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Keyed \_\_\_\_\_

15 -



SM No. CMP6528310101

# PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF  
(EXEMPT)

15  
Widening and Overlaying SR 528 from Interstate 59 to US Highway 11,  
known as State Project No. MP-6528-31(010) / 303276301, in the County  
of Jasper, State of Mississippi.  
Project Completion: 36 Time Units

## NOTICE

**BIDDERS MUST PURCHASE A BOUND PROPOSAL  
FROM MDOT CONTRACT ADMINISTRATION DIVISION  
TO BID ON THIS PROJECT.**

Electronic addendum updates will be posted on [www.goMDOT.com](http://www.goMDOT.com)

**SECTION 900  
OF THE CURRENT  
(2004) STANDARD SPECIFICATIONS  
FOR ROAD AND BRIDGE CONSTRUCTION  
MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
JACKSON, MISSISSIPPI**

**BIDDER CHECK LIST  
(FOR INFORMATION ONLY)**

- \_\_\_\_\_ All unit prices and item totals have been entered in accordance with Subsection 102.06 of the Mississippi Standard Specifications for Road and Bridge Construction.
- \_\_\_\_\_ If the bid sheets were prepared using MDOT's Electronic Bid System, proposal sheets have been stapled and inserted into the proposal package.
- \_\_\_\_\_ First sheet of SECTION 905--PROPOSAL has been completed.
- \_\_\_\_\_ Second sheet of SECTION 905--PROPOSAL has been completed and signed.
- \_\_\_\_\_ Addenda, if any, have been acknowledged. Second sheet of Section 905 listing the addendum number has been substituted for the original second sheet of Section 905. Substituted second sheet of Section 905 has been properly completed, signed, and added to the proposal.
- \_\_\_\_\_ DBE/WBE percentage, when required by contract, has been entered on last sheet of the bid sheets of SECTION 905 - PROPOSAL.
- \_\_\_\_\_ Form OCR-485, when required by contract, has been completed and signed.
- \_\_\_\_\_ The last sheet of the bid sheets of SECTION 905--PROPOSAL has been signed.
- \_\_\_\_\_ Combination Bid Proposal of SECTION 905--PROPOSAL has been completed for each project which is to be considered in combination (See Subsection 102.11).
- \_\_\_\_\_ Equal Opportunity Clause Certification, when included in contract, has been completed and signed.
- \_\_\_\_\_ Subcontract Certificate, when included in contract, has been completed and signed.
- \_\_\_\_\_ The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been executed in duplicate.
- \_\_\_\_\_ A certified check, cashier's check or bid bond payable to the State of Mississippi in the principal amount of 5% of the bid has been included with project number identified on same. Bid bond has been signed by the bidder and has also been signed or countersigned by a Mississippi Resident Agent for the Surety with Power of Attorney attached or on file with the Department's Contract Administration Engineer.
- \_\_\_\_\_ Non-resident Bidders: ON STATE FUNDED PROJECTS ONLY, a copy of the current laws regarding any preference for local Contractors from State wherein domiciled has been included. See Subsection 103.01, Mississippi Standard Specifications for Road and Bridge Construction, and Section 31-7-47, MCA, 1972 regarding this matter.

Return the proposal and contract documents in its entirety in a sealed envelope. DO NOT remove any part of the contract documents; exception - an addendum requires substitution of second sheet of Section 905. A stripped proposal is considered as an irregular bid and will be rejected.

Failure to complete any or all of the applicable requirements will be cause for the proposal to be considered irregular.

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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NON-COLLUSION CERTIFICATE,  
SECTION 902 - CONTRACT FORM, AND SECTION 903 - CONTRACT BOND FORM,  
PROGRESS SCHEDULE,  
HAUL PERMIT FOR BRIDGES WITH POSTED WEIGHT LIMITS.

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

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

## SECTION 901 - ADVERTISEMENT

Sealed bids will be received by the Mississippi Transportation Commission in the Office of the Contract Administration Engineer, Room 1013, Mississippi Department of Transportation Administration Building, 401 North West Street, Jackson, Mississippi, until 9:30 o'clock A.M., Tuesday, January 22, 2008; thereafter, bids will be received in the First Floor Auditorium of the Mississippi Department of Transportation Administration Building, Jackson, Mississippi, until 10:00 o'clock A.M., Tuesday, January 22, 2008, and shortly thereafter publicly opened for:

Widen and overlay SR 528 from Interstate 59 to US Highway 11, known as Maintenance Project No. MP-6528-31(010) / 303276301, in the County of Jasper, State of Mississippi.

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.

Bid proposals must be acquired from the MDOT Contract Administration Division. These proposals are available at a cost of Ten Dollars (\$10.00) per proposal. Specimen proposals are also available at the MDOT Contract Administration Division at a cost of Ten Dollars (\$10.00) per proposal, or can be viewed or downloaded at no cost at [www.gomdot.com](http://www.gomdot.com).

Bid bond, signed or countersigned by a Mississippi Resident Agent, with Power of Attorney attached or on file with the Contract Administration Engineer of the Department, 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.

LARRY L. "BUTCH" BROWN  
EXECUTIVE DIRECTOR

(SPWOP)



# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SECTION 904 - NOTICE TO BIDDERS NO. 1**

**CODE: (IS)**

**DATE: 05/03/2004**

**SUBJECT: Governing Specifications**

The current (2004) 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 herein. Copies of the specification book may be purchased from the MDOT Construction Division.

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 1990 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 2004 Edition of the Standard Specifications.

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

**CODE: (SP)**

**DATE: 05/03/2004**

**SUBJECT: Final Clean-Up**

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

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

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

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SECTION 904 - NOTICE TO BIDDERS NO. 12**

**CODE: (IS)**

**DATE: 05/03/2004**

**SUBJECT: Federal Bridge Formula**

Bidders are hereby advised that Federal Highway Administration Publication No. FHWA-MC-94-007, **BRIDGE FORMULA WEIGHTS**, dated January 1994, is made a part of this contract when applicable.

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

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

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

or

<http://ops.fhwa.dot.gov/freight/regulate/sw/>

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SECTION 904 - NOTICE TO BIDDERS NO. 151**

**CODE: (IS)**

**DATE: 06/18/2004**

**SUBJECT: Gopher Tortoises**

Bidders are hereby advised that the Contractor will be required to make special considerations regarding gopher tortoises on this project. In addition to the normal required documentation associated with borrow pits, the Contractor shall, for each site used to obtain or dispose of materials associated with this project, provide the Engineer with a letter from a qualified biologist certifying that the site was inspected prior to any clearing of vegetation or disposal of project materials and that the site is not inhabited by gopher tortoises, or appropriate avoidance measures have been installed. No individual lacking the proper State or Federal license shall touch or otherwise harass a gopher tortoise.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SECTION 904 - NOTICE TO BIDDERS NO. 640

CODE: (IS)

| DATE: 09/26/2005

SUBJECT: Fiber Reinforced Concrete

Bidders are hereby advised that synthetic structural fibers meeting the requirements of Subsection 907-711.04 may be used in lieu of wire mesh in some items of construction. Substitution of fibers for wire mesh will be allowed in the construction of paved ditches, paved flumes, paved inlet apron, driveways, guard rail anchors and pile encasements. Substitution in any other items of work must be approved by the State Construction Engineer prior to use.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SECTION 904 - NOTICE TO BIDDERS NO. [777](#)

CODE: (IS)

| DATE: [04/13/2006](#)

**SUBJECT: On-The-Job Training Program**

| Payment for training hours will be handled as outlined in Special Provision 906-6. A pay item for trainees will not be included in individual construction projects. Payment for training individuals will be processed in accordance with the conditions in MDOT's ON-THE-JOB TRAINING PROGRAM (Special Provision 906-6).

| On Federal-Aid projects, failure on the part of the Contractor to carryout the terms of the Alternate Training Special Provision (Special Provision 906-6) will be considered grounds to preclude the Contractor from participating in the Alternate On-The-Job Training Program. In the event the Department is required to preclude the Contractor from participating in the program, the Contractor will be required to adhere to the requirements of the Training Special Provision (Special Provision 906-3), for which purpose the special provision is also made a part of this proposal.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SECTION 904 - NOTICE TO BIDDERS NO. 883**

**CODE: (IS)**

**DATE: 04/28/2006**

**SUBJECT: Payroll Requirements**

Bidders are hereby advised that the Contractor and Subcontractor(s) are required to submit payroll information to the Project Engineers on a weekly basis.

On Federal-Aid Projects, CAD-880, CAD-881 and certified payroll submissions are required each week the Contractor or a Subcontractor performs work on the project. This is addressed in Section V, page 6 of Form FHWA-1273.

On State-Funded Projects, CAD-880 is required each week the Contractor or a Subcontractor performs work on the project.

When no work is performed on either Federal-Aid and State-Funded Projects, the Contractor should only submit CAD-880 showing no work activities.

The Contractor shall make all efforts necessary to submit this information to the Project Engineer in a timely manner. The Engineer will have the authority to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to submit the required information. Submission of forms and payrolls shall be current through the first full week of the month for the estimate period in order for the Project Engineer to process an estimate.

Bidders are advised to review the requirements regarding payroll submissions in Section 110 of the Standard Specifications.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SECTION 904 - NOTICE TO BIDDERS NO. 1312**

**CODE: (SP)**

**DATE: 01/22/2007**

**SUBJECT: Rumble Stripe**

Bidders are hereby advised that when edge lines are placed over rumble strips, the pavement marking stripe must be applied using the atomization method instead of extrusion / ribbon method. The thickness of the stripe will be 60-mils, unless otherwise noted in the plans/proposal or pay item description. To ensure the proper alignment of the rumble stripes, the Contractor will be required to place a layout line to be followed during installation of the edge lines over the rumble strips.

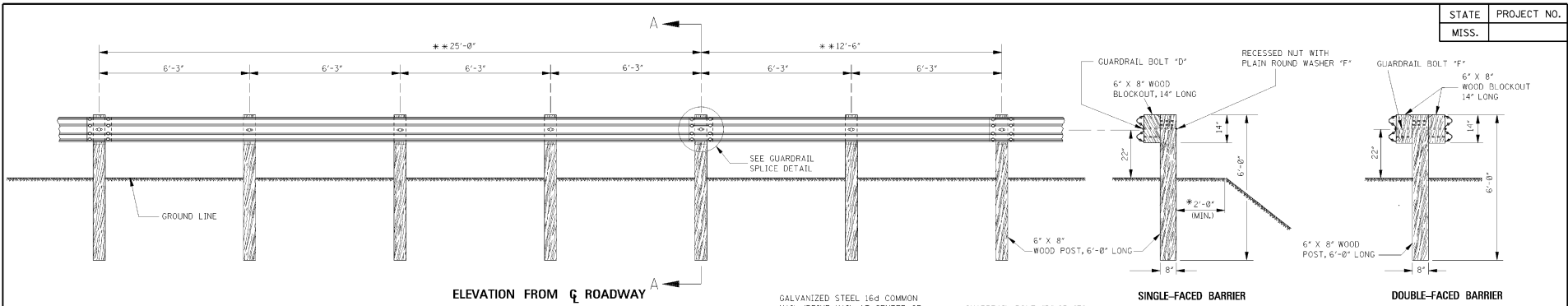


**SUPPLEMENT TO NOTICE TO BIDDERS NO. 1339**

**DATE: 12/10/2007**

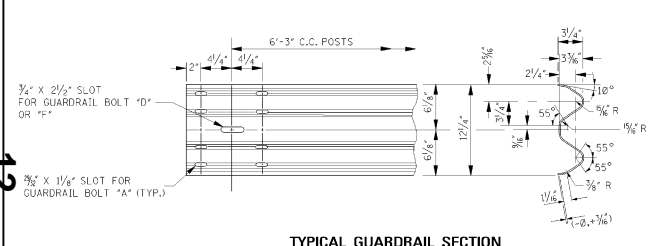
**PROJECT: MP-6528-31(010) / 303276301 -- Jasper County**

After the last drawing of Notice To Bidders No. 1339, add the attached drawing(s).

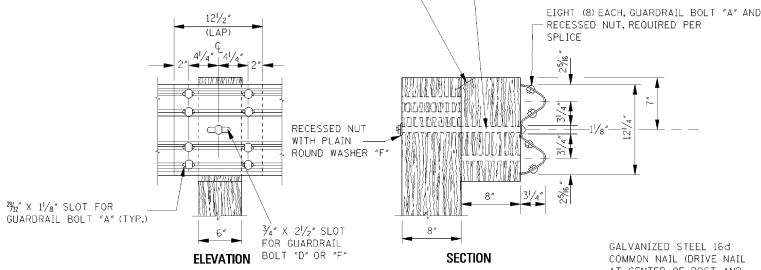


**ELEVATION FROM ROADWAY**  
 \*\* NOTE: OPTIONAL BEAM LENGTHS.

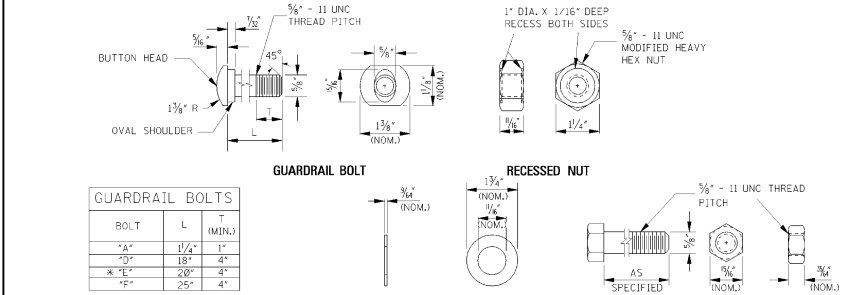
**SINGLE-FACED BARRIER**  
**DOUBLE-FACED BARRIER**  
**SECTION A-A**



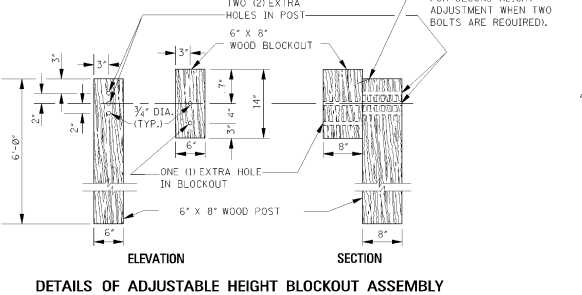
**TYPICAL GUARDRAIL SECTION**



**GUARDRAIL SPLICE DETAIL**



**FASTENER DETAILS**



**DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY**

\* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.

- GENERAL NOTES:**
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
  - GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
  - GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
  - ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
  - FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO.13, TITLED "A-GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
  - OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.

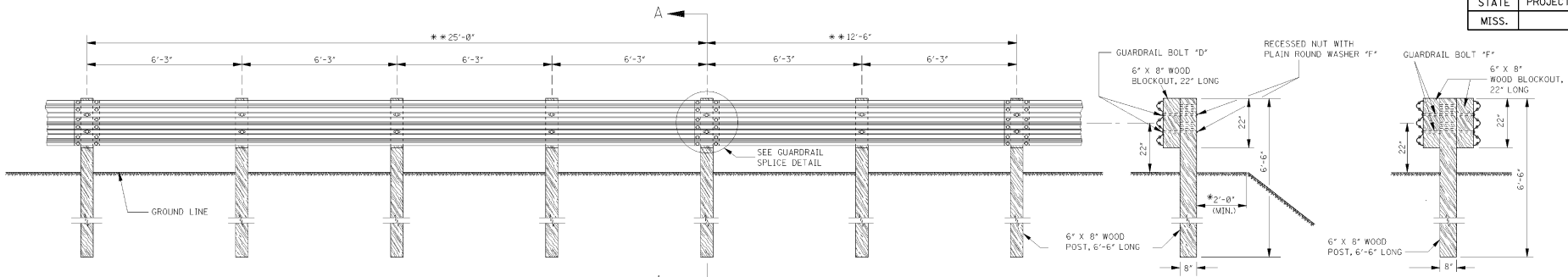
- NOTES:**
- ALL GUARDRAIL BOLTS ARE 3/8" - 11 UNC THREAD PITCH.
  - IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.
  - GUARDRAIL BOLT "E" IS USED FOR SINGLE-FACED BARRIER WITH 10" X 10" WOOD POST AND 6" X 8" WOOD BLOCKOUT.

- NOTES:**
- ON INITIAL INSTALLATION, THE BLOCKOUT SHALL BE ATTACHED TO THE BOTTOM HOLE IN THE POST, OTHER HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENT WHEN THE ROADWAY IS RESURFACED.
  - FOR THE SECOND HEIGHT ADJUSTMENT, ONE (1) HEX NUT AND BOLT "F", 18" LONG FOR SINGLE-FACED BARRIER OR 25" LONG FOR DOUBLE-FACED BARRIER, WITH TWO (2) PLAIN ROUND WASHERS "F", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, ARE REQUIRED PER POST IN ADDITION TO THE STANDARD GUARDRAIL BOLT AND RECESSED NUT.
  - HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
  - WOOD POSTS AND BLOCKOUTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
  - ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
DATE	ISSUE DATE: OCTOBER 1, 1998
<b>GUARDRAIL: "W" BEAM (WOOD POSTS)</b>	
WORKING NUMBER	GR-1
SHEET NUMBER	180



STATE	PROJECT NO.
MISS.	



ELEVATION FROM  $\bar{C}$  ROADWAY

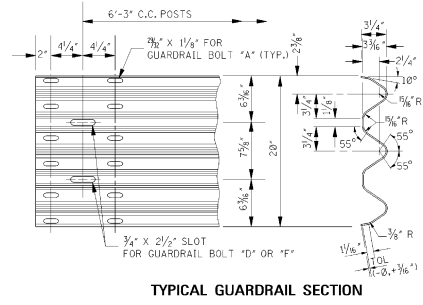
\*\*NOTE: OPTIONAL BEAM LENGTHS.

SINGLE-FACED BARRIER

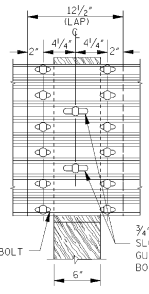
DOUBLE-FACED BARRIER

SECTION A-A

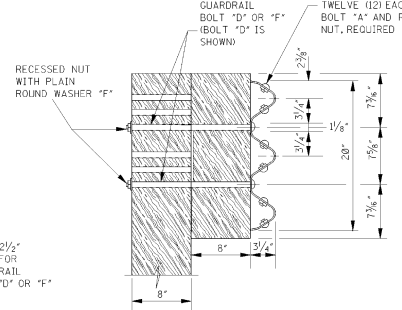
\*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.



TYPICAL GUARDRAIL SECTION



ELEVATION

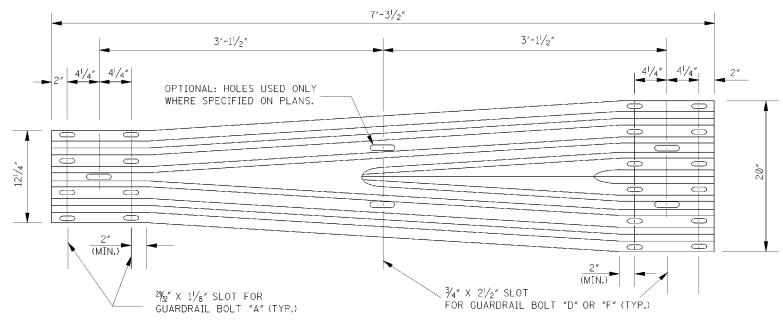


SECTION

GENERAL NOTES:

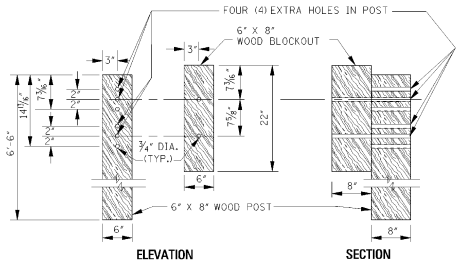
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
- GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
- GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
- ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1.
- FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-ACC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE", LATEST EDITION.
- OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.

GUARDRAIL SPLICE DETAIL



"W" THRIE-BEAM TRANSITION SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THE "W" AND THRIE BEAM ENDS OF THE TRANSITION SECTION ARE THE SAME AS THEIR RESPECTIVE TYPICAL GUARDRAIL SECTIONS.



ELEVATION

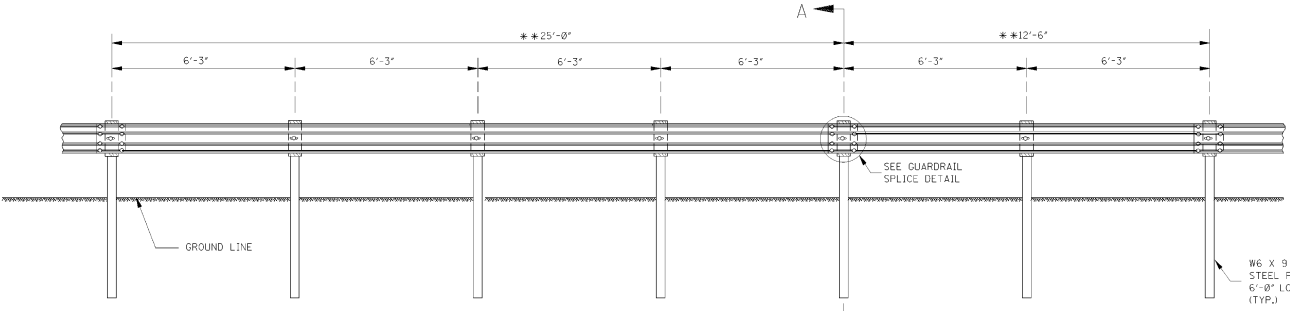
SECTION

DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY

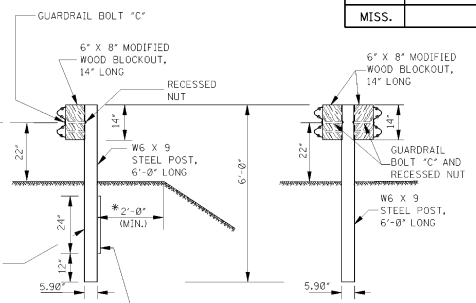
- NOTES:
- ON INITIAL INSTALLATION, THE TOP OF THE BLOCKOUT SHALL BE FLUSH WITH THE TOP OF THE POST. THE ADDITIONAL HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
  - HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
  - WOOD POSTS AND BLOCKOUTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
  - ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.

DATE	REVISION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
	S.W.R. E.P.T.		
DATE S.W.R. E.P.T.	DATE S.W.R. E.P.T.	<b>GUARDRAIL:          THRIE BEAM          (WOOD POSTS)</b>	
DATE S.W.R. E.P.T.	DATE S.W.R. E.P.T.	WORKING NUMBER GR-1A	SHEET NUMBER 181
ISSUE DATE: _____ OCTOBER 1, 1998			

STATE	PROJECT NO.
MISS.	



ELEVATION FROM  $\bar{C}$  ROADWAY  
 \*\* NOTE: OPTIONAL BEAM LENGTHS.



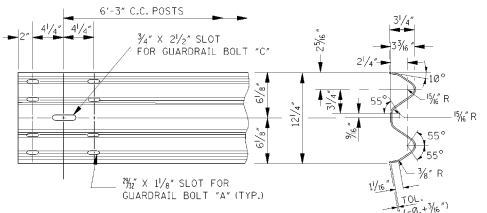
OPTIONAL: 24" X 12" STEEL SOIL BEARING PLATE, 1/4" THICK, WELDED TO POST WHERE SPECIFIED ON PLANS. WELD TOP, BOTTOM AND THREE 3" WELDS ON EACH SIDE.

**SINGLE-FACED BARRIER**      **DOUBLE-FACED BARRIER**  
**SECTION A-A**

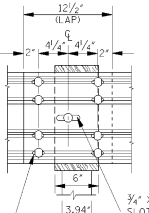
\* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.

GENERAL NOTES:

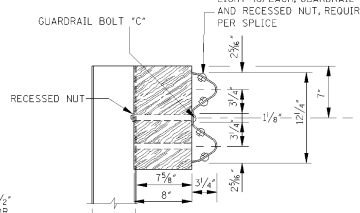
1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. STEEL POSTS SHALL CONFORM TO AASHTO M 183/M 183M OR ASTM A 769/A 769M (EXCEPT ULTRASONIC TESTING). THEY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 EXCEPT WHEN CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE POSTS SHALL CONFORM TO AASHTO M 222/M 222M AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING, DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
5. ALL MODIFIED WOOD BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
7. OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.



TYPICAL GUARDRAIL SECTION

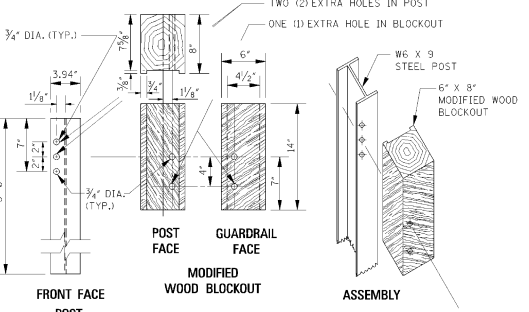


ELEVATION



SECTION

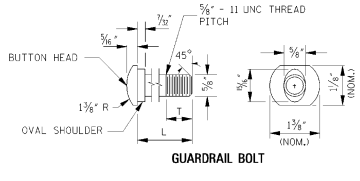
**GUARDRAIL SPLICE DETAIL**



DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY

NOTES:

1. ON INITIAL INSTALLATION, THE MODIFIED WOOD BLOCKOUT SHALL BE FASTENED TO THE BOTTOM HOLE IN THE STEEL POST. OTHER HOLES IN THE STEEL POST AND THE MODIFIED WOOD BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. AN ADDITIONAL GUARDRAIL BOLT "C" AND RECESSED NUT IS REQUIRED FOR THE SECOND HEIGHT ADJUSTMENT.
3. HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND MODIFIED WOOD BLOCKOUTS.
4. STEEL POSTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
5. MODIFIED WOOD BLOCKOUTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
6. ALL HOLES IN BOTH STEEL POSTS AND MODIFIED WOOD BLOCKOUTS ARE 3/4" IN DIAMETER.

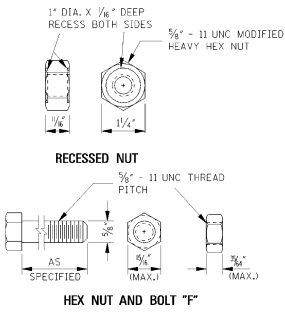


GUARDRAIL BOLTS

BOLT	L	(MIN.)
"A"	1 1/2"	1"
"B"	2"	1 3/4"
"C"	10"	4"

NOTES:

1. ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.



HEX NUT AND BOLT "F"

FASTENER DETAILS

DESIGNED	REVISIONS	DATE	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
 ROADWAY DESIGN DIVISION  
 STANDARD PLAN

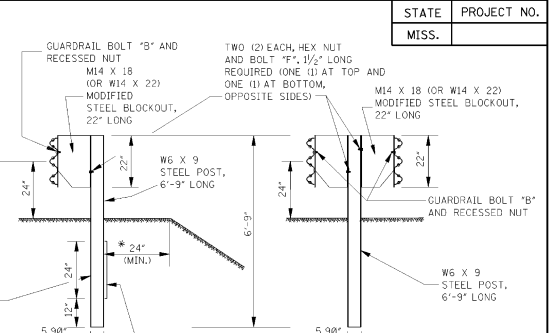
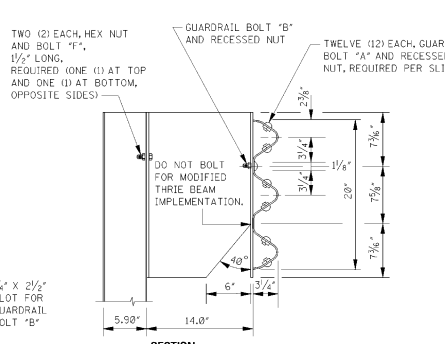
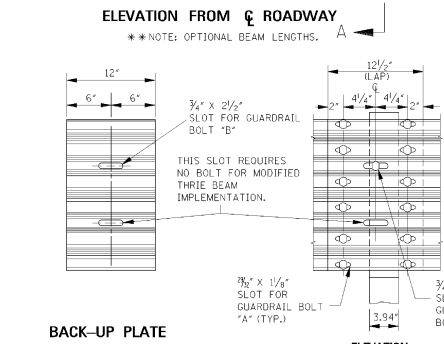
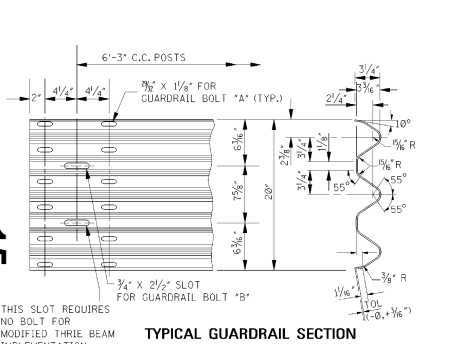
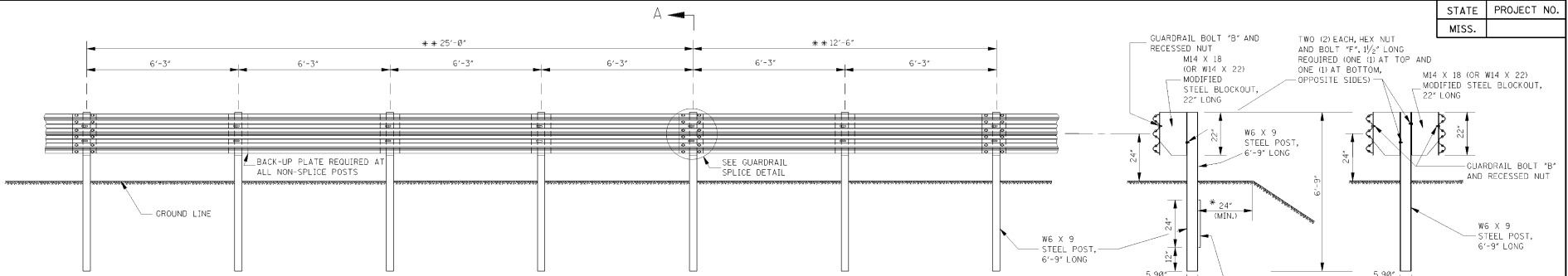
**GUARDRAIL:  
 "W" BEAM  
 (STEEL POSTS)**

WORKING NUMBER  
 CR-1B

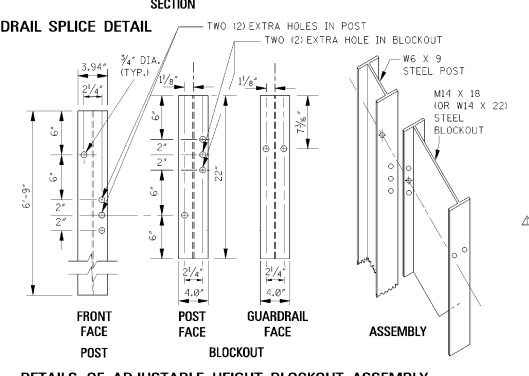
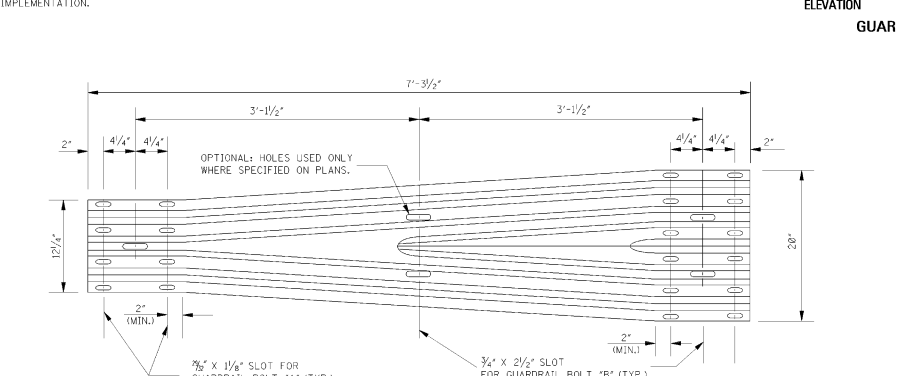
SHEET NUMBER  
 182

ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



- GENERAL NOTES:
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
  - GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
  - GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
  - POSTS AND BLOCKOUTS SHALL CONFORM TO AASHTO M 183/M 183 OR ASTM A 769/A 769M (EXCEPT ULTRASONIC TESTING). THEY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 311 EXCEPT WHEN CORROSION RESISTANT STEEL POSTS ARE REQUIRED IN WHICH CASE BOTH POSTS AND BLOCKOUTS SHALL CONFORM TO AASHTO M 222/M 222M AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
  - BACK-UP PLATE REQUIRED AT ALL NON-SPLICE POSTS.
  - FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-18.
  - FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-ACC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.
  - OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.



