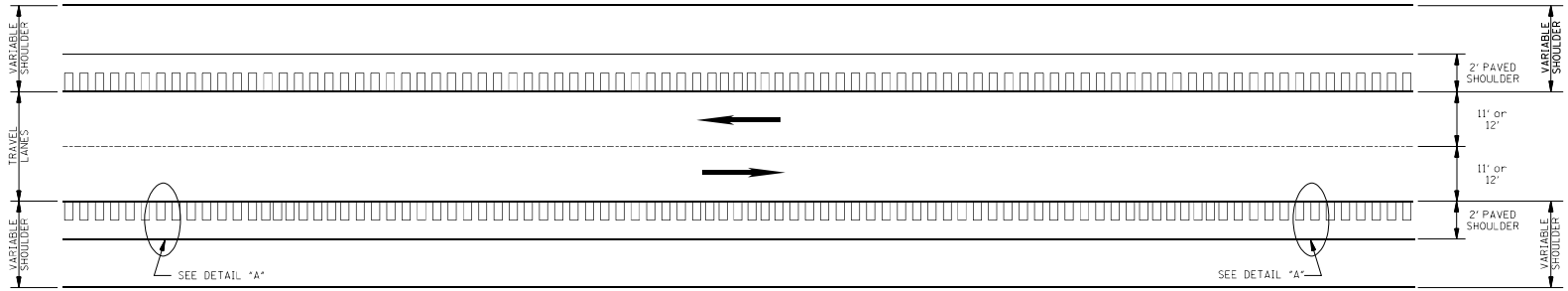
SECTION "A–A"



DETAIL "A"

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. DO NOT USE WHERE TRAVEL LANE IS LESS THAN 11' WIDE.



PLAN

NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

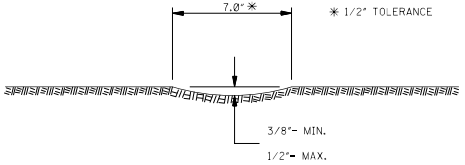
RUMBLE STRIPES 2-LANE HIGHWAYS (ASPHALT LANES, 2-FT ASPHALT SHOULDERS)

BY	DESCRIPTION	DATE
DSP	REVISED STRIPE LOCATION	2/8/17

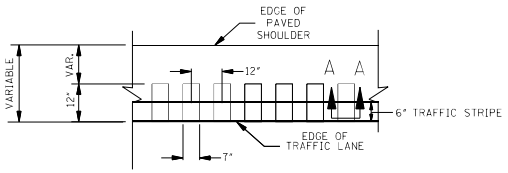
ISSUE DATE: AUGUST 01, 2017

MDOT
DRAWING NUMBER RS-1
SHEET NUMBER 6064

STATE	PROJECT NO.
MISS.	



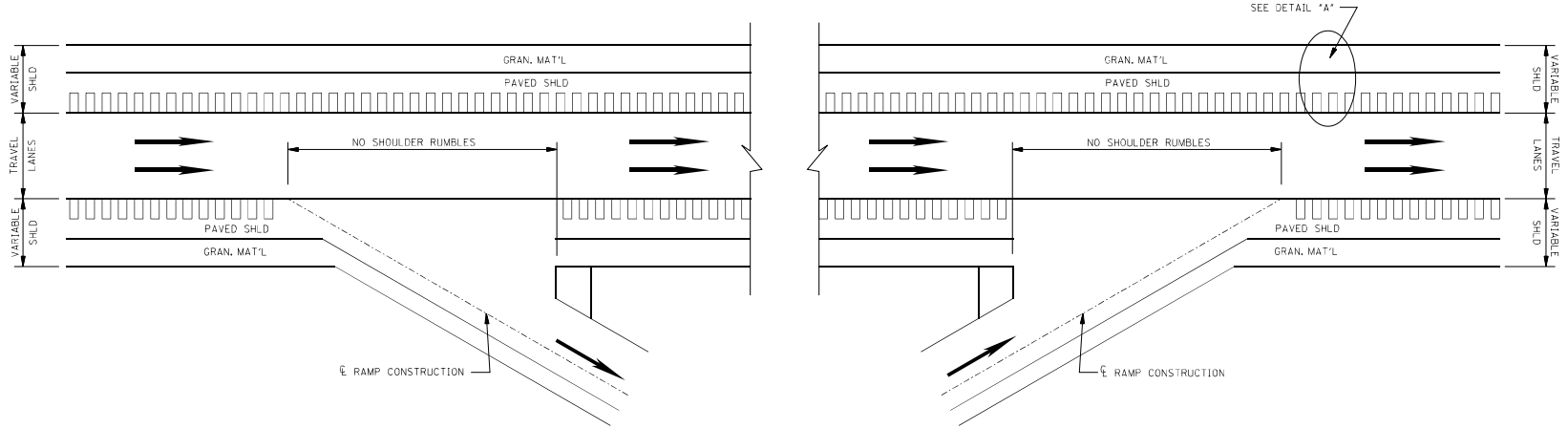
SECTION "A–A"



DETAIL "A"

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.



PLAN

NOT TO SCALE

DETAILS OF
RUMBLE STRIPS

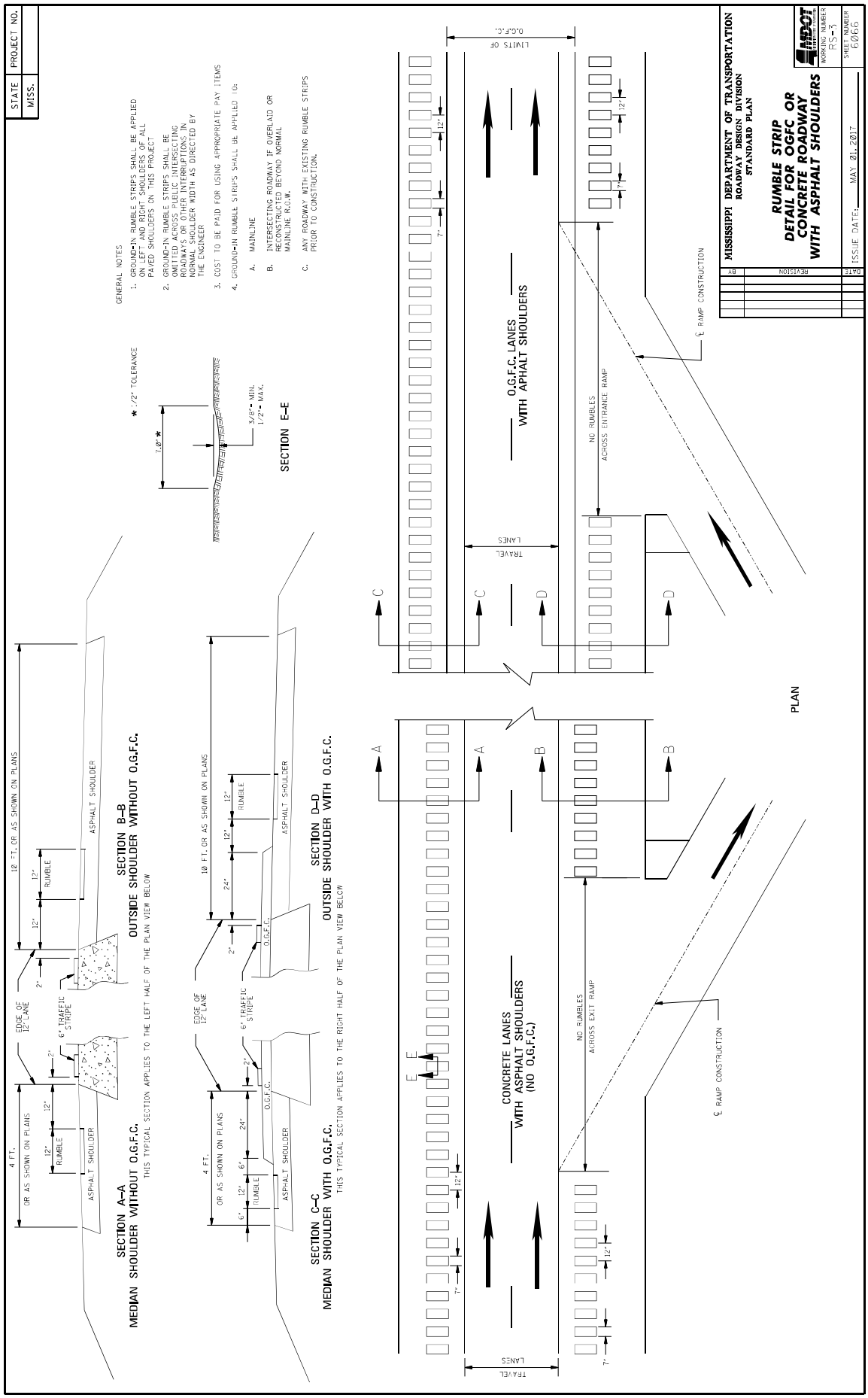
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

RUMBLE STRIPES 4-LANE HIGHWAYS (ASPHALT LANES, 2-FT OR WIDER ASPHALT SHOULDERS)

DATE	REVISION	BY
2/8/21	REVISED STRIPE LOCATION	DSP

ISSUE DATE: AUGUST 01, 2017

MDOT
DRAWING NUMBER
RS-2
SHEET NUMBER
6065


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"*
3/16" - 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
SECTION B–B
OUTSIDE SHOULDER WITHOUT O.G.F.C.
SECTION C–C
MEDIAN SHOULDER WITH O.G.F.C.
THIS TYPICAL SECTION APPLIES TO THE RIGHT HALF OF THE PLAN VIEW BELOW
SECTION D–D
OUTSIDE SHOULDER WITH O.G.F.C.
4 FT. OR AS SHOWN ON PLANS
10 FT. OR AS SHOWN ON PLANS
EDGE OF 12" LANE
6" TRAFFIC STRIPE
12" RUMBLE
ASPHALT SHOULDER
24"
6"
O.G.F.C.
2"
PLAN
LIMITS OF O.G.F.C.
TRAVEL LANES
7"
12"
O.G.F.C. LANES WITH APHALT SHOULDERS
NO RUMBLES ACROSS ENTRANCE RAMP
℄ RAMP CONSTRUCTION
CONCRETE LANES WITH ASPHALT SHOULDERS (NO O,G,F,C,)
NO RUMBLES ACROSS EXIT RAMP
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
RUMBLE STRIP DETAIL FOR OGFC OR CONCRETE ROADWAY WITH ASPHALT SHOULDERS
WORKING NUMBER RS-3
SHEET NUMBER 6066
BY REVISION DATE
ISSUE DATE: MAY 01, 2017

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3539 **CODE: (SP)**

DATE: 07/13/2021

SUBJECT: Contract Time

PROJECT: MP-1041-58(003) / 307744302 – Pontotoc County

The calendar date for completion of work to be performed by the Contractor for this project shall be **October 25, 2021** which date or extended date as provided in Subsection 108.06 shall be the end of contract time. It is anticipated that the Notice of Award will be issued no later than **July 22, 2021** and the effective date of the Notice to Proceed / Beginning of Contract Time will be simultaneous with the execution of the contract.

The Contractor will be allowed to work 24 hours per day, 7 days per week with the exception of the restrictions shown in Notice to Bidders No. 3542, Lane Closure Restrictions and Additional Work Requirements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3540 **CODE: (SP)**

DATE: 07/13/2021

SUBJECT: Scope of Work

PROJECT: MP-1041-58(003) / 307744302 – Pontotoc County

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

The work to be accomplished, using the pay items and corresponding specifications and attachments set forth in this contract, is to repair a slide on SR 41, located approximately 550 feet North of the SR 41 & SR 15 Intersection, in Pontotoc County.

It is estimated that approximately 2 W20-1 "AHEAD" signs will be required. All costs for this to be absorbed in 618-A: Maintenance of Traffic.

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	MP–1041–58(003)	1

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY STATE PROJECT NO. MP–1041–58(003)

SR 41 Pontotoc Co Slide
PONTOTOC

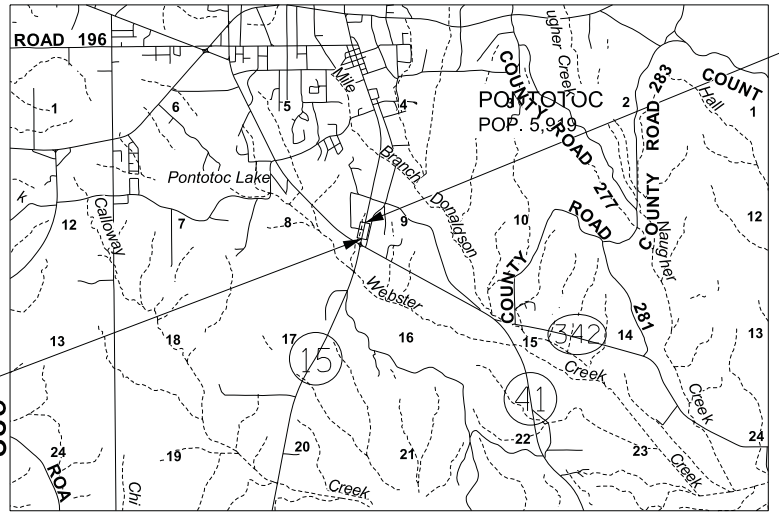
FMS CON. NO. 307744/ 302000

GENERAL INDEX

BRIDGE STRUCTURES REQ'D.

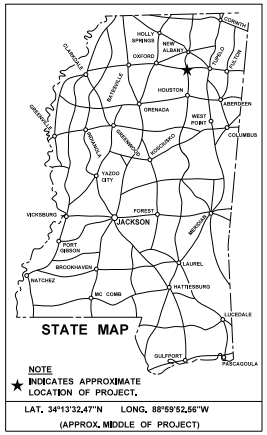
BOX BRIDGES REQ'D.

SCALES		
PLAN		1 IN. = 100 FT.
PROFILE	HOR.	1 IN. = 100 FT.
	VERT.	1 IN. = 10 FT.
LAYOUT		1 IN. = FT.



BEGINNING OF PROJECT
STA. 1223+00

END OF PROJECT
STA. 1227+00



DESIGN CONTROL
_____ MPH = V (SPEED DESIGN)
ADT (___) =_____; ADT (___) =_____
DHV =_____ ; D =_____% T=_____%

PERMITS ACQUIRED BY MDOT		
WETLANDS AND WATERS PERMITS		
	WATERS	WETLANDS
NATIONWIDE #14	[N]	[ ]
NATIONWIDE (OTHER)*	[N]	[ ]
GENERAL*	[N]	[ ]
INDIVIDUAL (404)*	[N]	[ ]

STORMWATER PERMIT [N]	
Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTURBED AREA = 5 ACRES)
S	REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)
APPROVED BY:_____	

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN CORPORATION LINE
SECTION LINE
EXISTING ROAD OR TRAVELED WAY
PROPOSED ROAD OR TRAVELED WAY
RAILROAD
SURVEY LINE
BRIDGES

EQUATIONS

EXCEPTIONS

LENGTH DATA

	FT.	MI.
LENGTH OF ROADWAY		
LENGTH OF BRIDGES		
LENGTH OF PROJECT (NET)		
LENGTH OF EXCEPTIONS		
LENGTH OF PROJECT (GROSS)		

P S & E DATE:

APPROVED:

DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER

EXECUTIVE DIRECTOR

MDOT MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BY | REVISIONS | DATE

- 2 -

Notice to Bidders No. 3540 -- Cont'd.

STATE	PROJECT NO.
MISS.	MP-1041-58(003)

DESCRIPTION OF SHEET	WKG. NO.	SH. NO.
TITLE SHEET (1)		1
DETAILED INDEX & GENERAL NOTES (1)		
DETAILED INDEX & GENERAL NOTES	DI-1	2
TYPICAL SECTION SHEETS (1)		
TYPICAL SECTION FOR MAINLINE SR 41	TS-2	3
QUANTITY SHEETS (3)		
SUMMARY OF QUANTITIES	SQ-1	4
SUMMARY OF QUANTITIES	SQ-2	5
ESTIMATED QUANTITIES	EQ-1	6
SPECIAL DESIGN SHEETS (2)		
SEQUENCE SHEET	SC-1	7
PLAN PROFILE OF SR 41	WK1	8
STANDARD DRAWINGS - ROADWAY SHEETS (16)		
BRIDGE END PAVEMENT WITH RAIL, OVERLAY, AND SLEEPER SLAB (NEW CONSTRUCTION)	BE-1	6007
PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED HIGHWAYS	PM-1	6051
2-WAY RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2-LANE)	PM-11	6061
TYPICAL TEMPORARY EROSION/SEDIMENT CONTROL APPLICATIONS	ECD-1	6101
DETAILS OF SEDIMENT BARRIER APPLICATIONS	ECD-2	6102
DETAILS OF SILT FENCE INSTALLATION	ECD-3	6103
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS	ECD-4	6104
TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES	ECD-5	6105
DETAILS OF EROSION CONTROL WATTLE DITCH CHECK	ECD-6	6106
TYPICAL APPLICATIONS AND DETAILS FOR INLET CONSTRUCTION	ECD-11	6111
FLEXIBLE PIPE CULVERT INSTALLATION	PI-2	6502
CONCRETE PIPE COLLAR	PC-1	6503
DROP INLET AND GRATE DETAILS FOR PIPE AND BOX CULVERTS	B-9	6527
SMALL ANIMAL GUARD AND UNDERDRAIN MARKER	SAG-1	6529
DETAILS OF NORMAL UNDERDRAIN AND STORM DRAIN USED AS UNDERDRAIN	UD-1	6533
NORMAL UNDERDRAIN TYPE II	UD-2	6534

GENERAL NOTES

(1) BIDDERS ARE ADVISED THAT HARD COPIES OF ANY ADDENDA FOR THIS PROJECT WILL NO LONGER BE MAILED. ALL ADDENDA FOR THIS PROJECT WILL BE POSTED TO www.mdot.ms.gov UNDER THE PROPOSAL ADDENDA COLUMN. IT IS THE BIDDER'S RESPONSIBILITY TO CHECK AND SEE IF ANY ADDENDA HAVE BEEN POSTED FOR THIS PROJECT. PLEASE CONTACT CONTRACT ADMINISTRATION DIVISION AT 601-359-7700 FOR ANY QUESTIONS REGARDING ELECTRONIC ADDENDA.