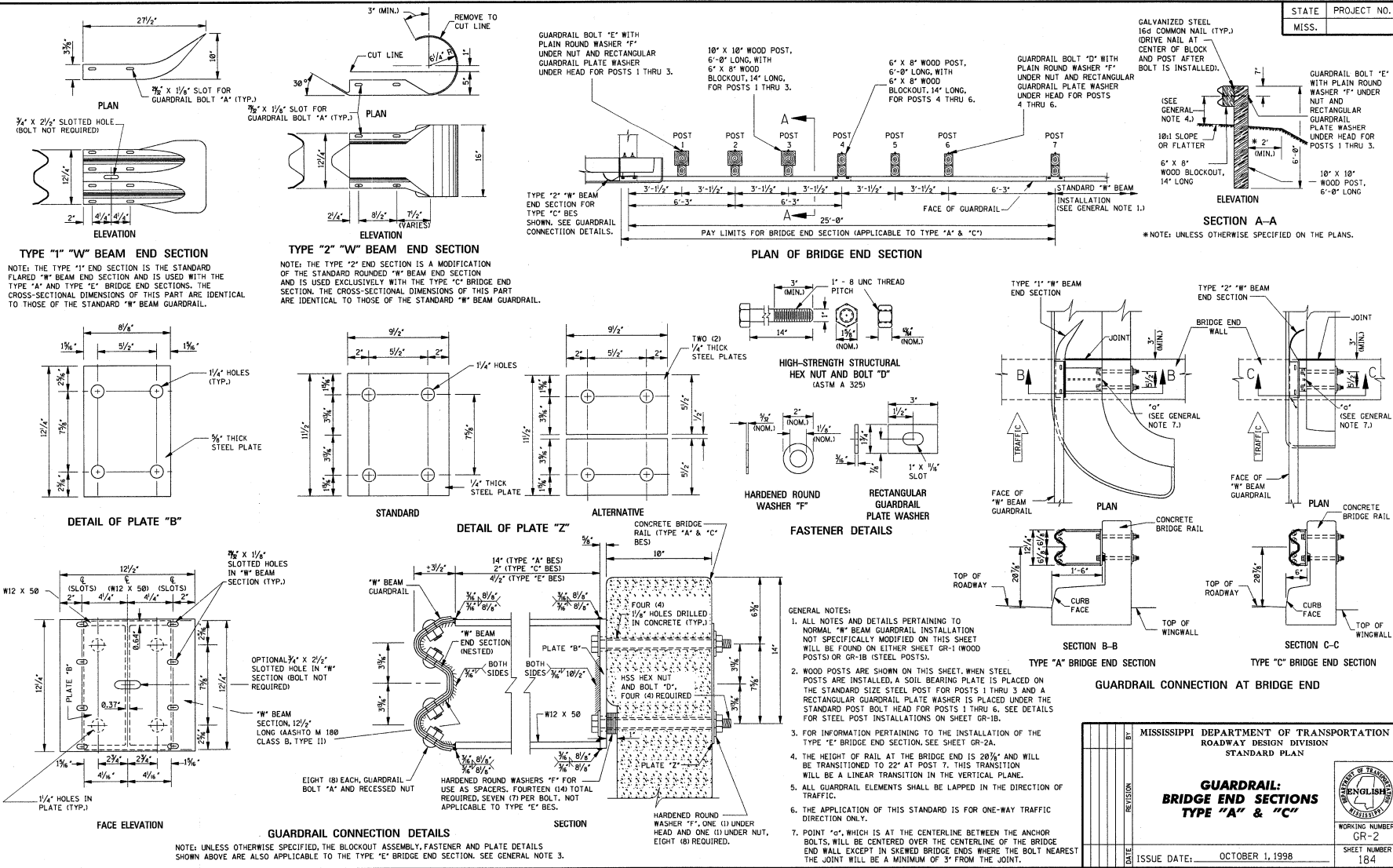
- NOTES:
- ON INITIAL INSTALLATION, THE TOP HOLE IN THE BLOCKOUT SHALL BE FASTENED TO THE TOP HOLE IN THE POST. OTHER HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
  - HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND BLOCKOUTS.
  - STEEL POSTS AND BLOCKOUTS ARE FABRICATED FROM W6 X 9 AND M14 X 18 (OR W14 X 22) STRUCTURAL STEEL SHAPES, RESPECTIVELY.
  - ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.

DATE	ISSUED	BY	S.N.R.	REVISION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN  <b>GUARDRAIL:          MODIFIED THRIE BEAM          (STEEL POSTS)</b>   WORKING NUMBER GR-1C SHEET NUMBER 183
	DATE				

15

5-

Notice to Bidders No. 1339 -- Cont'd



STATE	PROJECT NO.
MISS.	

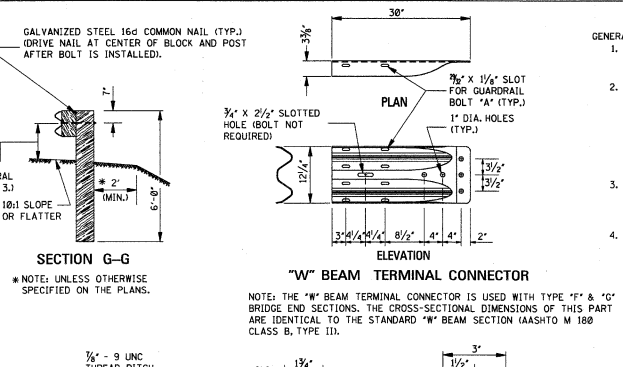
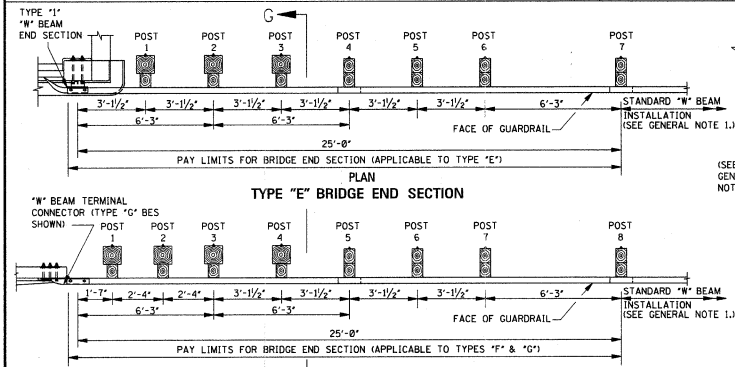
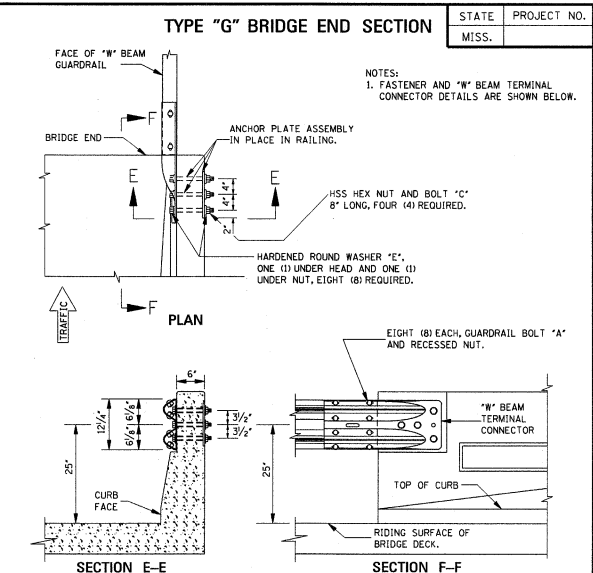
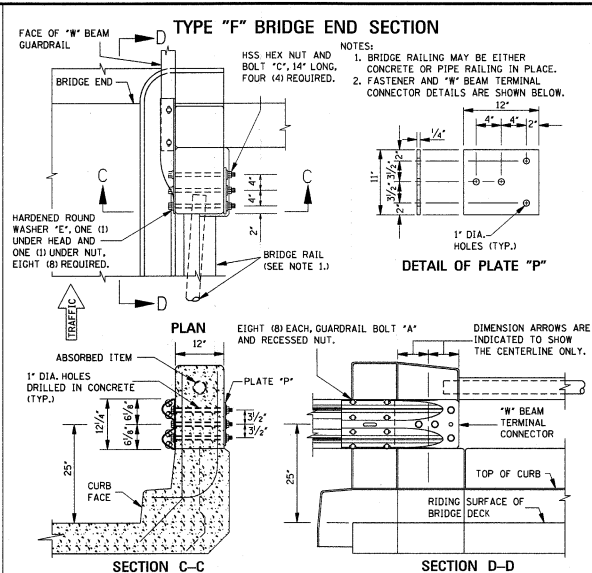
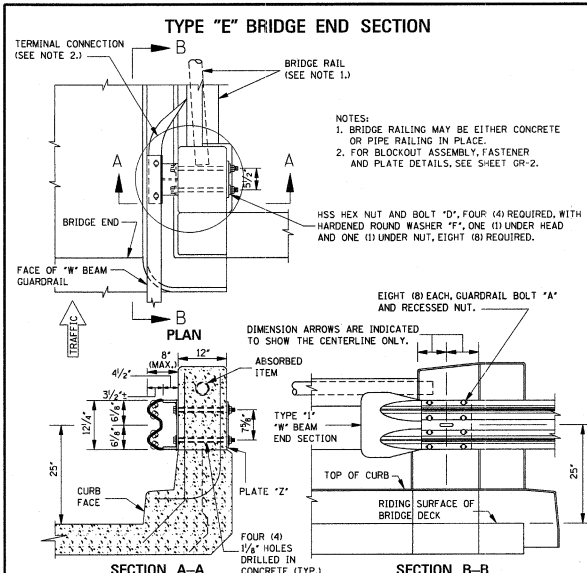
MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
 ROADWAY DESIGN DIVISION  
 STANDARD PLAN

**GUARDRAIL: BRIDGE END SECTIONS TYPE "A" AND "C"**

WORKING NUMBER CR-2  
 SHEET NUMBER 184

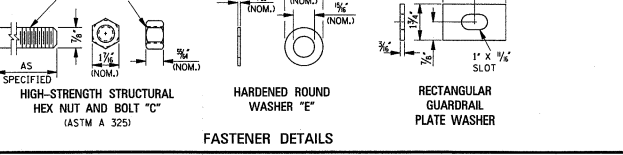
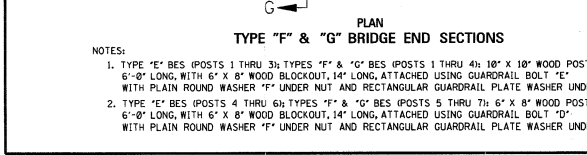
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

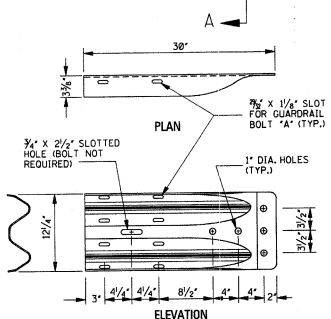
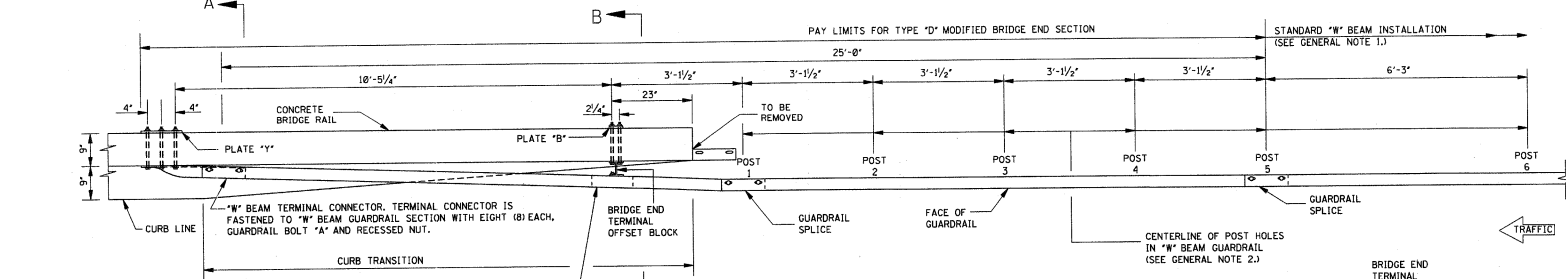


**GENERAL NOTES:**

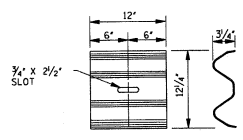
- ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
- WOOD POSTS ARE SHOWN ON THIS SHEET. WHEN STEEL POSTS ARE INSTALLED, A SOIL BEARING PLATE IS PLACED ON THE STANDARD SIZE STEEL POST FOR POSTS 1 THRU 3 IN THE TYPE "E" BES AND FOR POSTS 1 THRU 4 IN THE TYPE "F" & "G" BES. A RECTANGULAR GUARDRAIL PLATE WASHER IS PLACED UNDER THE STANDARD POST BOLT HEAD FOR POSTS 1 THRU 6 IN THE TYPE "E" BES AND FOR POSTS 1 THRU 7 IN THE TYPE "F" & "G" BES. SEE DETAILS FOR STEEL POST INSTALLATION ON SHEET GR-1B.
- THE HEIGHT OF RAIL AT THE BRIDGE END IS 25" AND WILL BE TRANSITIONED TO 22" AT POST 7 IN THE TYPE "E" BES AND AT POST 8 IN THE TYPE "F" & "G" BES. THIS TRANSITION WILL BE A LINEAR TRANSITION IN THE VERTICAL PLANE.
- GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.



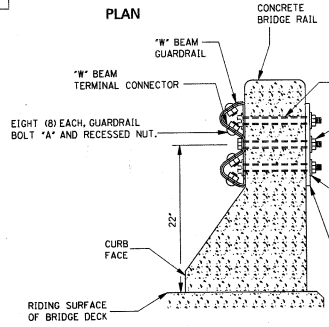
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
REVISION		<b>GUARDRAIL: BRIDGE END SECTIONS TYPE "E", "F" &amp; "G"</b>	
DATE			
ISSUE DATE:		OCTOBER 1, 1998	
WORKING NUMBER		GR-2A	
SHEET NUMBER		185	



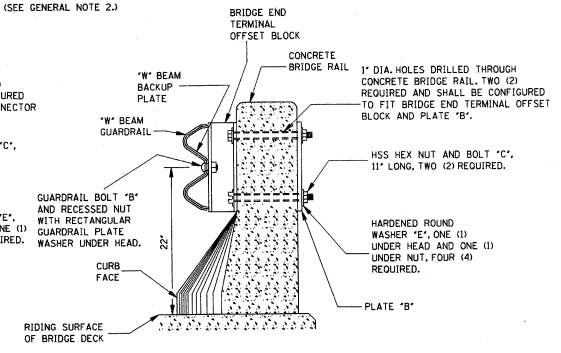
**"W" BEAM TERMINAL CONNECTOR**  
 NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "D" MODIFIED BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE III).



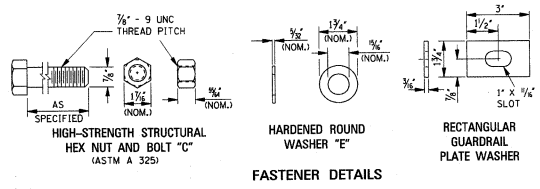
**"W" BEAM BACKUP PLATE**  
 NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.



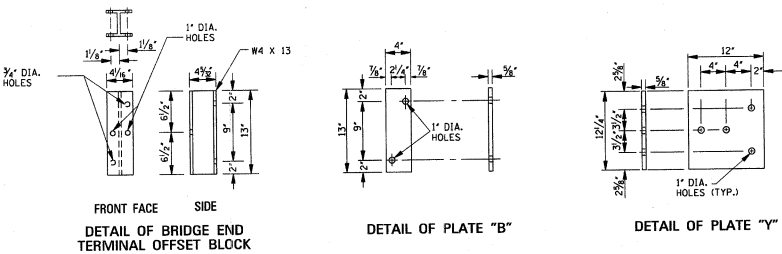
**SECTION A-A**



**SECTION B-B**



**FASTENER DETAILS**



**DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK**

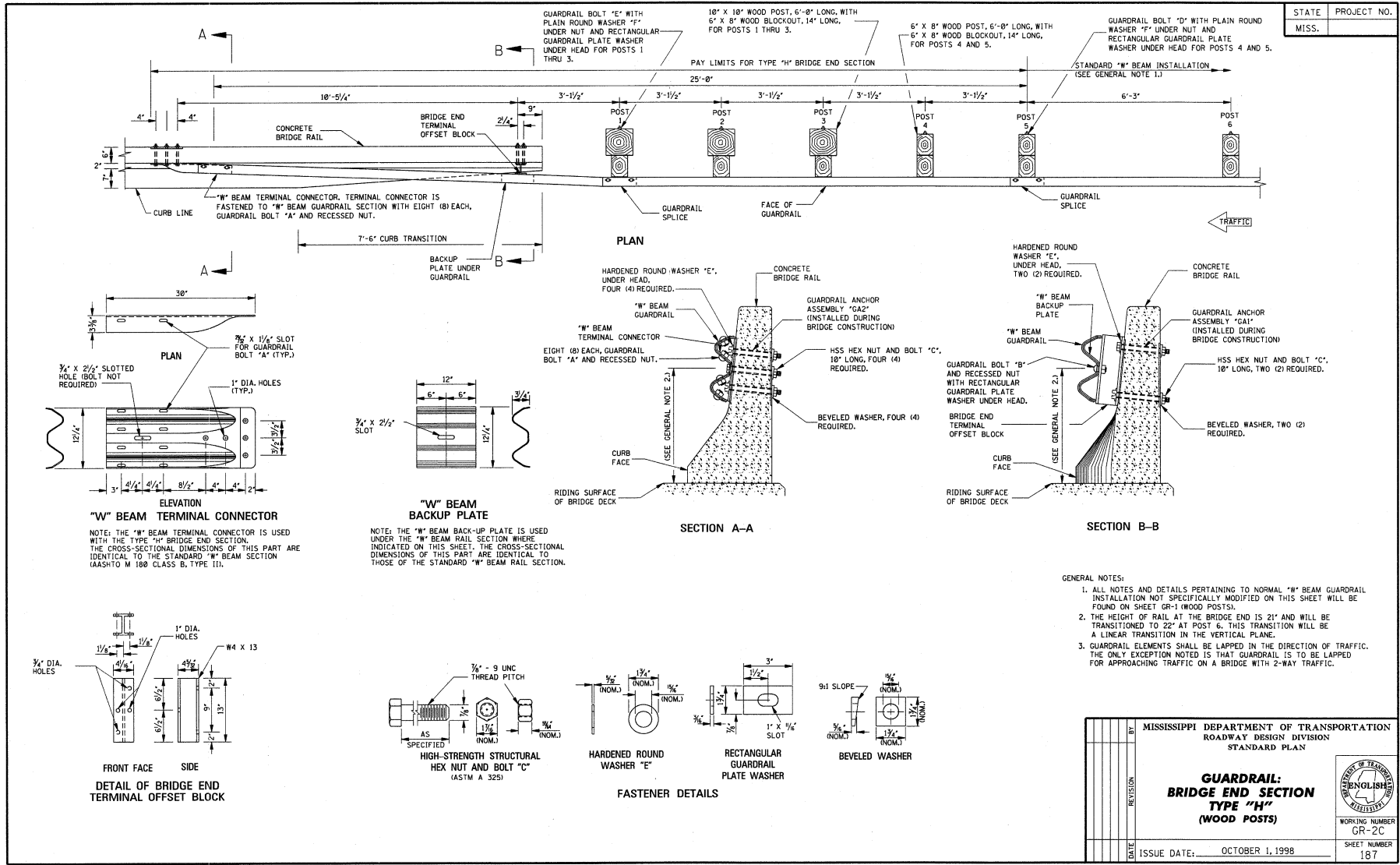
**DETAIL OF PLATE "B"**

**DETAIL OF PLATE "Y"**

- GENERAL NOTES:**
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON EITHER SHEET GR-1 (WOOD POSTS) OR GR-1B (STEEL POSTS).
  2. INSTALLATION DETAILS FOR BRIDGE END SECTION GUARDRAIL POSTS WILL BE FOUND ON EITHER SHEET GR-2C (WOOD POSTS) OR GR-2D (STEEL POSTS).
  3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>GUARDRAIL: BRIDGE END SECTION TYPE "D" MODIFIED</b>	
WORKING NUMBER GR-2B	SHEET NUMBER 186
ISSUE DATE: OCTOBER 1, 1998	

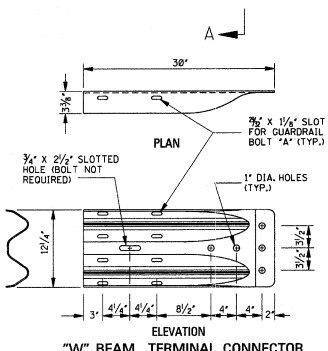
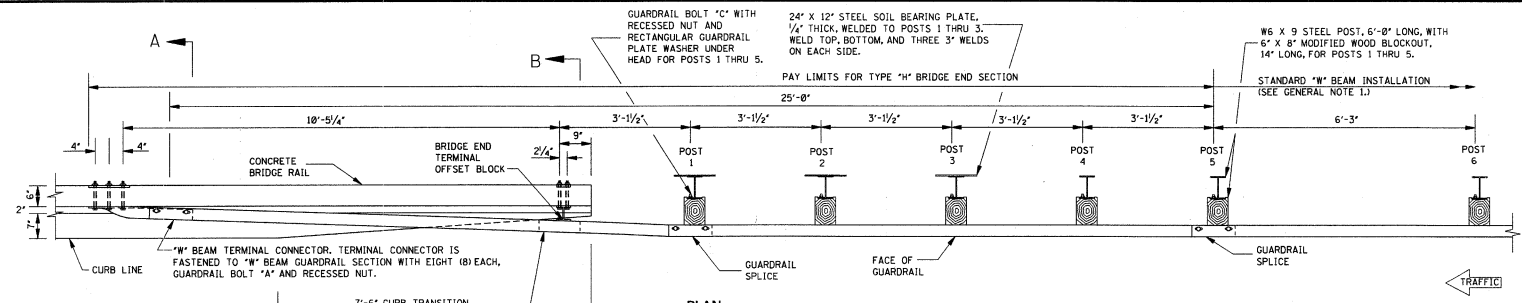




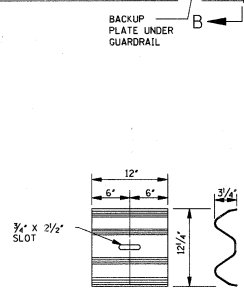
STATE	PROJECT NO.
MISS.	

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISION	ROADWAY DESIGN DIVISION
	STANDARD PLAN
	<b>GUARDRAIL: BRIDGE END SECTION TYPE "H" (WOOD POSTS)</b>
DATE	ISSUE DATE: OCTOBER 1, 1998
	WORKING NUMBER GR-2C
	SHEET NUMBER 187

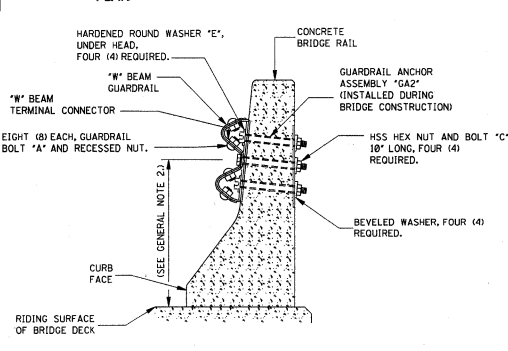
STATE	PROJECT NO.
MISS.	



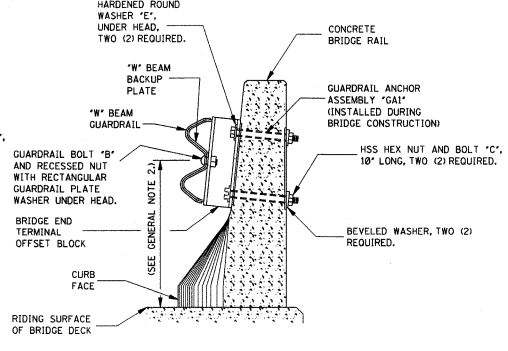
**"W" BEAM TERMINAL CONNECTOR**  
 NOTE: THE "W" BEAM TERMINAL CONNECTOR IS USED WITH THE TYPE "H" BRIDGE END SECTION. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THE STANDARD "W" BEAM SECTION (AASHTO M 180 CLASS B, TYPE III).



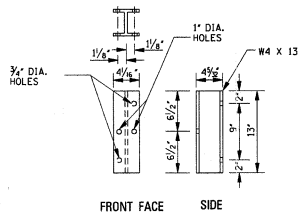
**"W" BEAM BACKUP PLATE**  
 NOTE: THE "W" BEAM BACK-UP PLATE IS USED UNDER THE "W" BEAM RAIL SECTION WHERE INDICATED ON THIS SHEET. THE CROSS-SECTIONAL DIMENSIONS OF THIS PART ARE IDENTICAL TO THOSE OF THE STANDARD "W" BEAM RAIL SECTION.



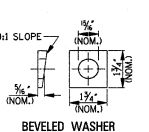
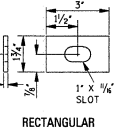
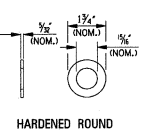
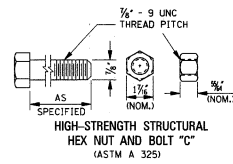
**SECTION A-A**



**SECTION B-B**



**DETAIL OF BRIDGE END TERMINAL OFFSET BLOCK**

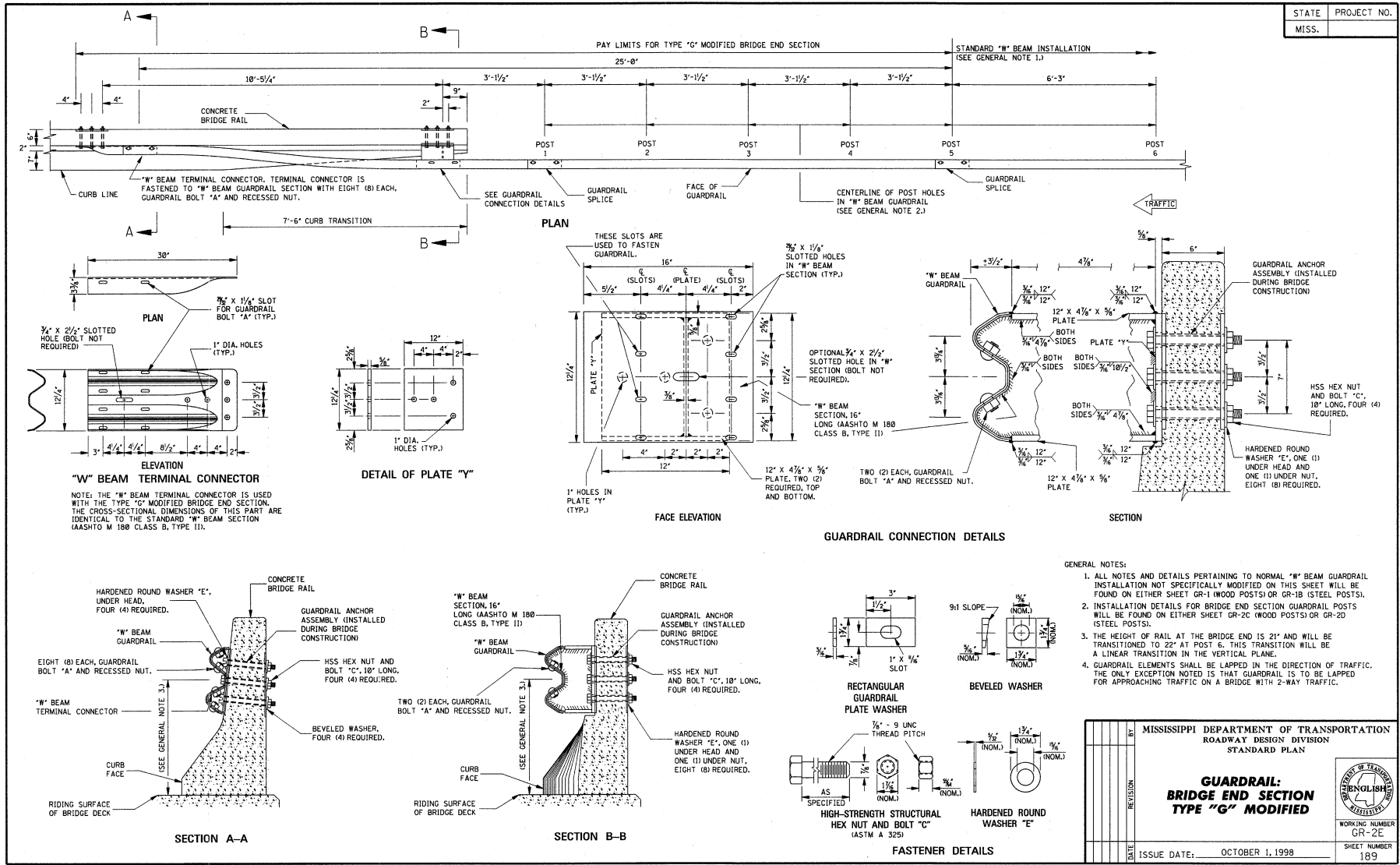


**FASTENER DETAILS**

- GENERAL NOTES:**
1. ALL NOTES AND DETAILS PERTAINING TO NORMAL "W" BEAM GUARDRAIL INSTALLATION NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEET GR-19 (STEEL POSTS).
  2. THE HEIGHT OF RAIL AT THE BRIDGE END IS 21" AND WILL BE TRANSITIONED TO 22" AT POST 6. THIS TRANSITION WILL BE A LINEAR TRANSITION IN THE VERTICAL PLANE.
  3. GUARDRAIL ELEMENTS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
REVISION	ROADWAY DESIGN DIVISION
DATE	STANDARD PLAN
<b>GUARDRAIL: BRIDGE END SECTION TYPE "H" (STEEL POSTS)</b>	
ISSUE DATE:	OCTOBER 1, 1998
WORKING NUMBER	GR-2D
SHEET NUMBER	188



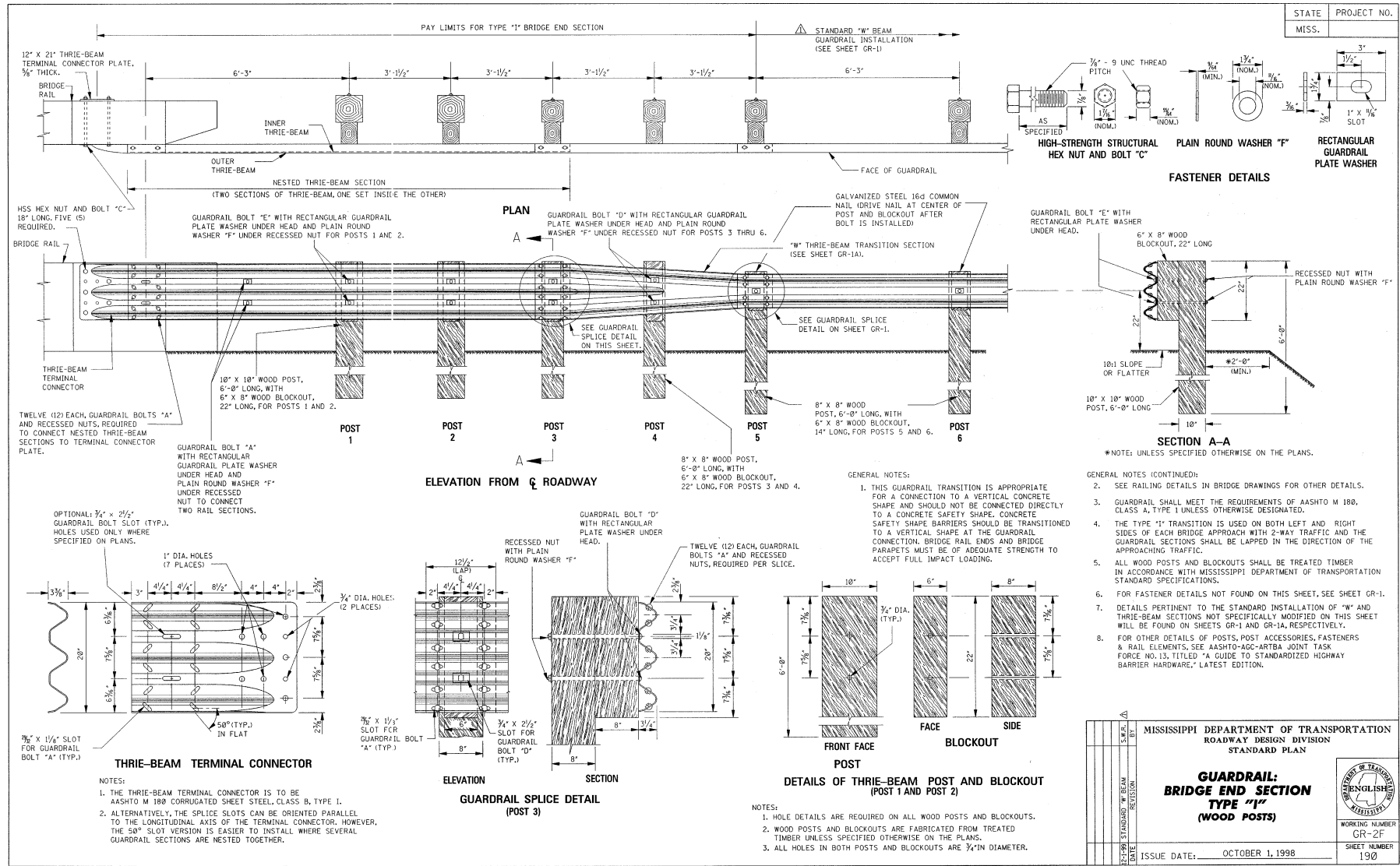


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Notice to Bidders No.1339 -- Cont'd

STATE	PROJECT NO.
MISS.	