(2) CONTRACTOR MUST MAINTAIN ACCESS TO RESIDENCES WITHIN LIMITS OF CONTRUCTION.

(3) Any reference to MEP-1041-58(003) 307744/301000 should be MP-1041-58(003) 307744/302000.

Notice to Bidders No. 3540 (cont'd.)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

49

7/9/2021 3:28 PM SR41 PLANS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL INDEX

PROJ. NO.: MP-1041-58(003)
COUNTY: PONTOTOC

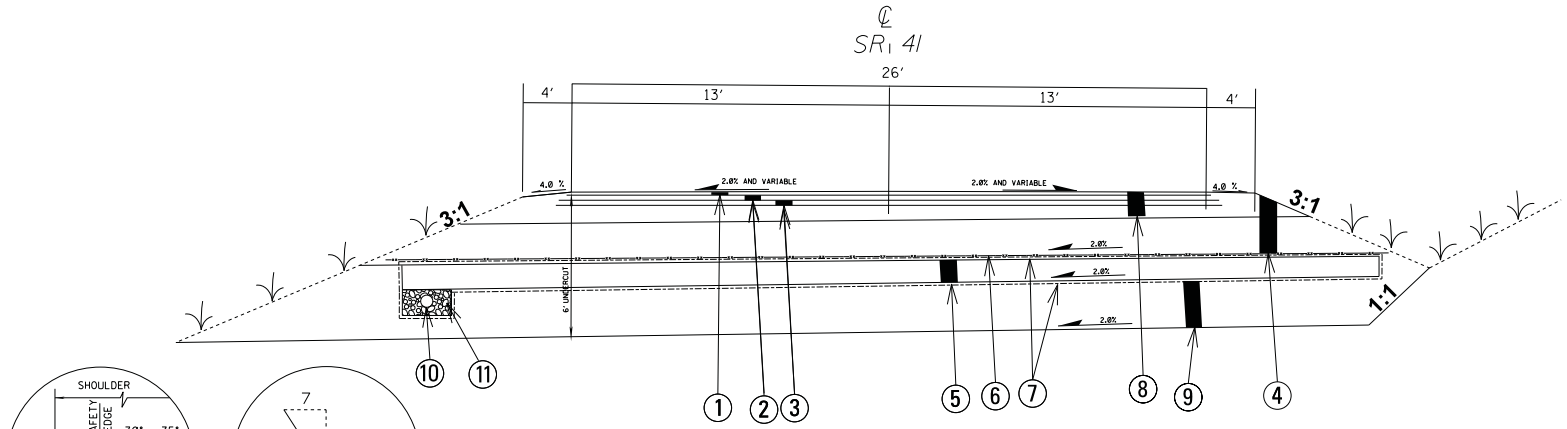
REVISION BY DATE

FILE NAME: SR41 PLANS.dgn
DESIGN TEAM CHECKED DATE

WORKING NUMBER

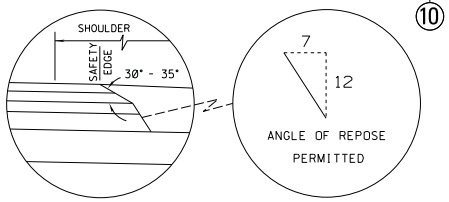
SHEET NUMBER
2

STATE	PROJECT NO.
MISS.	MP-1041-58(003)



TYPICAL SECTION

STA. 1224+00-1225+60
REMOVAL ASPHALT PAVEMENT, ALL DEPTHS (PAY ITEM 202-B007)
REQUIRED FOR THIS SECTION



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

50

↓↓↓ INDICATES AREA TO BE SOLID SODDED (PAY ITEM 216-A001)

1½" 9.5-MM, ST, ASPHALT PAVEMENT (PAY ITEM 403-A015) (1)

2½" 19-MM, ST, ASPHALT PAVEMENT (PAY ITEM 403-A006) (2)

2½" 19-MM, ST, ASPHALT PAVEMENT (PAY ITEM 403-A006) (3)

29 1/2" OF CRUSHED STONE BASE, LVM (4)

12" SIZE III STABILIZER AGGREGATE, COARSE (PAY ITEM 310-B006) (5)

GEOGRID, TYPE II, BIAXIAL (PAY ITEM 907-204-A003) (6)

GEOTEXTILE FOR SUBSURFACE DRAINAGE, TYPE V, NON-WOVEN (PAY ITEM 605-AA003) (7)

12" AND VARIABLE REMOVAL OF ASPHALT, ALL DEPTHS (PAY ITEM 202-B007) (8)

BORROW EXCAVATION, AH, FME, CLASS B9-6 (PAY ITEM 203-EX021) (9)

6" PERFORATED PIPE FOR UNDERDRAINS (PAY ITEM 605-0004) (10)

FILTER MATERIAL FOR COMBINATION STORM DRAIN AND/OR UNDERDRAINS, TYPE A, FM (PAY ITEM 605-W001) (11)

REVISION | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

PROJ. NO.: MP-1041-58(003)
COUNTY: PONTOTOC

FILE NAME: SR41 PLANS.dgn
DESIGN TEAM _____ CHECKED _____ DATE _____

WORKING NUMBER: TS-1

SHEET NUMBER: 3

PLAN
PRODUCT DEVELOPMENT DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

7/9/2021 2:37 PM SR41 PLANS

FMS: 307744-301000

STATE	PROJECT NO.
MISS	MEP-1041-58(003)

SUMMARY OF QUANTITIES (SHEET 1)

PAY ITEM NO.	PAY ITEM	UNIT	PONTOTOC : 307744-301000 Prelim	Final	Note
201-A001	Clearing and Grubbing	LS	1		
202-B007	Removal of Asphalt Pavement, All Depths	SY	463		
202-B191	Removal of Pipe, 8" And Above	LF	95		(2)
203-A001	Unclassified Excavation, FM, AH	CY	225		
203-EX021	Borrow Excavation, AH, FME, Class B9-6	CY	950		
203-G001	Excess Excavation, FM, AH	CY	1,700		
907-204-A003	Geogrid, Type II, Biaxial	SY	700		
216-A001	Solid Sodding	SY	3,000		
219-A001	Watering	KGAL	2		
234-A001	Temporary Silt Fence	LF	460		
237-A002	Wattles, 20"	LF	100		
304-H001	3/4" and Down Crushed Stone Base, LVM	CY	590		
	OR				
304-H002	Size 610 Crushed Stone Base, LVM	CY	590		
	OR				
304-H003	Size 825B Crushed Stone Base, LVM	CY	590		
310-B006	Size III Stabilizer Aggregate, Coarse	CY	240		
403-A006	19-mm, ST, Asphalt Pavement	TON	140		
403-A015	9.5-mm, ST, Asphalt Pavement	TON	150		(1)
406-A002	Cold Milling of Bituminous Pavement, All Depths	SY	570		
407-A001	Asphalt for Tack Coat	GAL	102		
503-C010	Saw Cut, Full Depth	LF	52		
601-B001	Class "B" Structural Concrete, Minor Structures	CY	4		
602-A001	Reinforcing Steel	LBS	186		
603-PE011	42" Corrugated Polyethylene Pipe	LF	305		
604-B001	Gratings	LBS	464		
605-AA003	Geotextile for Subsurface Drainage, Type V, Non-Woven	SY	700		
605-O004	6" Perforated Sewer Pipe for Underdrains, SDR 23.5	LF	160		
605-P004	6" Non-perforated Sewer Pipe for Underdrains, SDR 23.5	LF	367		
605-W001	Filter Material for Combination Storm Drain and/or Underdrains,Type A, FM	CY	12		
605-Z006	Underdrain Appurtenances, Small Animal Guard	EA	1		
618-A001	Maintenance of Traffic	LS	1		
618-B001	Additional Construction Signs	SF	1		
620-A001	Mobilization	LS	1		
619-A1002	Temporary Traffic Stripe, Continuous White	LF	570		

(1) QUANTITY INCLUDES 29.42 TONS FOR COUNTY RD.

(2) REMOVAL OF RETAINING WALL TO BE ABSORBED IN REMOVAL OF PIPE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

By | Revision | Date

PROJ NO: MEP-1041-58(003)
COUNTY: PONTOTOC
FILENAME: 307744_SQS
Design Team Checked Date

Working Number SQ-1
Sheet Number 4

STATE	PROJECT NO.
MISS	MEP-1041-58(003)

SUMMARY OF QUANTITIES (SHEET 2)

PAY ITEM NO.	PAY ITEM	UNIT	PONTOTOC : 307744-301000	
			Prelim	Final
619-A4001	Temporary Traffic Stripe, Skip Yellow	LF	285	
619-A5001	Temporary Traffic Stripe, Detail	LF	244	
619-A6002	Temporary Traffic Stripe, Legend	LF	45	
626-B003	6" Thermoplastic Traffic Stripe, Continuous White	LF	570	
626-D004	6" Thermoplastic Traffic Stripe, Skip Yellow	LF	285	
626-G002	Thermoplastic Detail Stripe, White	LF	160	
626-G003	Thermoplastic Detail Stripe, Yellow	LF	84	
626-H005	Thermoplastic Legend, White	LF	60	
627-J001	Two-Way Clear Reflective High Performance Raised Markers	EA	28	
627-L001	Two-Way Yellow Reflective High Performance Raised Markers	EA	10	
815-A002	Loose Riprap, Size 100	TON	24	

By / Revision / Date

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
SUMMARY OF QUANTITIES

PROJ NO: MEP-1041-58(003)
COUNTY: PONTOTOC
FILENAME: 307744_SQS
Design Team Checked Date

Working Number: SQ-2
Sheet Number: 5

STATE	PROJECT NO.
MISS.	MP-1041-58(003)

UNDERDRAIN QUANTITIES

6" PERFORATED SEWER PIPE

STA	STA		Left side	right side
1224+00	1225+60		160	
total			160	LF

6" NON-PERFORATED SEWER PIPE

STA	LEFT SIDE	RIGHT SIDE	NOTE
1224+00	82		OUTLET TO INLET @ 1224+02
1224+50	115		OUTLET TO INLET @ 1224+02
1225+00	140		OUTLET TO INLET @ 1224+02
1225+50	30		OUTLET TO APRON
total			367 LF

FILTER MATERIAL TYPE A

side	length	cu. Yds/ft	cu. Yds
left	160	0.0638	10.208
right			
Total			10.208 CY

RODENT GUARD

STA		left side	right side
1224+00			
1224+50			
1225+00			
1225+50		1	
total			1 EA

CLASS B STRUCTURAL CONCRETE

STA	left side	right side	
1224+00			
1224+50			
1225+00			
1225+50	1		
total			0.363 CY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES

PROJ. NO.: MP-1041-58(003)
COUNTY: PONTOTOC

FILE NAME: SR41 PLANS.dgn
DESIGN TEAM ____ CHECKED ____ DATE ____

WORKING NUMBER: EQ-1
SHEET NUMBER: 6

STATE	PROJECT NO.
MISS.	MP-1041-58(003)

LANDSLIDE REPAIR CONSTRUCTION SEQUENCE

A. ESTABLISH EROSION AND SEDIMENTATION CONTROL.

B. EXCAVATE ROADWAY BETWEEN STA. 1224+00 TO STA. 1225+60 AS DIRECTED BY THE ENGINEER.

C. PLACE AND COMPACT BORROW EXCAVATION, CLASS B9-6, IN ACCORDANCE WITH MDOT STANDARD SPECIFICATIONS, SECTION 203.03.8--EMBANKMENT CONSTRUCTION.

E. PLACE TYPE V, NON-WOVEN GEOTEXTILE IN ACCORDANCE WITH MDOT STANDARD SPECIFICATIONS, SECTION 209--GEOTEXTILE STABILIZATION. PROVIDE 3-FEET (MIN) OVERLAP, AS SPECIFIED. CONSTRUCT NORMAL TYPE II UNDERDRAIN. UNDERDRAIN SHALL OUTLET TO B-9 INLET AT 1224+02.

F. PLACE AND COMPACT LAYER OF SIZE III STABILIZER AGGREGATE. PLACE LAYER OF GEOTEXTILE FOR SUBSURFACE DRAINAGE THEN BIAXIAL GEOGRID MATERIAL BETWEEN AGGREGATE LAYERS. WORK SHALL BE PERFORMED IN ACCORDANCE WITH MDOT STANDARD SPECIFICATIONS, SECTION 204--GEOGRID REINFORCEMENT OF EMBANKMENT SLOPES AND SUBGRADES.

G. PREPARE DISTURBED SOIL AREAS AND SOD IN ACCORDANCE WITH MDOT SPECIFICATIONS, SECTION 216, AND AS DIRECTED BY THE ENGINEER.

H. COMPACT ROADWAY SUBGRADE. PLACE AND COMPACT ROADWAY BASE AND PAVE ROADWAY IN ACCORDANCE WITH MDOT SPECIFICATIONS, SECTION 403.

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CONSTRUCTION NOTES

The Contractor Shall Ensure All Excavation Remains Drained And Free Of Excess Water Throughout Construction.

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

7/9/2021 3:09 PM SR41 PLANS

REVISION | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

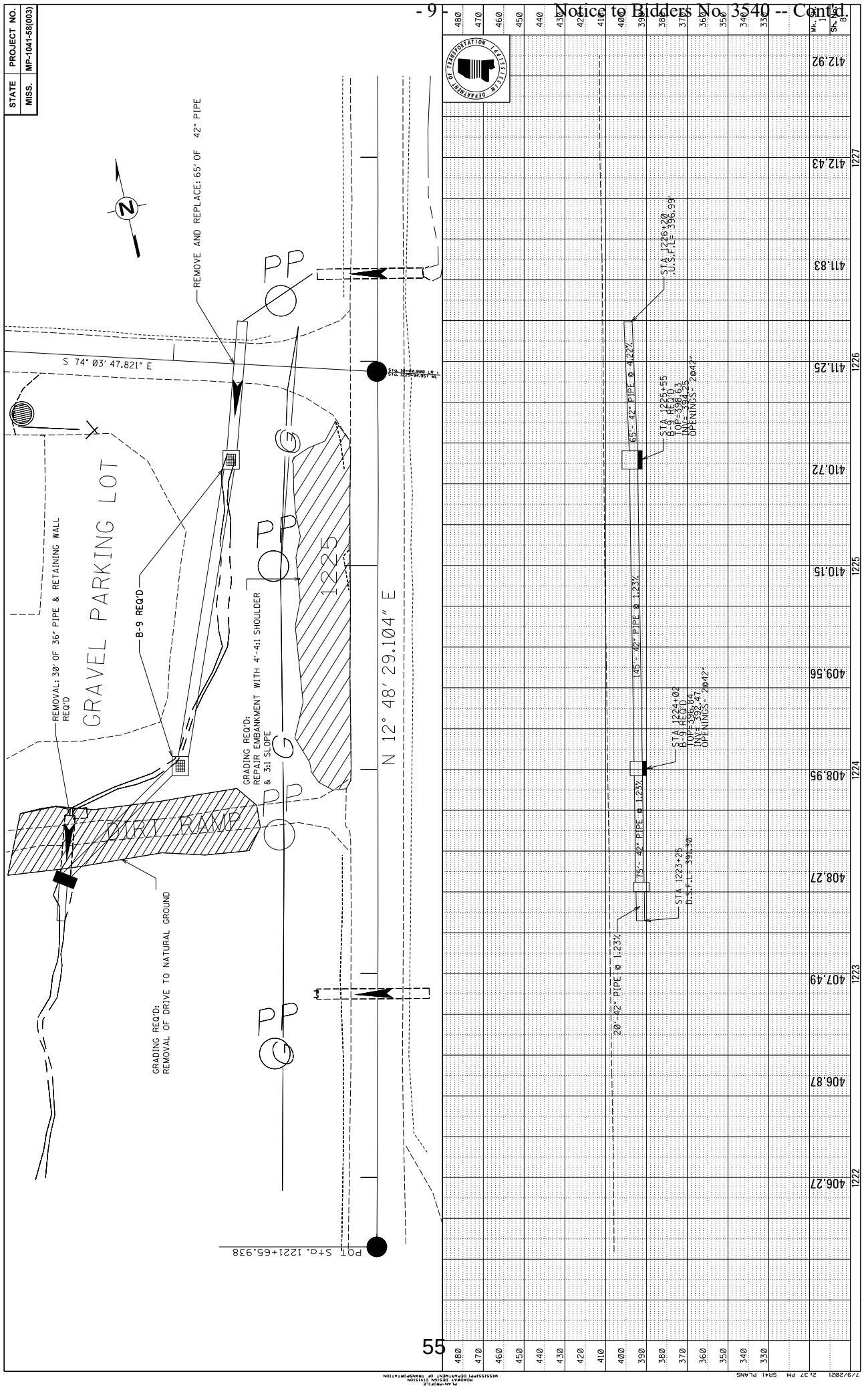
SEQUENCE OF WORK

PROJ. NO.: MP-1041-58(003)
COUNTY: PONTOTOC

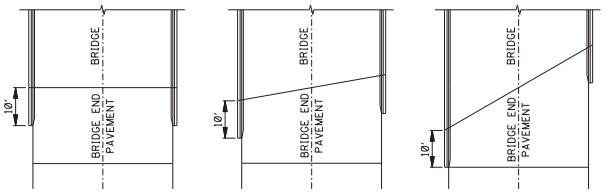
FILE NAME: SR41 PLANS.dgn
DESIGN TEAM _____ CHECKED _____ DATE _____

WORKING NUMBER SC-1

SHEET NUMBER 7


FMS CON: 307744/302000
STATE PROJECT NO.
MISS. MP-1041-58(003)
REMOVE AND REPLACE: 65' OF 42" PIPE
S 74° 03' 47.821" E
N 12° 48' 29.104" E
GRAVEL PARKING LOT
B-9 REQ'D
REMOVAL: 30' OF 36" PIPE & RETAINING WALL REQ'D
GRADING REQ'D: REPAIR EMBANKMENT WITH 4'-4:1 SHOULDER & 3:1 SLOPE
GRADING REQ'D: REMOVAL OF DRIVE TO NATURAL GROUND
DIRT RAMP
1225
PP
65' - 42" PIPE @ 4.22%
STA 1225+55
RT 66.00
TOP=398.63
INV=394.25
OPENINGS - 2@42"
145' - 42" PIPE @ 1.23%
STA 1224+02
RT 66.00
TOP=396.84
INV=392.47
OPENINGS - 2@42"
75' - 42" PIPE @ 1.23%
STA 1223+25
D.S.F.E.=391.30
20'-42" PIPE @ 1.23%
STA 1226+20
U.S.F.E.=396.99
Pot Sta. 1221+65.938
480 470 460 450 440 430 420 410 400 390 380 370 360 350 340 330
412.92
412.43
411.83
411.25
410.72
410.15
409.56
408.95
408.27
407.49
406.87
406.27
1222 1223 1224 1225 1226 1227
Wk. 1
Sh. 8
DESIGN TEAM:
FILENAME: SR41 PLANS.dgn
COUNTY: PONTOTOC
PROJECT NO.: MP-1041-58(003)
SHEET ID:
7/9/2021 2:37 PM SR41 PLANS
PLAN-PROFILE ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

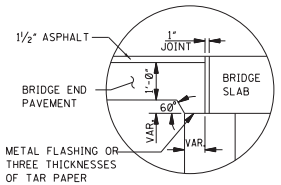
STATE	PROJECT NO.
MISS.	