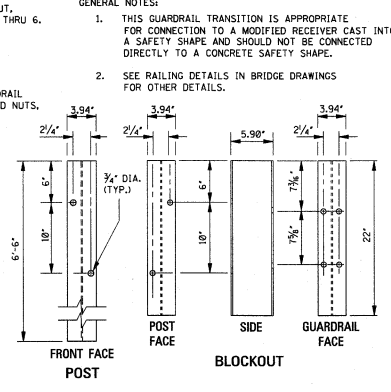
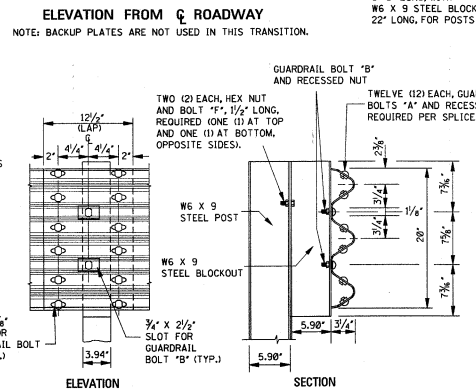
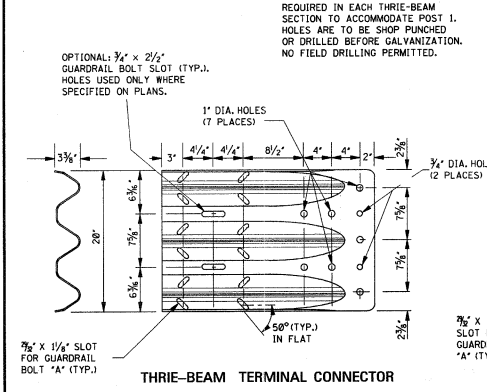
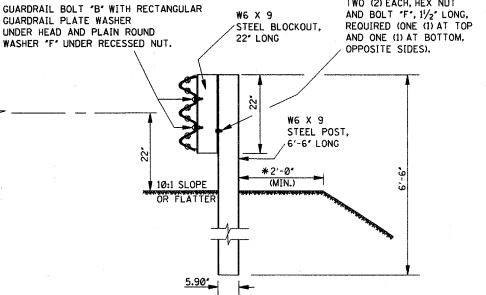
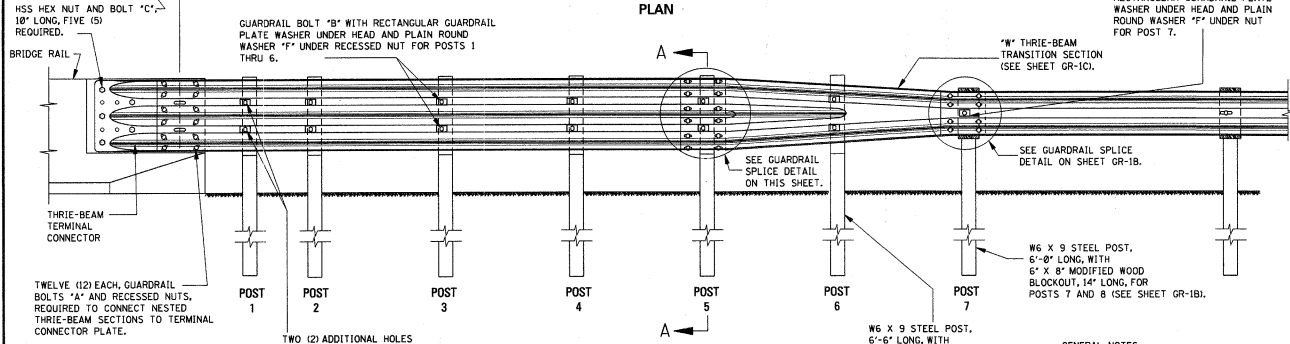
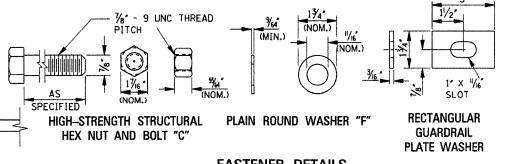
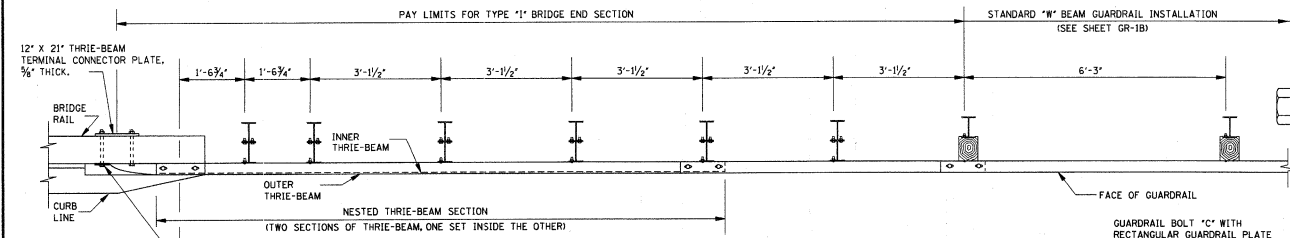
DESIGNED BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
DRAWN BY	ROADWAY DESIGN DIVISION
CHECKED BY	STANDARD PLAN
DATE	

**GUARDRAIL: BRIDGE END SECTION TYPE "I" (WOOD POSTS)**

ISSUE DATE: OCTOBER 1, 1998

WORKING NUMBER	GR-2F
SHEET NUMBER	190

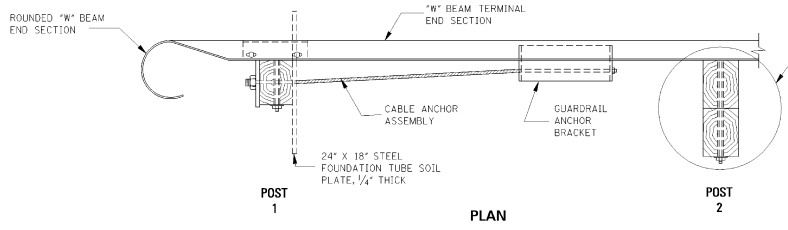
STATE	PROJECT NO.
MISS.	



- GENERAL NOTES:
- THIS GUARDRAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A MODIFIED RECEIVER CAST INTO A SAFETY SHAPE AND SHOULD NOT BE CONNECTED DIRECTLY TO A CONCRETE SAFETY SHAPE.
  - SEE RAILING DETAILS IN BRIDGE DRAWINGS FOR OTHER DETAILS.
  - GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 188, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
  - THE TYPE '1' TRANSITION IS USED ON BOTH LEFT AND RIGHT SIDES OF EACH BRIDGE APPROACH WITH 2-WAY TRAFFIC AND THE GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF THE APPROACHING TRAFFIC.
  - POSTS AND BLOCKOUTS SHALL CONFORM TO AASHTO M 270/M 270M (ASTM A 709/A 709M) GRADE 250 STEEL UNLESS CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE GRADE 50B STEEL SHALL BE USED. THE STRUCTURAL W6 X 9 DIMENSIONS ARE DEFINED IN AASHTO M 160M (ASTM A 6M). THE SECTION SHOULD BE ZINC-COATED PER AASHTO M 111 (ASTM A 123) AFTER CUTTING, DRILLING AND PUNCHING. CORROSION RESISTANT STEEL SHOULD NOT BE ZINC-COATED PAINTED OR OTHERWISE TREATED. GUARDRAIL IS EXEMPT FROM THE FRACTURE-CRITICAL TOUGHNESS IN AASHTO M 270/A 270 M.
  - FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1B.
  - DETAILS PERTINENT TO THE STANDARD INSTALLATION OF 'M' AND 'THREE-BEAM' SECTIONS NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEETS GR-1B AND GR-1C, RESPECTIVELY.
  - FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED 'A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE', LATEST EDITION.

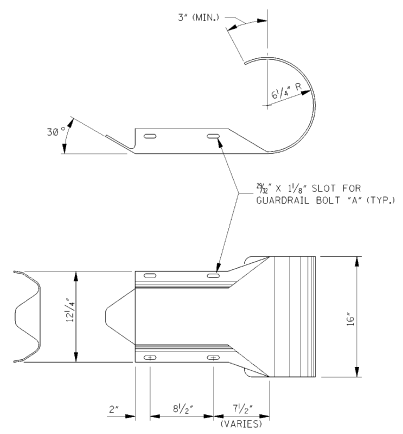
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		
<b>GUARDRAIL: BRIDGE END SECTION TYPE "1" (STEEL POSTS)</b>		
ISSUE DATE:	OCTOBER 1, 1998	WORKING NUMBER GR-2G SHEET NUMBER 191

STATE	PROJECT NO.
MISS.	

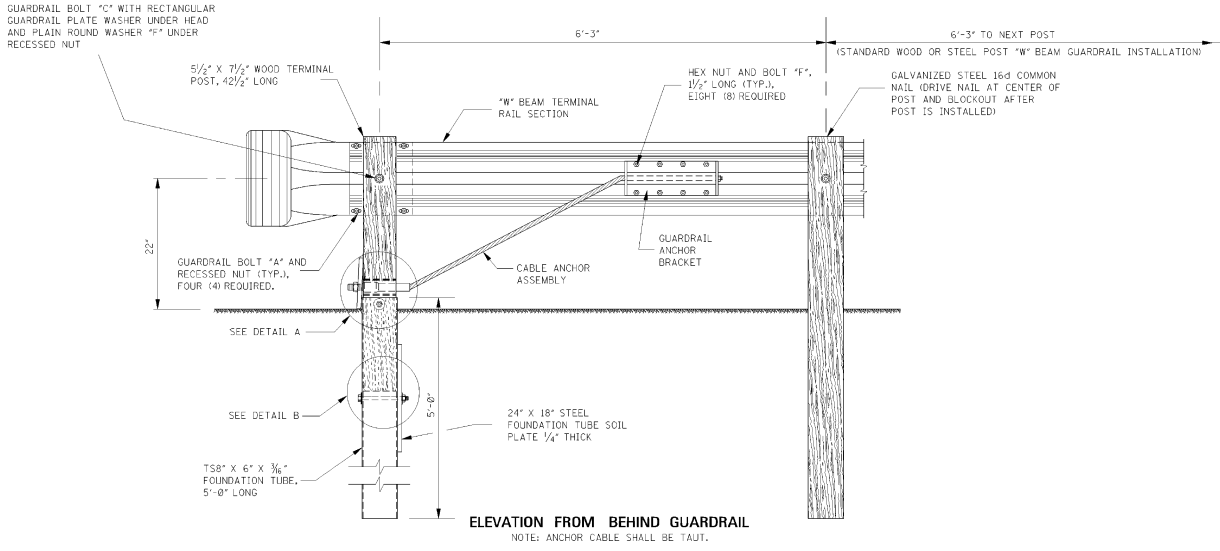


NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:

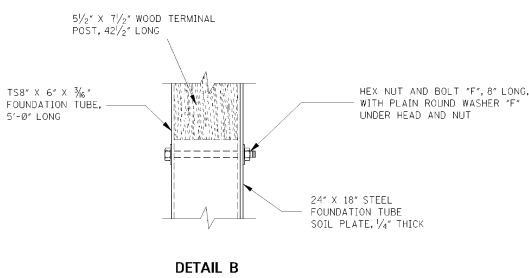
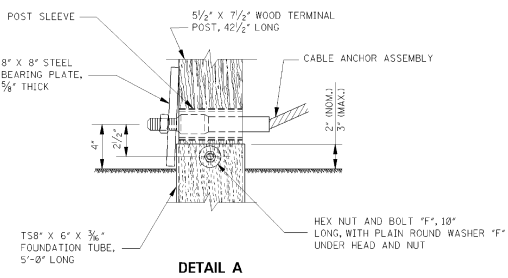
- WOOD POST INSTALLATION (SHOWN)**  
 "W" BEAM TERMINAL RAIL SECTION, 6" X 8" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 5'-4" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "E" UNDER RECESSED NUT.
- STEEL POST INSTALLATION**  
 "W" BEAM TERMINAL RAIL SECTION, 6" X 8" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.



**ROUNDED "W" BEAM END SECTION**  
 NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.



- GENERAL NOTES:
- THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
  - GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE I UNLESS OTHERWISE DESIGNATED.
  - ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
  - FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
  - DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
  - FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-ACC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.



DATE	ISSUE DATE:	OCTOBER 1, 1998
	BY	
DATE	REVISION	
DATE	REVISION	
DATE	REVISION	

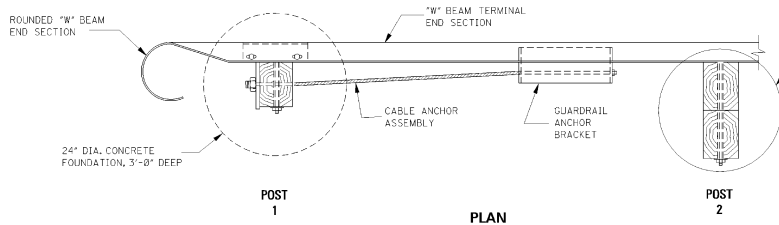
MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
 ROADWAY DESIGN DIVISION  
 STANDARD PLAN  
**GUARDRAIL:**  
**TYPE I CABLE ANCHORAGE**  
 (FOUNDATION TUBE)



WORKING NUMBER  
 GR-3  
 SHEET NUMBER  
 192

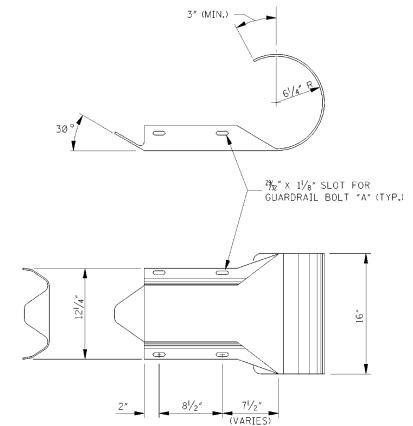
Notice to Bidders No. 1339 Cont'd

STATE	PROJECT NO.
MISS.	



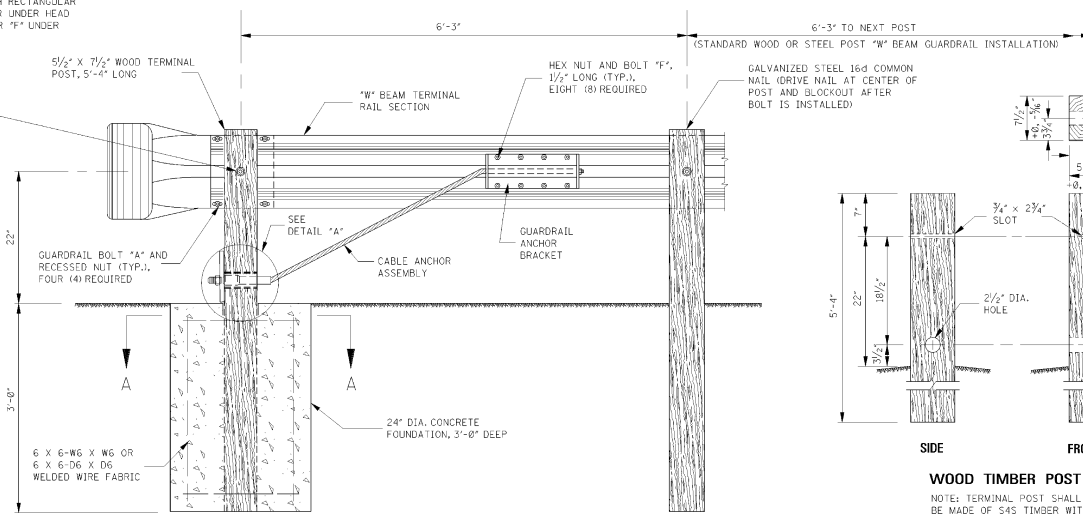
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:

- WOOD POST INSTALLATION (SHOWN)**  
"W" BEAM TERMINAL RAIL SECTION, 6" X 8" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 5'-4" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "E" UNDER RECESSED NUT.
- STEEL POST INSTALLATION**  
"W" BEAM TERMINAL RAIL SECTION, 6" X 8" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.

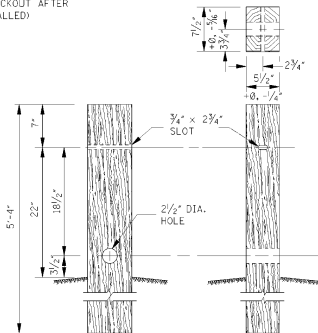


**ROUNDED "W" BEAM END SECTION**  
NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.

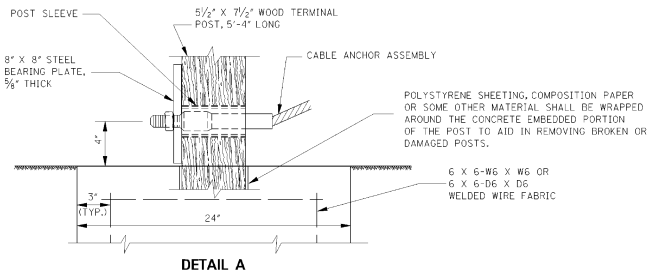
GUARDRAIL BOLT "C" WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "E" UNDER RECESSED NUT



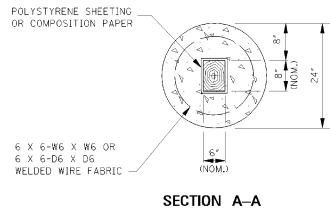
**ELEVATION FROM BEHIND GUARDRAIL**  
NOTE: ANCHOR CABLE SHALL BE TAUT.



**WOOD TIMBER POST**  
NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 LB/IN<sup>2</sup>.



**DETAIL A**



**SECTION A-A**

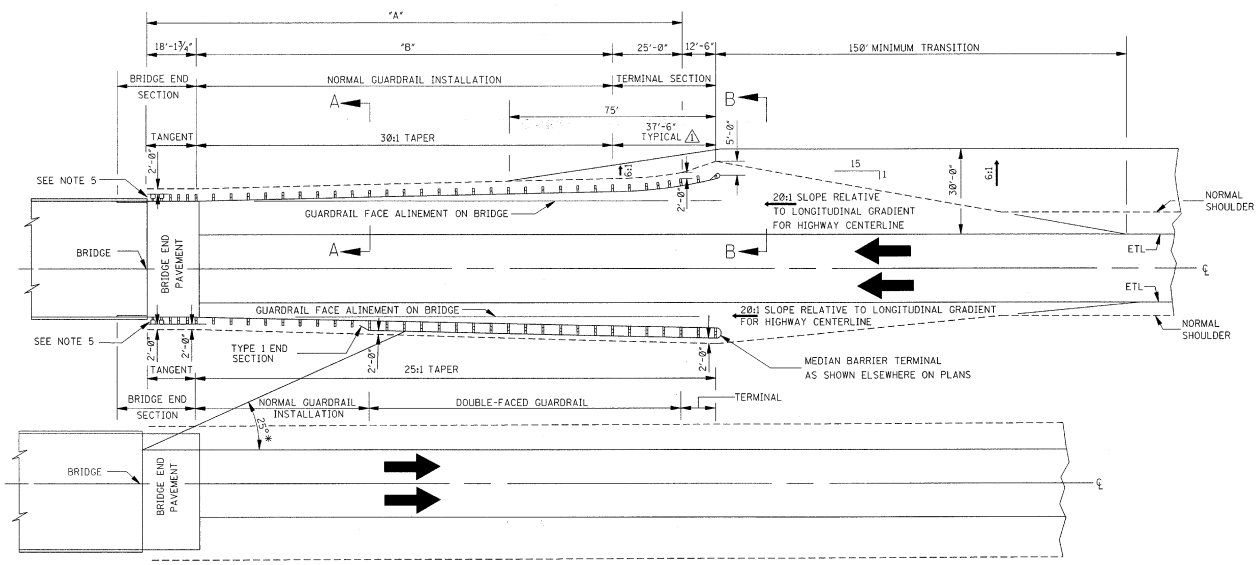
NOTE: FORM A NOMINAL 6" X 8" SOCKET IN THE FOUNDATION TO RECEIVE THE 3/2" X 7/2" TIMBER POST. FORM HOLE WITH 1/2" THICK POLYSTYRENE FOAM SHEETING OR WRAP THE TIMBER POST IN A DOUBLE LAYER OF COMPOSITION PAPER. THE LAYER OF SHEETING OR PAPER WILL AID IN REMOVING A DAMAGED POST.

**GENERAL NOTES:**

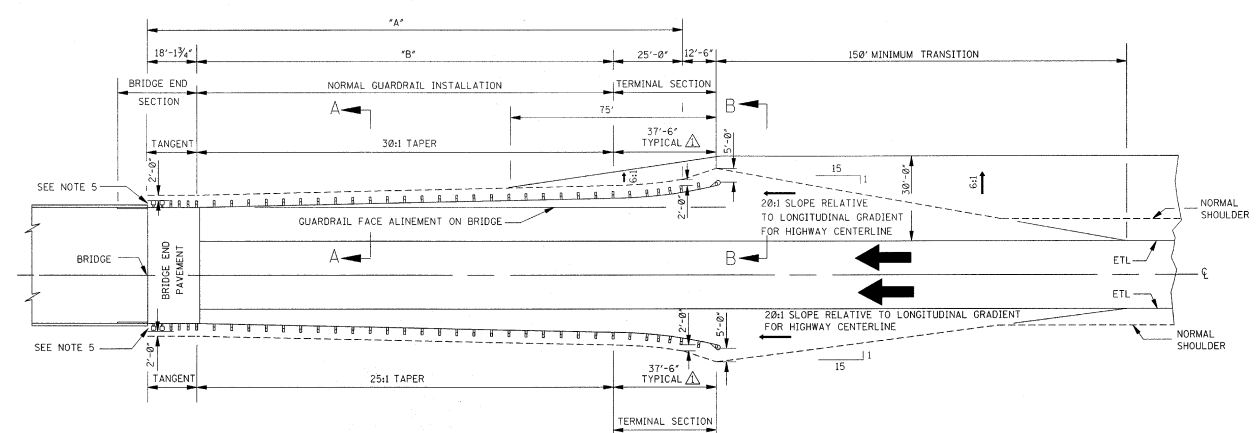
- THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
- GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
- ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
- CONCRETE FOR THE CONCRETE FOUNDATION MAY BE EITHER CLASS "B" STRUCTURAL CONCRETE OR AN APPROVED COMMERCIAL PRE-MIXED BAG CONCRETE. THE WELDED WIRE FABRIC FOR THE CONCRETE FOUNDATION SHALL CONFORM TO AASHTO M 221/M 221M AND AASHTO M 55/M 55.
- FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW.
- DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1 FOR WOOD POSTS, AND GR-1B FOR STEEL POSTS.
- FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-ACC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

DESIGNED BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
DRAWN BY	ROADWAY DESIGN DIVISION
CHECKED BY	STANDARD PLAN
DATE	
REVISIONS	
<b>GUARDRAIL: TYPE 1 CABLE ANCHORAGE (CONCRETE FOOTING)</b>	
WORKING NUMBER	GR-3A
SHEET NUMBER	193
ISSUE DATE:	OCTOBER 1, 1998

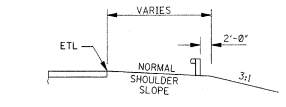
STATE	PROJECT NO.
MISS.	



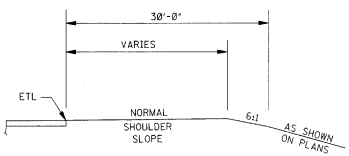
**DIVIDED HIGHWAY WITH BARRIER INSIDE CLEAR ZONE OF OPPOSING TRAFFIC**  
 \* NOTE: THE 25° LINE IS USED TO DETERMINE THE LIMITS OF MEDIAN BARRIER AS SHOWN.



**DIVIDED HIGHWAY WITH BARRIER OUTSIDE CLEAR ZONE OF OPPOSING TRAFFIC**



**SECTION A-A**



**SECTION B-B**

**GENERAL NOTES:**

- VALUES FOR "A" AND "B" WILL BE SHOWN ELSEWHERE ON THE PLANS.
- FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
- GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
- THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
- THE SHOULDER WIDTH AT THE BRIDGE END SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
- TYPE, DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.

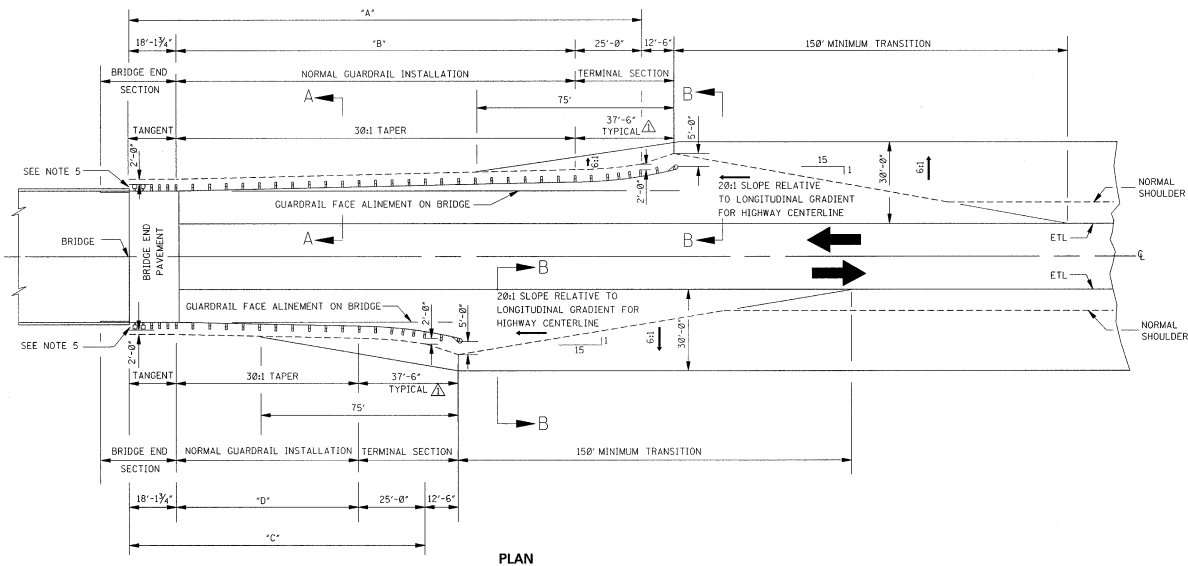
DESIGNED BY	DATE	ISSUE DATE: OCTOBER 1, 1998
CHECKED BY	DATE	
APPROVED BY	DATE	
IN CHARGE	DATE	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
 ROADWAY DESIGN DIVISION  
 STANDARD PLAN

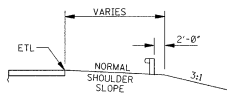
**GUARDRAIL:  
 TYPICAL INSTALLATION AT  
 BRIDGE APPROACHES  
 FOR DIVIDED HIGHWAYS**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
 WORKING NUMBER GR-4  
 SHEET NUMBER 194

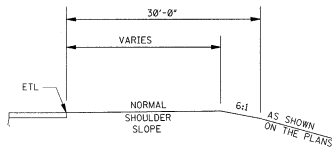




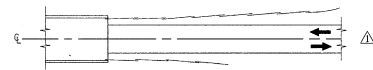
PLAN



SECTION A-A



SECTION B-B



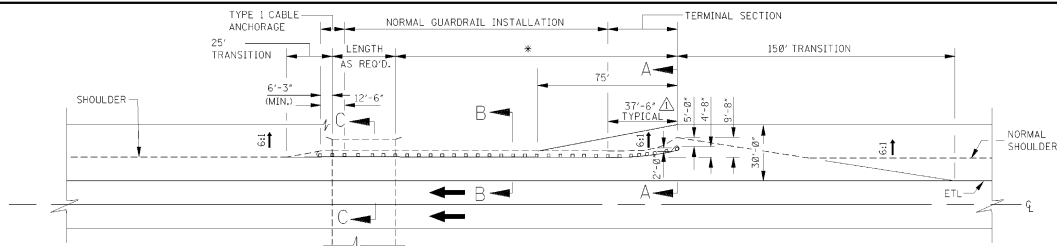
DETAIL OF GUARDRAIL SECTION LAPS

GENERAL NOTES:

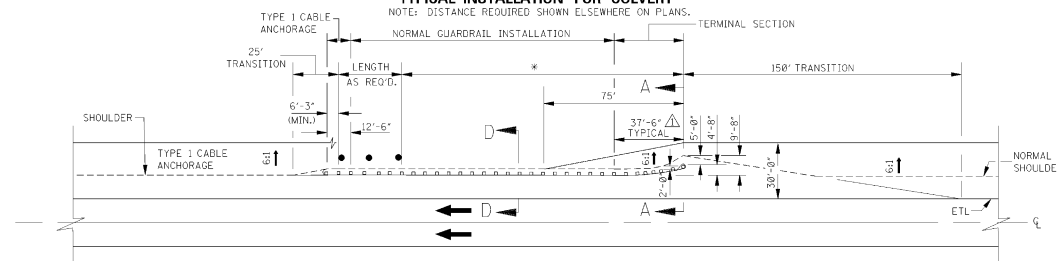
- VALUES FOR "A", "B", "C" AND "D" WILL BE SHOWN ELSEWHERE ON THE PLANS.
- FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
- GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC APPROACHING THE BRIDGE.
- THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
- THE SHOULDER WIDTH AT THE BRIDGE END SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
- TYPE, DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		
<b>GUARDRAIL: TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR 2-LANE, 2-WAY HIGHWAY</b>		
ISSUE DATE:	OCTOBER 1, 1998	WORKING NUMBER GR-4A SHEET NUMBER 195

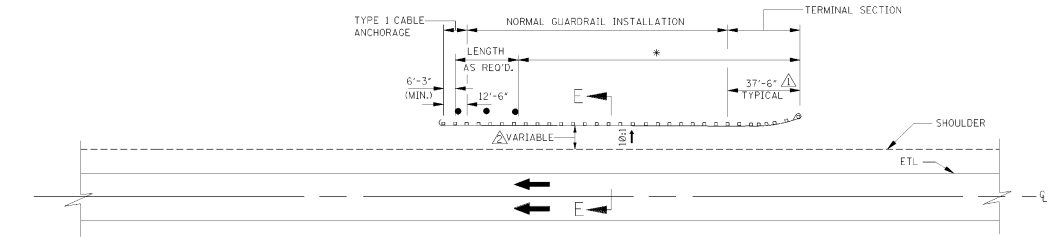
STATE	PROJECT NO.
MISS.	



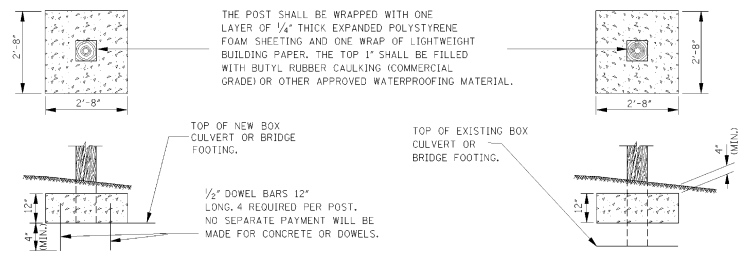
**TYPICAL INSTALLATION FOR CULVERT**  
NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



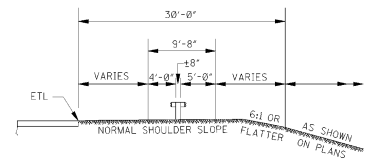
**TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1**  
\*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



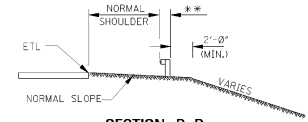
**TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER**  
\*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



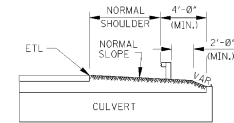
**DETAIL OF POST INSTALLATION WITH COVER LESS THAN NORMAL POST LENGTH**



**SECTION A-A**

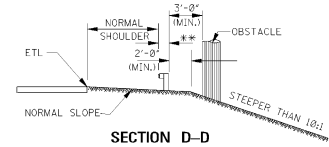


**SECTION B-B**

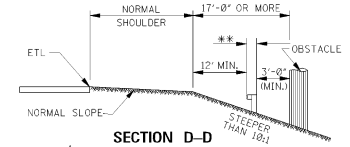


**SECTION C-C**

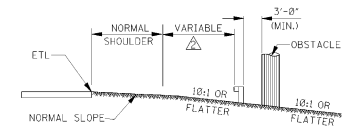
\*\*NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, 17.15'; FOR WOOD POST AND BLOCKOUT, 19.25'.



**SECTION D-D**  
FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER



**SECTION D-D**  
FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER



**SECTION E-E**

- GENERAL NOTES:**
- FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
  - GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
  - PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.

STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
ROADWAY DESIGN DIVISION  
STANDARD PLAN

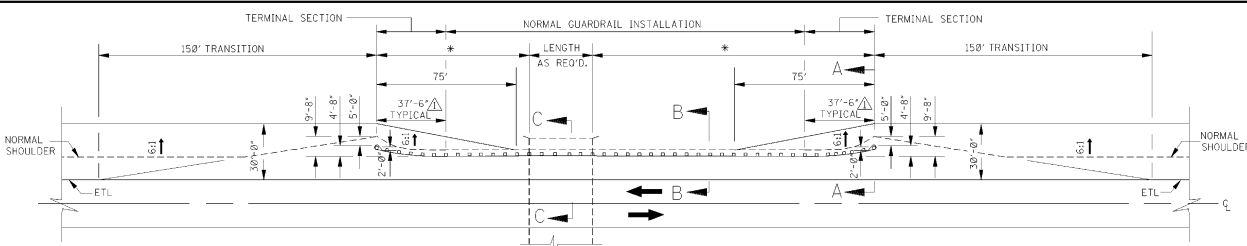
**GUARDRAIL:  
TYPICAL INSTALLATION  
FOR ROADSIDE HAZARDS  
ON DIVIDED HIGHWAYS**

WORKING NUMBER  
CR-4C

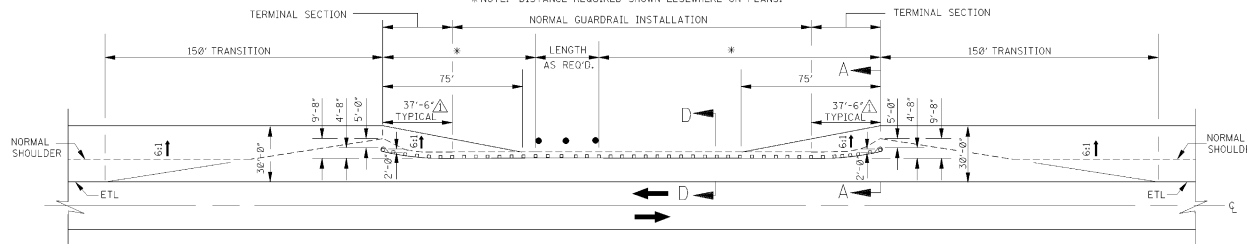
SHEET NUMBER  
197

ISSUE DATE: OCTOBER 1, 1998

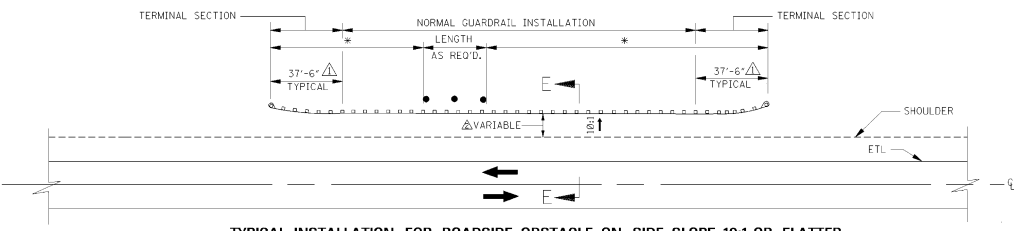
STATE	PROJECT NO.
MISS.	



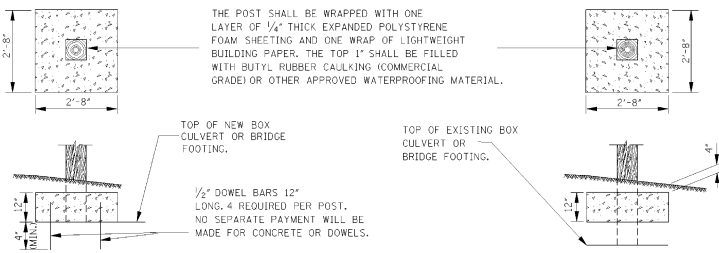
**TYPICAL INSTALLATION FOR CULVERT**  
 \*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



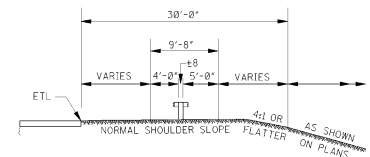
**TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE STEEPER THAN 10:1**  
 \*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



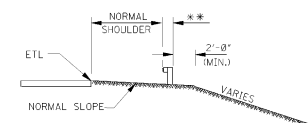
**TYPICAL INSTALLATION FOR ROADSIDE OBSTACLE ON SIDE SLOPE 10:1 OR FLATTER**  
 \*NOTE: DISTANCE REQUIRED SHOWN ELSEWHERE ON PLANS.



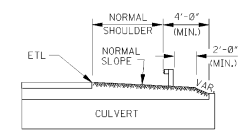
**DETAIL OF POST INSTALLATION WITH COVER LESS THAN NORMAL POST LENGTH**



**SECTION A-A**

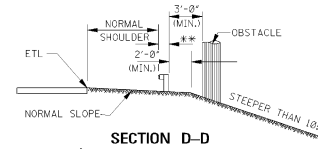


**SECTION B-B**

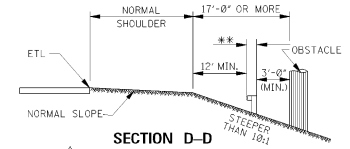


**SECTION C-C**

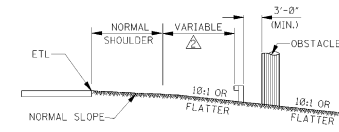
\*\*NOTE: FOR STEEL POST AND MODIFIED WOOD BLOCKOUT, 17.15° FOR WOOD POST AND WOOD BLOCKOUT, 19.25°.



**SECTION D-D FOR OBSTACLES 5' TO 17' FROM NORMAL SHOULDER**



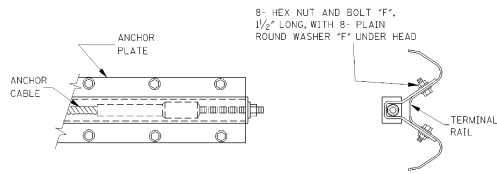
**SECTION D-D FOR OBSTACLES 17' OR MORE FROM NORMAL SHOULDER**



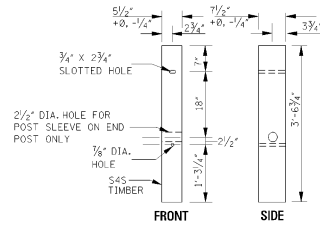
**SECTION E-E**

- GENERAL NOTES:
- FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS.
  - GUARDRAIL SECTIONS TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
  - PAY LIMITS FOR NORMAL GUARDRAIL INSTALLATION WILL BE THE TOTAL LENGTH LESS THE LENGTHS OF END TERMINALS.

STATE	MISS.	PROJECT NO.	
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN			
<b>GUARDRAIL:          TYPICAL INSTALLATION          FOR ROADSIDE HAZARDS          ON 2-LANE, 2-WAY          HIGHWAYS</b>			
ISSUE DATE:	OCTOBER 1, 1998	WORKING NUMBER	GR-4D
		SHEET NUMBER	198

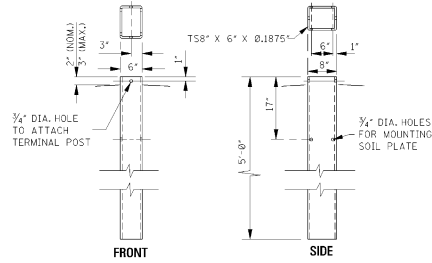


**ANCHOR PLATE ASSEMBLY DETAILS**



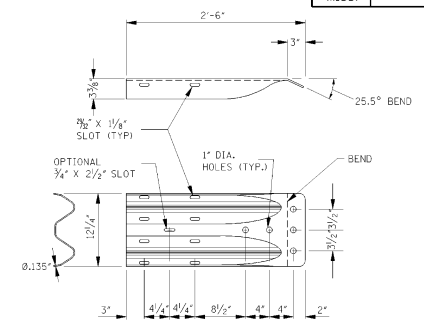
**TERMINAL POST**

NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lbs/in<sup>2</sup>.



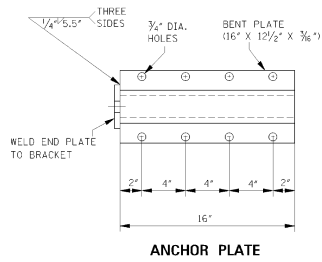
**STEEL TUBE ANCHOR**

NOTE: TERMINAL POST SHOULD BE ABLE TO SLIDE INTO THE TOP OF THIS SECTION SO THE ACTUAL INSIDE DIMENSIONS OF THIS GALVANIZED TUBE CANNOT BE LESS THAN 7 1/2" x 5 1/2".

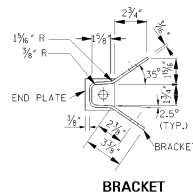


**"W" BEAM TERMINAL CONNECTOR PLATE**

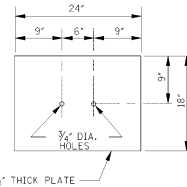
- NOTES:
1. THE "W" BEAM TERMINAL CONNECTOR IS TO BE AASHTO M 180 CORRUGATED SHEET STEEL CLASS B, TYPE 1.
  2. SPLICE-BOLT SLOTS MAY ALSO BE ORIENTED AT 50° (ON THE PLATE) INSTEAD OF 0° AS SHOWN.



**ANCHOR PLATE**

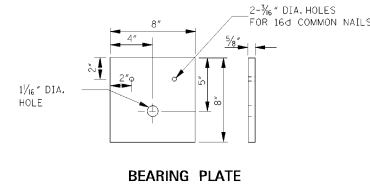


**BRACKET**

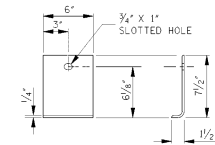


**SOIL PLATE**

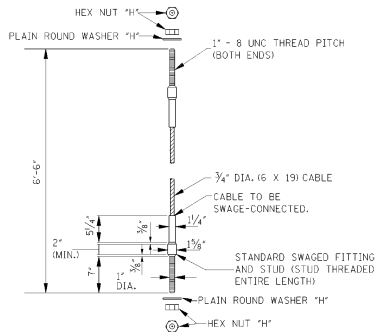
NOTE: 2 REQUIRED



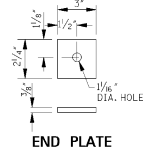
**BEARING PLATE**



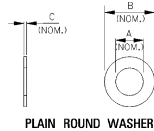
**SHELF ANGLE BRACKET**



**CABLE ANCHOR ASSEMBLY**

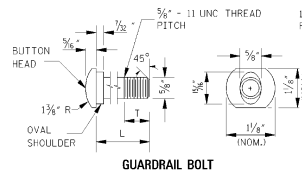


**END PLATE**



**PLAIN ROUND WASHER**

WASHER	A (INOM.)	B (INOM.)	C (INOM.)
"F"	1/2"	1 3/4"	3/4"
"H"	1 1/4"	2"	3/4"

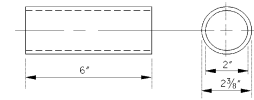
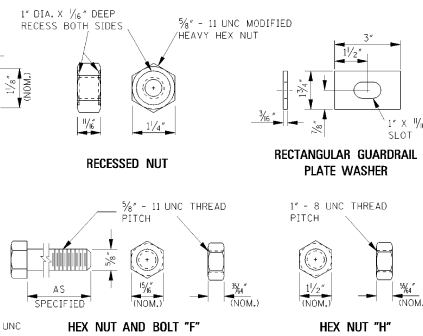


**GUARDRAIL BOLTS**

BOLT	L (INOM.)	T (MIN.)
"A"	1 1/4"	1"
"B"	2"	1 3/4"
"C"	10"	4"
"D"	18"	4"

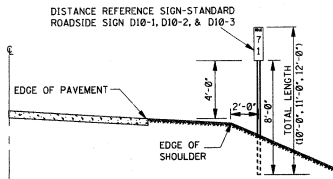
- NOTES:
1. ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
  2. IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.

**FASTENER DETAILS**



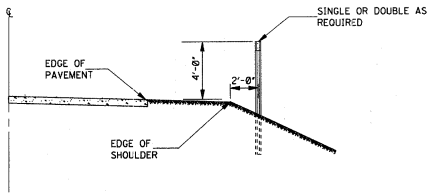
**BREAKAWAY TERMINAL POST SLEEVE**

SWR	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISE SHEET TITLE	<b>GUARDRAIL: MISCELLANEOUS HARDWARE</b>
DATE	ISSUE DATE: OCTOBER 1, 1998
WORKING NUMBER	GR-HW
SHEET NUMBER	202

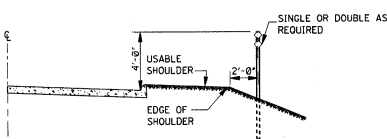


**DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY**

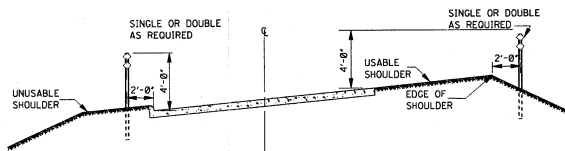
NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 90° OPPOSITE THE RIGHT LANE STATION. IF CONDITIONS ARE SUCH THAT MILE SIGN CANNOT BE LOCATED WITHIN 50 FEET OF ITS TRUE LOCATION, IT SHALL BE OMITTED ENTIRELY.



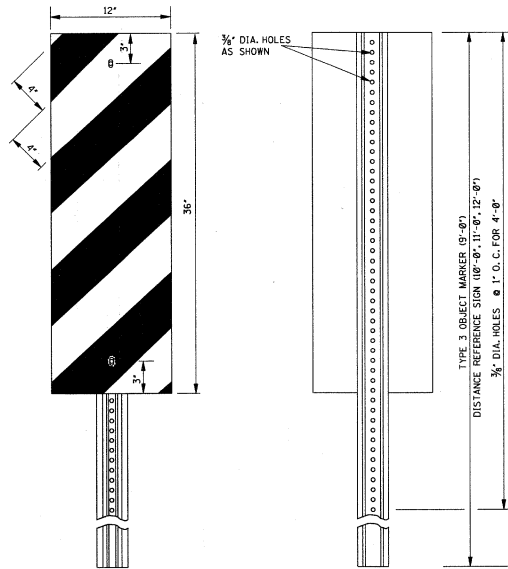
**DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP**



**DELINEATOR MOUNTING ON OUTSIDE SHOULDER WITH MOUNTABLE CURB ALONG MAIN FACILITY OR RAMP**



**DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE**

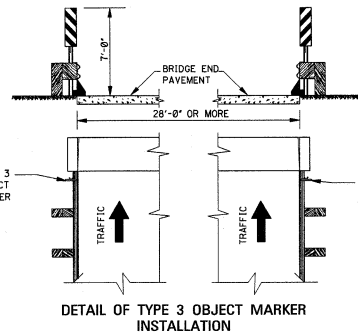


**DETAIL OF TYPE 3 OBJECT MARKER**

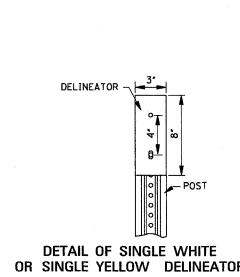
NOTE: COLORS- BLACK AND YELLOW. STRIPING SHOWN ABOVE FOR RIGHT SIDE ONLY. STRIPES SLANT DOWNWARD TO THE RIGHT FOR LEFT SIDE OF BRIDGE END. SEE DETAIL BELOW.

**REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY**

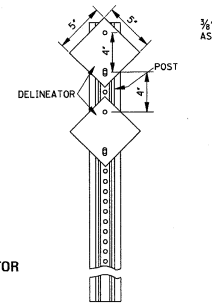
NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS ARE TO BE FASTENED TO U-SECTION POSTS WITH 1/2" DIA. HUCK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OR OTHER APPROVED EQUAL.



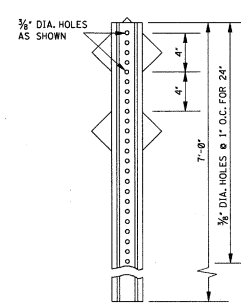
**DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION**



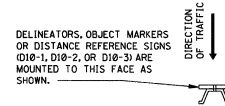
**DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR**



**DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR**



**REAR VIEW OF DELINEATOR ASSEMBLY**



DELINEATORS, OBJECT MARKERS OR DISTANCE REFERENCE SIGNS (D10-1, D10-2, OR D10-3) ARE MOUNTED TO THIS FACE AS SHOWN.


**MOUNTING DETAIL**

NOTE: DELINEATORS ARE TO BE FASTENED TO U-SECTION POSTS WITH 1/2" DIA. HUCK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OR OTHER APPROVED EQUAL.

**GENERAL NOTES:**

- DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE REFLECTIVE SHEETING ON 0.088" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
- DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS ARE TO BE FABRICATED BEFORE THE METAL IS GALVANIZED.
- WEIGHT WITHOUT GROUND PLATES:  
A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft  
B. TYPE 3 OBJECT MARKER POST 9'-0" - 2.5 lb/ft TO 3.0 lb/ft  
C. DISTANCE REFERENCE SIGN POST 10'-0", 11'-0", & 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
- UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST. DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
- RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 1/8" FOR HOT ROLLED SECTION.
- GROUND PLATE NOT REQUIRED ON U-SECTION POST.

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION	<b>TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS</b>
DATE	ISSUE DATE: OCTOBER 1, 1998



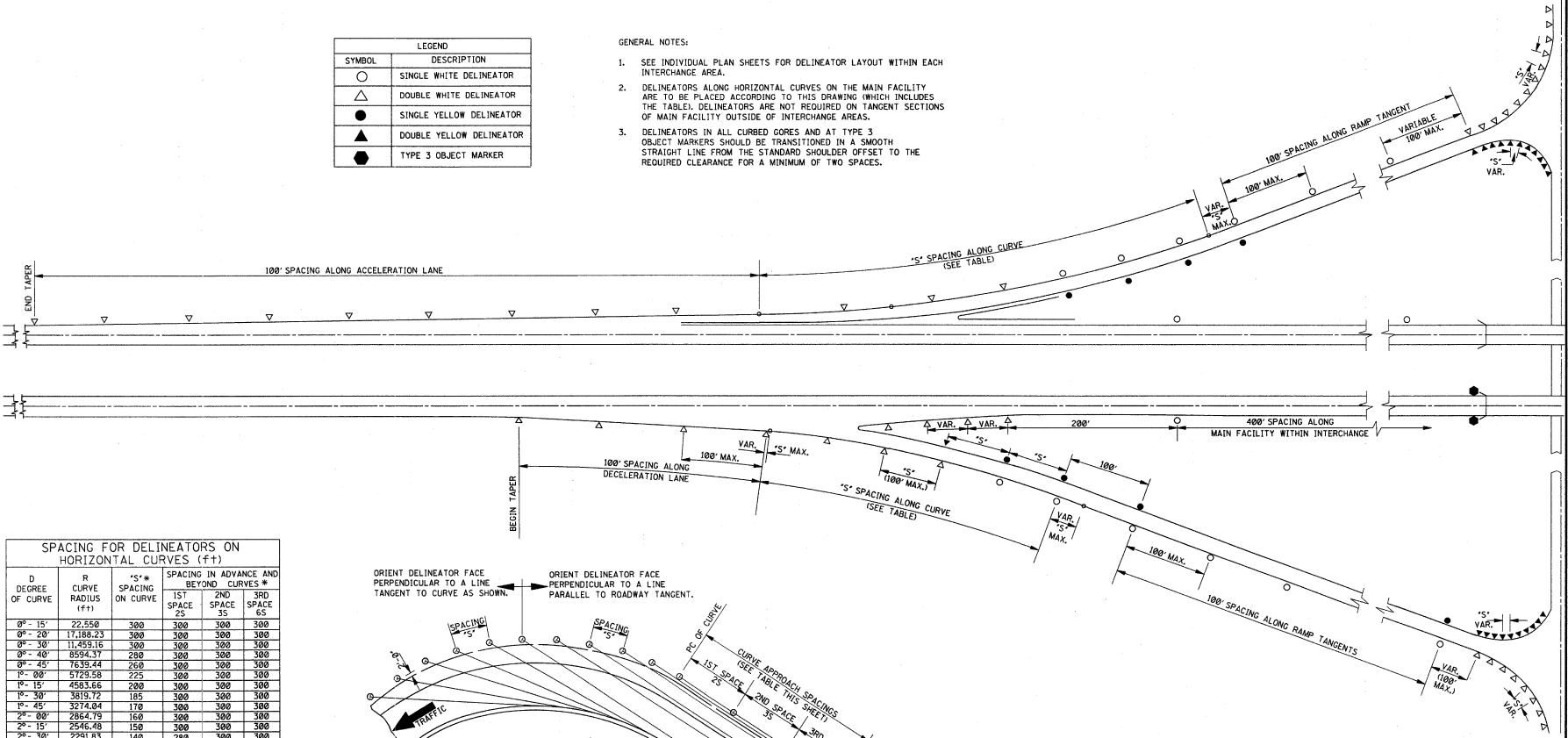
WORKING NUMBER  
SN-8

SHEET NUMBER  
233

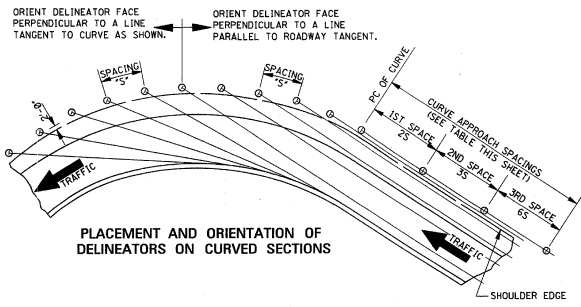
LEGEND	
SYMBOL	DESCRIPTION
○	SINGLE WHITE DELINEATOR
△	DOUBLE WHITE DELINEATOR
●	SINGLE YELLOW DELINEATOR
▲	DOUBLE YELLOW DELINEATOR
●	TYPE 3 OBJECT MARKER

GENERAL NOTES:

- SEE INDIVIDUAL PLAN SHEETS FOR DELINEATOR LAYOUT WITHIN EACH INTERCHANGE AREA.
- DELINEATORS ALONG HORIZONTAL CURVES ON THE MAIN FACILITY ARE TO BE PLACED ACCORDING TO THIS DRAWING (WHICH INCLUDES THE TABLE). DELINEATORS ARE NOT REQUIRED ON TANGENT SECTIONS OF MAIN FACILITY OUTSIDE OF INTERCHANGE AREAS.
- DELINEATORS IN ALL CURBED GORES AND AT TYPE 3 OBJECT MARKERS SHOULD BE TRANSITIONED IN A SMOOTH STRAIGHT LINE FROM THE STANDARD SHOULDER OFFSET TO THE REQUIRED CLEARANCE FOR A MINIMUM OF TWO SPACES.



D DEGREE OF CURVE	R CURVE RADIUS (ft)	S* SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVES *		
			1ST SPACE 2S	2ND SPACE 3S	3RD SPACE 6S
0° - 15'	22,550	300	300	300	300
0° - 20'	17,188.23	300	300	300	300
0° - 30'	11,453.16	300	300	300	300
0° - 40'	8594.37	280	300	300	300
0° - 45'	7639.44	260	300	300	300
1° - 00'	5723.58	225	300	300	300
1° - 15'	4583.66	200	300	300	300
1° - 30'	3819.72	185	300	300	300
1° - 45'	3274.04	170	300	300	300
2° - 00'	2864.79	160	300	300	300
2° - 15'	2546.48	150	300	300	300
2° - 30'	2291.83	140	280	300	300
2° - 45'	2083.40	135	270	300	300
3° - 00'	1909.86	130	260	300	300
3° - 30'	1637.02	120	240	300	300
4° - 00'	1432.39	110	220	300	300
6° - 00'	954.93	90	180	270	300
8° - 00'	716.20	75	150	225	300
	500.00	65	130	195	300
	350.00	50	100	150	300
	300.00	45	90	135	270
	250.00	40	80	120	240
	200.00	35	70	105	210
	150.00	30	60	90	180



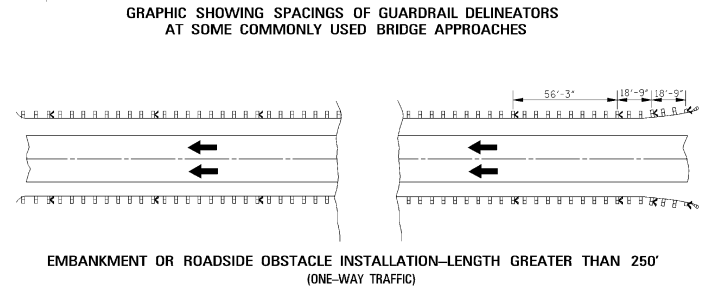
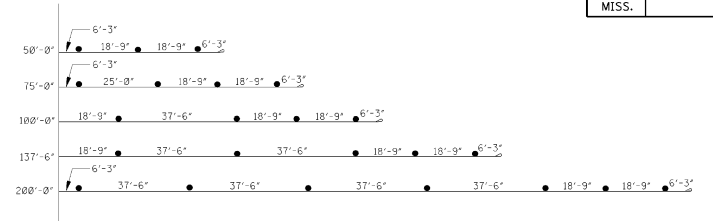
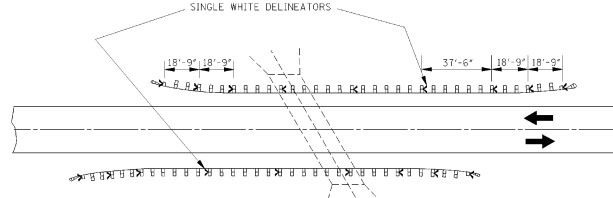
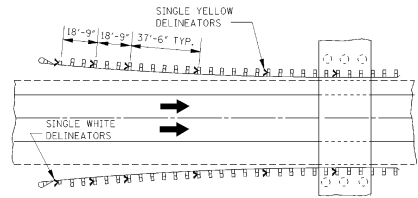
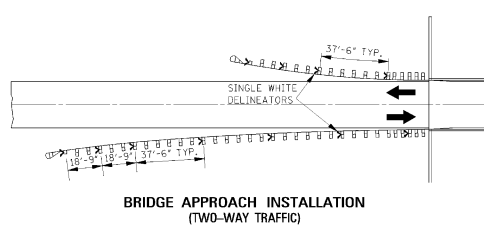
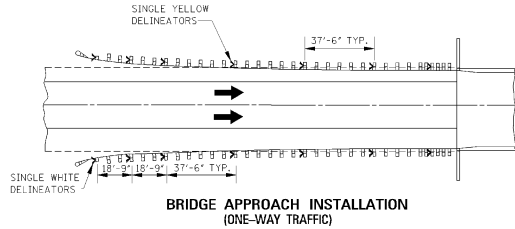
\* NOTE: THE SPACING 'S' ON THE CURVE IS FOUND FROM THE FORMULA  $S = \sqrt{R/50}$ , WHERE R IS THE RADIUS OF THE CURVE IN FEET. THE SPACING OF THE FIRST DELINEATOR IN ADVANCE OF AND BEYOND THE CURVE IS 2S, THE SECOND DELINEATOR 3S, AND THE THIRD 6S, BUT NOT TO EXCEED 300' ALONG THE MAIN FACILITY AND 100' ALONG THE RAMPS. MINIMUM DELINEATOR SPACING IS 20'.

BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
DATE	ISSUE DATE: OCTOBER 1, 1998

**TYPICAL INSTALLATION OF DELINEATORS**

WORKING NUMBER  
SN-BA  
SHEET NUMBER  
234

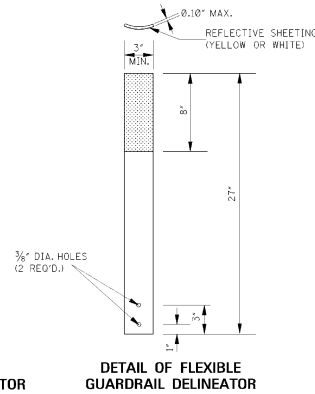
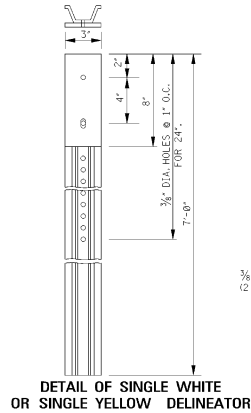
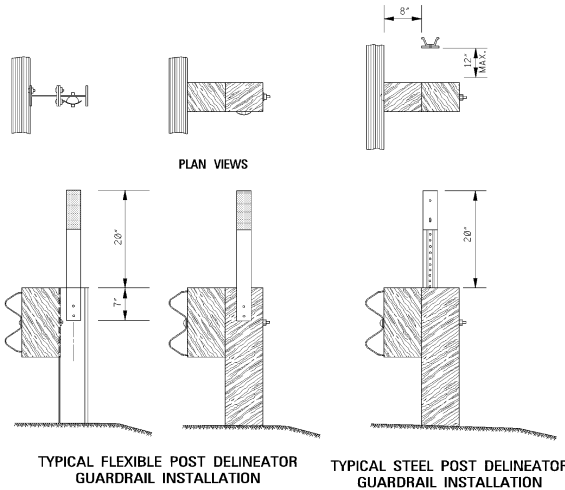
STATE	PROJECT NO.
MISS.	



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

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. DELINEATORS FOR GUARDRAIL SHALL BE MOUNTED ON STEEL POSTS OR FLEXIBLE POSTS AS FOLLOWS:
  - 3A. DELINEATORS ON STEEL POSTS:
    1. DELINEATOR FACE SHALL BE PLACED ON 0.080" THICK SHEET ALUMINUM OR 14 GAUGE GALVANIZED SHEET STEEL.
    2. DELINEATOR POSTS SHALL BE GALVANIZED STEEL U-SECTION POSTS (2.0 lb/ft. TO 2.5 lb/ft). THE POSTS ARE TO BE FABRICATED BEFORE THE METAL IS GALVANIZED. RADIUS IN BENDS OF POST CROSS-SECTION NOT TO EXCEED 3/8" FOR HOT ROLLED SECTION.
    3. WHEN COVER OVER A DRAINAGE STRUCTURE IS LESS THAN THE NORMAL DELINEATOR POST DEPTH, THE DELINEATOR POSTS WILL BE FIELD CUT, DRILLED AND FASTENED TO THE BACK OF THE GUARDRAIL POSTS WITH (2) 1/4" DIA. LAG SCREWS.
  - 3B. DELINEATORS ON FLEXIBLE POSTS:
    1. THE DELINEATOR POSTS WILL BE FROM THE DEPARTMENT'S "APPROVED SOURCE OF MATERIALS" AND WILL BE FASTENED TO GUARDRAIL POST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>TYPICAL GUARDRAIL DELINEATION</b>	
DATE	REVISION
FOR DELETED NOTE	
ISSUE DATE: OCTOBER 1, 1998	
WORKING NUMBER SN-8C SHEET NUMBER 236	

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SECTION 904 – NOTICE TO BIDDERS NO. 1339**

**CODE: (SP)**

**DATE: 02/16/2007**

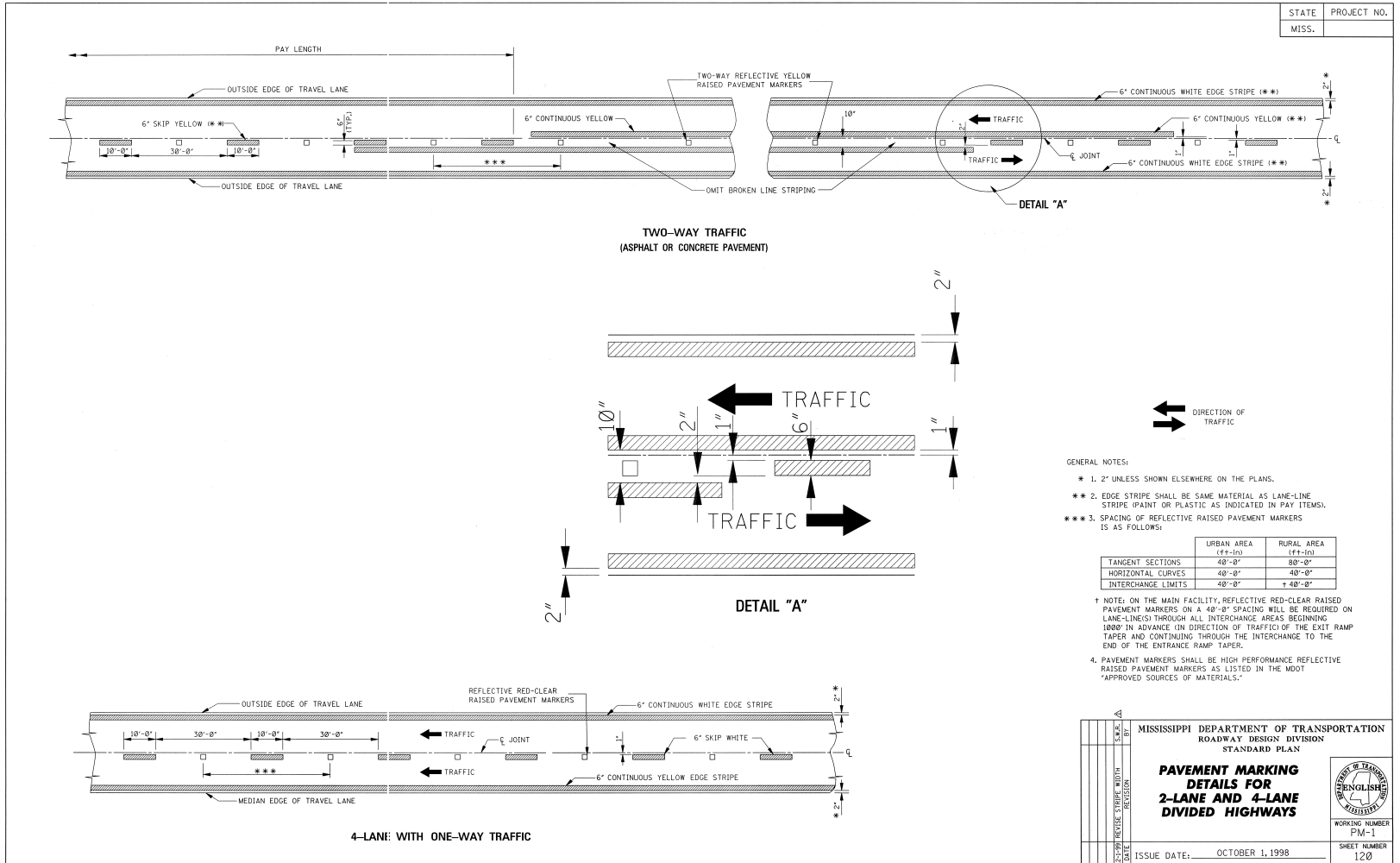
**SUBJECT: Standard Drawings**

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 Administration Building  
401 North West Street, Room 1100  
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](mailto:plans@mdot.state.ms.us)





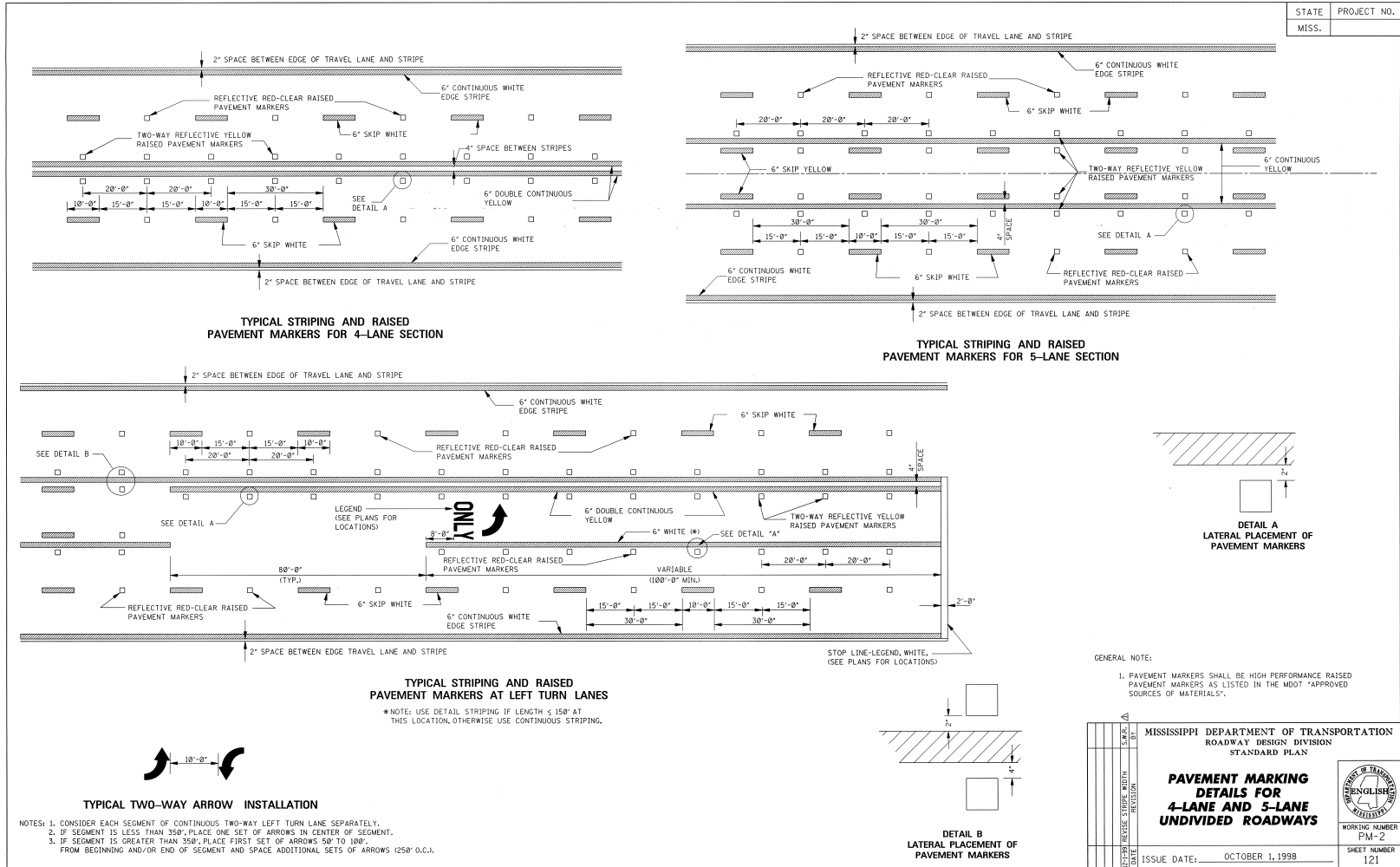
MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
ROADWAY DESIGN DIVISION  
STANDARD PLAN

**PAVEMENT MARKING  
DETAILS FOR  
2-LANE AND 4-LANE  
DIVIDED HIGHWAYS**

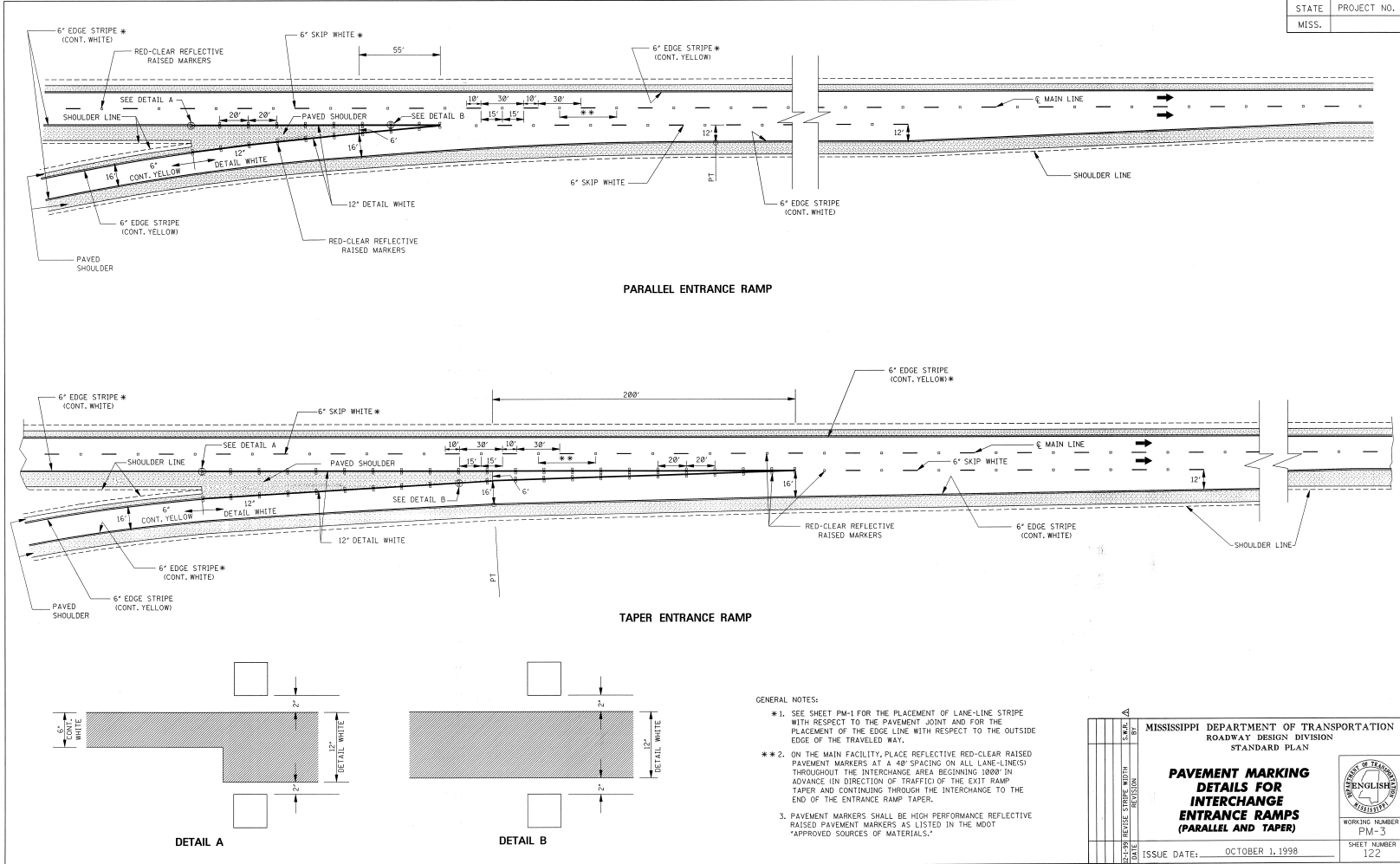
ISSUE DATE: OCTOBER 1, 1998

WORKING NUMBER  
PM-1

SHEET NUMBER  
120



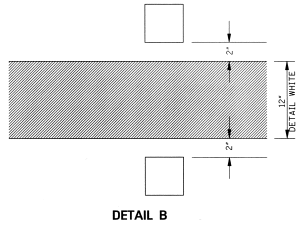
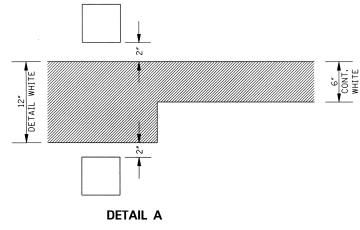
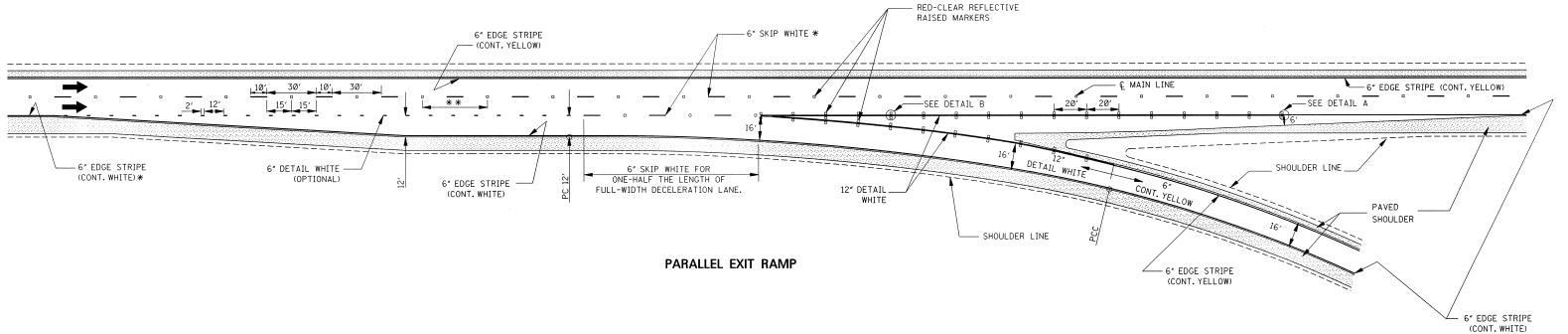
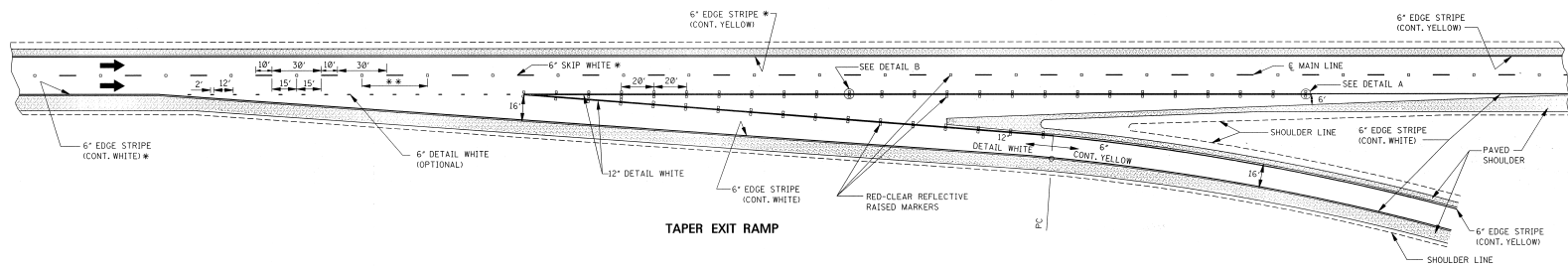
STATE	PROJECT NO.
MISS.	



STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN			
<b>PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPER)</b>			
ISSUE DATE: OCTOBER 1, 1998			WORKING NUMBER PM-3
			SHEET NUMBER 122

STATE	PROJECT NO.
MISS.	



- GENERAL NOTES:
- \* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.
  - \*\* 2. ON THE MAIN FACILITY, PLACE REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS AT A 40' SPACING ON ALL LANE-LINES THROUGHOUT THE INTERCHANGE AREA 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 MDT "APPROVED SOURCES OF MATERIALS."

STATE	PROJECT NO.
MISS.	

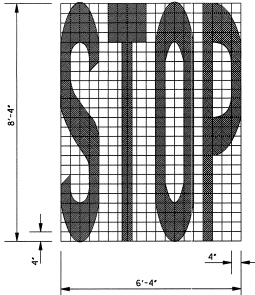
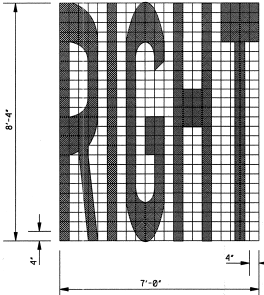
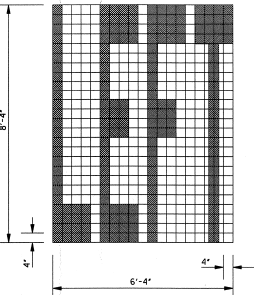
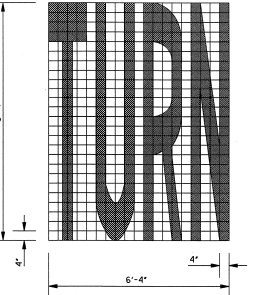
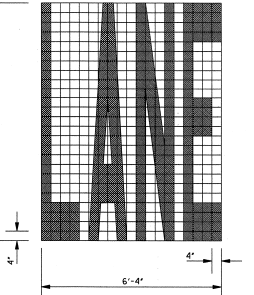
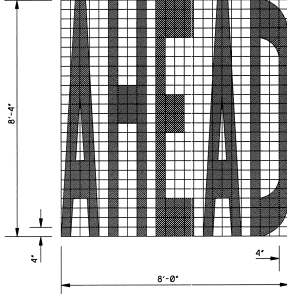
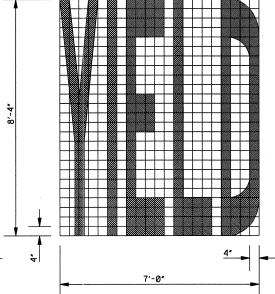
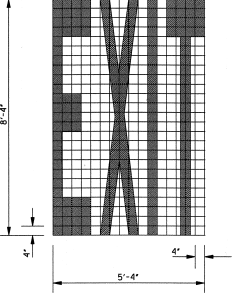
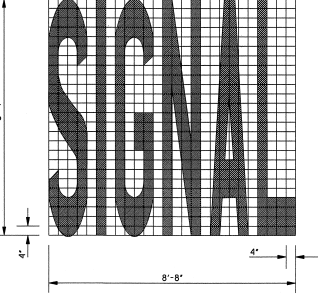
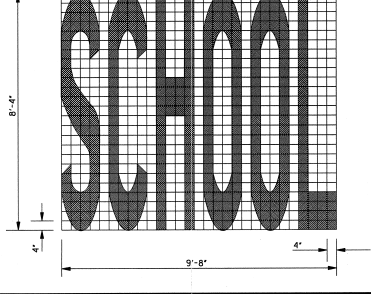

MISSISSIPPI DEPARTMENT OF TRANSPORTATION  
ROADWAY DESIGN DIVISION  
STANDARD PLAN

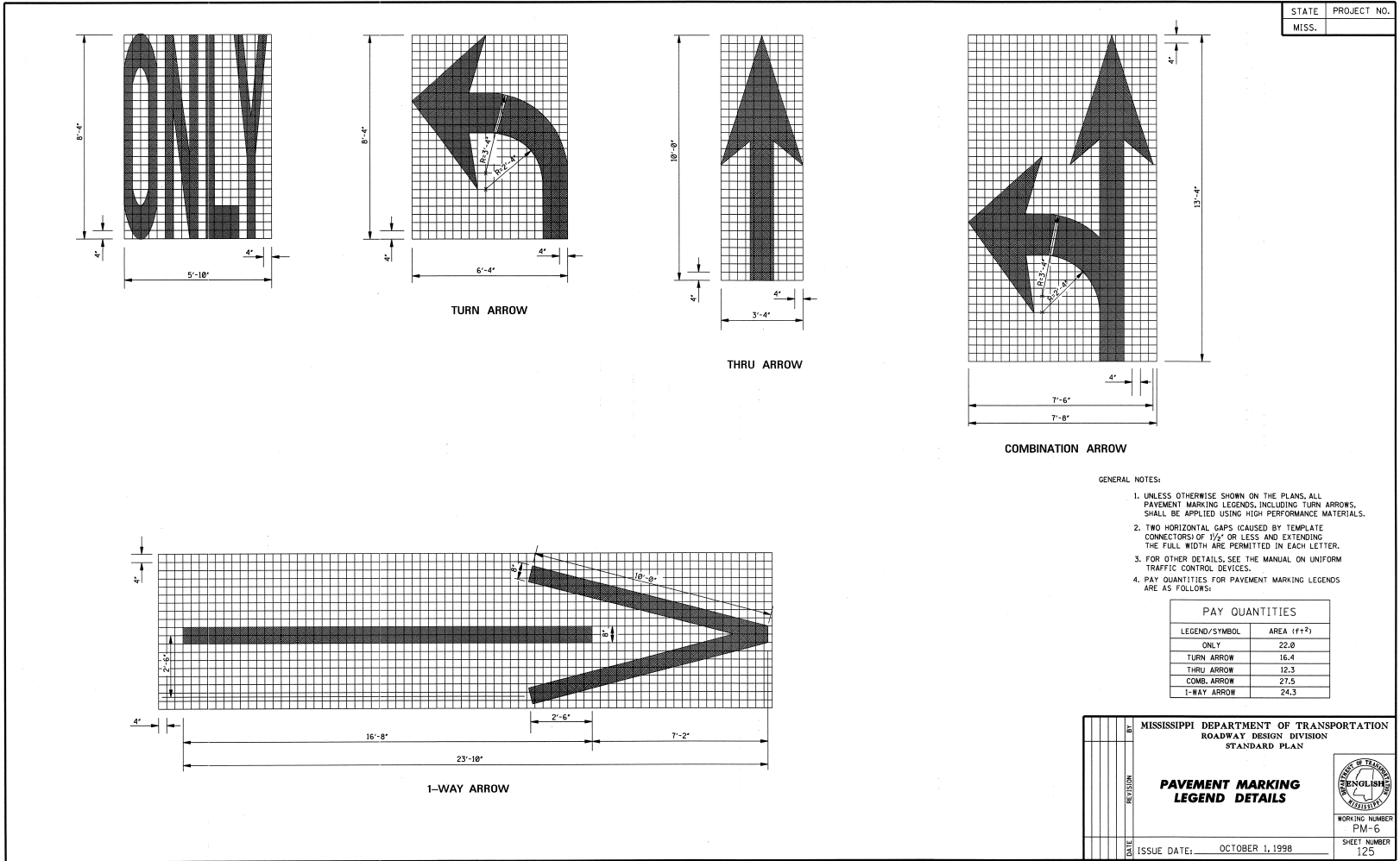
**PAVEMENT MARKING  
DETAILS FOR  
INTERCHANGE  
EXIT RAMP  
(PARALLEL AND TAPER)**

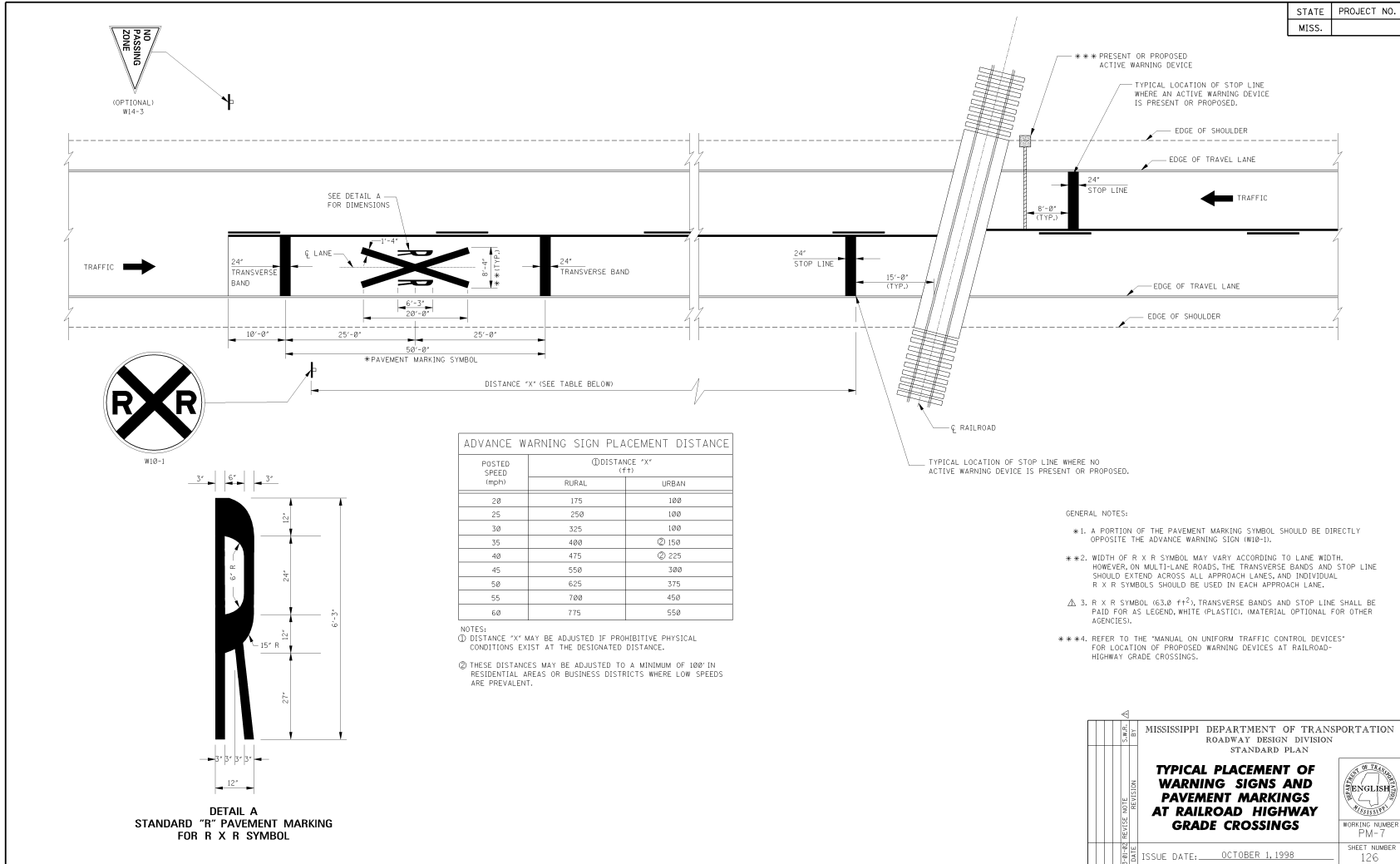
WORKING NUMBER: PM-4  
SHEET NUMBER: 123

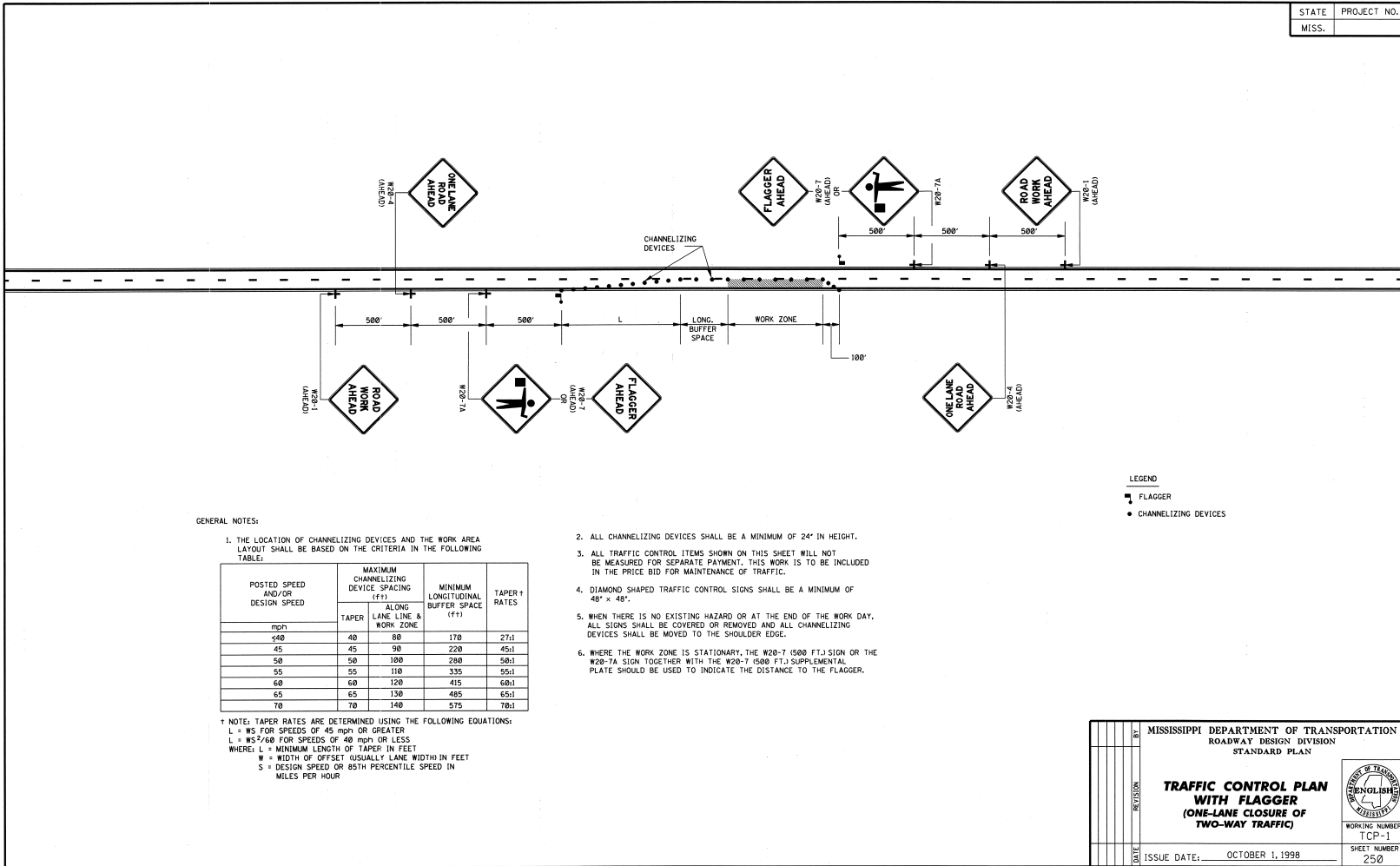
ISSUE DATE: OCTOBER 1, 1998

DATE: \_\_\_\_\_  
BY: \_\_\_\_\_  
CHECKED BY: \_\_\_\_\_  
DESIGNED BY: \_\_\_\_\_

		STATE PROJECT NO. MISS.																																		
																																				
			<p><b>GENERAL NOTES:</b></p> <ol style="list-style-type: none"> <li>UNLESS OTHERWISE SHOWN ON THE PLANS, ALL PAVEMENT MARKING LEGENDS SHALL BE APPLIED USING HIGH PERFORMANCE MATERIALS.</li> <li>TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS OF 1/2" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.</li> <li>FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.</li> <li>PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:</li> </ol> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>LEGEND</th> <th>AREA (ft<sup>2</sup>)</th> </tr> </thead> <tbody> <tr><td>STOP</td><td>24.6</td></tr> <tr><td>RIGHT</td><td>28.6</td></tr> <tr><td>LEFT</td><td>19.6</td></tr> <tr><td>TURN</td><td>27.7</td></tr> <tr><td>LANE</td><td>22.7</td></tr> <tr><td>AHEAD</td><td>32.3</td></tr> <tr><td>YIELD</td><td>26.8</td></tr> <tr><td>EXIT</td><td>18.5</td></tr> <tr><td>SIGNAL</td><td>32.5</td></tr> <tr><td>SCHOOL</td><td>35.5</td></tr> </tbody> </table>		LEGEND	AREA (ft <sup>2</sup> )	STOP	24.6	RIGHT	28.6	LEFT	19.6	TURN	27.7	LANE	22.7	AHEAD	32.3	YIELD	26.8	EXIT	18.5	SIGNAL	32.5	SCHOOL	35.5										
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SIGNAL	32.5																																			
SCHOOL	35.5																																			
	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>DATE</th> <th>REVISION</th> <th>BY</th> </tr> </thead> <tbody> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> <tr><td> </td><td> </td><td> </td></tr> </tbody> </table>			DATE	REVISION	BY																														
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	<p style="text-align: center;"><b>MISSISSIPPI DEPARTMENT OF TRANSPORTATION</b> ROADWAY DESIGN DIVISION STANDARD PLAN</p> <p style="text-align: center;"><b>PAVEMENT MARKING LEGEND DETAILS</b></p> <div style="text-align: right;">               WORKING NUMBER PM-5 SHEET NUMBER 124         </div> <p>ISSUE DATE: OCTOBER 1, 1998</p>																																			







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 (FF)		MINIMUM LONGITUDINAL BUFFER SPACE (FF)	TAPER RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

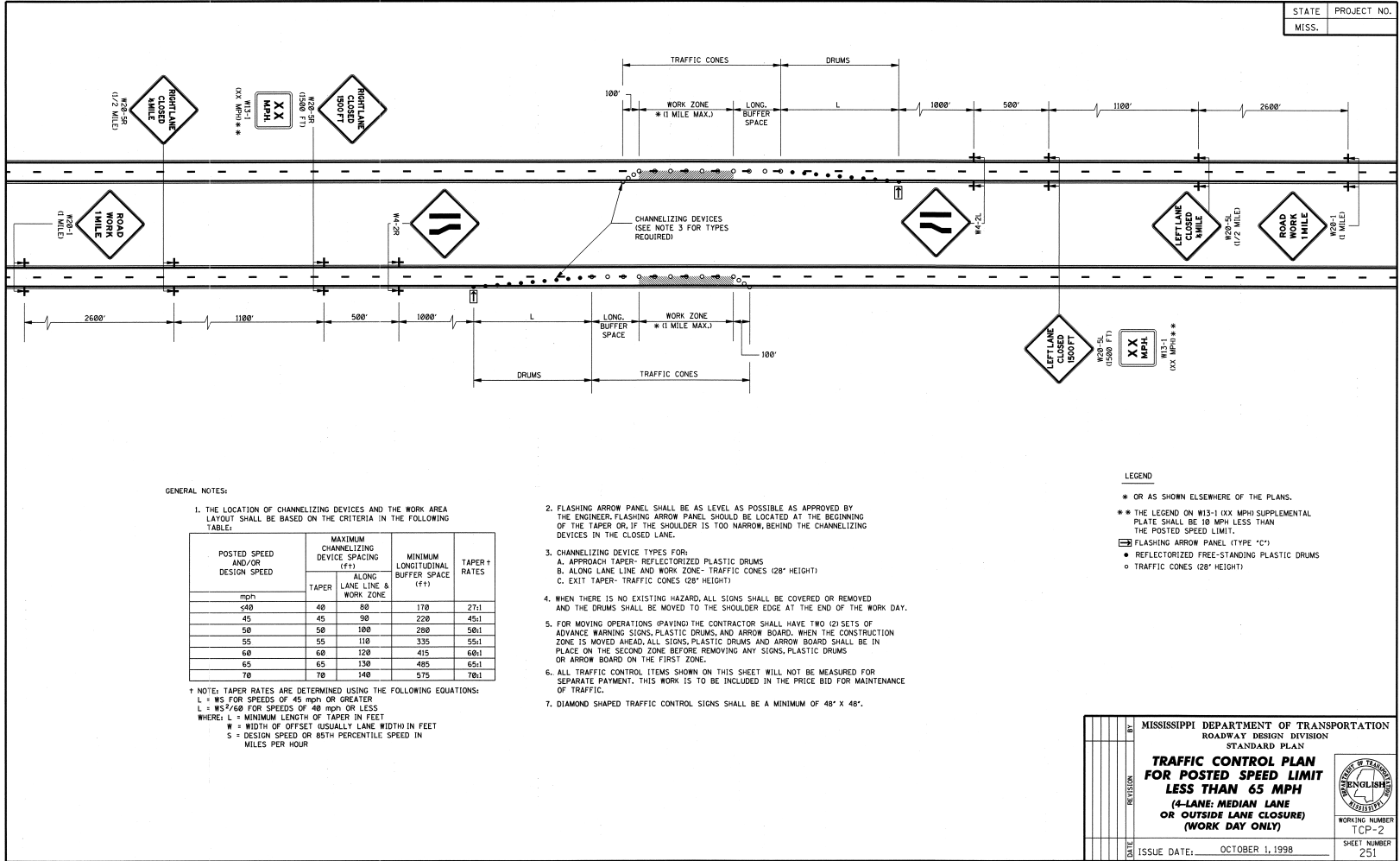
\* NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:  
 $L = WS$  FOR SPEEDS OF 45 mph OR GREATER  
 $L = WS^2/60$  FOR SPEEDS OF 40 mph OR LESS  
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET  
 W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET  
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 24" IN HEIGHT.
3. 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.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".
5. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
6. WHERE THE WORK ZONE IS STATIONARY, THE W20-7 (500 FT.) SIGN OR THE W20-7A SIGN TOGETHER WITH THE W20-7 (500 FT.) SUPPLEMENTAL PLATE SHOULD BE USED TO INDICATE THE DISTANCE TO THE FLAGGER.