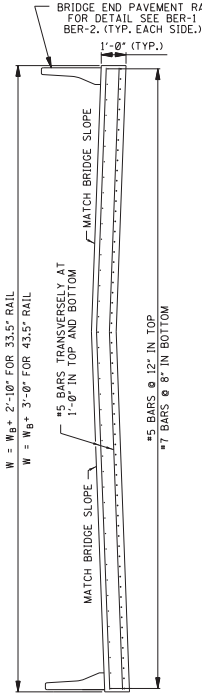
BRIDGE WITH NO SKEW

BRIDGE WITH SKEW AND 'A' MORE THAN 10'

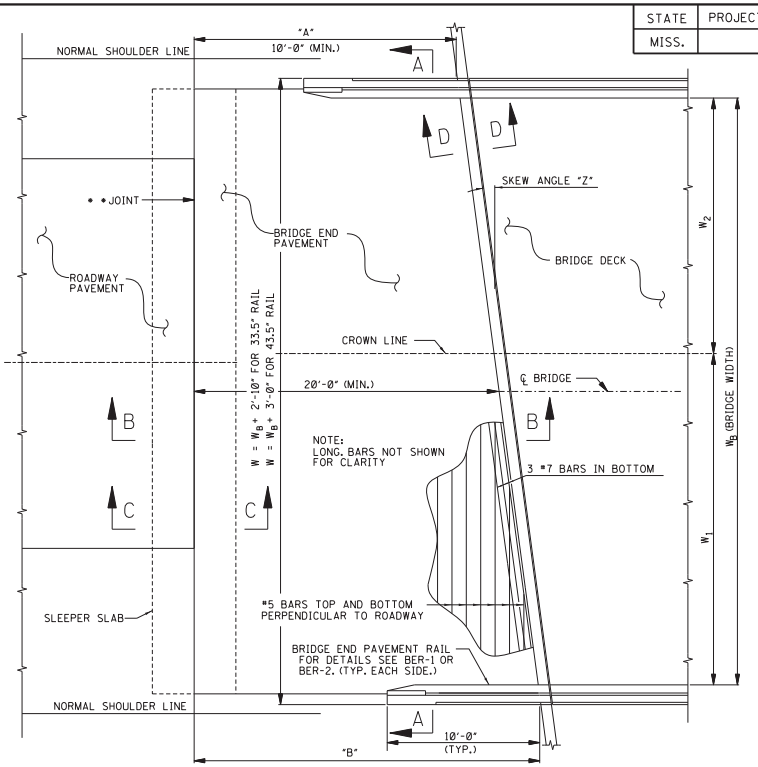
BRIDGE WITH SKEW AND 'A' EQUAL TO 10'



DETAIL SHOWING METHOD OF SEATING BRIDGE END PAVEMENT ON BRIDGES WITH NO PAVING BRACKET



SECTION A–A

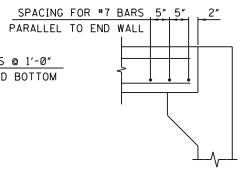


PLAN AT BRIDGE END

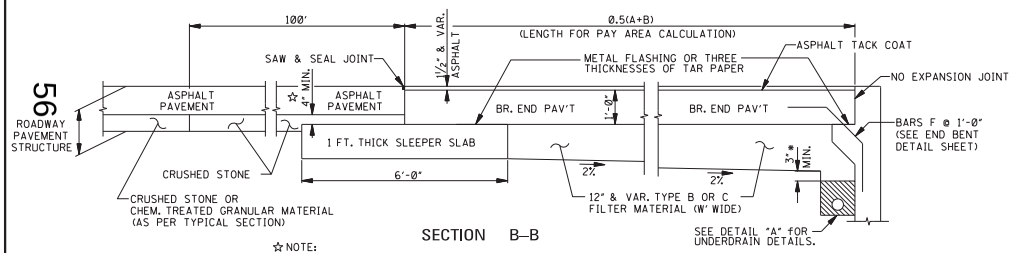
GENERAL NOTES:

1. IF BRIDGE END PAVEMENT IS CONSTRUCTED IN MORE THAN ONE SECTION, LONGITUDINAL CONSTRUCTION JOINTS WITH TIE BARS SHALL BE USED. TIE BARS SHALL BE #5 BARS, 2'-6" LONG AND SPACED 2'-6" O.C.. SUCH CONSTRUCTION SHALL BE USED WHERE INDICATED ON PLANS.
2. DIMENSIONS "A" AND "B" ARE BASED ON A MID-LENGTH OF 20'-0", EXCEPT IN NO CASE SHALL "A" BE LESS THAN 10'-0".
3. SEE QUANTITY SECTION OF PLANS FOR DIMENSIONS "W", "W¹", W²", "A", "B", SKEW ANGLE "Z", AND QUANTITIES.
4. REINFORCEMENT (DEFORMED) MAY BE FURNISHED FULL LENGTH OR MAY BE SPLICED. IF BARS ARE SPLICED, THEY SHALL BE SPLICED NOT LESS THAN 30 DIAMETERS.
5. IF TOP LIFT OF ASPHALT IS GREATER THAN 1.5", THE LIFT SHALL BE TRANSITIONED TO 1.5" ACROSS THE LENGTH OF THE BRIDGE END PAVEMENT.
6. THE BRIDGE END PAVEMENT PAY ITEM INCLUDES BRIDGE END PAVEMENT, SLEEPER SLAB, AND METAL FLASHING. ALL OTHER ITEMS SHOWN ON THIS SHEET WILL BE PAID AS INDICATED ELSEWHERE IN THE PLANS.
7. CLASS "B" CONCRETE REQUIRED FOR SLEEPER SLAB AND BRIDGE END PAVEMENT. CLASS "AA" CONCRETE MAY BE USED WITH APPROVAL OF THE ENGINEER (NO COST ADJUSTMENT WILL BE MADE).

SECTION C–C



SECTION D–D

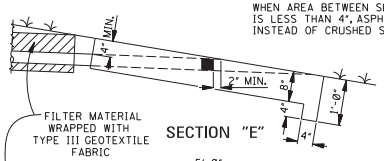


SECTION B–B

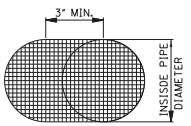
☆ NOTE:
WHEN AREA BETWEEN SLEEPER SLAB AND ASPHALT IS LESS THAN 4", ASPHALT SHOULD BE USED INSTEAD OF CRUSHED STONE.

* NOTE:
ADJUST AS NECESSARY TO ENSURE PROPER DRAINAGE.

* * NOTE:
1" PREMOLDED EXPANSION JOINT SEALED WITH POURED JOINT FILLER (DOWELED). THIS JOINT REQUIRED ONLY IF ROADWAY PAVEMENT IS CONCRETE.

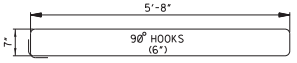


SECTION "E"



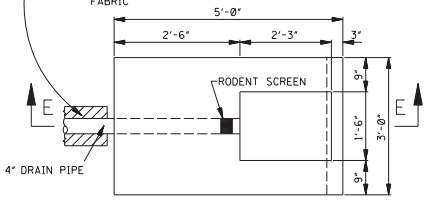
DETAIL OF RODENT SCREEN

3x3 GALVANIZED HARDWARE CLOTH Ø.063 WIRE OR EQUAL FORMED TO FIT SNUG TO INSIDE OF PIPE. (COST ABSORBED)

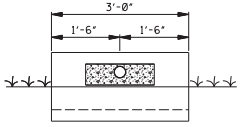


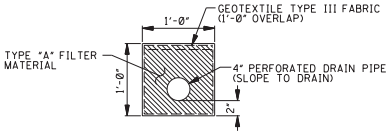
BAR BENDING DETAILS

DIMENSIONS ARE OUT TO OUT



OUTLET APRON DETAIL





DETAIL "A"

NOTES:

1. 0.363 C.Y. CLASS "C" CONCRETE REQUIRED FOR APRON.
2. SMALL ANIMAL GUARDS SHALL BE REQUIRED ON ALL EXPOSED PIPE OPENINGS BY THE END OF THE WORK DAY INSTALLED.
3. 4" PERFORATED DRAIN PIPE TO BE INSTALLED UNDER THE ROADWAY AND 2' OUTSIDE OF THE SHOULDER. 4" NON-PERFORATED DRAIN PIPE TO BE INSTALLED FOR THE REMAINDER TO THE OUTLET APRON.
4. UNDERDRAIN OUTLETS SHALL BE REQUIRED ON BOTH SIDES OF THE ROADWAY IN NORMAL CROWN SECTIONS AND ONLY ON THE LOW SIDE OF SUPERELEVATED SECTIONS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BRIDGE END PAVEMENT WITH RAIL, OVERLAY, AND SLEEPER SLAB (NEW CONSTRUCTION)

BY	REVISION	DATE

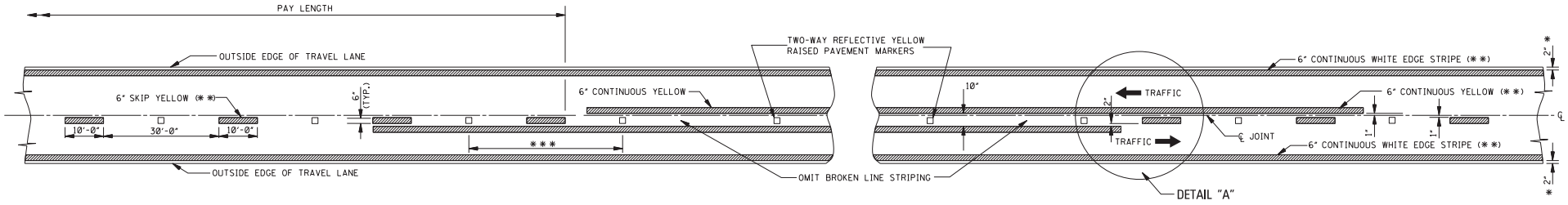
ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: BE-1

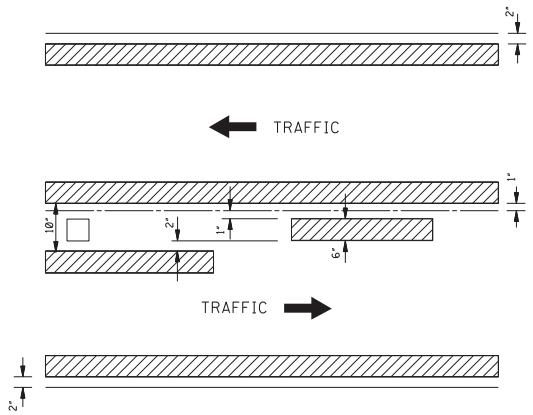
SHEET NUMBER: 6007

56

STATE	PROJECT NO.
MISS.	



TWO–WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"

NOTE: THE CRITERIA FOR NO-PASSING ZONES CAN BE FOUND IN THE MDOT ROADWAY DESIGN MANUAL, SECTION 11-1.01.

DIRECTION OF TRAFFIC

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.

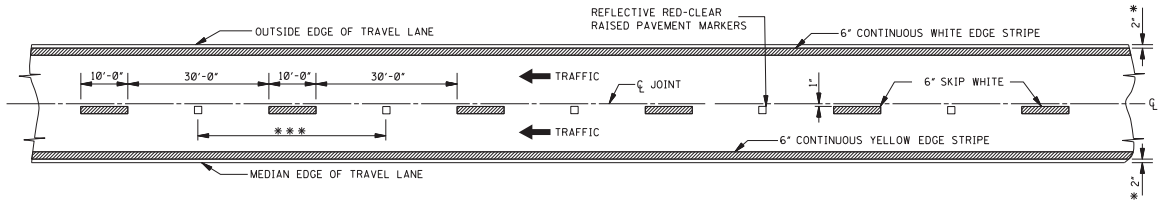
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).

*** 3. SPACING OF REFLECTIVE 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, REFLECTIVE 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.

4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."



4–LANE WITH ONE–WAY TRAFFIC

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING DETAILS FOR 2–LANE AND 4–LANE DIVIDED ROADWAYS

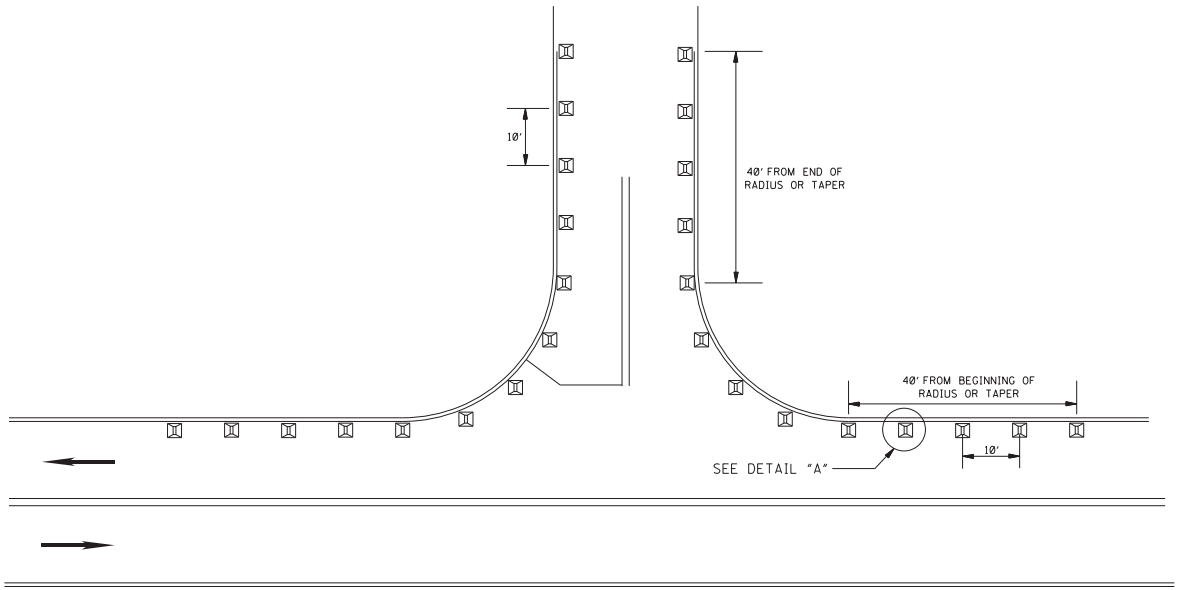
ISSUE DATE: AUGUST 01, 2017

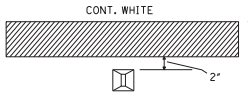
WORKING NUMBER: PM-1

SHEET NUMBER: 605†

STATE	PROJECT NO.
MISS.	

TYPICAL PLACEMENT OF RAISED PAVEMENT
MARKERS ON SIDE ROAD RADIUS
2–LANE, TWO WAY TRAFFIC





DETAIL A

GENERAL NOTES:

1. MARKERS SHALL BE VISIBLE FROM THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
2. MARKERS SHALL BE HIGH PERFORMANCE TWO-WAY CLEAR.
3. MARKERS SHALL NOT BE ROTATED WHEN BEING PLACED ALONG RADIUS AND TANGENT SECTION OF LOCAL ROAD.
4. MARKERS SHALL BE INSTALLED AT SIMPLE AND CHANNELIZED INTERSECTIONS TO THE LIMITS SHOWN ABOVE.