LEGEND  
 ■ FLAGGER  
 ● CHANNELIZING DEVICES

DATE	REVISION	BY
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN		
<b>TRAFFIC CONTROL PLAN WITH FLAGGER (ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)</b>		
ISSUE DATE: OCTOBER 1, 1998		WORKING NUMBER TCP-1
		SHEET NUMBER 250





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)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

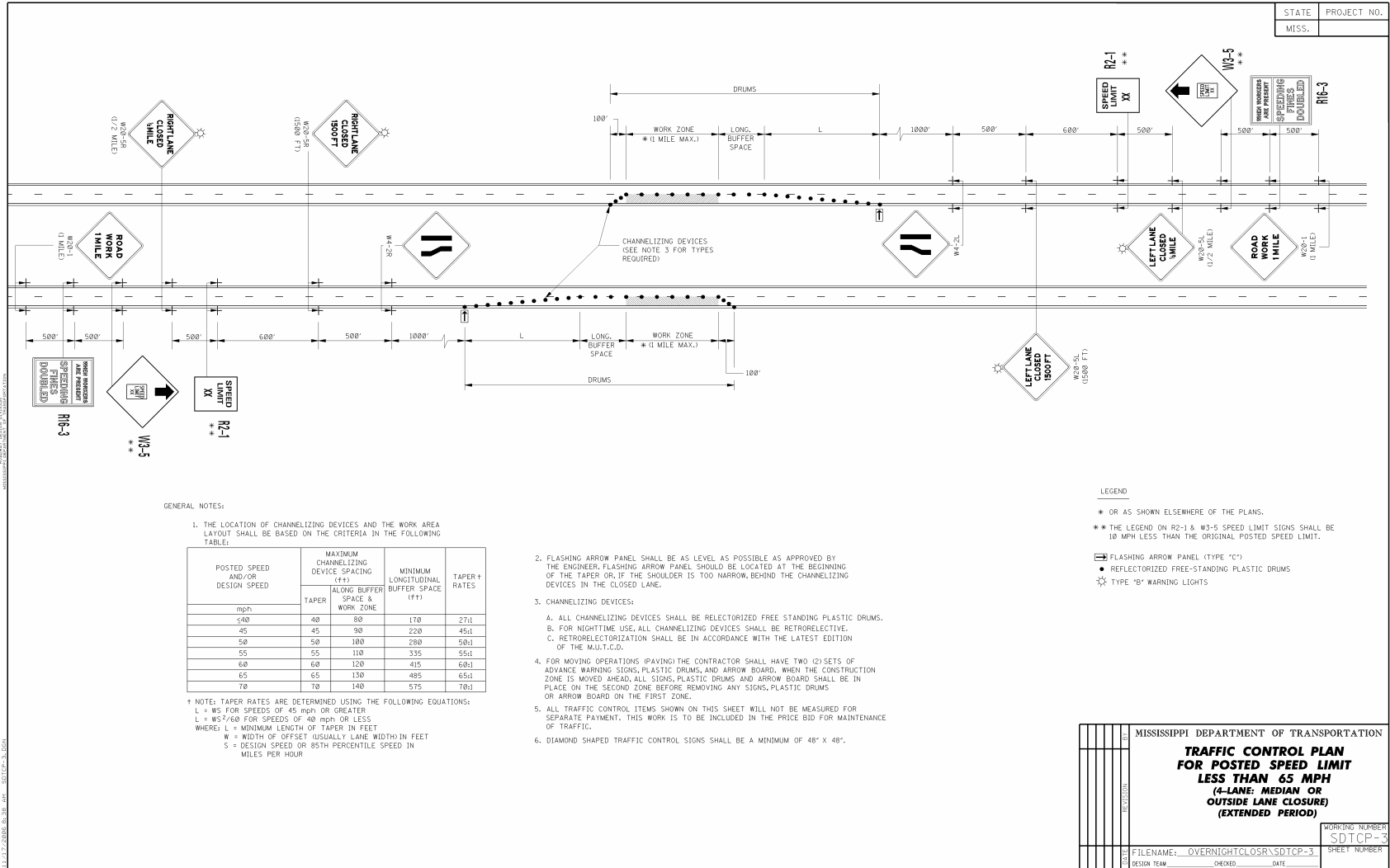
† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:  
 L = WS FOR SPEEDS OF 45 mph OR GREATER  
 L = WS²/60 FOR SPEEDS OF 40 mph OR LESS  
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET  
 W = WIDTH OF OFFSET USUALLY LANE WIDTH IN FEET  
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES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

- FLASHING ARROW PANEL SHALL 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.
- CHANNELIZING DEVICE TYPES FOR:  
 A. APPROACH TAPER- REFLECTORIZED PLASTIC DRUMS  
 B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)  
 C. EXIT TAPER- TRAFFIC CONES (28" HEIGHT)
- WHEN THERE IS NO EXISTING HAZARD, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE DRUMS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.
- 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.
- 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.
- DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".

LEGEND

- \* OR AS SHOWN ELSEWHERE OF THE PLANS.
- \*\* THE LEGEND ON W13-1 (XXX MPH) SUPPLEMENTAL PLATE SHALL BE 10 MPH LESS THAN THE POSTED SPEED LIMIT.
- ▭ FLASHING ARROW PANEL (TYPE "C")
- REFLECTORIZED FREE-STANDING PLASTIC DRUMS
- TRAFFIC CONES (28" HEIGHT)

DATE		ISSUE DATE: OCTOBER 1, 1998
BY		MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION		<b>TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT LESS THAN 65 MPH</b> (4-LANE; MEDIAN LANE OR OUTSIDE LANE CLOSURE) (WORK DAY ONLY)
DATE		WORKING NUMBER TCP-2
BY		SHEET NUMBER 251



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)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER RATES
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
50	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	495	65:1
70	70	140	575	70:1

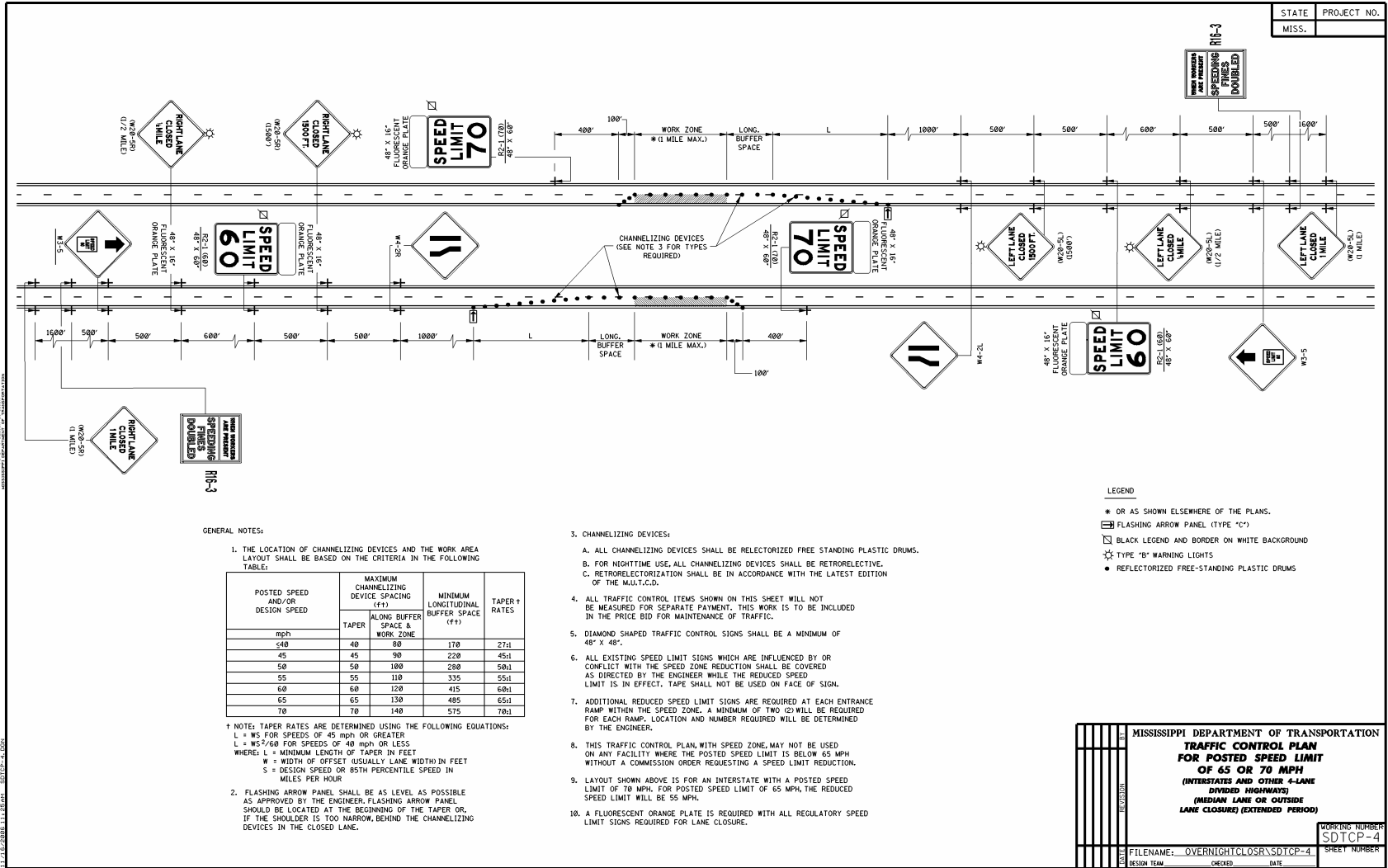
+ NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:  
 $L = WS$  FOR SPEEDS OF 45 MPH OR GREATER  
 $L = WS^2/60$  FOR SPEEDS OF 40 MPH OR LESS  
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET  
 W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET  
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

- FLASHING ARROW PANEL SHALL 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.
- CHANNELIZING DEVICES:
  - ALL CHANNELIZING DEVICES SHALL BE REFLECTORIZED FREE STANDING PLASTIC DRUMS.
  - FOR NIGHTTIME USE, ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
  - RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.
- 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.
- 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.
- DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".

LEGEND

- \* OR AS SHOWN ELSEWHERE OF THE PLANS.
- \*\* THE LEGEND ON R2-1 & W3-5 SPEED LIMIT SIGNS SHALL BE 10 MPH LESS THAN THE ORIGINAL POSTED SPEED LIMIT.
- ☁ FLASHING ARROW PANEL (TYPE "C")
- REFLECTORIZED FREE-STANDING PLASTIC DRUMS
- ☼ TYPE "B" WARNING LIGHTS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION	
<b>TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT LESS THAN 65 MPH (4-LANE, MEDIAN OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)</b>	
FILENAME: OVERNIGHTCLOS\SDTCP-3	WORKING NUMBER: SDTCP-34
DESIGN TEAM	CHECKED DATE
	SHEET NUMBER



STATE PROJECT NO.  
MISS. \_\_\_\_\_

- LEGEND**
- ✱ OR AS SHOWN ELSEWHERE OF THE PLANS.
  - ◻ FLASHING ARROW PANEL (TYPE "C")
  - ◻ BLACK LEGEND AND BORDER ON WHITE BACKGROUND
  - ✱ TYPE "B" WARNING LIGHTS
  - REFLECTORIZED FREE-STANDING PLASTIC DRUMS

**GENERAL NOTES:**

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

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (FT)		MINIMUM LONGITUDINAL BUFFER SPACE (FT)	TAPER † RATES
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
<40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	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

2. FLASHING ARROW PANEL SHALL 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 SHALL BE REFLECTORIZED FREE STANDING PLASTIC DRUMS.
- B. FOR NIGHTTIME USE, ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
- C. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

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.

5. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".

6. 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.

7. ADDITIONAL REDUCED SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. A MINIMUM OF TWO (2) WILL BE REQUIRED FOR EACH RAMP. LOCATION AND NUMBER REQUIRED WILL BE DETERMINED BY THE ENGINEER.

8. 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.

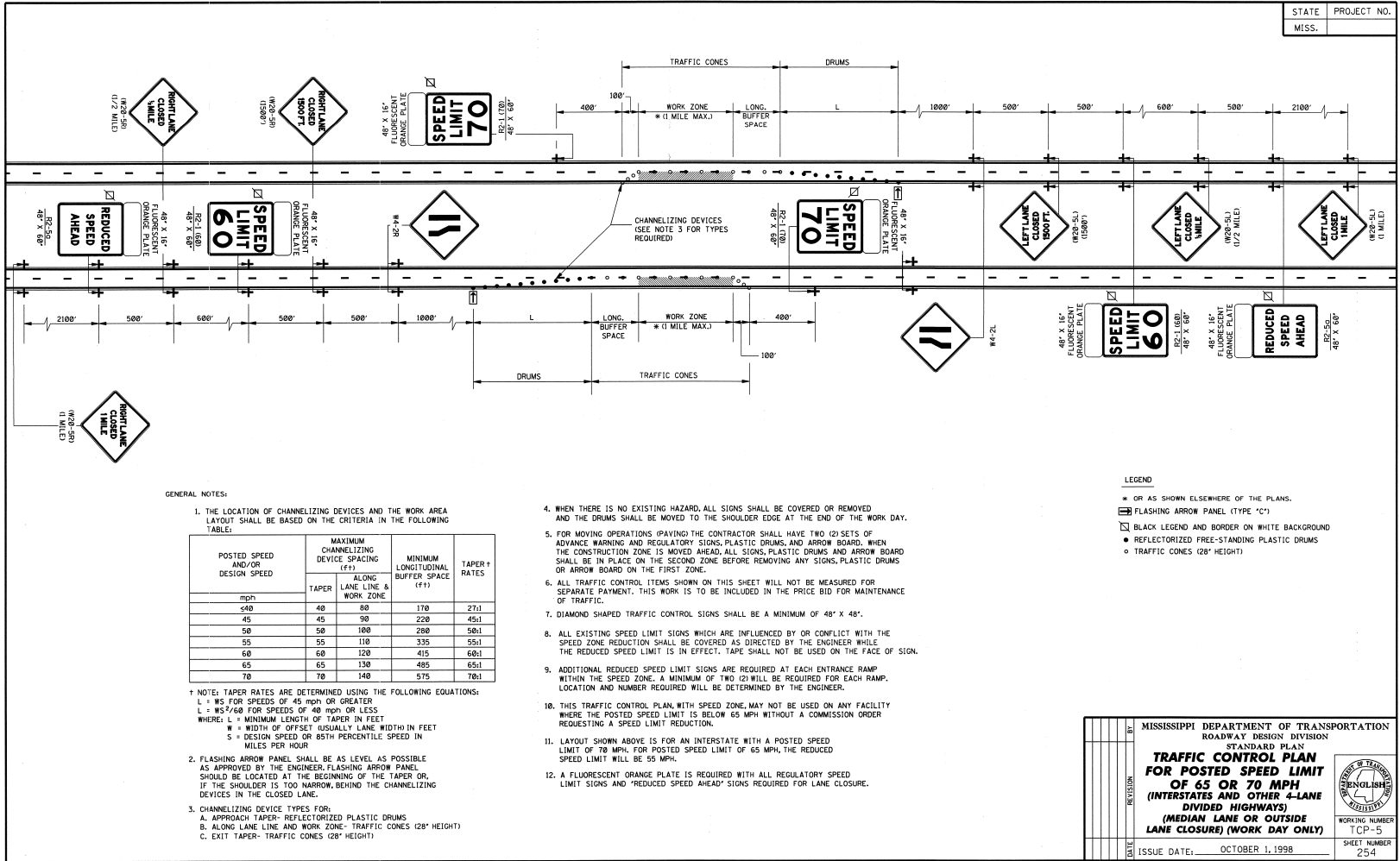
9. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.

10. A FLOURESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.

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

WORKING NUMBER  
SDTCP-4

FILENAME: OVERNIGHTCLOSRS/SDTCP-4 SHEET NUMBER  
 DESIGN TEAM \_\_\_\_\_ CHECKED \_\_\_\_\_ DATE \_\_\_\_\_



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)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER† RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
40	48	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

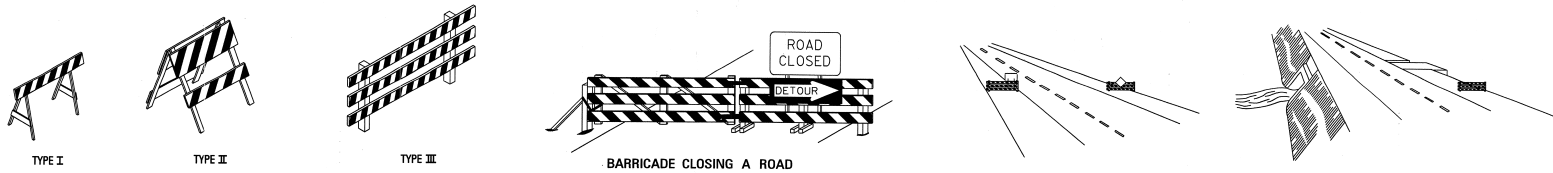
- † NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:  
 L = WS FOR SPEEDS OF 45 MPH OR GREATER  
 L = WS<sup>2</sup>/60 FOR SPEEDS OF 40 MPH OR LESS  
 WHERE: L = MINIMUM LENGTH OF TAPER IN FEET  
 W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET  
 S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
2. FLASHING ARROW PANEL SHALL 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- REFLECTORIZED PLASTIC DRUMS  
 B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)  
 C. EXIT TAPER- TRAFFIC CONES (28" HEIGHT)

4. WHEN THERE IS NO EXISTING HAZARD, 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 (PAYING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING AND REGULATORY SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.
6. ALL 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.
7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".
8. 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.
9. ADDITIONAL REDUCED SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. A MINIMUM OF TWO (2) WILL BE REQUIRED FOR EACH RAMP. LOCATION AND NUMBER REQUIRED WILL BE DETERMINED BY THE ENGINEER.
10. 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.
11. 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.
12. A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS AND "REDUCED SPEED AHEAD" SIGNS REQUIRED FOR LANE CLOSURE.

LEGEND

- \* OR AS SHOWN ELSEWHERE OF THE PLANS.
- ☐ FLASHING ARROW PANEL (TYPE "C")
- ◻ BLACK LEGEND AND BORDER ON WHITE BACKGROUND
- ◻ REFLECTORIZED FREE-STANDING PLASTIC DRUMS
- ◻ TRAFFIC CONES (28" HEIGHT)

DATE	BY	REVISION	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN <b>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)</b>	 WORKING NUMBER TCP-5 SHEET NUMBER 25-4
ISSUE DATE: _____	OCTOBER 1, 1998			



**STANDARD BARRICADES**

1. A TYPE I BARRICADE CONSISTS OF ONE (1) HORIZONTAL RAIL SUPPORTED BY A DEMOUNTABLE FRAME OR A LIGHT 'A' FRAME. A TYPE I BARRICADE NORMALLY WOULD BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS.
2. A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT 'A' FRAME. TYPE II BARRICADES ARE INTENDED FOR USE ON EXPRESSWAYS AND FREEWAYS AND OTHER HIGH-SPEED ROADWAYS.
3. TYPE I AND TYPE II BARRICADES ARE INTENDED FOR USE WHERE THE HAZARD IS RELATIVELY SMALL, AS, FOR EXAMPLE, ON CITY STREETS, OR FOR THE MORE OR LESS CONTINUOUS DELIMITING OF A RESTRICTED ROADWAY, OR FOR TEMPORARY DAYTIME USE.
4. A TYPE III BARRICADE CONSISTS OF THREE (3) HORIZONTAL RAILS SUPPORTED BY FIXED POSTS, A RIGID SKID, A HEAVY DEMOUNTABLE FRAME OR A HEAVY, HINGED 'A' FRAME.
5. TYPE III BARRICADES ARE INTENDED FOR USE ON CONSTRUCTION AND MAINTENANCE PROJECTS AS WING BARRICADES AND AT ROAD CLOSURES, WHERE THEY MUST REMAIN IN PLACE FOR EXTENDED PERIODS.
6. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE ISLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION OF TRAFFIC IS TO PASS.
7. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
8. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.

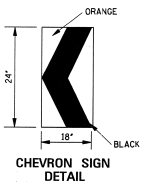
**BARRICADE CHARACTERISTICS**

	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 REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS
TYPE OF FRAME	LIGHT	LIGHT 'A' FRAME	POST OR SKID

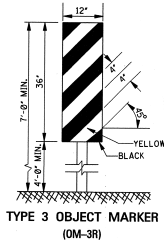
\* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.  
 \*\* 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 IN<sup>2</sup> OF REFLECTIVE AREA FACING TRAFFIC.

**WING BARRICADES**

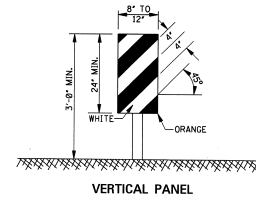
1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
  - A. IN ADVANCE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



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 FIXED POST OR RIGID SKID.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPES.



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.

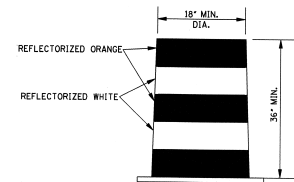


**VERTICAL PANEL**

1. VERTICAL PANELS CONSIST OF AT LEAST ONE PANEL 8" TO 12" IN WIDTH AND A MINIMUM OF 24" IN HEIGHT.
2. THE DIAGONAL STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION THAT TRAFFIC IS TO PASS THE PANEL. THE PANELS SHALL BE MOUNTED WITH THE TOP A MINIMUM OF 36" ABOVE THE ROADWAY ON A SINGLE LIGHTMASS POST.
3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 IN<sup>2</sup> OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

**GENERAL NOTES:**

1. MARKINGS ON ALL DEVICES SHOWN ON THIS SHEET SHALL BE HIGH INTENSITY REFLECTIVE SHEETING.
2. THE TRAFFIC CONTROL PLAN WILL LIST THE VARIOUS TRAFFIC CONTROL DEVICES REQUIRED FOR EACH PROJECT.

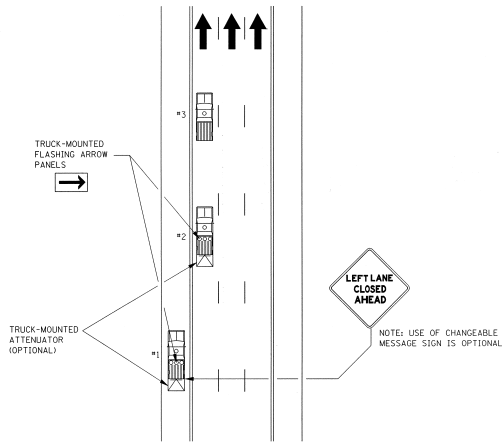


**PLASTIC DRUM STRIPING DETAIL**

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) REFLECTORIZED, 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 SHALL BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

DATE	REVISION	BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
			<b>HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS</b>
			WORKING NUMBER TCP-10
			SHEET NUMBER 233
ISSUE DATE:			OCTOBER 1, 1998

**MOBILE OPERATIONS ON MULTILANE ROAD  $\Delta$**

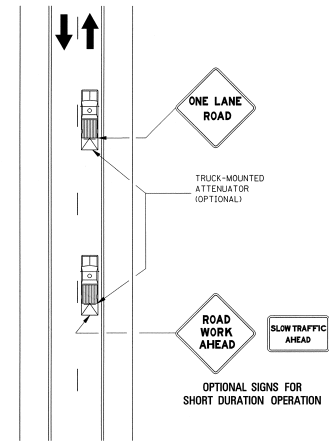


**MOBILE OPERATIONS ON MULTILANE ROAD**

**NOTES:**

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. PROTECTION VEHICLE #1 SHOULD BE EQUIPPED WITH AN ARROW PANEL. AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON PROTECTION VEHICLE #1 SO AS NOT TO OBSCURE THE ARROW PANEL.
3. PROTECTION VEHICLE #2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).
4. PROTECTION VEHICLE #1 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, PROTECTION VEHICLE #1 SHOULD BE ELIMINATED.
6. ON HIGH-SPEED ROADWAYS, A THIRD PROTECTION VEHICLE SHOULD BE USED (I.E., VEHICLE #1 ON THE SHOULDER IF PRACTICAL, VEHICLE #2 IN THE CLOSED LANE, AND VEHICLE #3 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. 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**



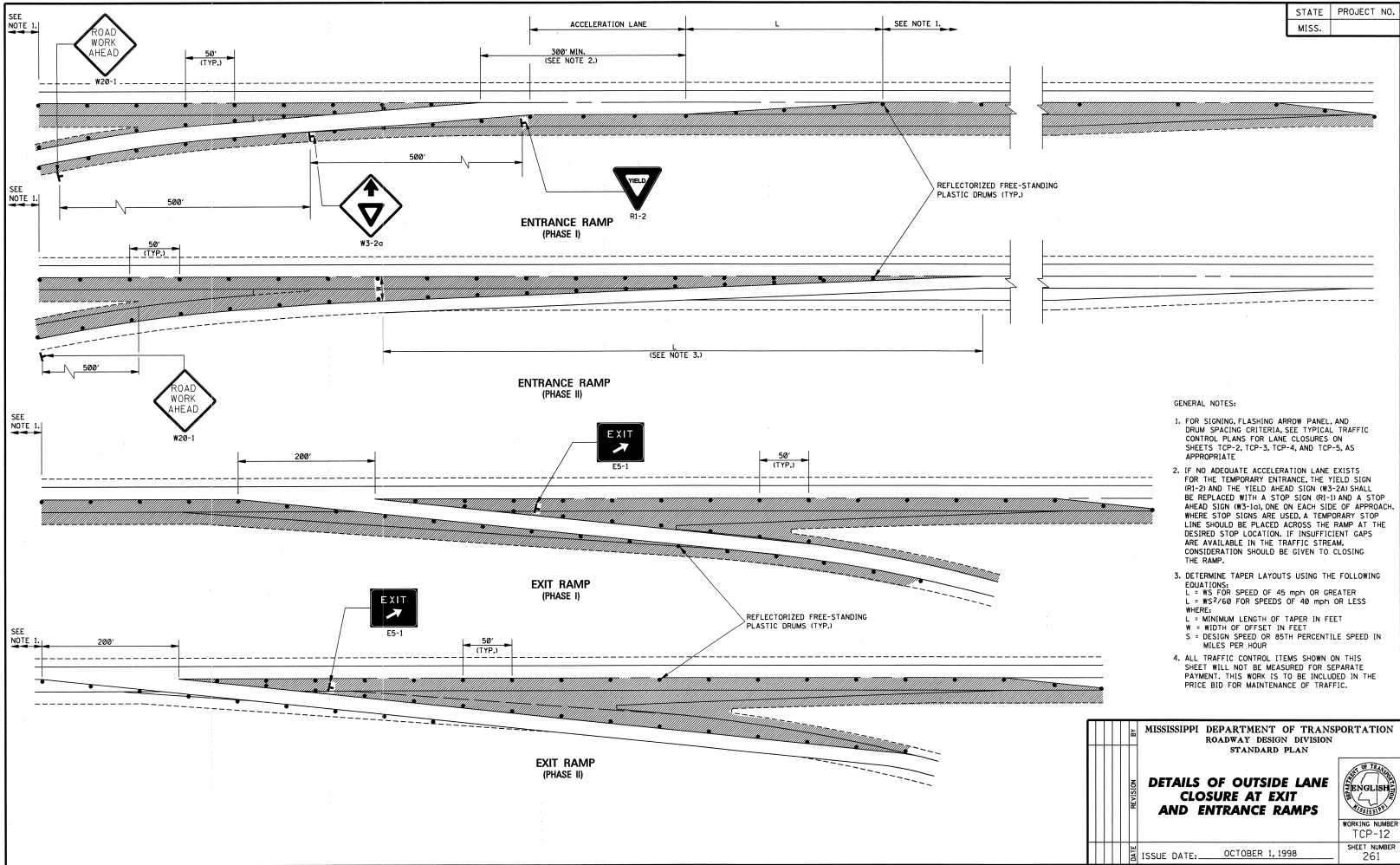
**MOBILE OPERATIONS ON TWO-LANE ROAD**

**NOTES:**


1. WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND PROTECTION 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 PROTECTION VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT DRYING TIME, AND OTHER FACTORS. PROTECTION VEHICLES ARE USED TO WARN TRAFFIC OF THE OPERATION AHEAD. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE PROTECTION VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE PROTECTION VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
3. ADDITIONAL PROTECTION 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 PROTECTION VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
5. THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE PROTECTION VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. PROTECTION AND WORK VEHICLES SHOULD DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.
6. VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
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.

STATE	PROJECT NO.
MISS.	

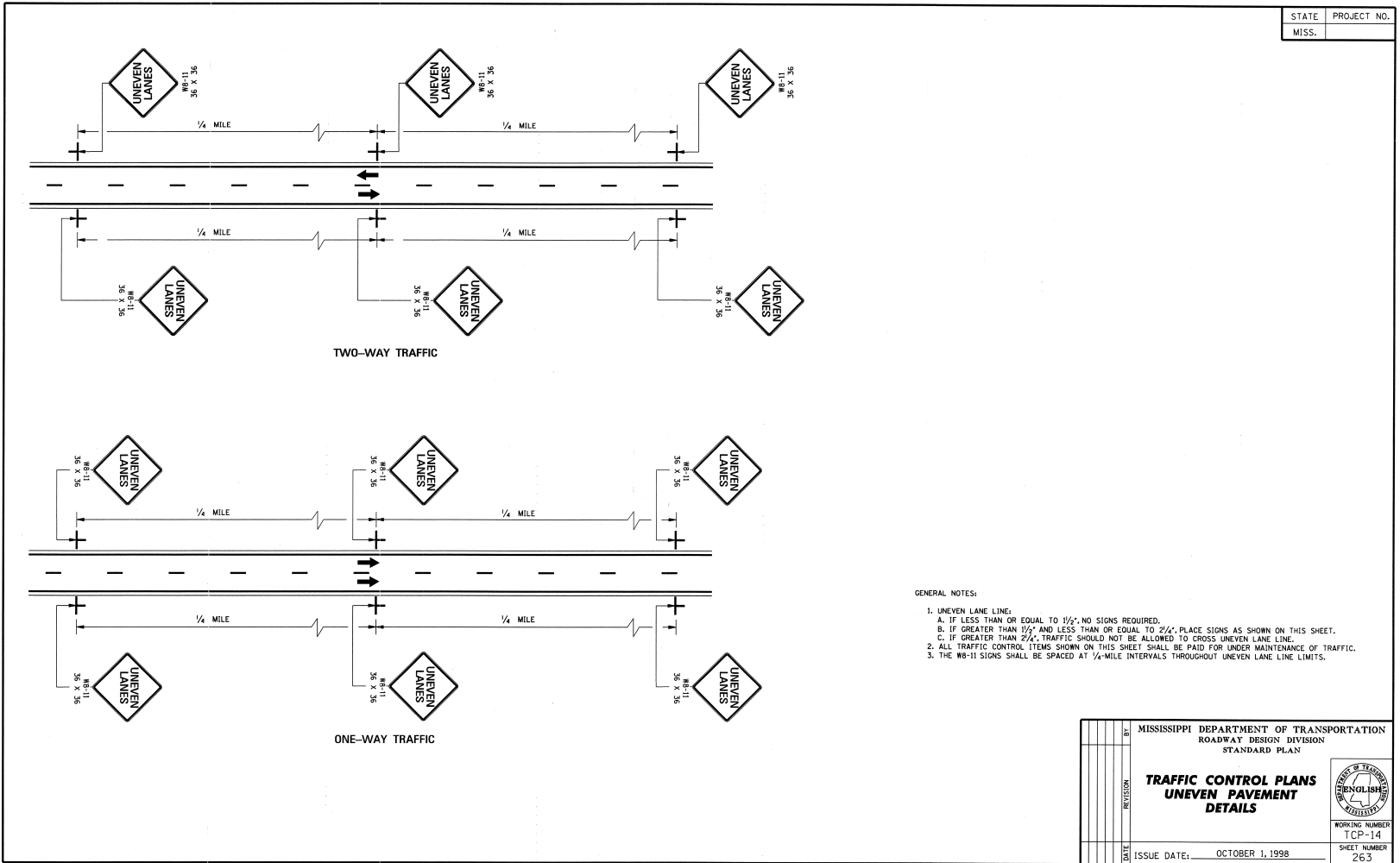
MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>TRAFFIC CONTROL PLAN MOBILE OPERATIONS MULTILANE ROADS AND TWO-LANE ROADS</b>	
WORKING NUMBER TCP-11	SHEET NUMBER 260
ISSUE DATE: OCTOBER 1, 1998	



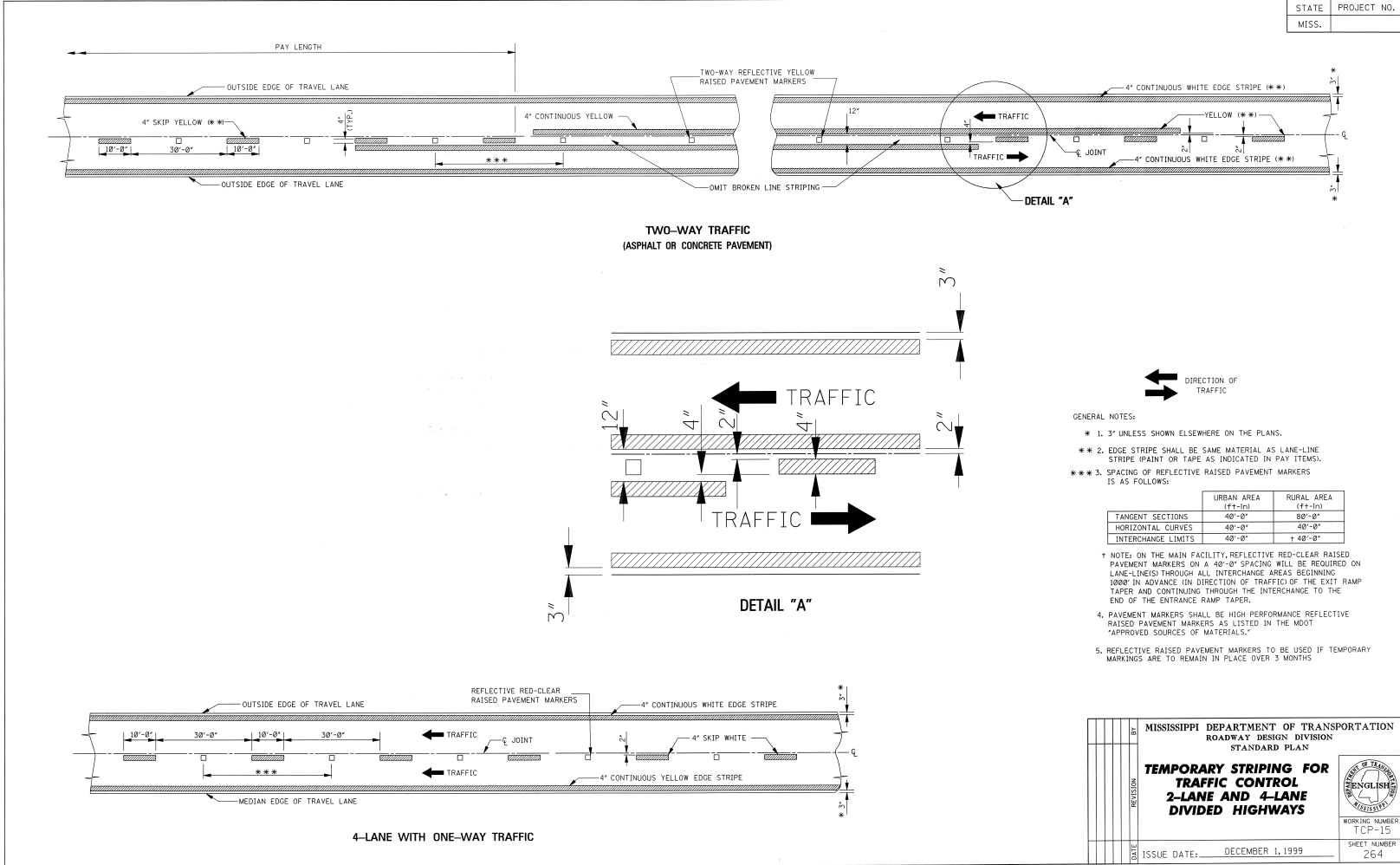
- GENERAL NOTES:
1. FOR SIGNING, FLASHING ARROW PANEL, AND DRUM SPACING CRITERIA SEE TYPICAL TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5, AS APPROPRIATE.
  2. IF NO ADEQUATE ACCELERATION LANE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN (RI-2) AND THE YIELD AHEAD SIGN (W3-2A) SHALL BE REPLACED WITH A STOP SIGN (RI-1) AND A STOP AHEAD SIGN (W3-1a), ONE ON EACH SIDE OF APPROACH. WHERE STOP SIGNS ARE USED, A TEMPORARY STOP 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  
 $L = WS^2/60$  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.