DIRECTION OF TRAFFIC

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

2–WAY RAISED PAVEMENT MARKERS AT INTERSECTING ROADS (2–LANE)

DATE	REVISION	BY

ISSUE DATE: AUGUST 01, 2017

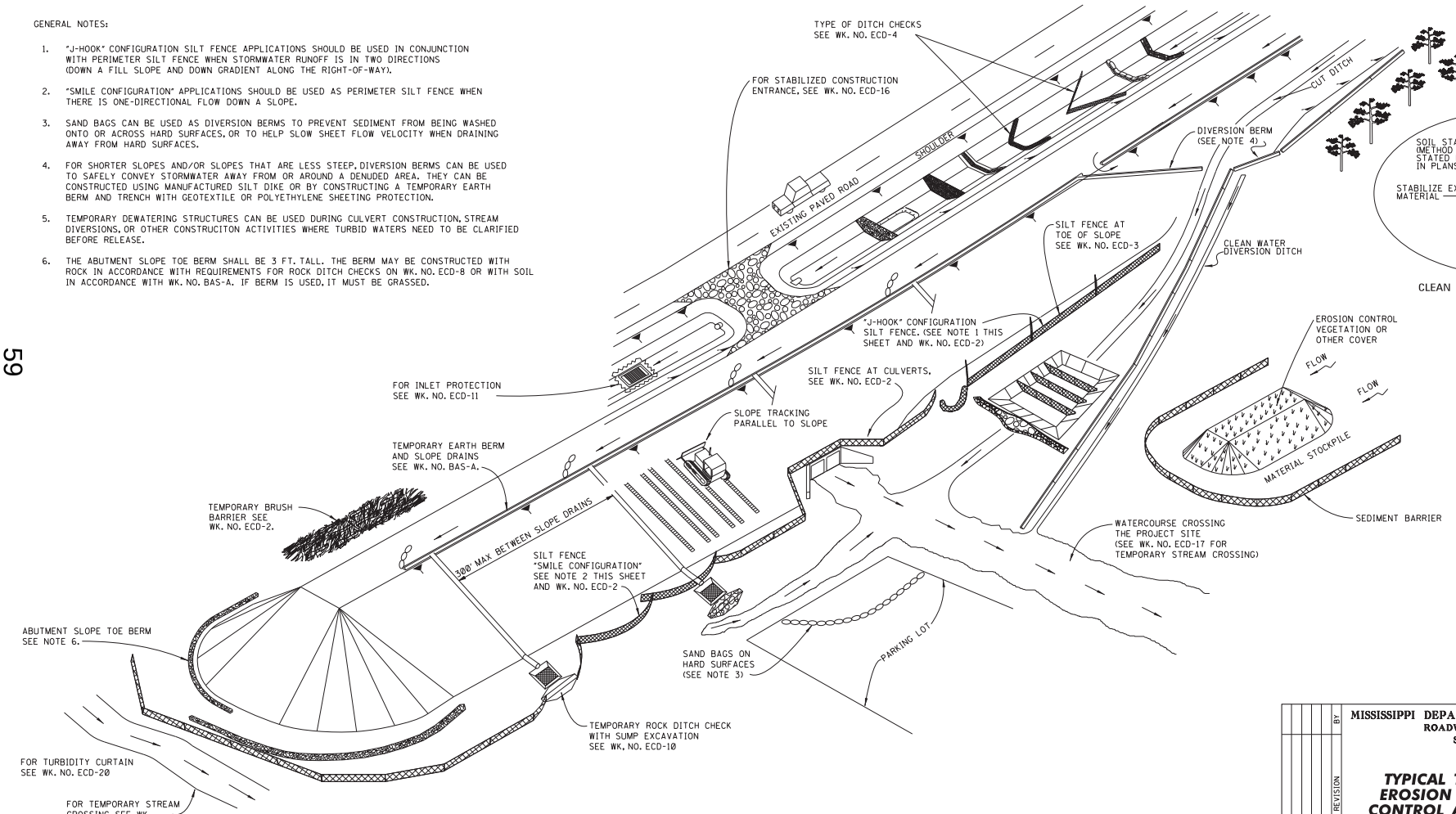
WORKING NUMBER: PM-11

SHEET NUMBER: 6061

STATE	PROJECT NO.
MISS.	

GENERAL NOTES:

1. "J-HOOK" CONFIGURATION SILT FENCE APPLICATIONS SHOULD BE USED IN CONJUNCTION WITH PERIMETER SILT FENCE WHEN STORMWATER RUNOFF IS IN TWO DIRECTIONS (DOWN A FILL SLOPE AND DOWN GRADIENT ALONG THE RIGHT-OF-WAY).
2. "SMILE CONFIGURATION" APPLICATIONS SHOULD BE USED AS PERIMETER SILT FENCE WHEN THERE IS ONE-DIRECTIONAL FLOW DOWN A SLOPE.
3. SAND BAGS CAN BE USED AS DIVERSION BERMS TO PREVENT SEDIMENT FROM BEING WASHED ONTO OR ACROSS HARD SURFACES, OR TO HELP SLOW SHEET FLOW VELOCITY WHEN DRAINING AWAY FROM HARD SURFACES.
4. FOR SHORTER SLOPES AND/OR SLOPES THAT ARE LESS STEEP, DIVERSION BERMS CAN BE USED TO SAFELY CONVEY STORMWATER AWAY FROM OR AROUND A DENUDED AREA. THEY CAN BE CONSTRUCTED USING MANUFACTURED SILT DIKE OR BY CONSTRUCTING A TEMPORARY EARTH BERM AND TRENCH WITH GEOTEXTILE OR POLYETHYLENE SHEETING PROTECTION.
5. TEMPORARY DEWATERING STRUCTURES CAN BE USED DURING CULVERT CONSTRUCTION, STREAM DIVERSIONS, OR OTHER CONSTRUCITON ACTIVITIES WHERE TURBID WATERS NEED TO BE CLARIFIED BEFORE RELEASE.
6. THE ABUTMENT SLOPE TOE BERM SHALL BE 3 FT. TALL. THE BERM MAY BE CONSTRUCTED WITH ROCK IN ACCORDANCE WITH REQUIREMENTS FOR ROCK DITCH CHECKS ON WK. NO. ECD-8 OR WITH SOIL IN ACCORDANCE WITH WK. NO. BAS-A. IF BERM IS USED, IT MUST BE GRASSED.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL TEMPORARY EROSION / SEDIMENT CONTROL APPLICATIONS

DATE	REVISION	BY

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STATE	PROJECT NO.
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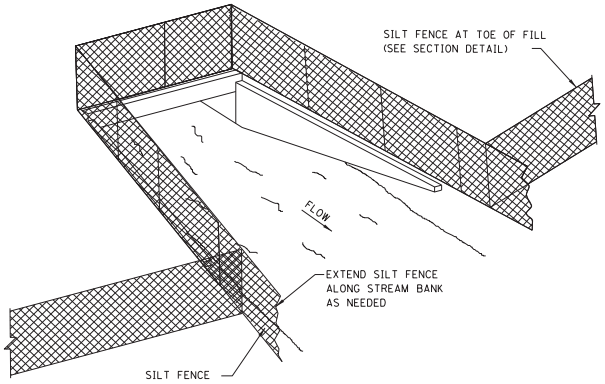
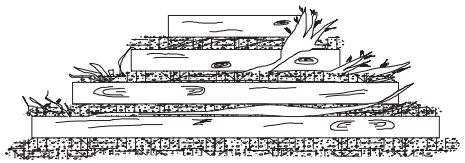
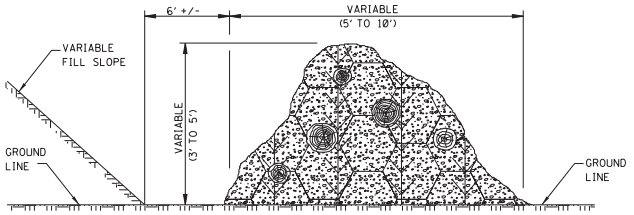


SEDIMENT BARRIER AT CROSS DRAIN



FRONT ELEVATION

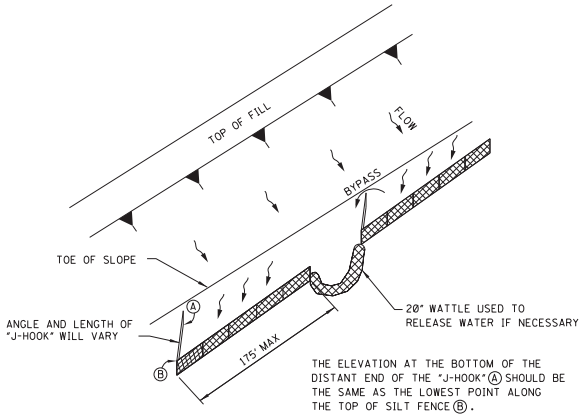


SIDE ELEVATION

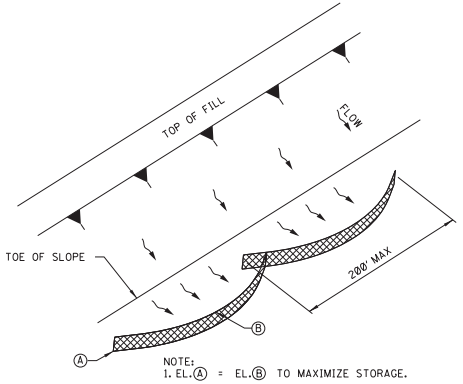
TEMPORARY BRUSH BARRIER

NOTES:

1. BRUSH BARRIER MAY BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TO TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED OR PERMITTED BY THE ENGINEER.
3. TO ALLOW WATER TO SEEP THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.
4. THE BRUSH BARRIER MAY BE CHOKED WITH FILTER FABRIC. THE COST OF FABRIC TO BE INCLUDED IN OTHER ITEMS BID.
5. TEMPORARY BRUSH BARRIER WILL NOT BE MEASURED FOR SEPARATE PAYMENT.



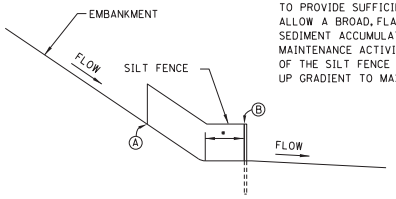
"J–HOOK" SILT FENCE
APPLICATION



"SMILE–CONFIGURATION" SILT FENCE
APPLICATION

NOTE: ANCHOR AND INSTALL SILT FENCE PER DETAILS SHOWN ON WK. NO. ECD-3

- SILT FENCE SHOULD BE LOCATED AWAY FROM THE TOE OF THE SLOPE TO PROVIDE SUFFICIENT SPACE TO ALLOW A BROAD, FLAT AREA FOR SEDIMENT ACCUMULATION AND MAINTENANCE ACTIVITIES. THE ENDS OF THE SILT FENCE SHOULD BE TURNED UP GRADIENT TO MAXIMIZE STORAGE.



SILT FENCE SECTION AT
TOE OF FILL

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF SEDIMENT BARRIER APPLICATIONS

WORKING NUMBER: ECD-2

SHEET NUMBER: 6102

ISSUE DATE: AUGUST 01, 2017

STATE	PROJECT NO.
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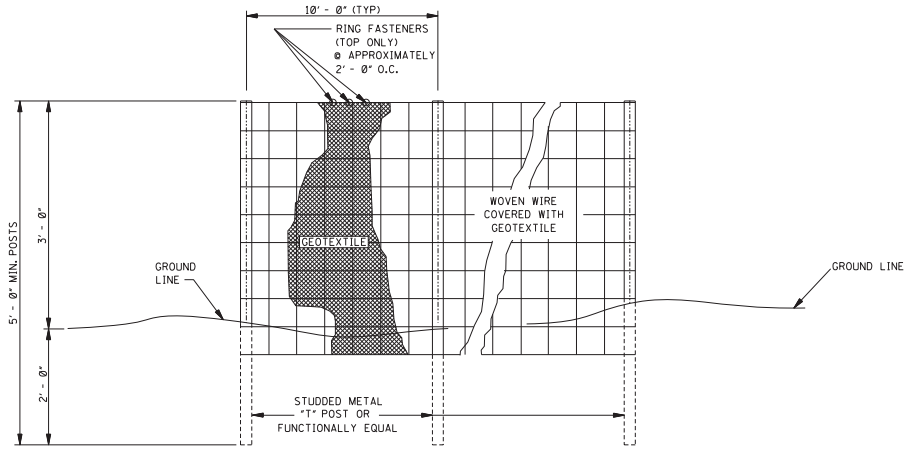
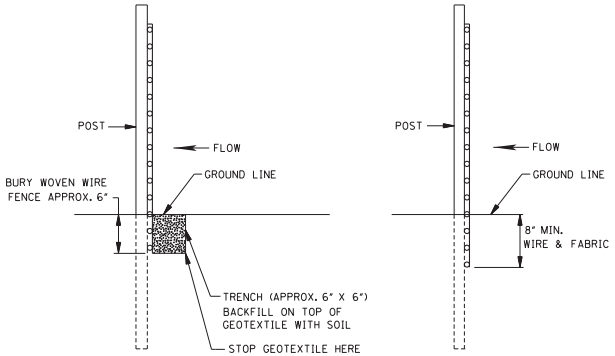


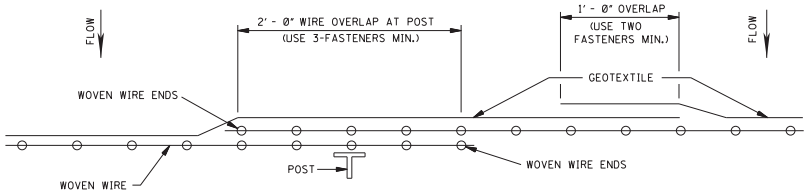
ELEVATION VIEW



METHOD I

METHOD II
MECHANICAL INSTALLATION

SIDE VIEW



PLAN VIEW

REQUIRED LAPPING

GENERAL NOTES:

1. SILT FENCES SHOULD BE USED IN AREAS WHERE FLOW IS NOT SEVERE.
2. SILT FENCES ARE TEMPORARY SEDIMENT CONTROL ITEMS THAT SHOULD BE ERECTED OPPOSITE ERODIBLE AREAS SUCH AS NEWLY GRADED FILL SLOPES AND ADJACENT TO STEAMS AND CHANNELS.
3. SILT FENCE SHOULD BE PLACED WELL INSIDE RIGHT-OF-WAY AND ALONG EDGE OF CLEARING LIMITS. THIS WILL ALLOW ROOM FOR BACK-UP FENCE IF FIRST FENCE BECOMES FULL.
4. WHENEVER POSSIBLE SILT FENCE SHOULD BE CONSTRUCTED ACROSS A LEVEL AREA IN THE SHAPE OF A SMILE. THIS AIDS IN PONDING OF RUNOFF AN FACILITATES SEDIMENTATION.
5. THE CONTRACTOR MAY ELECT TO USE EITHER METHOD I OR METHOD II. COST TO BE LINEAR FEET OF SILT FENCE.
6. METHOD II INSTALLATION SHALL BE ACCOMPLISHED USING AN IMPLEMENT THAT IS MANUFACTURED FOR THE APPLICATION AND PROVIDES A CONFIGURATION MEETING THE REQUIREMENTS OF DETAIL.
7. WIRE SHALL BE A MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
8. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATION MAY BE USED WITHOUT WIRE FENCE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF SILT FENCE INSTALLATION

REVISION	BY	DATE

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: ECD-11

SHEET NUMBER: 6103

STATE	PROJECT NO.
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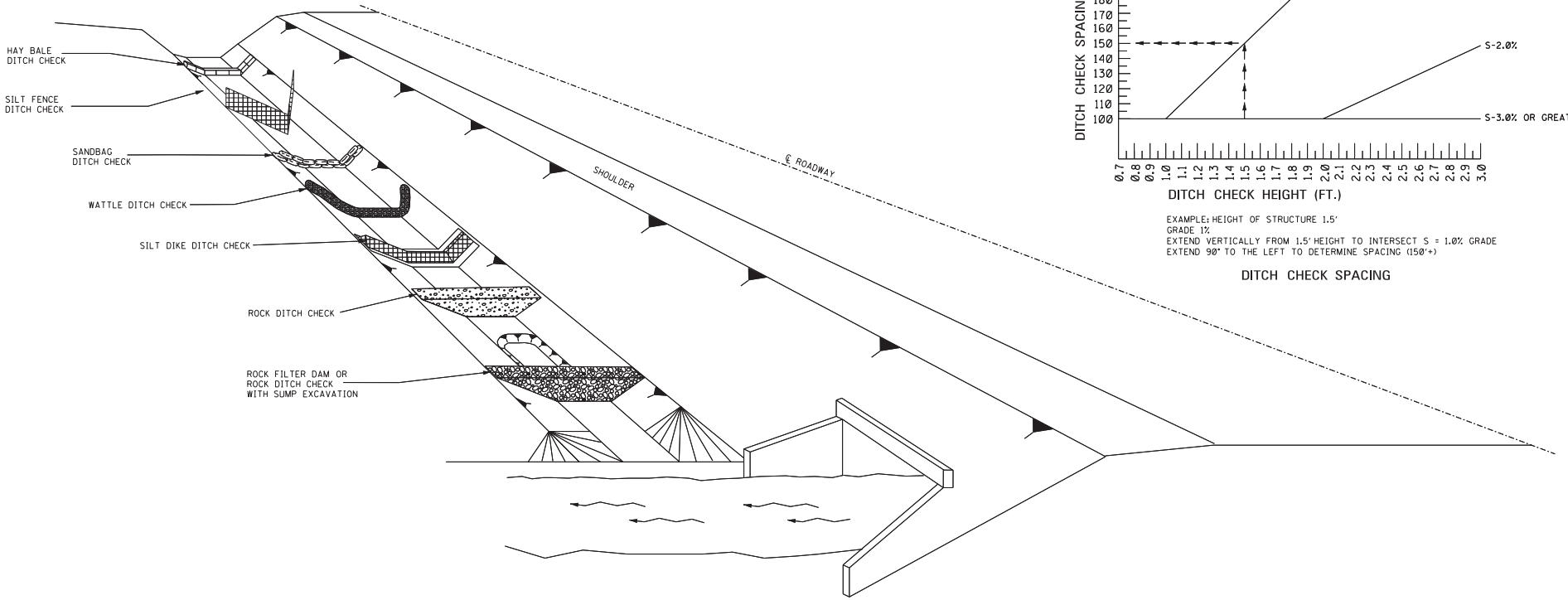
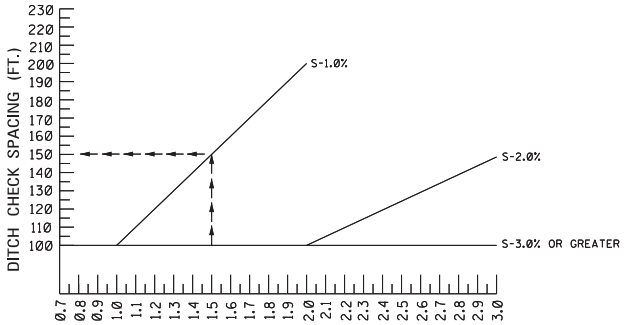




EXAMPLE: HEIGHT OF STRUCTURE 1.5'
GRADE 1%
EXTEND VERTICALLY FROM 1.5' HEIGHT TO INTERSECT S = 1.0% GRADE
EXTEND 90° TO THE LEFT TO DETERMINE SPACING (150'+)

DITCH CHECK SPACING

GENERAL NOTES:

1. THE DITCH CHECK PERSPECTIVE ILLUSTRATES A TOOL BOX OF TEMPORARY PRACTICES THAT MAY BE USED. DITCH CHECKS ARE INSTALLED TO CONTROL RUNOFF VELOCITY AND THUS REDUCE EROSION AND PROVIDE FOR TRAPPING OF SEDIMENTS.
2. SELECTION OF THE APPROPRIATE DITCH CHECK SHOULD BE A FUNCTION OF CONSTRUCTION PHASE, DRAINAGE AREA, DITCH GRADIENT, SOIL TYPE, ECONOMY AND SAFETY.
3. DITCH CHECKS CAN BE REMOVED FOR MAINTENANCE AND/OR REPLACEMENT BUT MUST REMAIN IN PLACE UNTIL UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED. MAINTENANCE INCLUDES REMOVAL OF SEDIMENT BEGINNING WHEN SEDIMENT ACCUMULATION REACHES ⅓ THE CAPACITY OR HEIGHT OF THE STRUCTURE AND NEVER ALLOWING FOR SEDIMENT TO ACCUMULATE MORE THAN ½ THE VOLUME OR HEIGHT OF THE DITCH CHECK STRUCTURE.
4. HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
5. SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
6. SANDBAG DITCH CHECKS SHOULD BE USED FOR VELOCITY REDUCTION AND MINIMAL SEDIMENT TRAPPING IN CONCRETE PAVED DITCHES OR IN DITCHES THAT HAVE ROCK BOTTOMS.
7. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
8. SILT DIKES CAN BE USED IN DITCHES WITH CONCENTRATED FLOWS WITHIN THE CLEAR ZONE WHERE RIPRAP CAN NOT BE USED. AS CONSTRUCTION PROGRESSES.
9. ROCK DITCH CHECKS WITH SUMP EXCAVATION CAN BE PLACED IN DITCHES TO ASSURE ON-SITE SEDIMENT TRAPPING REQUIREMENTS ARE MET. DITCH CHECK WITH SUMP EXCAVATION IS USED WHEN DITCHES RECEIVE DRAINAGE FROM CUT OR FILL SLOPES OR OTHER CRITICAL AREAS WHERE SOIL EROSION IS EXPECTED. DRAINAGE AREA FOR A TEMPORARY SEDIMENT TRAP SHOULD BE LIMITED TO 3 ACRES. THEY CAN BE USED IN SERIES TO INCREASE ON-SITE SEDIMENT TRAPPING EFFICIENCY.
10. DITCH CHECKS, IN NO CASE, SHALL BE PLACED IN LIVE STREAMS.
11. CONFIGURATION AND SPACING MAY BE ADJUSTED IF APPROVED BY THE ENGINEER TO ACCOMMODATE TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

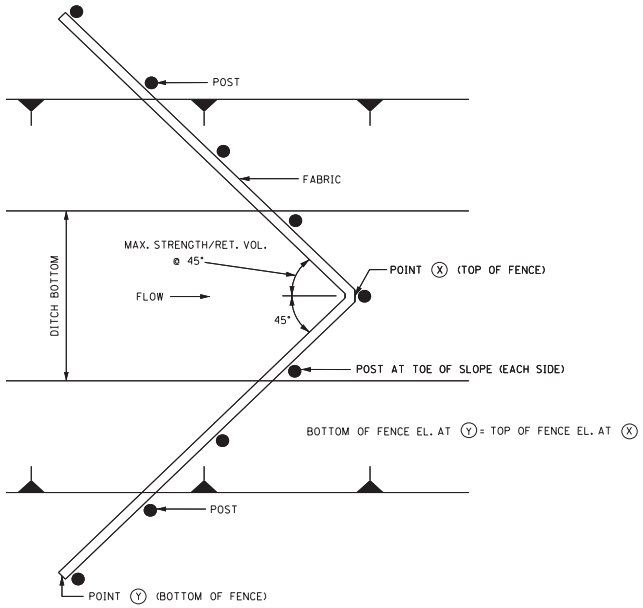
DITCH CHECK STRUCTURES, TYPICAL APPLICATIONS AND DETAILS

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: ECD-4

SHEET NUMBER: 6104

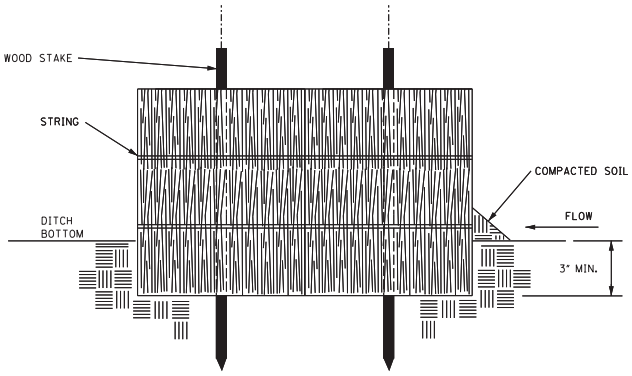
STATE	PROJECT NO.
MISS.	



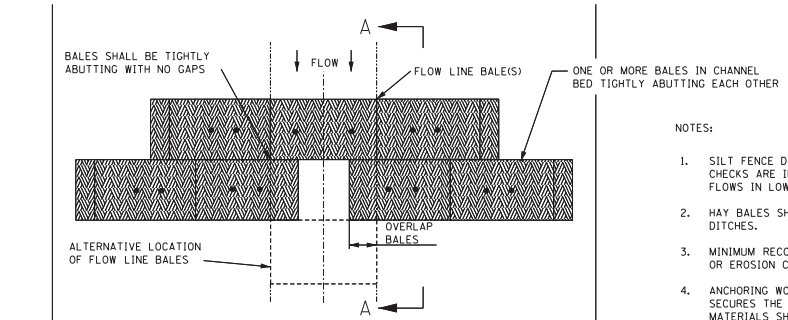
PLAN VIEW

NOTES:

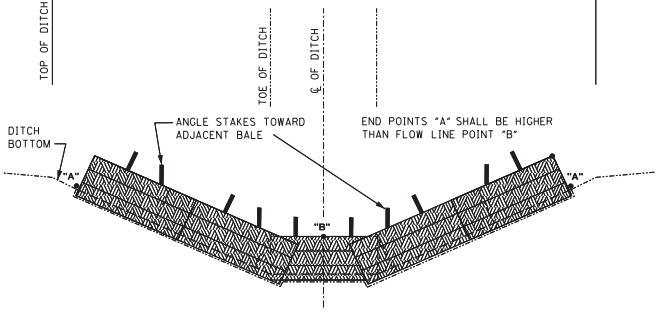
1. ANCHOR AND INSTALL PER DETAILS FOR SILT FENCE SPACING GUIDELINES ON WK. NO. ECD-4.
2. A "W" SHAPE MAY BE USED FOR WIDER DITCHES.



SECTION A–A



PLAN VIEW
TRAPEZOIDAL DITCH



PROFILE VIEW
TRAPEZOIDAL DITCH

NOTES:

1. SILT FENCE DITCH CHECKS SHOULD BE USED WHERE IT HAS BEEN DETERMINED THAT HAY BALE CHECKS ARE INADEQUATE. SILT FENCE DITCH CHECKS SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
2. HAY BALES SHOULD BE USED TO INTERCEPT LOW VOLUME FLOWS IN LOW TO MODERATE GRADIENT DITCHES.
3. MINIMUM RECOMMENDED CHECK SPACING IS 100 FEET UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
4. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. A MINIMUM OF TWO STAKES PER BALE IS REQUIRED. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
5. BALES SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 3 INCHES.
6. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES. THE BALES SHALL BE PLACED WITH BINDINGS PARALLEL TO THE GROUND.
7. SOIL IS COMPACTED ALONG THE BASE OF THE UPSTREAM FACE TO PREVENT PIPING.
8. MULTIPLE ADJACENT ROWS OF BALES ARE REQUIRED AS SHOWN.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TEMPORARY EROSION, SEDIMENT, AND WATER POLLUTION CONTROL MEASURES

(SILT FENCE AND HAY BALE DITCH CHECKS)

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: ECD-1

SHEET NUMBER: 6105

STATE	PROJECT NO.
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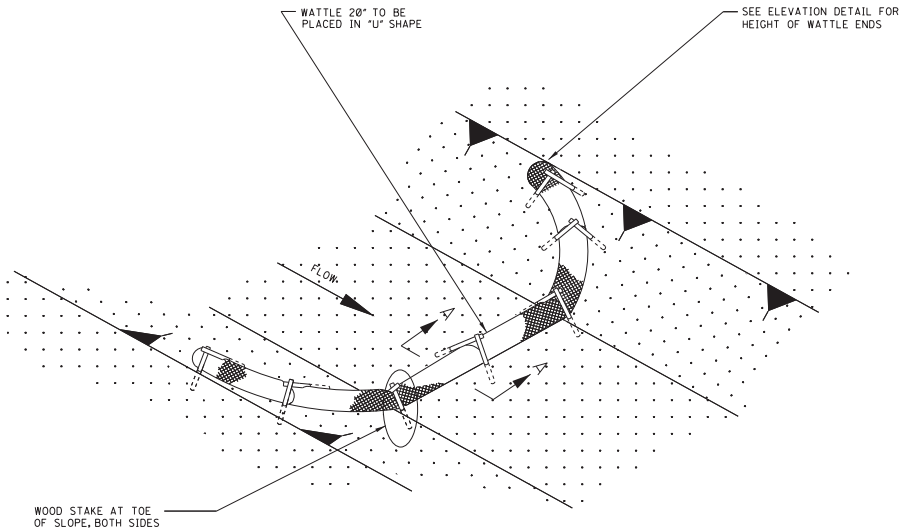
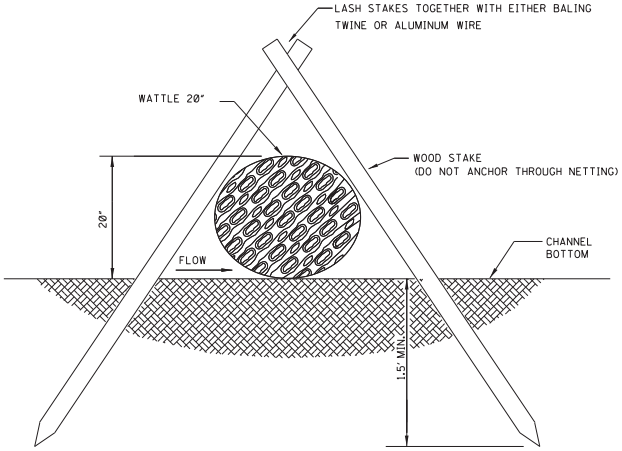
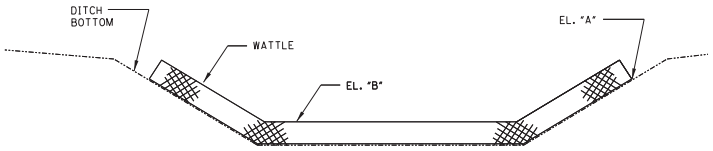


DETAIL (DITCH CHECK)



SECTION A–A

NOTE: END POINTS "A" SHALL BE HIGHER THAN FLOWLINE POINT "B".



ELEVATION DETAIL

NOTES:

1. WATTLE DITCH CHECKS CAN BE USED FOR VELOCITY REDUCTION AND CONTROL OF SEDIMENT TRANSPORT UNDER LOW TO MEDIUM FLOW CONDITIONS.
2. THE PLACEMENT INTERVAL BETWEEN WATTLE DITCH CHECK SHALL BE 100' UNLESS SHOWN OTHERWISE ON THE PLANS OR EROSION CONTROL PLAN APPROVED BY THE ENGINEER. SEE SPACING GUIDANCE ON WK. NO. ECD-4.
3. ANCHORING WOOD STAKES SHALL BE SIZED, SPACED, DRIVEN, AND BE OF A MATERIAL THAT EFFECTIVELY SECURES THE CHECK. STAKE SPACING SHALL BE A MAXIMUM OF THREE FEET. ALL NON-DEGRADABLE MATERIALS SHALL BE REMOVED WHEN NO LONGER NEEDED.
4. TRENCHING OF WATTLES MAY BE NECESSARY IF PIPING BECOMES EVIDENT.
5. WATTLES SHOULD NOT BE USED IN HARD BOTTOM CHANNELS.
6. IN THE EVENT WATTLES CANNOT BE SECURED IN PLACE USING WOOD STAKES, SAND BAGS MAY BE USED IN LIEU OF WOOD STAKES IN ORDER TO SECURE THE WATTLES IN PLACE. IF SANDS BAGS ARE USED IN THIS APPLICATION THEY WILL NOT BE A SEPARATE PAY ITEM.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

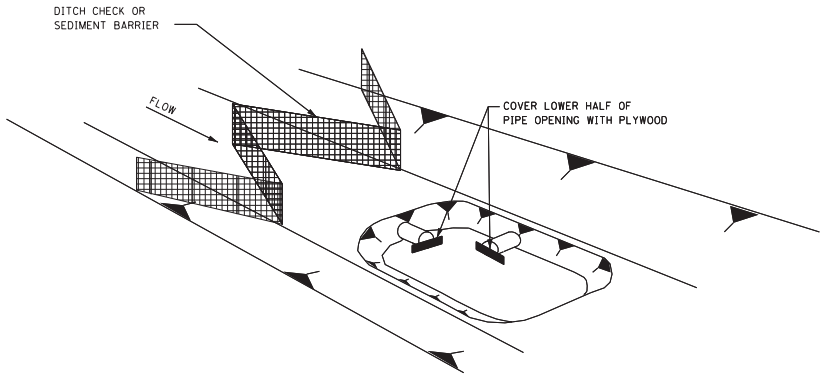
DETAILS OF EROSION CONTROL WATTLE DITCH CHECK

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: ECD-8

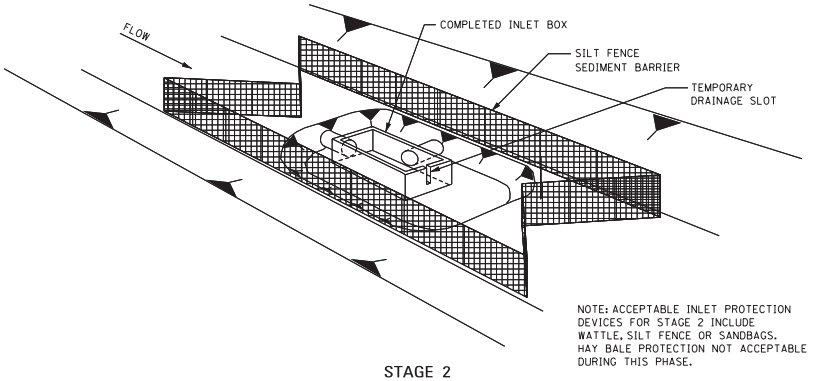
SHEET NUMBER: 6106

STATE	PROJECT NO.
MISS.	



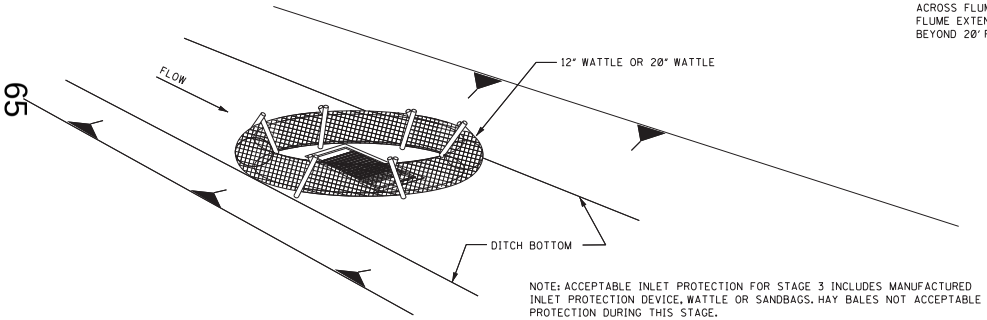
STAGE 1

INLET/JUNCTION BOX LOCATION EXCAVATED



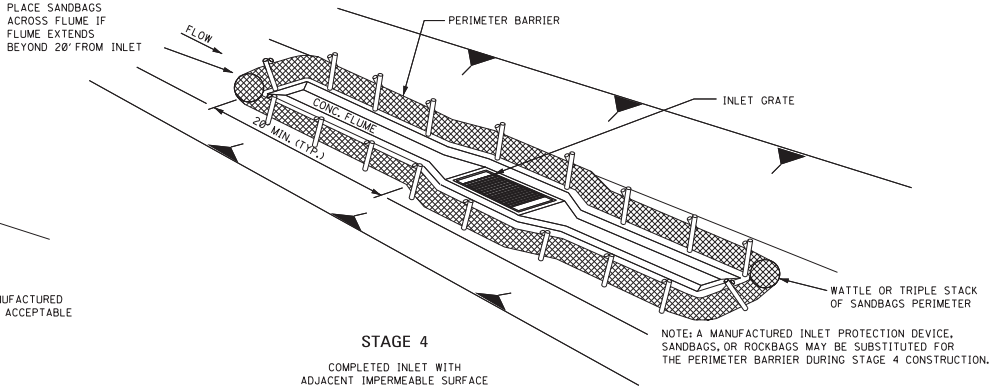
STAGE 2

INLET/JUNCTION BOX
CONSTRUCTED BUT NOT BACKFILLED



STAGE 3

INLET CONSTRUCTED AND BACKFILLED



STAGE 4

COMPLETED INLET WITH
ADJACENT IMPERMEABLE SURFACE

DITCH INLET CONSTRUCTION STAGES

NOTES:

1. DRAINAGE STRUCTURE BACKFILL SHOULD BE PLACED IN STAGE 1 IMMEDIATELY AFTER PIPE INSTALLATION. INLET CONSTRUCTION SHOULD COMMENCE AS SOON AS POSSIBLE AND BE CONTINUOUS THROUGH COMPLETION.
2. CONFIGURATIONS MAY BE ADJUSTED WITH APPROVAL OF THE ENGINEER FOR TRAVELWAY SAFETY, WATER FLOW, OR SOIL AND INSTALLATION CHALLENGES.
3. DURING STAGE 1 AND STAGE 2, SILT FENCE MAY BE REQUIRED UPSLOPE OF THE INLET EXCAVATION AS DIRECTED BY THE ENGINEER.
4. IF SILT FENCE IS INSTALLED AROUND THE INLET INSTALLATION IT SHOULD BE IN A CONFIGURATION THAT WILL ALLOW INLET CONSTRUCTION.
5. FOR INLET PROTECTION TO BE USED IN STAGES 1 AND 2 OF CONSTRUCTION, SEE WK. NO. ECD-12.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL APPLICATIONS AND DETAILS FOR INLET CONSTRUCTION

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: ECD-11

SHEET NUMBER: 6111

STATE	PROJECT NO.
MISS.	