DATE		BY	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
REVISION			<b>DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMP</b>  WORKING NUMBER TCP-12 SHEET NUMBER 261
DATE		ISSUE DATE: OCTOBER 1, 1998	

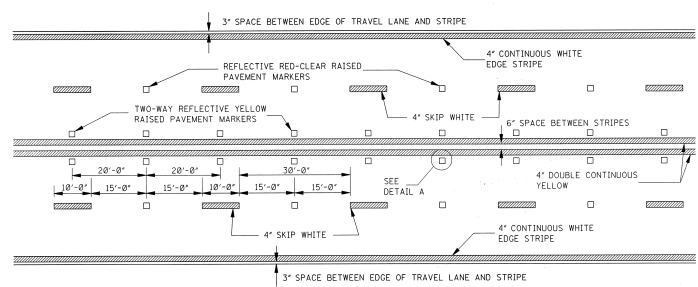
STATE	PROJECT NO.
MISS.	



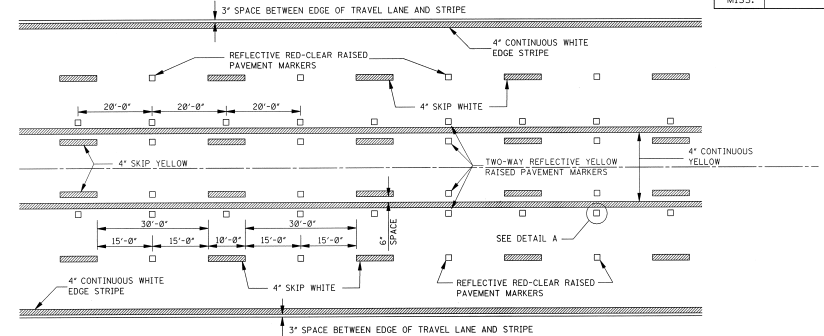




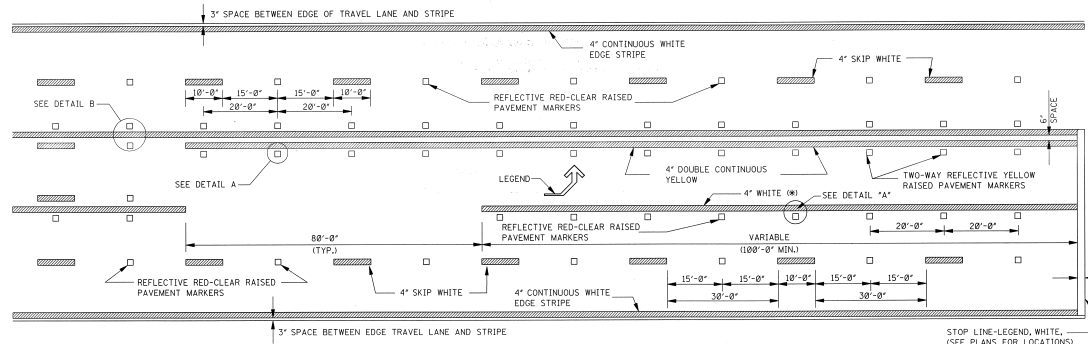
STATE	PROJECT NO.
MISS.	



**TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4-LANE SECTION**

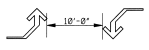


**TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5-LANE SECTION**



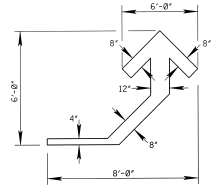
**TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES**

\*NOTE: USE DETAIL STRIPING IF LENGTH  $\leq$  150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.

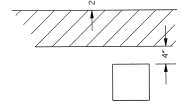


**TYPICAL TWO-WAY ARROW INSTALLATION**

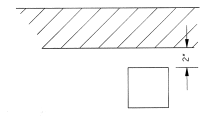
- NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.  
 2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.  
 3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100' FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).



**DETAIL OF TEMPORARY TURN ARROW**



**DETAIL B LATERAL PLACEMENT OF PAVEMENT MARKERS**



**DETAIL A LATERAL PLACEMENT OF PAVEMENT MARKERS**

**GENERAL NOTE:**

- PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDT "APPROVED SOURCES OF MATERIALS".
- REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS.
- TEMPORARY TURN ARROW TO BE PAID FOR AS TEMPORARY TRAFFIC STRIPE (LEGEND), ESTIMATED AT 10.9 SQ. FT. PER ARROW.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN	
<b>TEMPORARY STRIPING FOR TRAFFIC CONTROL 4-LANE AND 5-LANE UNDIVIDED ROADWAYS</b>	
WORKING NUMBER TCP-16	MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN
DATE	ISSUE DATE: DECEMBER 1, 1999
SHEET NUMBER 265	

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1405

CODE: (IS)

DATE: 03/15/2007

SUBJECT: ERRATA AND MODIFICATIONS TO THE 2004 STANDARD SPECIFICATIONS

<u>Page</u>	<u>Subsection</u>	<u>Change</u>
101	201.01	In the second sentence of the first paragraph, change “salvable” to “salvageable”.
107	202.04	In the fourth sentence of the fourth paragraph, change “yard” to “feet”.
107	202.05	In the list of units measurements for 202-B, add “square foot”.
132	211.03.4	In the second sentence of the second paragraph, change “planted” to “plated”.
192	306.02.4	In the first line of the first paragraph, delete the word “be”.
200	307.03.7	In the fourth sentence of the second paragraph, change “lime-fly ash” to “treated”.
236	401.01	Change the header from “Section 403” to “Section 401”.
242	401.02.3.2	In the first sentence of the third full paragraph, add “1/8” in the blank before the inch mark.
250	401.02.6.3	In the second sentence of the first paragraph on page 250, change “rutting over ”” to “rutting over 1/8” ”.
253	401.02.6.4.2	In the paragraph preceding the table, change “91.0” to “89.0”.
259	401.03.1.4	In the first paragraph, change “92.0 percent” to “the specified percentage (92.0 or 93.0)”.
269	403.03.2	In the table at the top of page 269, change the PI requirement from “ = ” to “ ≤ ”.

- 278 404.04 In the second sentence, change the subsection from “401.04” to “403.04”.
- 283 409.02.2 Change “PG 64-22” to “PG 67-22”.
- 294 413.02 In the first sentence of the second paragraph, change “707.02.1.3” to “Subsection 707.02.1.3”.
- 340 511.04 In the second sentence of the second paragraph, change “412” to “512”.
- 349 601.03.3 In the first sentence, change “804.03.2” to “804.03.5”.
- 355 603.02 Change the subsection reference for Joint mortar from “707.03” to “714.11”.
- 369 604.04 In the first sentence, change “601.04” to “Subsection 601.04”.
- 427 619.04 Delete the second paragraph.
- 442 625.04 In the third paragraph, change “626.04” to “Subsection 626.04”.
- 444 626.03.1.2 Delete the third sentence of the first paragraph.
- 464 631.02 Change the subsection reference for Water from “714.01.0” to “714.01.1”.
- 570 682.03 Change the subsection number from “682-03” to “682.03”.
- 575 683.10.4 Change the subsection number from “683.10.4” to “683.04”.
- 575 683.10.5 Change the subsection number from “683.10.5” to “683.05”.
- 596 701.02 In the table under the column titled “Cementations material required”, change Class F, FA” to “Class F FA,”.
- 603 702.11 In the first sentence, change “702.12” to “Subsection 702.12”.
- 612 703.04.2 In the fifth paragraph, delete “Subsection 703.11 and”.
- 616 703.07.2 In the Percentage By Weight Passing Square Mesh Sieves table, change the No. 10 requirement for Class 7 material from “30 - 10” to “30 - 100”.

- 618 703.13.1 In the first sentence of the first paragraph, change “703.09” to “703.06”.
- 618 703.13.2 In the first sentence, change “703.09” to “703.06”.
- 671 712.06.2.2 In the first sentence, change “712.05.1” to “Subsection 712.05.1”.
- 689 714.11.2 In the first sentence, change “412” to “512”.
- 709 715.09.5 In the first sentence of the first paragraph, change “guage” to “gauge”.
- 717 717.02.3.4 In the top line of the tension table, change “1 1/2” to “1 1/8” and change “1 1/8” to “1 1/2”.
- 741 720.05.2.2 In the last sentence of this subsection, change “720.05.2.1” to “Subsection 720.05.2.1”.
- 827 803.03.2.3.7.5.2 In the first sentence of the second paragraph, change “803.03.5.4” to “803.03.2.3.4”.
- 833 803.03.2.6 In the first sentence, change “803.03.7” to “803.03.2.5”.
- 854 804.02.11 In the last sentence of the first paragraph, change “automatically” to “automatic”.
- 859 804.02.13.1.3 In the last sentence, change Subsection “804.02.12.1” to “804.02.12”.
- 879 804.03.19.3.2 In the first sentence of the third paragraph, change “listed on of Approved” to “listed on the Approved”.
- 879 804.03.19.3.2 In the last sentence of the last paragraph, change “804.03.19.3.1” to “Subsection 804.03.19.3.1”.
- 962 814.02.3 In the first sentence, change “710.03” to “Subsection 710.03”.
- 976 820.03.2.1 In the first sentence, change “803.02.6” to “803.03.1.7”.
- 976 820.03.2.2 In the first sentence, change “803.03.9.6” to “803.03.1.9.2”.
- 985 Index Change the subsection reference for Petroleum Asphalt Cement from “702.5” to “702.05”.

985	Index	Change the subsection reference for the Definition of Asphaltic Cement or Petroleum Asphalt from “700.2” to “700.02”.
985	Index	Change the subsection reference for Automatic Batchers from “501.03.2.4” to “804.02.10.4”.
986	Index	Delete “501.03.2” as a subsection reference for Batching Plant & Equipment.
988	Index	Change the subsection reference for the Central Mixed Concrete from “501.03.3.2” to “804.02.11”.
988	Index	Change the subsection reference for the Concrete Batching Plant & Equipment from “501.03.2” to “804.02.11”.
999	Index	Delete “501.03.3.3” as a subsection reference for Truck Mixers.
1001	Index	Change the subsection reference for Edge Drain Pipes from “605.3.5” to “605.03.5”.
1002	Index	Change the subsection reference for Metal Posts from “713.05.2” to “712.05.2”.
1007	Index	Change the subsection reference for Coarse Aggregate of Cement Concrete Table from “703.3” to “703.03”.
1007	Index	Change the subsection reference for Composite Gradation for Mechanically Stabilized Courses Table from “703.8” to “703.08”.
1009	Index	Delete “501.03.3.3” as a subsection reference for Truck Mixers and Truck Agitators.
1010	Index	Delete reference to “Working Day, Definition of”.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SECTION 904 - NOTICE TO BIDDERS NO. 1546**

**CODE: (SP)**

**DATE: 05/23/2007**

**SUBJECT: Advancement of Materials**

Bidders are advised that **NO ADVANCEMENT OF MATERIALS**, as addressed in Subsection 109.06.2 of the Standard Specifications, will be allowed on this project.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SECTION 904 - NOTICE TO BIDDERS NO. 1554**

**CODE: (SP)**

**DATE: 12/10/2007**

**SUBJECT: Contract Time**

**PROJECT: MP-6528-31(010) / 303276301 -- Jasper County**

The completion of work to be performed by the Contractor for this project will not be a specified date but shall be when all allowable time units are assessed, or any extension thereto as provided in Subsection 108.06. It is anticipated that the Notice of Award will be issued by not later than **February 12, 2008** and the date for issuing the Notice to Proceed / Beginning of Contract Time will be **no later than April 10, 2008**.

Should the Contractor request a Notice to Proceed earlier than **April 10, 2008**, the date the Notice to Proceed is issued will also be the Beginning of Contract Time date.

Allowable Time Units will be **36**.

The contract time has been based on Column "**D**" of the Table of Time Units, in Subsection 108.06.



## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1555

CODE: (SP)

DATE: 12/10/2007

SUBJECT: Scope of Work

PROJECT: MP-6528-31(010) / 303276301 -- Jasper 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." All other references to plans in the contract documents and Standard Specifications for Road and Bridge Construction are to be disregarded.

Work on the project shall consist of the following:

### SR 528

#### WIDEN AND OVERLAY APPROXIMATELY 4.1 MILES OF SR 528 FROM THE NEW PAVEMENT AT I-59 EAST 4.1 MILES TO THE JCT. OF US 11.

(A) Prior to the overlay, centerline alignment shall be determined by the contractor by measuring the existing roadway at 500 feet intervals in tangent sections, and 100 feet intervals in horizontal curves. The existing pavement edge shall be cut to a smooth and near vertical face with an approved cutting device (Not to be measured for separate pay). The foundation for widening the base shall be built according to the Typical Section(see typical drawing). The existing widening in place shall be removed prior to placing back new widening. Material excavated while building the foundation for widening shall be used to raise the existing shoulder to match the new pavement elevation. Surplus material shall be spread along the edge of the shoulders, foreslopes, or other adjacent areas as directed by the Project Engineer, and will be an absorbed item.

(B) Cold mill the roadway at the B.O.P., E.O.P., bridge approaches, and railroad crossings as designated by the Project Engineer to ensure smooth transition of new overlay with existing grade (See Typical Drawings).

(C) Overlay SR 528 with 1" and variable (ST) asphalt 9.5-mm mixture from the new pavement at I-59, east 4.1 miles to the jct. of US 11. Prior to the overlay, a leveling course of ¾" & variable of 9.5mm ST asphalt will be required in all lanes. The foundation for widening the roadway shall be built according to the Typical Section (See Typical Drawing.) The asphalt for the widening shall be placed at the same time with the ¾" leveling course. Remove any failed areas on the main facility and repair by backfilling with 19.0mm ST asphalt as directed by the Project Engineer. Approximately 275 tons of 19.0mm ST asphalt will be used for Base Repair. Publicly maintained roads or streets shall be surfaced to the existing R.O.W.; Privately owned entrances shall be surfaced a distance of 10 feet & var. from edge of pavement. Any site grading at local roads or drives will not be measured for separate payment but will be considered an absorbed item. A paved apron shall be placed around each guardrail location as directed by the

Project Engineer. Cross slopes shall be increased where practical with contract quantities in an effort to achieve a uniform cross slope of 2%. The existing superelevation in horizontal curves is to be maintained as a minimum. Any work to control the laydown equipment for proper placement of the asphalt in the superelevated curves shall be absorbed by the contractor at no additional cost to the state. Paved islands are to be as shown, and layout will be provided by the Project Engineer. Approximately 75 tons of 19mm asphalt will be used for basing in the paved islands. Any saw cutting needed during the removal of pavement for the islands will not be measured for separate pay. The 19 mm asphalt will be paid for under pay item number 403-A. Removal of pavement to construct header curbs in paved islands shall be paid for under pay item 202-B as directed by the Project Engineer. The Contractor will mill a 12" rumble strip along the shoulders. The Contractor will place the traffic stripe on the inside 6" of the rumble strip.

(D) Raise the existing shoulders to match the new pavement elevation by placing existing shoulder material bladed to 4%, the cost of which shall be included in other items bid. Any additional shoulder material needed, place 1¾" and variable borrow excavation. Placement of the borrow excavation shall be permitted only on shoulders that have been lifted by the new overlay, and have no curb and gutter. All existing shoulders shall be bladed and dressed to a finished slope of 4% (absorbed) as directed by the Project Engineer. Placement of the borrow excavation on the finished surface course shall not be permitted. The material shall be bladed, rolled and compacted to a finished slope of 4%.

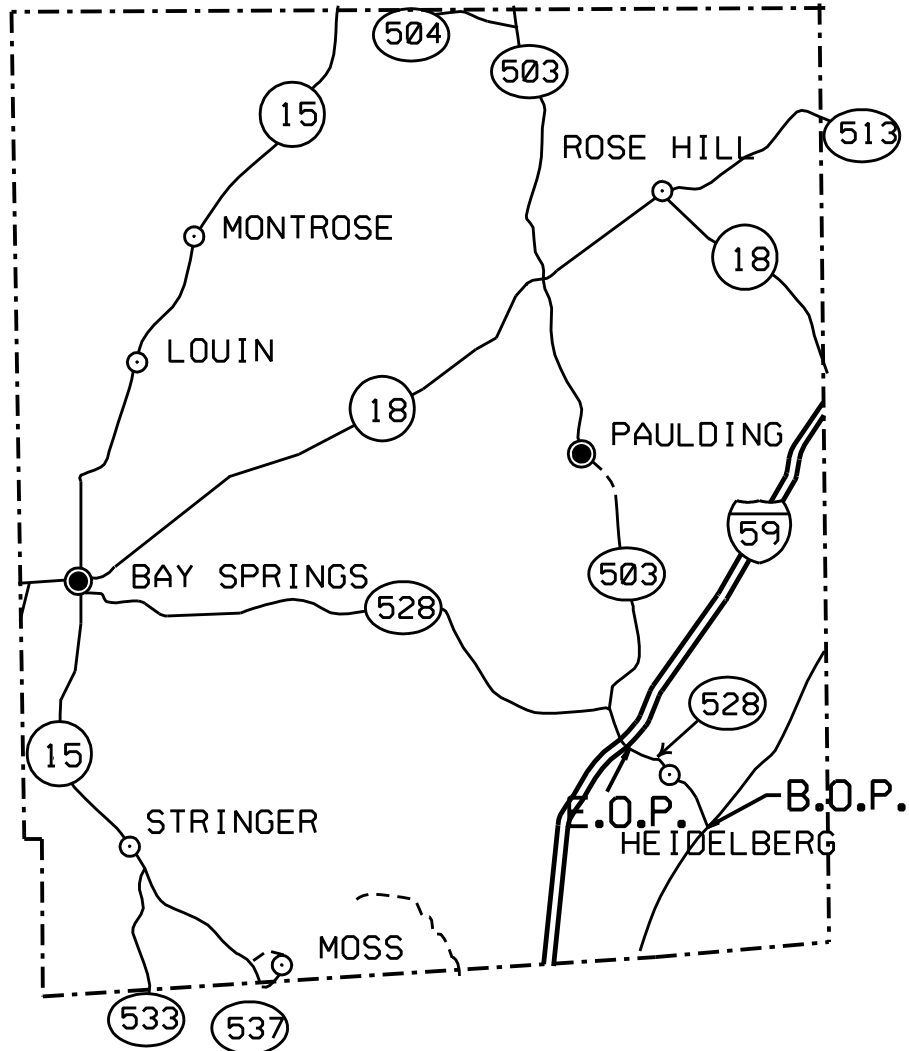
(E) Temporary striping shall conform to finished stripe specifications for alignment, reflectivity, straightness, and neatness. All permanent pavement markings are to be hot thermoplastic. Edge lines will be placed so as to maintain the original lane width. Glass beads applied to thermoplastic shall conform to Section Number - 720.01 (Beads shall be double dropped Class B, High-Visibility first, and then Class A High-Visibility). On all concrete bridges, old traffic stripe shall be removed and replaced with High Performance Cold Plastic.

(F) Raised pavement markers will be placed at 80 feet intervals in tangents and 40 feet intervals in curves, and in urban limits along the centerline of roadway. Any removals of existing raised pavement markers or rumble bars shall be considered an absorbed item.

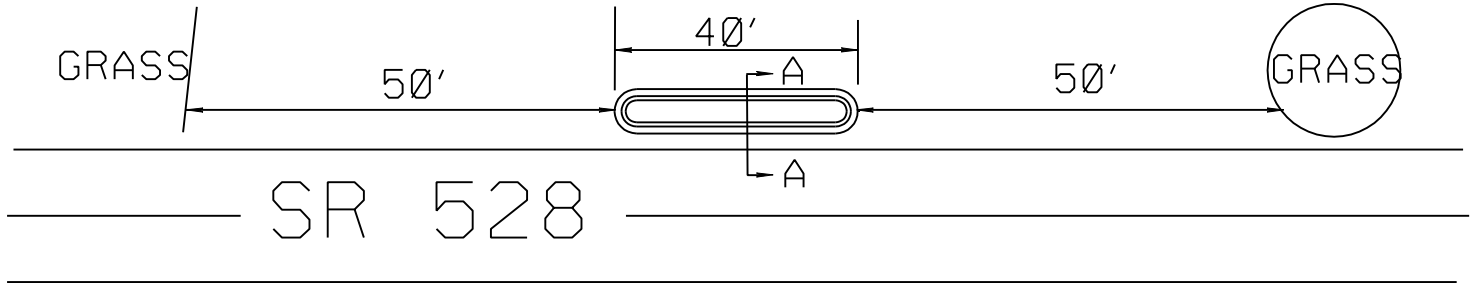
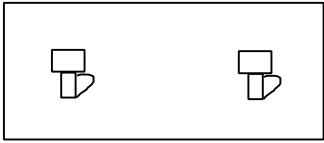
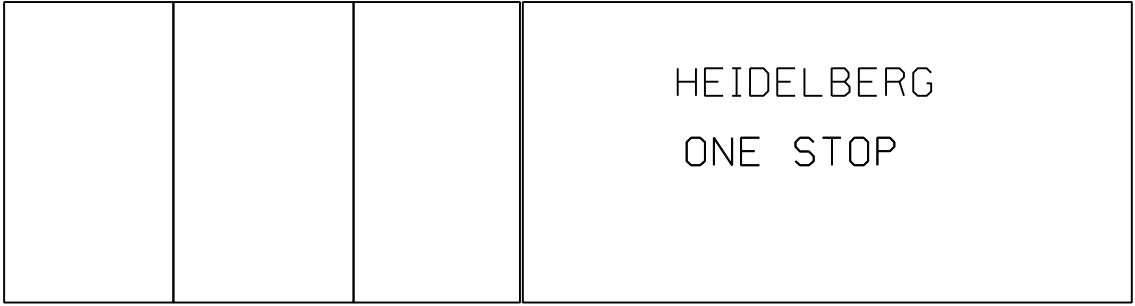
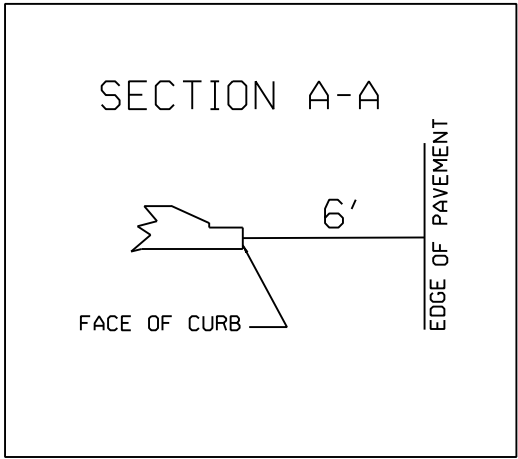
The contractor shall erect and maintain construction signing, and provide all signs and traffic handling devices in accordance with Traffic Control Plan (the cost is to be included in the price bid for pay item No. 618-A, Maintenance of Traffic). All traffic control devices on this project should comply with Part VI of the MUTCD (Latest Edition). Fluorescent orange sheeting shall be used on all construction and traffic control signs except for those designated in plans to be black legend and border on white background. Cones shall be narrow profile with a minimum height of 28 inches and a minimum weight of ten (10) pounds. Cones used in speed zones equal to or greater than 45 mph shall be narrow profile with a minimum height of 28 inches and a minimum weight of fifteen (15) pounds. All cones shall be approved by the engineer prior to use.

Incidental work such as removing vegetation, shaping and compaction of shoulder, removing excess asphalt material, project clean-up, and other incidental work necessary to complete the project will not be measured for separate payment, but will be included in other bid items.

# MP - 6528 - 31(010) / 303276301 JASPER COUNTY



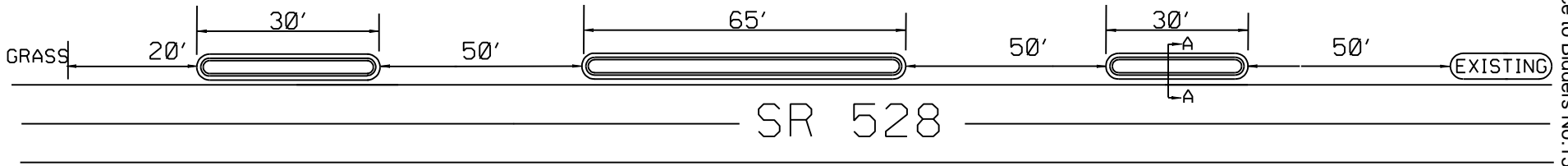
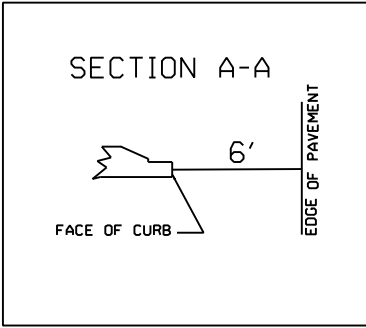
THE ABOVE REFERENCED PROJECT IS FOR WIDENING AND OVERLAYING SR 528 FROM THE NEW PAVEMENT AT I-59, EAST 4.1 MILES TO THE JCT. OF US 11.



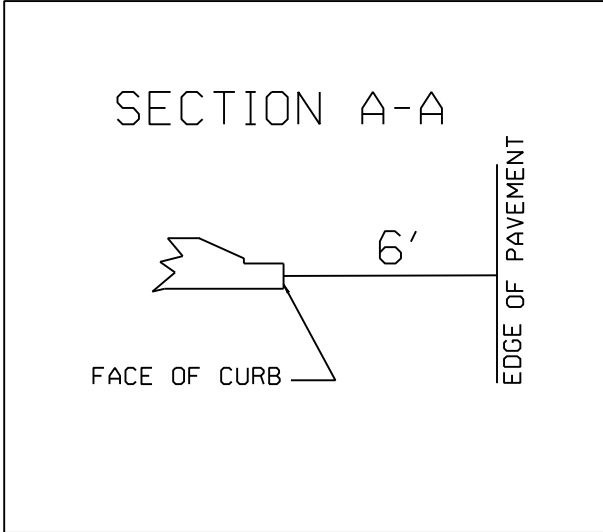
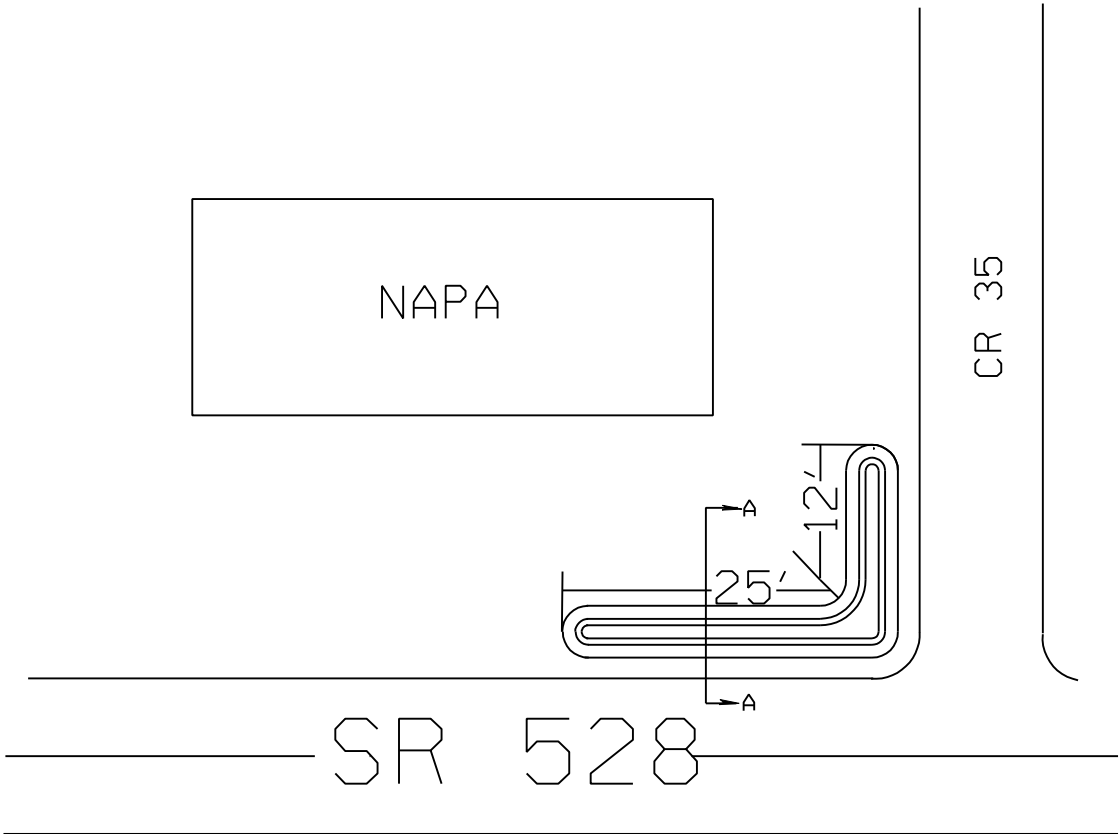
63

T AND T  
TAX SERVICE

SIMMONS  
RESTAURANT  
AND CATFISH



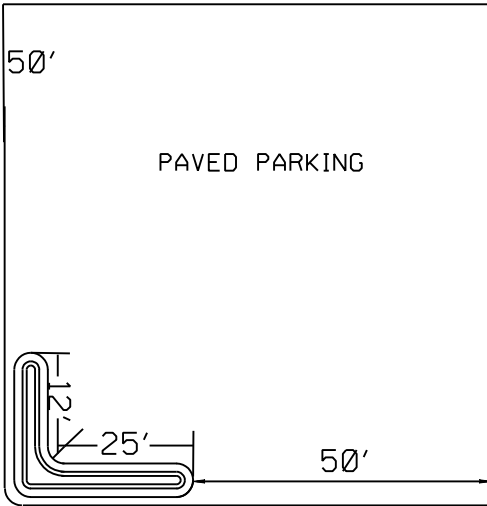
64



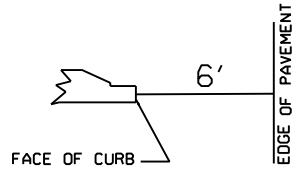
-9-

65

SCHOOL RD.