STANDARD INSTALLATION DETAIL

TABLE 1: BEDDING AND BACKFILL REQUIREMENTS

BEDDING AND BACKFILL REQUIREMENTS FOR NON-RIGID PIPE IN CROSS DRAIN AND STORM DRAIN APPLICATIONS

A. BEDDING SHALL BE CLASS B IN ACCORDANCE WITH THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
B. BACKFILL MATERIAL SHALL BE ONE OF THE FOLLOWING:
   1. FLOWABLE FILL IN ACCORDANCE WITH THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION LATEST EDITION.
   2. CRUSHED STONE AGGREGATE BACKFILL IN ACCORDANCE WITH THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.

IF FLOWABLE FILL IS UTILIZED, CARE SHALL BE TAKEN TO PREVENT "FLOATING" OF THE PIPE.
THE COST OF FURNISHING AND PLACING THE REQUIRED BEDDING AND BACKFILL MATERIAL INDICATED IN A AND B SHALL BE INCLUDED IN THE UNIT COST OF THE NON-RIGID PIPE ALTERNATE, I.E., THERE IS NO SEPARATE PAY ITEM FOR NON-RIGID PIPE BEDDING AND BACKFILL MATERIAL.

BEDDING AND BACKFILL REQUIREMENTS FOR NON-RIGID PIPE IN SIDE DRAIN APPLICATIONS

A. BEDDING SHALL BE CLASS C IN ACCORDANCE WITH THE MISSISSIPPI SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION.
B. BACKFILL MATERIAL SHALL BE IN ACCORDANCE WITH THE MISSISSIPPI SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, LATEST EDITION. PIPES THAT SERVE AS A SIDE DRAIN ON DEPARTMENT RIGHT OF WAY, BUT CARRY DRAINAGE UNDER A COUNTY OR LOCAL ROAD SHALL ADHERE TO THE BEDDING AND BACKFILL REQUIREMENTS FOR A CROSS DRAIN CONTAINED ABOVE.

THE COST OF FURNISHING AND PLACING THE REQUIRED BEDDING AND BACKFILL MATERIAL INDICATED IN A AND B SHALL BE INCLUDED IN THE UNIT COST OF THE NON-RIGID ALTERNATE PIPE, I.E., THERE IS NO SEPARATE PAY ITEM FOR NON-RIGID BEDDING AND BACKFILL MATERIAL.

TABLE 2:
HIGH DENSITY CORRIGATED POLYETHYLENE PIPE
HEIGHT OF COVER

NOMINAL DIAMETER IN.	MINIMUM COVER IN.	MAXIMUM COVER - FT.	
		CROSS DRAIN	SIDE DRAIN
12	12	38	11
15	12	36	12
18	12	35	11
24	12	30	10
30	12	25	9
36	21	29	10
42	21	27	9
48	21	25	8

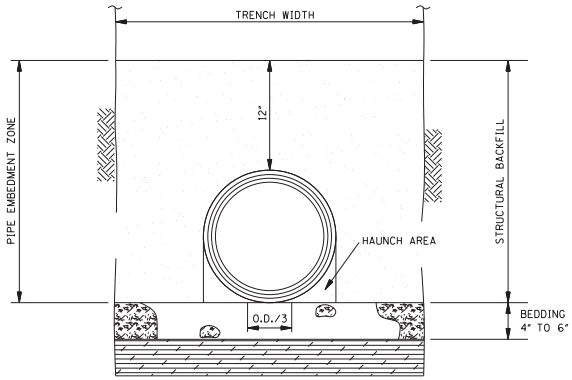
TABLE 3: RECOMMENDED TRENCH WIDTH

DIAMETER IN.	O.D. IN.	TRENCH WIDTH IN.
12	14.45	34
15	17.57	38
18	21.20	44
24	27.80	54
30	35.10	65
36	41.70	75
42	47.70	84
48	53.60	92

THE TRENCH WIDTH MUST BE WIDE ENOUGH TO ACCOMODATE COMPATION EQUIPMENT

TABLE 4: MULTIPLE INSTALLATION OF POLYETHYLENE PIPES

DIAMETER OF PIPE IN.	CLEAR DISTANCE BETWEEN PIPES FT.-IN.
18	1'-2"
24	1'-5"
30	1'-8"
36	1'-11"
42	2'-2"
48	2'-5"



TRENCH CROSS SECTION SHOWING TERMINOLOGY

GENERAL NOTES:

1. MATERIALS
   THERMOPLASTIC PIPE
   POLYETHYLENE PIPE SHALL CONFORM TO THE REQUIREMENTS OF AASHTO M 294, LATEST EDITION.
   DESIGNATION OF TYPE: TYPE S: THIS PIPE WILL HAVE A FULL CIRCULAR CROSS SECTION WITH AN OUTER CORRUGATED PIPE WALL AND A SMOOTH INNER LINER.
   BEDDING MATERIAL AND STRUCTURAL BACKFILL
   BEDDING MATERIAL AND STRUCTURAL BACKFILL SHALL MEET THE REQUIREMENTS OF TABLE 1.
2. JOINTS
   JOINTS FOR THERMOPLASTIC PIPE SHALL MEET THE PERFORMANCE REQUIREMENTS OF SOILTIGHTNESS UNLESS WATERTIGHTNESS IS SPECIFIED.
   SUITABLE JOINTS CAN BE OBTAINED WITH THE FOLLOWING TYPES OF CONNECTIONS:
   A) CORRUGATED BANDS (WITH OR WITHOUT GASKETS)
   B) BELL AND SPIGOT PIPE ENDS (WITH OF WITHOUT GASKETS)
   C) DOUBLE BELL COUPLINGS (WITH OR WITHOUT GASKETS)
3. INSTALLATION
   MINIMUM TRENCH WIDTHS SHALL MEET THE REQUIREMENTS OF TABLE 3.
   THE MIDDLE THIRD OF THE BEDDING MATERIAL UNDER THE PIPE SHOULD BE LOOSELY PLACED, WHILE THE REMAINDER SHALL BE COMPACTED TO A MINIMUM 90% OF MAXIMUM DENSITY PER AASHTO T 99.
   A MINIMUM OF 4 INCHES OF BEDDING SHALL BE PROVIDED PRIOR TO PLACEMENT OF THE PIPE.
   STRUCTURAL BACKFILL SHALL BE PLACED AND COMPACTED IN LAYERS NOT EXCEEDING AN 8" LOOSE LIFT THICKNESS AND BROUGHT UP EVENLY ON BOTH SIDES OF THE PIPE WITH AN ELEVATION NOT LESS THAN 12 INCHES ABOVE THE TOP OF THE PIPE. A MINIMUM COMPACTION LEVEL OF 90% STANDARD DENSITY PER AASHTO T 99 SHALL BE ACHIEVED.
   MINIMUM COVER REQUIREMENTS SHALL MEET THE REQUIREMENTS OF TABLE 2.
   FOR MULTIPLE INSTALLATIONS OF POLYETHYLENE PIPES, A CLEAR DISTANCE BETWEEN THE PIPES SHALL MEET THE REQUIREMENTS OF TABLE 4.
4. CALCULATIONS FOR FILL DEPTHS ARE BASED ON PROPERTIES DEFINED IN AASHTO M294 AND CALCULATIONS IN AASHTO SEC. 19.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

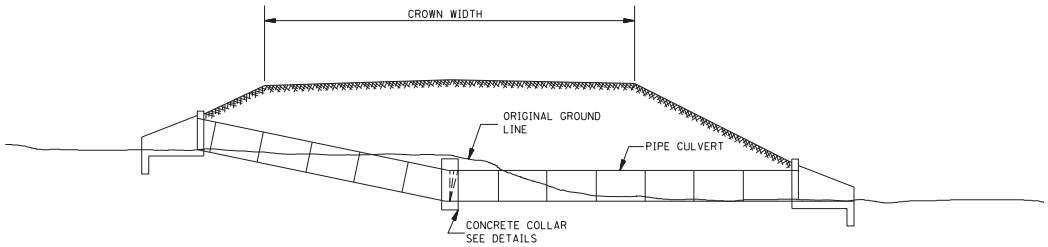
FLEXIBLE PIPE CULVERT INSTALLATION

ISSUE DATE: AUGUST 01, 2017

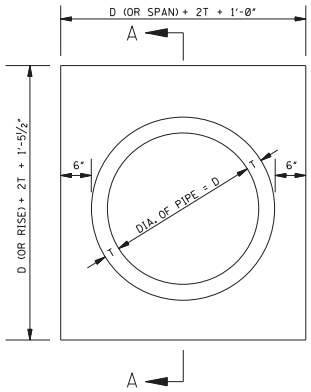
WORKING NUMBER: PI-2

SHEET NUMBER: 6502

STATE	PROJECT NO.
MISS.	

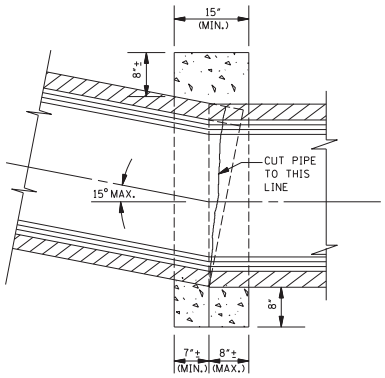


TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR

NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.



SECTION A–A

GENERAL NOTES:

1. THE MAXIMUM BEND ANGLE IS 15 DEGREES.
2. THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR
CONCRETE COLLAR FOR PIPE CULVERTS

CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd^3)	SIZE OF PIPE	CLASS "B" CONCRETE (yd^3)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

CONCRETE PIPE COLLAR

BY	REVISION	DATE

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: PC-1

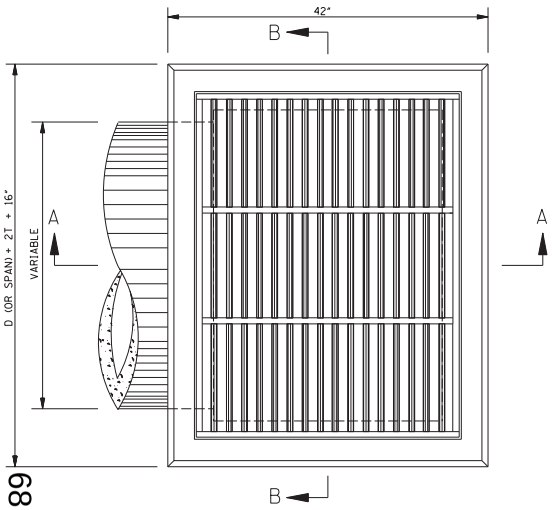
SHEET NUMBER: 6503

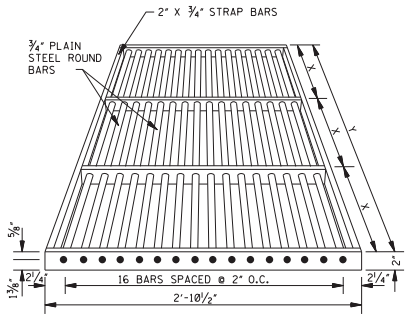
67

STATE	PROJECT NO.
MISS.	

"A", #4 BARS	AS PER TABLE
"B", #4 BARS	D (OR SPAN) +2T+9"
"C", #4 BARS	34"
"D", #4 BARS	D (OR RISE) +T+4"

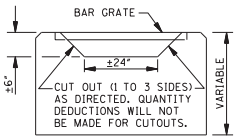
BARS "A", "B", "C" & "D"





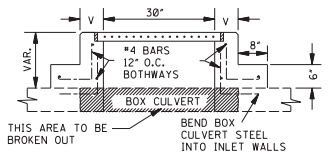
BAR GRATE DETAILS

NOTE: JUNCTIONS OF ROUND AND STRAP BARS SHALL BE WELDED. GRATE SHALL BE SHOP COATED WITH APPROVED EPOXY MASTIC PAINT.

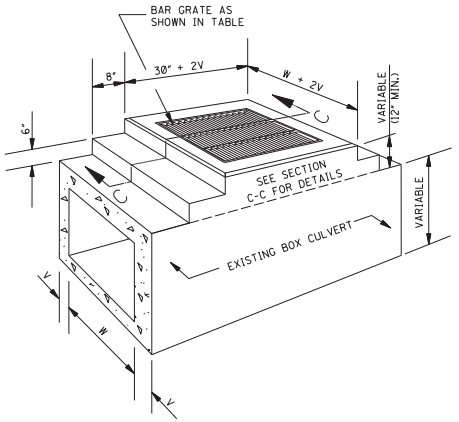


ELEVATION

MODIFIED PIPE OR BOX CULVERT INLET

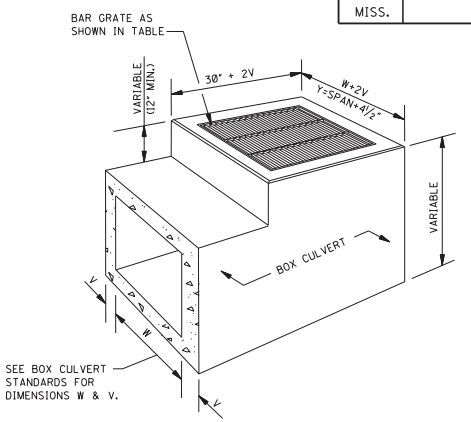


SECTION C–C



SECTIONAL PERSPECTIVE

INLET ON EXISTING BOX CULVERT



SECTIONAL PERSPECTIVE

INLET USED IN LIEU OF HEADWALLS

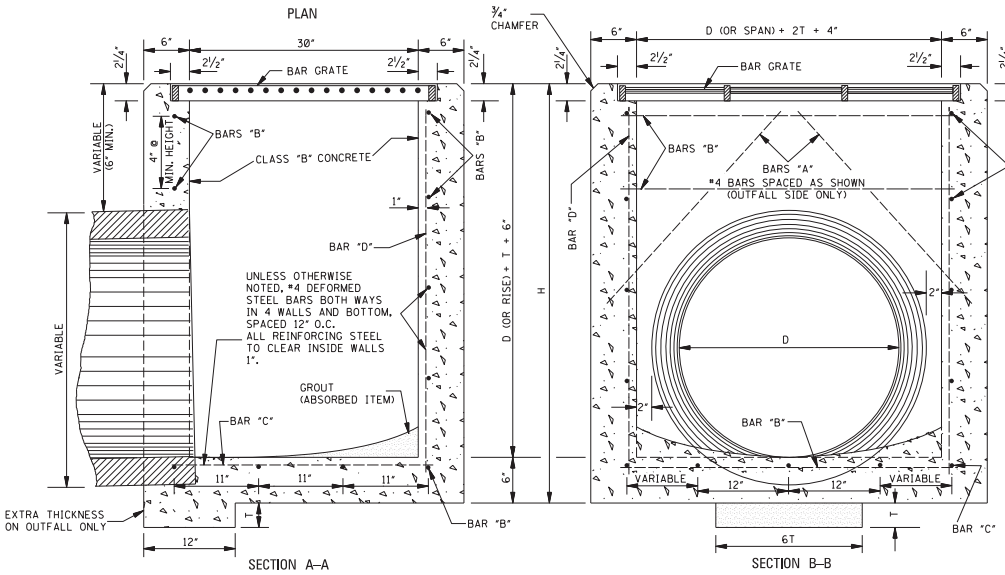
LENGTH AND WEIGHT OF GRATING

PIPE INLETS					BOX CULVERT INLETS				
PIPE SIZE	Y	X	NO. X-SPANS	WEIGHT (lbs)	BOX CULVERT SIZE	Y	X	NO. X-SPANS	WEIGHT (lbs)
18"	2'-7½"	1'-3¾"	2	127	2' X 2'	2'-4½"	1'-2¼"	2	119
22" X 13"	2'-11½"	1'-5¾"	2	139	3' X 2'	3'-4½"	1'-1½"	3	166
24"	3'-2½"	1'-7¼"	2	147	4' X 2'	4'-4½"	1'-5½"	3	200
29" X 18"	3'-7"	1'-2 19/32"	3	173	5' X 2'	5'-4½"	1'-4⅛"	4	247
30"	3'-9½"	1'-3 13/32"	3	180	6' X 2'	6'-4½"	1'-3 9/16"	5	293
36"	4'-4½"	1'-5½"	3	200	7' X 2'	7'-4½"	1'-5 9/16"	5	328
42"	4'-11½"	1'-2⅛"	4	232	8' X 2'	8'-4¾"	1'-4¾"	6	374
48"	5'-6½"	1'-4⅝"	4	252	3' X 3'	3'-4½"	1'-1½"	3	166
54"	6'-1½"	1'-6⅜"	4	272	4' X 3'	4'-4½"	1'-5½"	3	200
60"	6'-8½"	1'-4 7/32"	5	305	5' X 3'	5'-4½"	1'-4⅛"	4	247
					6' X 3'	6'-4½"	1'-3 9/16"	5	293

QUANTITIES

PIPE SIZE	MIN. DEPTH TO F.L.	MIN. DEPTH INLET		EACH ADDED FOOT		PIPE OPENING DEDUCTION (yd³)	T	BARS/SIZES			
		CONC * (yd³)	STEEL (lbs)	CONC (yd³)	STEEL (lbs)			"A" / #4	"B" / #4	"C" / #4	"D" / #4
								NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.
18"	2.209'	0.623	42	0.213	13	0.053	2½"	2 @ 21"	8 @ 32"	7 @ 34"	9 @ 24½"
22" X 13"	1.833'	0.586	42	0.225	14	0.053	2½"	2 @ 25"	8 @ 36"	7 @ 34"	9 @ 20"
24"	2.750'	0.800	55	0.235	14	0.091	3"	2 @ 25"	9 @ 39"	9 @ 34"	9 @ 31"
29" X 18"	2.250'	0.742	57	0.248	16	0.087	3"	2 @ 30"	9 @ 43½"	9 @ 34"	11 @ 25"
30"	3.292'	0.992	70	0.256	16	0.138	3½"	2 @ 30"	9 @ 46"	11 @ 34"	11 @ 37½"
36"	3.834'	1.198	85	0.278	17	0.196	4"	2 @ 33"	10 @ 53"	13 @ 34"	11 @ 44"
42"	4.375'	1.418	93	0.299	18	0.263	4½"	2 @ 36"	10 @ 60"	13 @ 34"	11 @ 50½"
48"	4.917'	1.653	109	0.321	19	0.340	5"	2 @ 39"	11 @ 67"	15 @ 34"	11 @ 57"
54"	5.458'	1.902	136	0.343	21	0.427	5½"	2 @ 42"	12 @ 74"	19 @ 34"	13 @ 63½"
60"	6.000'	2.165	146	0.364	21	0.524	6"	2 @ 47"	12 @ 81"	19 @ 34"	13 @ 70"

*NOTE: ONE (1) PIPE OPENING HAS BEEN DEDUCTED FROM THE STRUCTURE.



PIPE CULVERT INLET

GENERAL NOTES:

1. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. BOX CULVERTS:
   A. UNLESS OTHERWISE SHOWN, THE DETAILS OF THE BOX CULVERT INLETS SHALL CONFORM TO THOSE SHOWN FOR THE PIPE INLETS.
   B. BOX CULVERT REINFORCEMENT SHALL BE CONTINUED AND RESHAPED TO ACCOMMODATE THE INLET BOX. ADDITIONAL BARS SHALL BE THE SAME DIAMETER AS THOSE IN THE BOX CULVERT AND THE CONCRETE SHALL BE THE SAME. QUANTITIES SHALL BE COMPUTED IN CONJUNCTION WITH QUANTITIES FOR BOX CULVERT.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DROP INLET AND GRATE DETAILS FOR PIPE AND BOX CULVERTS

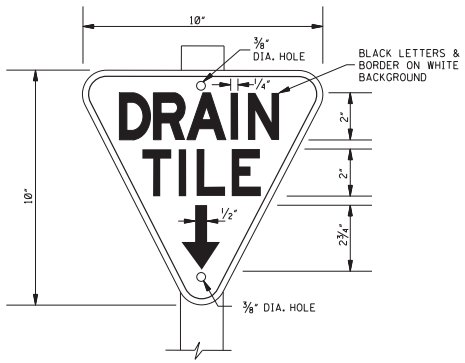
MDOT

WORKING NUMBER B-9

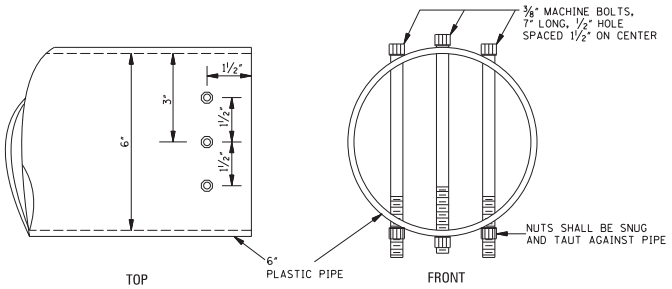
SHEET NUMBER 6527

ISSUE DATE: AUGUST 01, 2017

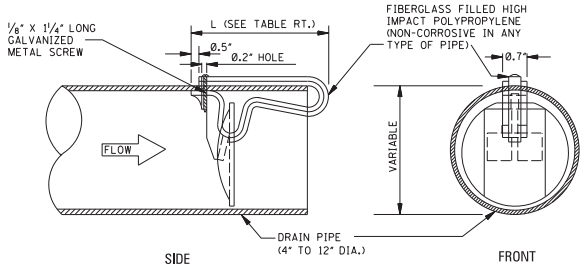
STATE	PROJECT NO.
MISS.	



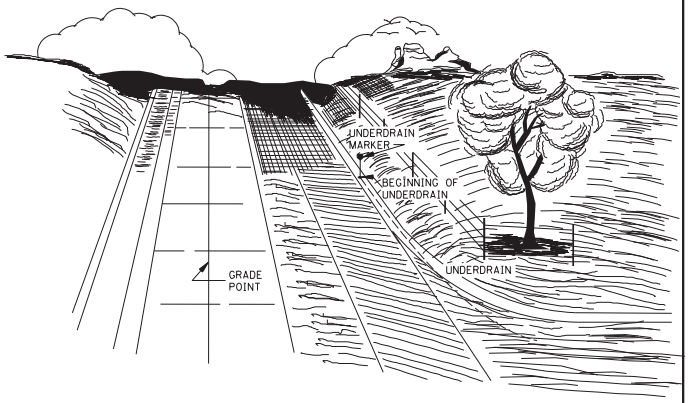
MARKER



SMALL ANIMAL GUARD – ALTERNATE I

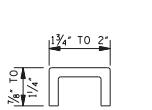


FOR UNDERDRAINS 4" TO 12" IN DIAMETER

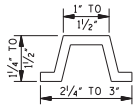


DIA. OF UNDERDRAIN	L
4"	3"
5"	3"
6"	4.75"
8"	4.75"
10"	9.50"
12"	9.50"

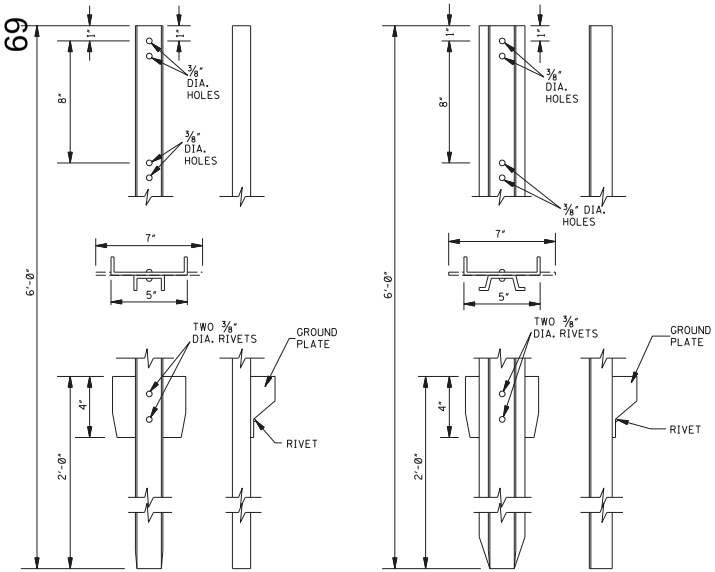
LOCATION OF UNDERDRAIN MARKER



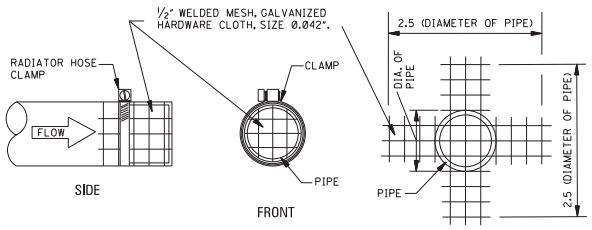
CROSS SECTION



CROSS SECTION

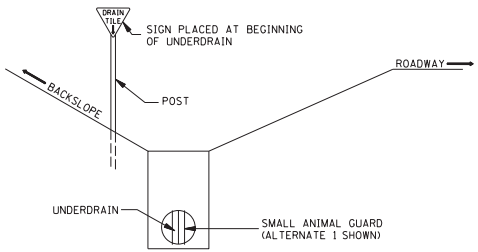


METAL POST



FOR UNDERDRAINS LESS THAN 4" IN DIAMETER

SMALL ANIMAL GUARD – ALTERNATE II



CROSS SECTION OF UNDERDRAIN

GENERAL NOTES:

1. MARKER SHALL BE FASTENED TO POST WITH ⅝" BLIND FASTENERS OF THE COLLAR TYPE.
2. MARKER FACE SHALL BE 0.080" ALUMINUM SHEET OR 14 GAGE SHEET STEEL WHICH IS GALVANIZED.
3. POSTS SHALL BE GALVANIZED AS SPECIFIED BY SECTION 630 OF THE MDOT STANDARD SPECIFICATIONS.
4. POSTS SHALL BE 2.0 lbs/ft TO 2.5 lbs/ft.
5. PAYMENT FOR INSTALLED DRAIN TILE MARKERS AND SMALL ANIMAL GUARDS SHALL BE ABSORBED IN THE PRICE FOR PIPE UNDERDRAINS.
6. BOLTS, NUTS, WASHERS AND HARDWARE CLOTH SHALL BE ZINC COATED BY THE MECHANICAL OR HOT DIP GALVANIZING PROCESS.
7. ANIMAL GUARD AND SIGN SHALL BE PLACED IMMEDIATELY AFTER PIPE INSTALLATION

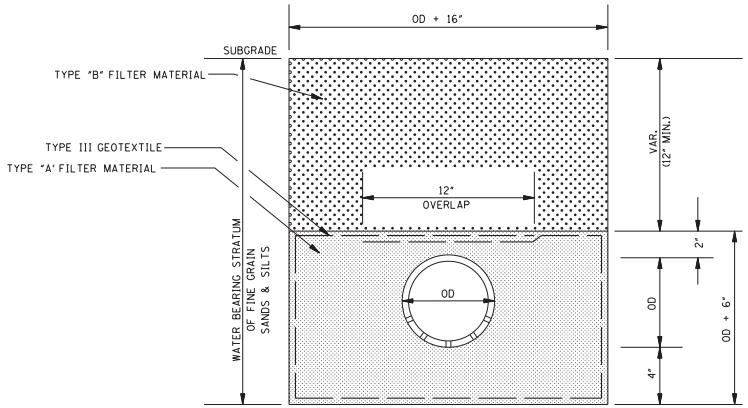
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SMALL ANIMAL GUARD AND UNDERDRAIN MARKER

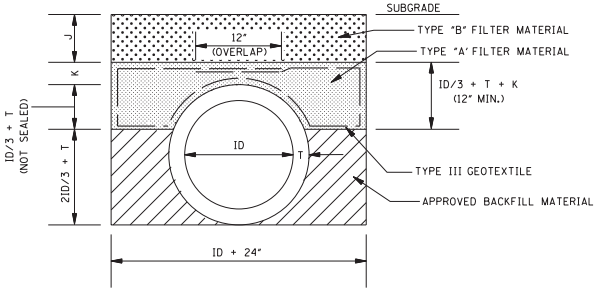
DATE	REVISION	BY

WORKING NUMBER: SAG-1
SHEET NUMBER: 6529
ISSUE DATE: AUGUST 01, 2017

STATE	PROJECT NO.
MISS.	



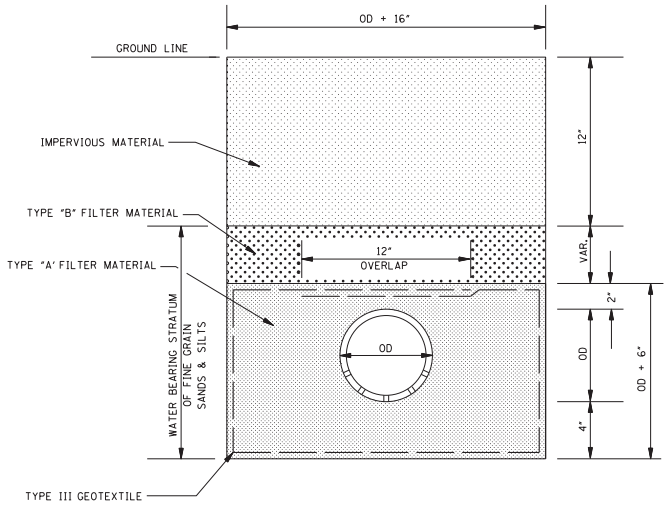
NORMAL UNDERDRAIN TYPE I



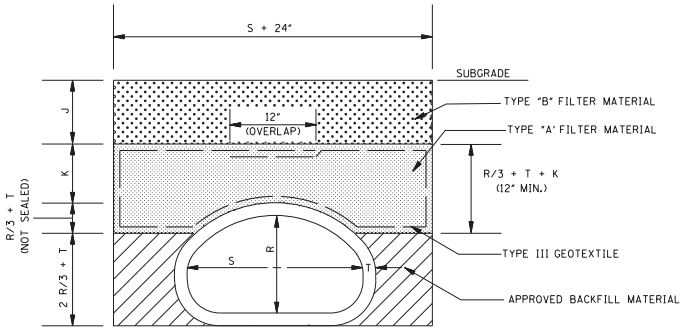
CIRCULAR STORM DRAIN USED AS UNDERDRAIN

PIPE SIZE	T	K	TYPE "A" MATERIAL (yd^3/ft)	TYPE "B" MATERIAL* ($yd^3/ft/ft$)	TYPE III GEOTEXTILE (yd^2/ft)	IMPERVIOUS MATERIAL (yd^3/ft)
6"	--	--	0.0638	0.0694	0.7593	0.0694
18"	2½"	4"	0.099	0.130	1.193	--
24"	3"	2"	0.100	0.148	1.334	--
30"	3½"	2"	0.124	0.167	1.513	--
36"	4"	2"	0.149	0.185	1.691	--
42"	4½"	2"	0.176	0.204	1.869	--
48"	5"	2"	0.204	0.222	2.048	--
54"	5½"	2"	0.233	0.241	2.226	--
60"	6"	2"	0.264	0.259	2.404	--
66"	6½"	2"	0.296	0.278	2.583	--
72"	7"	2"	0.330	0.296	2.761	--
84"	8"	2"	0.401	0.333	3.118	--
96"	9"	2"	0.477	0.370	3.474	--

*NOTE: $yd^3/ft/ft$ = CUBIC YARD PER FOOT DEPTH OF MATERIAL PER FOOT LENGTH OF PIPE.



NORMAL UNDERDRAIN TYPE II



ARCH STORM DRAIN USED AS UNDERDRAIN

PIPE SIZE	T	K	TYPE "A" MATERIAL (yd^3/ft)	TYPE "B" MATERIAL* ($yd^3/ft/ft$)	TYPE III GEOTEXTILE (yd^2/ft)
22" X 13"	2½"	5"	0.109	0.142	1.231
29" X 18"	3"	2.92"	0.113	0.162	1.383
36" X 23"	3½"	2"	0.124	0.186	1.537
44" X 27"	4"	2"	0.154	0.209	1.734
51" X 31"	4½"	2"	0.184	0.232	1.913
58" X 36"	5"	2"	0.217	0.255	2.098
65" X 40"	5½"	2"	0.248	0.275	2.158
73" X 45"	6"	2"	0.289	0.299	2.471
88" X 54"	7"	2"	0.374	0.346	2.849

*NOTE: $yd^3/ft/ft$ = CUBIC YARD PER FOOT DEPTH OF MATERIAL PER FOOT LENGTH OF PIPE.

GENERAL NOTES:

1. QUANTITIES SHOWN WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. TYPE I UNDERDRAIN IS GENERALLY USED WHEN UNDERDRAIN IS REQUIRED UNDER THE ROADWAY SUBGRADE.
3. TYPE II UNDERDRAIN IS USED AS REQUIRED OUTSIDE THE ROADWAY.
4. 6" OVERLAP SHALL BE REQUIRED AT THE END OF EACH ROLL OF TYPE III GEOTEXTILE. BOTH THE 6" AND 12" OVERLAP SHALL BE INCLUDED FOR PAYMENT UNDER GEOTEXTILE FOR SUBSURFACE DRAINAGE, TYPE III, PER SQUARE YARD).
5. (J + K) SHALL BE 12" MINIMUM OR VARIABLE DEPTH UNLESS SPECIFIED ELSEWHERE ON THE PLANS.

BY	REVISION	DATE

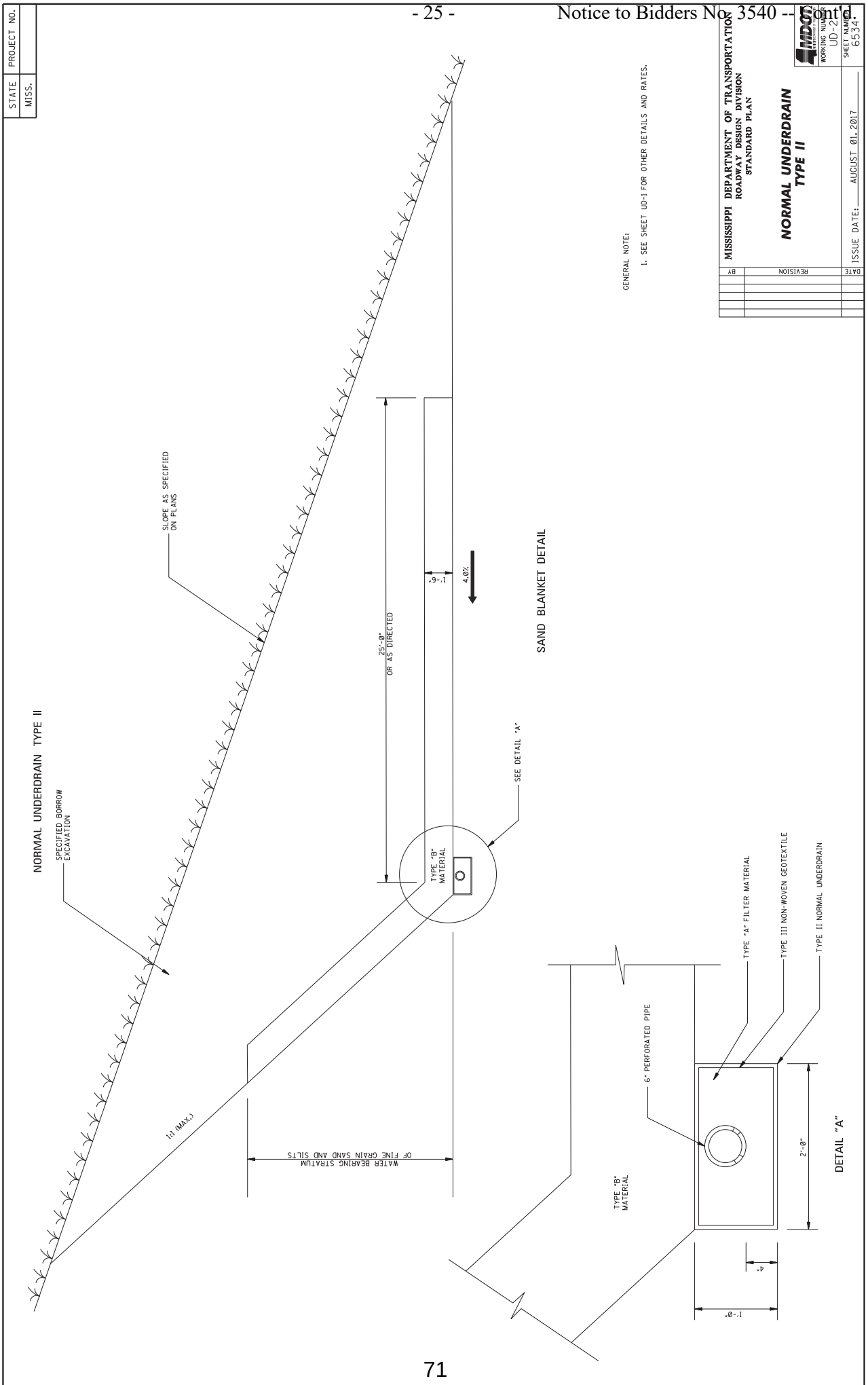
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF NORMAL UNDERDRAIN AND STORM DRAIN USED AS UNDERDRAIN

ISSUE DATE: AUGUST 01, 2017

WORKING NUMBER: UD-1

SHEET NUMBER: 6533


STATE
MISS.
PROJECT NO.
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN
NORMAL UNDERDRAIN
TYPE II
WORKING NUMBER
UD-2
SHEET NUMBER
6534
ISSUE DATE: AUGUST 01, 2017
REVISION
BY
DATE
GENERAL NOTE:
1. SEE SHEET UD-1 FOR OTHER DETAILS AND RATES.
NORMAL UNDERDRAIN TYPE II
SPECIFIED BORROW EXCAVATION
SLOPE AS SPECIFIED ON PLANS
25'-0" OR AS DIRECTED
1'-6"
4.0%
SEE DETAIL "A"
TYPE "B" MATERIAL
1:1 (MAX.)
WATER BEARING STRATUM OF FINE GRAIN SAND AND SILTS
SAND BLANKET DETAIL
TYPE "A" FILTER MATERIAL
TYPE III NON-WOVEN GEOTEXTILE
TYPE II NORMAL UNDERDRAIN
6" PERFORATED PIPE
TYPE "B" MATERIAL
2'-0"
4"
1'-0"
DETAIL "A"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3541 **CODE: (SP)**

DATE: 07/13/2021

SUBJECT: Liquidated Damages

PROJECT: MP-1041-58(003) / 307744302 – Pontotoc County

Liquidated damages, as referenced in Subsection 108.07, will be **$3,000.00** per calendar day for this project.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3542 **CODE: (SP)**

DATE: 07/13/2021

SUBJECT: Lane Closure Restrictions and Additional Work Requirements

PROJECT: MP-1041-58(003) / 307744302 – Pontotoc County

Bidders are hereby advised that **NO WORK OR LANE CLOSURES** will be allowed during the following times throughout the life of the project:

- **Sundays from 7:00 AM to 12 Noon**
- **Wednesdays from 5:00 PM to 8:00 PM**

If the restrictions listed above are violated, the Contractor will be assessed a fee of **$500.00** for each full or partial five minute period until the roadway is back in compliance with the lane closure restriction requirement.

For the purposes of this contract, official time shall be the announced time available at the Tupelo area telephone number (662) 842-8422.

All night work shall be in accordance with Section 680 – Portable Construction Lighting.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3543 **CODE: (SP)**

DATE: 07/13/2021

SUBJECT: Project Number Change

PROJECT: MP-1041-58(003) / 307744302 – Pontotoc County

Bidders are hereby advised that any references to Project Number MEP-1041-58(003) / 307744301 in the plans or specifications shall be understood to mean Project Number MP-1041-58(003) / 307744302.

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. 907-103-2 **CODE: (SP)**

DATE: 06/22/2017

SUBJECT: Award and Execution of Contract

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-1 **CODE: (SP)**

DATE: 05/07/2021

SUBJECT: Authority of the Engineer

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

907-105.1--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.

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. 907-109-3 **CODE: (SP)**

DATE: **02/23/2021**

SUBJECT: **Measurement and Payment**

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

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.

907-109.06--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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-204-1 **CODE: (SP)**

DATE: 05/04/2021

SUBJECT: Geogrid

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-701-3 **CODE: (SP)**

DATE: **05/04/2021**

SUBJECT: **Hydraulic Cement**

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

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.

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

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

$$\text{lb alkali per cu Yd} = \frac{(\text{lb cement per cu Yd}) x (\%Na_2O \text{ equivalent in cement})}{100}$$

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

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

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

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

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

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

Table 1- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate Exposure	Water-soluble sulfate (SO_4) in soil, % by mass	Sulfate (SO_4) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type I cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS or Type II*,** cement
Severe	0.20 - 2.00	1,500 - 10,000	Type I cement with a replacement by weight of 49.5 - 50.0% GGBFS, or Type II* cement with one of the following replacements of cement by weight: 24.5 - 25.0% Class F fly ash, or 49.5 - 50.0% GGBFS

* Type III cement conforming to AASHTO M85 with a maximum 8% tricalcium aluminate (C_3A) may be used in lieu of Type II cement as allowed in Subsection 701.02.1; this cement is given the designation "Type III(MS)."

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

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

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

907-701.04--Blended Hydraulic Cement.

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

907-701.04.1.1--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.

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

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

The blended cement manufacturer shall include the percent equivalent alkalis as Na_2O on their cement mill reports.

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

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

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

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

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

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

Table 2- Cementitious Materials for Soluble Sulfate Conditions or Seawater

Sulfate Exposure	Water-soluble sulfate (SO_4) in soil, % by mass	Sulfate (SO_4) in water, ppm	Cementitious material required
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type IL (MS)* cement, Type IL cement with one of the following replacements of cement by weight: 24.5 - 35.0% Class F fly ash, or 49.5 - 50.0% GGBFS, Type IP (MS) cement, or Type IS (MS) cement
Severe	0.20 - 2.00	1,500 - 10,000	Type IL cement with a replacement of cement by weight of 49.5 - 50.0% GGBFS, or Type IL (MS) cement with one of following replacements of cement by weight: 24.5 - 35.0% Class F fly ash, or 49.5 - 50.0% GGBFS

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

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

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

Delete Subsection 701.04.3 on page 721.

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. 907-703-1 **CODE: (IS)**

DATE: 06/13/2018

SUBJECT: Gradation

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

907-703.03--Course Aggregates for Hydraulic Cement Concrete.

907-703.03.2--Detail Requirements.

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.

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. 907-707-2 **CODE: (IS)**

DATE: **06/05/2019**

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.

907-707.02.3--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. 907-714-2 **CODE: (SP)**

DATE: **06/29/2021**

SUBJECT: **Miscellaneous Materials**

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

907-714.01--Water.

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

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.

907-714.13--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 Subsection 714.15 on pages 816 and 817 and substitute the following.

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. 907-720-2 **CODE: (IS)**

DATE: 09/11/2018

SUBJECT: Acceptance Procedure for Glass Beads

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

907-720.01--Glass Beads.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-721-2 **CODE: (IS)**

DATE: 01/08/2020

SUBJECT: Materials for Signing

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

907-721.06--Reflective Sheeting.

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

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.

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.

Slide Repair on SR 41 approximately 550 feet North of the SR 41 & SR 15 Intersection, known as State Project No. MP-1041-58(003) / 307744302 in Pontotoc County.

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
				Roadway Items	
0010	201-A001		1	Lump Sum	Clearing and Grubbing
0020	202-B007		463	Square Yard	Removal of Asphalt Pavement, All Depths
0030	202-B191		95	Linear Feet	Removal of Pipe, 8" And Above
0040	203-A001	(E)	225	Cubic Yard	Unclassified Excavation, FM, AH
0050	203-EX021	(E)	950	Cubic Yard	Borrow Excavation, AH, FME, Class B9-6
0060	203-G001	(E)	1,700	Cubic Yard	Excess Excavation, FM, AH
0070	216-A001		3,000	Square Yard	Solid Sodding
0080	219-A001		2	Thousand Gallon	Watering ($20.00)
0090	234-A001		460	Linear Feet	Temporary Silt Fence
0100	237-A002		100	Linear Feet	Wattles, 20"
0110	310-B006	(GY)	240	Cubic Yard	Size III Stabilizer Aggregate, Coarse
0120	403-A006	(BA1)	140	Ton	19-mm, ST, Asphalt Pavement
0130	403-A015	(BA1)	150	Ton	9.5-mm, ST, Asphalt Pavement
0140	406-A002		570	Square Yard	Cold Milling of Bituminous Pavement, All Depths
0150	407-A001	(A2)	102	Gallon	Asphalt for Tack Coat
0160	503-C010		52	Linear Feet	Saw Cut, Full Depth
0170	601-B001	(S)	4	Cubic Yard	Class "B" Structural Concrete, Minor Structures
0180	602-A001	(S)	186	Pounds	Reinforcing Steel
0190	603-PE011	(S)	305	Linear Feet	42" Corrugated Polyethylene Pipe
0200	604-B001		464	Pounds	Gratings
0210	605-AA003	(S)	700	Square Yard	Geotextile for Subsurface Drainage, Type V, Non-Woven
0220	605-O004	(S)	160	Linear Feet	6" Perforated Sewer Pipe for Underdrains, SDR 23.5
0230	605-P004	(S)	367	Linear Feet	6" Non-perforated Sewer Pipe for Underdrains, SDR 23.5
0240	605-W001	(GY)	12	Cubic Yard	Filter Material for Combination Storm Drain and/or Underdrains,Type A, FM
0250	605-Z006		1	Each	Underdrain Appurtenances, Small Animal Guard
0260	618-A001		1	Lump Sum	Maintenance of Traffic
0270	618-B001		1	Square Feet	Additional Construction Signs ($10.00)
0280	619-A1002		570	Linear Feet	Temporary Traffic Stripe, Continuous White
0290	619-A4001		285	Linear Feet	Temporary Traffic Stripe, Skip Yellow
0300	619-A5001		244	Linear Feet	Temporary Traffic Stripe, Detail
0310	619-A6002		45	Linear Feet	Temporary Traffic Stripe, Legend
0320	620-A001		1	Lump Sum	Mobilization
0330	626-B003		570	Linear Feet	6" Thermoplastic Traffic Stripe, Continuous White
0340	626-D004		285	Linear Feet	6" Thermoplastic Traffic Stripe, Skip Yellow
0350	626-G002		160	Linear Feet	Thermoplastic Detail Stripe, White

Line no.	Item Code	Adj Code	Quantity	Units	Description[Fixed Unit Price]
0360	626-G003		84	Linear Feet	Thermoplastic Detail Stripe, Yellow
0370	626-H005		60	Linear Feet	Thermoplastic Legend, White
0380	627-J001		28	Each	Two-Way Clear Reflective High Performance Raised Markers
0390	627-L001		10	Each	Two-Way Yellow Reflective High Performance Raised Markers
0400	815-A002	(S)	24	Ton	Loose Riprap, Size 100
0410	907-204-A003		700	Square Yard	Geogrid, Type II, Biaxial
					ALTERNATE GROUP AA NUMBER 1
0420	304-H001	(GY)	590	Cubic Yard	3/4" and Down Crushed Stone Base, LVM
					ALTERNATE GROUP AA NUMBER 2
0430	304-H002	(GY)	590	Cubic Yard	Size 610 Crushed Stone Base, LVM
					ALTERNATE GROUP AA NUMBER 3
0440	304-H003	(GY)	590	Cubic Yard	Size 825B Crushed Stone Base, LVM

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.

* *

COMBINATION BID PROPOSAL

This proposal is tendered as one part of a Combination Bid Proposal utilizing option ___* of Subsection 102.11 on the following contracts:

* Option to be shown as either (a), (b), or (c).

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

(a) If Combination A has been selected, your Combination Bid is complete.

(b) If Combination B has been selected, then complete the following page.

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

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.

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

CERTIFICATE

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

I (we) agree that this notification of intent DOES NOT constitute APPROVAL of the subcontracts.

(Individual or Firm)	(Address)
(Individual or Firm)	(Address)
(Individual or Firm)	(Address)
(Individual or Firm)	(Address)

NOTE: Failure to complete the above DOES NOT preclude subsequent subcontracts. Subsequent subcontracts, if any, equal to or in excess of fifty thousand dollars ($50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on September 8, 2011.

Contractor _____

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION

I,_____,
(Name of person signing bid)

individually, and in my capacity as_____ of
(Title of person signing bid)

_____
(Name of Firm, partnership, or Corporation)

do hereby certify under penalty of perjury under the laws of the United States and the State of Mississippi

that_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **MP-1041-58(003)/ 307744302000**

in **Pontotoc** County(ies), Mississippi, has not either directly or indirectly entered into any agreement, participated in any collusion; or otherwise taken any action in restraint of free competitive bidding in connection with this contract; nor have any of its corporate officers or principal owners.

Except as noted hereafter, it is further certified that said legal entity and its corporate officers, principal owners, managers, auditors and others in a position of administering federal funds are not currently under suspension, debarment, voluntary exclusion or determination of ineligibility; nor have a debarment pending; nor been suspended, debarred, voluntarily excluded or determined ineligible within the past three years by the Mississippi Transportation Commission, the State of Mississippi, any other State or a federal agency; nor been indicted, convicted or had a civil judgment rendered by a court of competent jurisdiction in any matter involving fraud or official misconduct within the past three years.

Do exceptions exist and are made a part thereof? Yes / No

Any exceptions shall address to whom it applies, initiating agency and dates of such action.

Note: Exceptions will not necessarily result in denial of award but will be considered in determining bidder responsibility. Providing false information may result in criminal prosecution or administrative sanctions.

All of the foregoing is true and correct.

(1/2016 S)

SECTION 902

CONTRACT FOR **MP-1041-58(003)/ 307744302000**

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

STATE OF MISSISSIPPI,
COUNTY OF HINDS

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

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

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

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

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

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

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

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

Witness our signatures this the____ day of _____,_____.

_____
Contractor(s)

By_____

Title_____

Signed and sealed in the presence of:
(names and addresses of witnesses)

_____

MISSISSIPPI TRANSPORTATION COMMISSION

By_____
Executive Director

_____
Secretary to the Commission

Award authorized by the Mississippi Transportation Commission in session on the ____ day of _____,_____, Minute Book No. _____, Page No. _____.

Revised 8/06/2003

SECTION 903
PERFORMANCE AND PAYMENT BOND

CONTRACT BOND FOR: **MP-1041-58(003)/ 307744302000**

LOCATED IN THE COUNTY(IES) OF: **Pontotoc**

STATE OF MISSISSIPPI,
COUNTY OF HINDS

Know all men by these presents: that we, _____
(Contractor)
_____ Principal, a _____

residing at_____ in the State of _____

and _____
(Surety)
residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, effective as of the contract date shown below, are held and firmly bound unto the State of Mississippi in the sum of _____

_____

($_____) Dollars, lawful money of the United States of America, to be paid to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or assigns jointly and severally by these presents.

The conditions of this bond are such, that whereas the said _____

_____

principal, has (have) entered into a contract with the Mississippi Transportation Commission, bearing the date of _____ day of _____ A.D. _____ hereto annexed, for the construction of certain projects(s) in the State of Mississippi as mentioned in said contract in accordance with the Contract Documents therefor, on file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

Now therefore, if the above bounden _____
_____in all things shall stand to and abide by and well and truly observe, do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract, contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the manner and form and furnish all of the material and equipment specified in said contract in strict accordance with the terms of said contract which said plans, specifications and special provisions are included in and form a part of said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commission from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud, or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes, licenses, assessments, contributions, damages,

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

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

BID BOND

KNOW ALL MEN BY THESE 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 **Slide Repair on SR 41 approximately 550 feet North of the SR 41 & SR 15 Intersection, known as State Project No. MP-1041-58(003) / 307744302 in Pontotoc 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