SECTION A-A



WOOD FENCE

A & B  
PUMP & SUPPLY

SHRUBS

GRASS

50'

30'

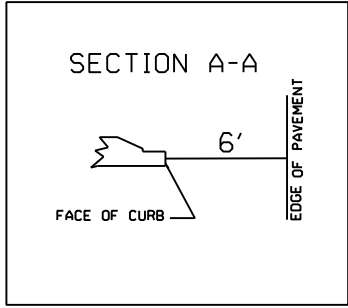
50'

25'

SR 528

99

WEST WOOD DRIVE



CHAIN LINK FENCE

CEMETARY

STA. 94+25

325'

STA. 91+00

OAK TREE



ACCESS

ACCESS

GRAVEL

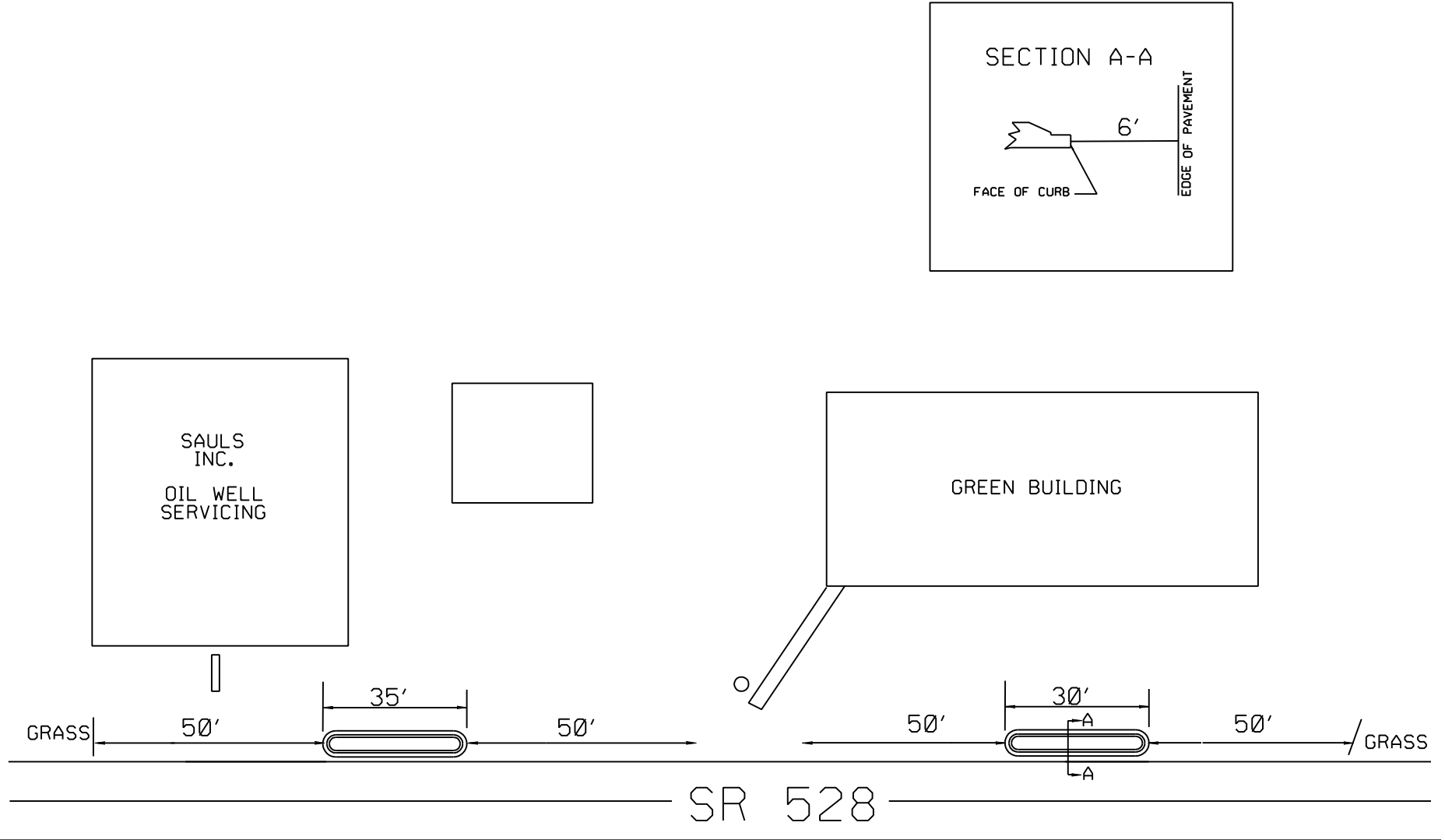
SR 528

-8-

Notice to Bidders No. 1555 -- Cont'd

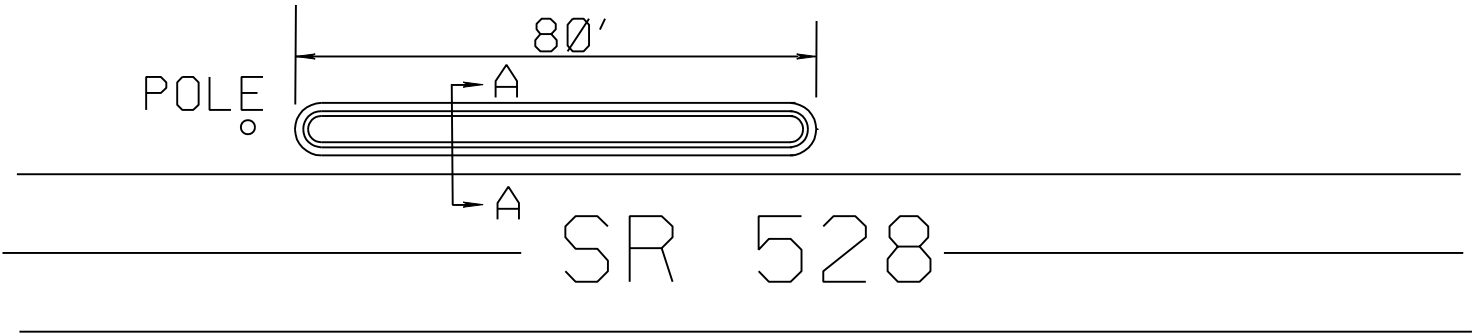
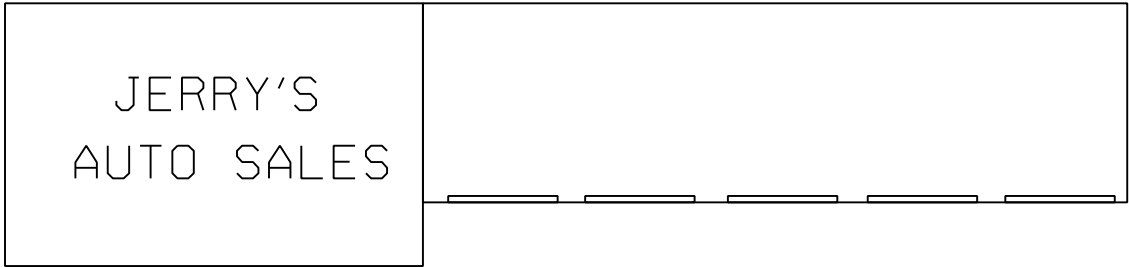
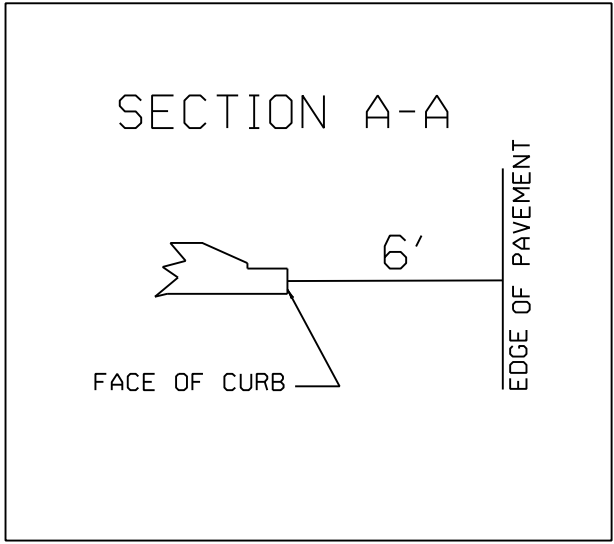


67

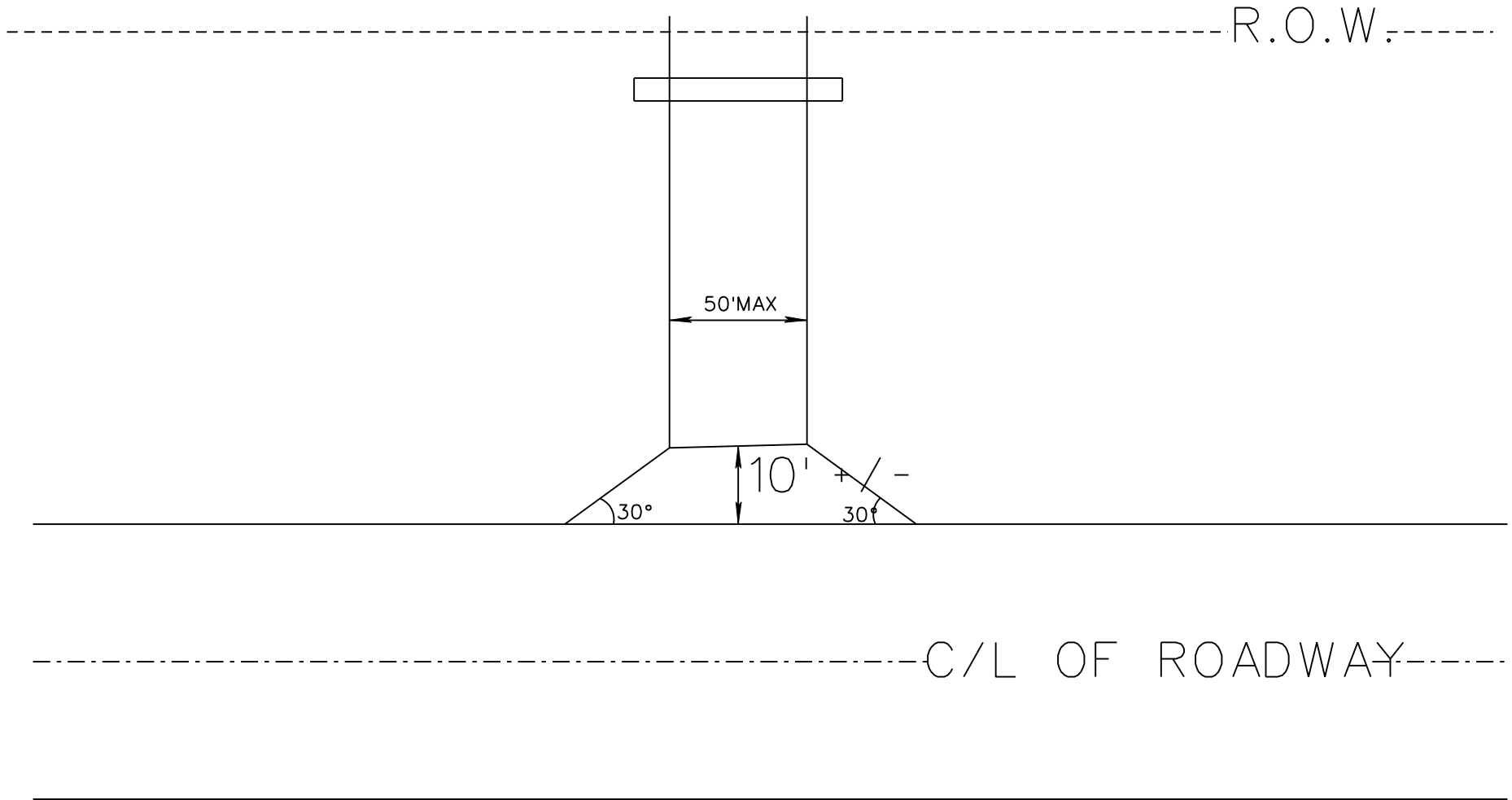


-9-

Notice to Bidders No. 1555 -- Cont'd



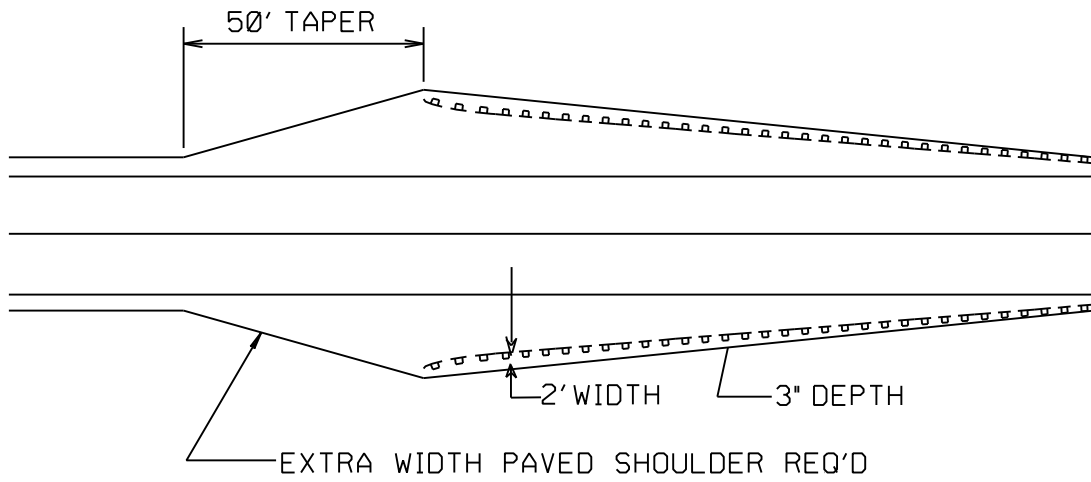
# PRIVATE DRIVEWAY DETAIL



69

-11-

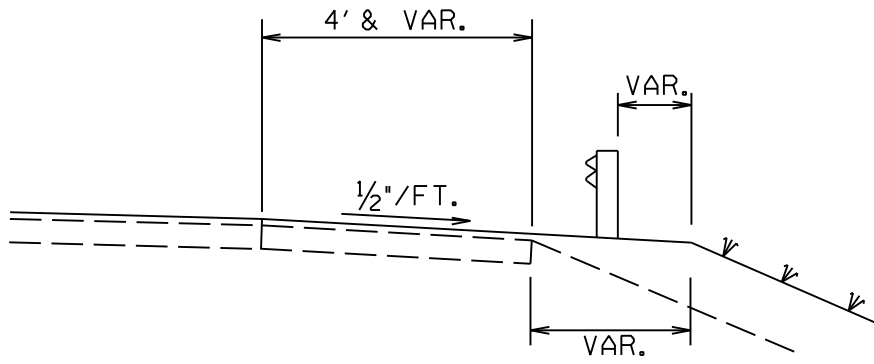
Notice to Bidders No. 1555 -- Cont'd



DETAIL OF INSTALLATION OF EXTRA WIDTH PAVED SHOULDERS AT BRIDGES

70

1. 3" AND VAR. DEPTH 9.5MM HOT BITUMINOUS PAVEMENT REQ'D



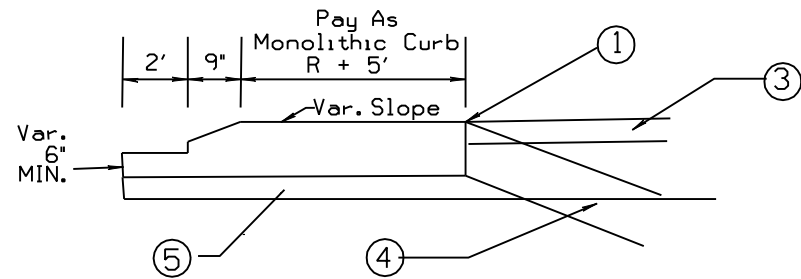
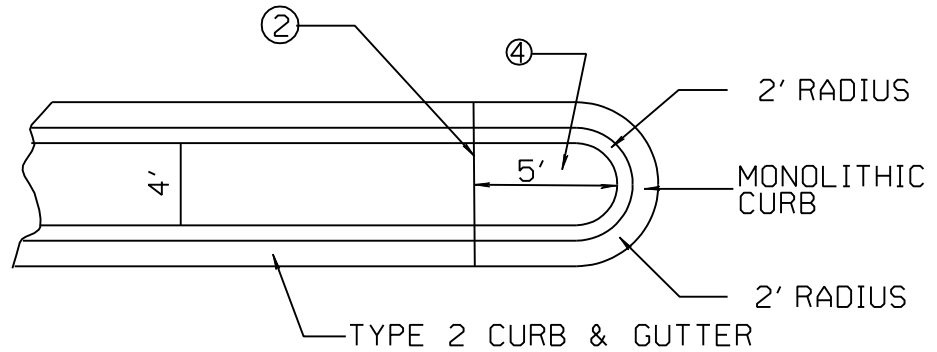
BOTH SIDES

TYPICAL SECTION  
 DETAILS OF PAVED SHOULDERS AT  
 BRIDGE GUARD RAIL INSTALLATIONS

-12-

Notice to Bidders No. 1555 -- Cont'd

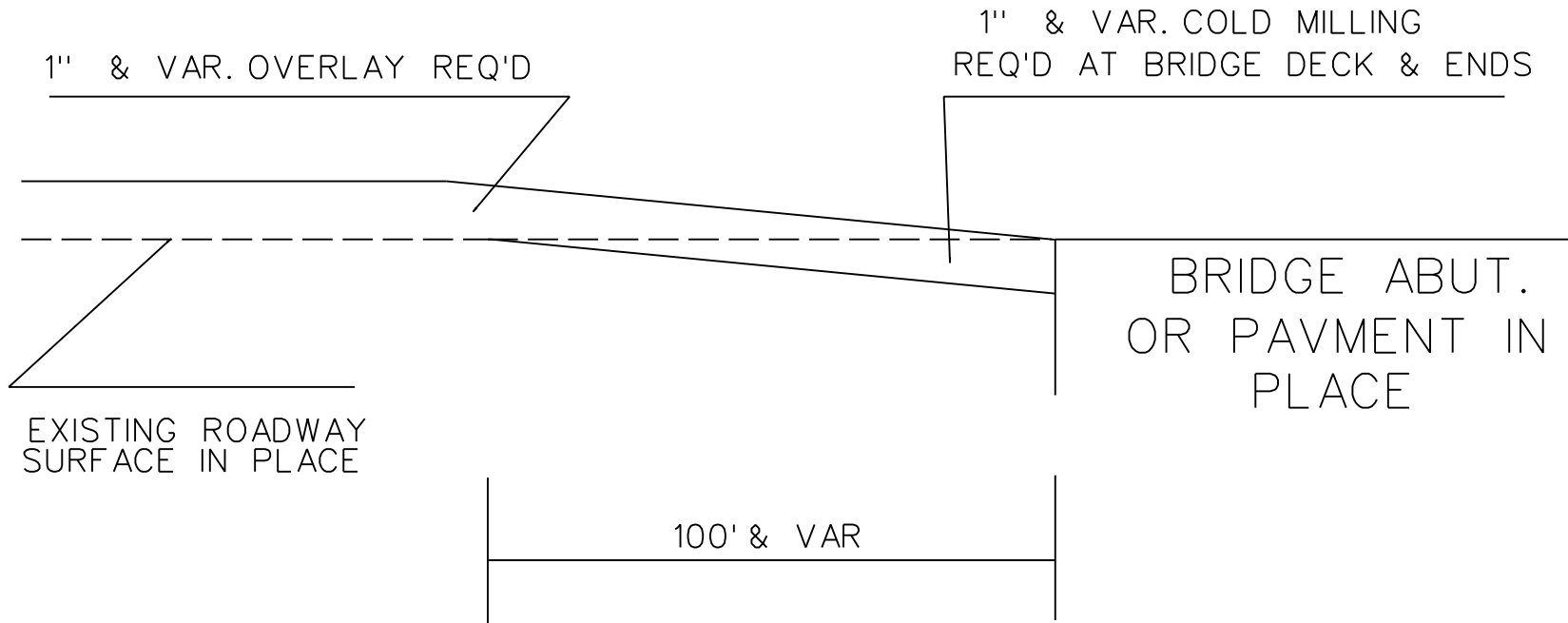
# TYPICAL DETAIL OF MONOLITHIC CURB & GUTTER AT ISLAND



- ① - 1/2" PREMOULDED EXPANSION JOINT ( NOT A PAY ITEM )
- ② - 1/2" TOOLED CONTRACTION JOINT ( NOT A PAY ITEM )
- ③ - 4" CLASS "C" STRUCTURAL CONCRETE ( FOR MEDIAN & ISLAND PAV'T. ) PAY ITEM NO. 616-A
- ④ - 10" & VAR. DEPTH CLASS "C" STRUCTURAL CONCRETE ( FOR MEDIAN & ISLAND PAV'T. )
- ⑤ - 2" MIN. ASPHALT BASE SHALL BE REQUIRED BEFORE PLACING ISLANDS

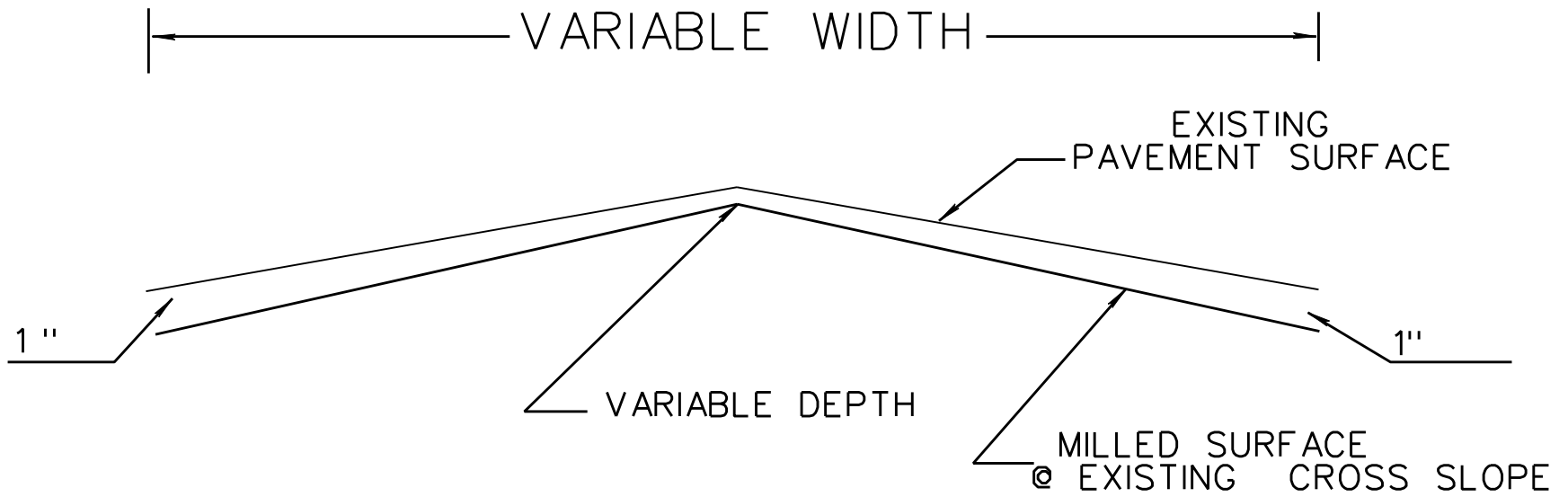
# TYPICAL MILLED TRANSITION AT BRIDGE ABUT. OR PAVEMENT IN PLACE

72



-14-

# TYPICAL MILLING DIAGRAM

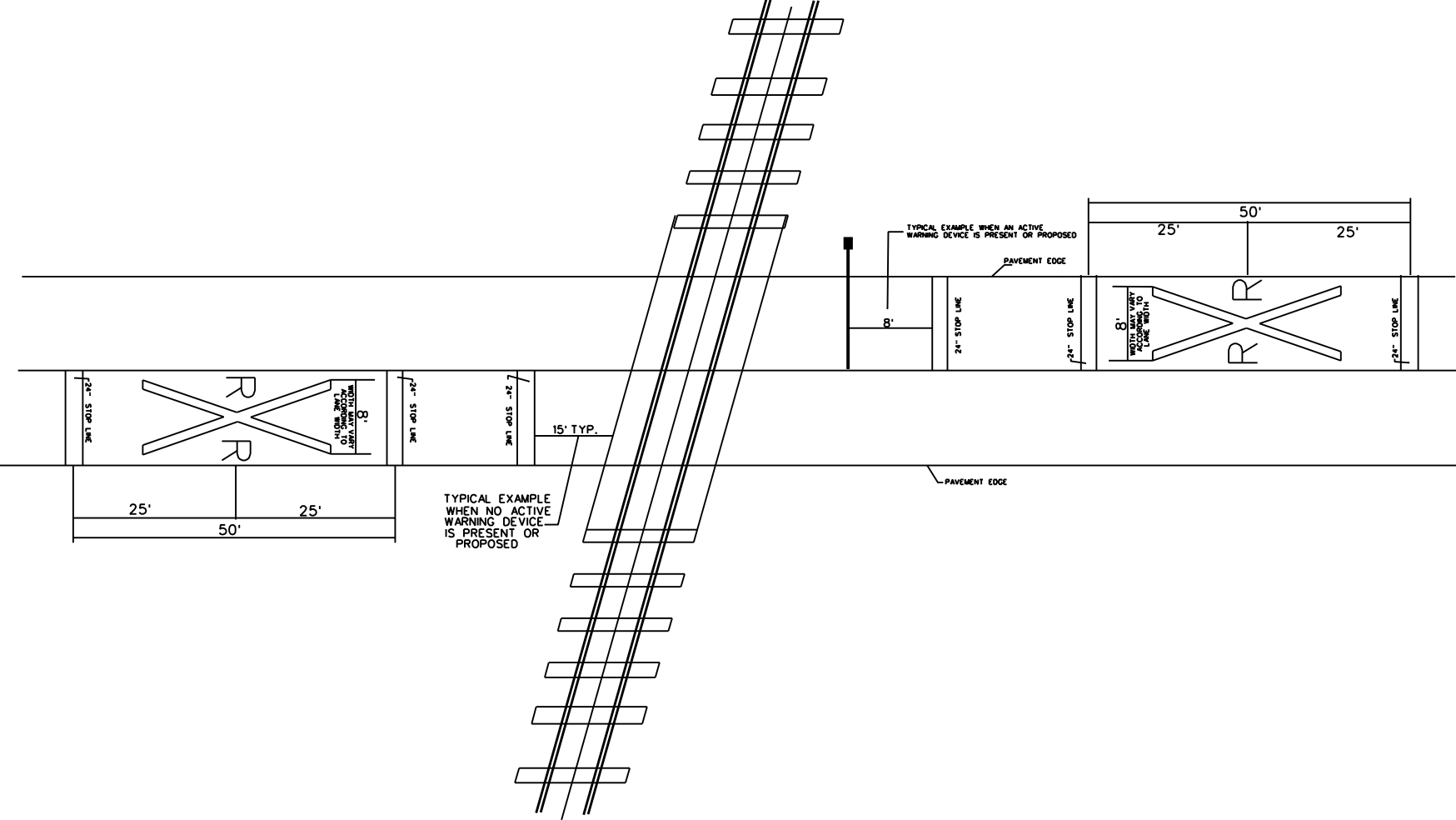


73

-15-

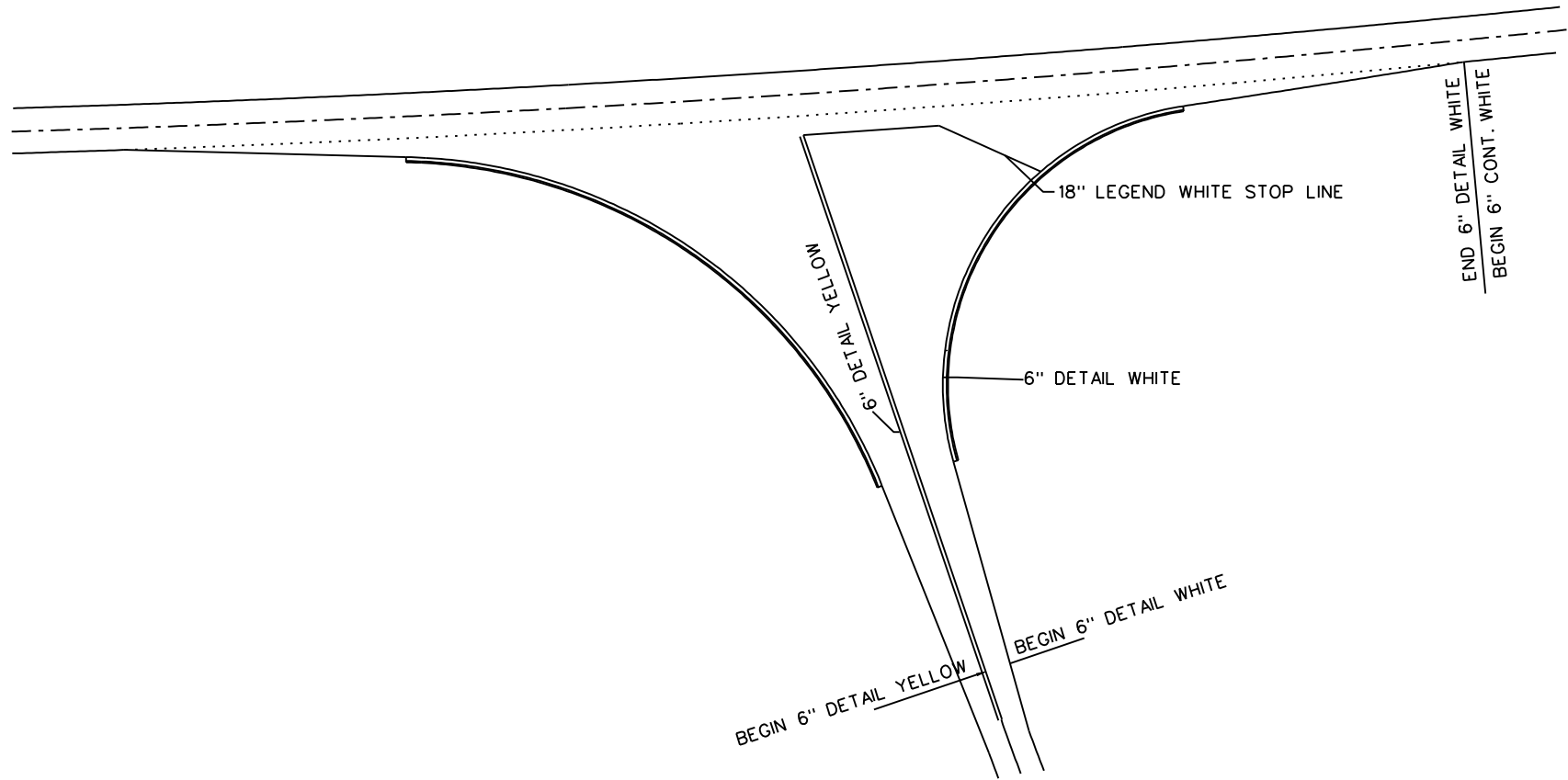
Notice to Bidders No. 1555 -- Cont'd

# TYPICAL STRIPING AT RAILROAD CROSSING





# TYPICAL STRIPING FOR SIMPLE INTERSECTION AT LOCAL ROADS

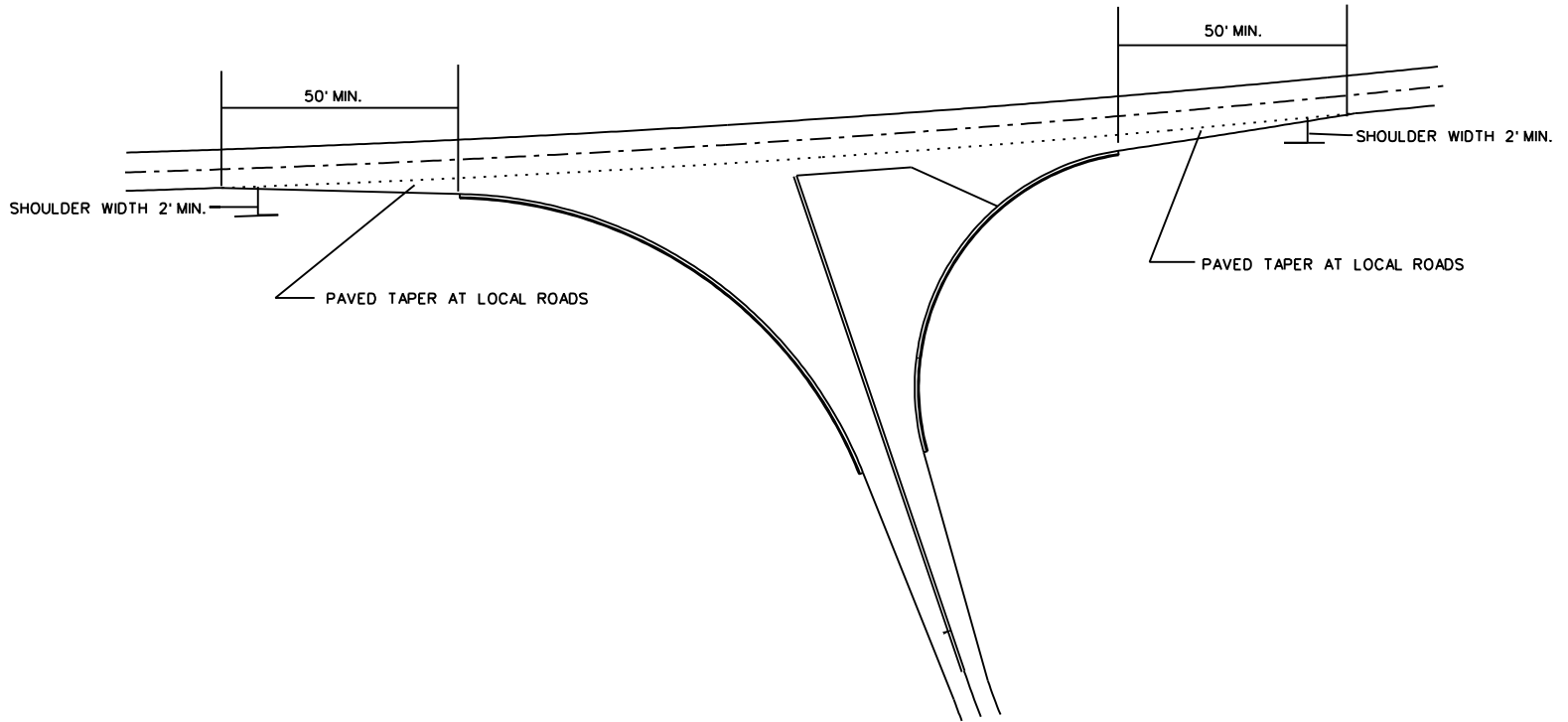


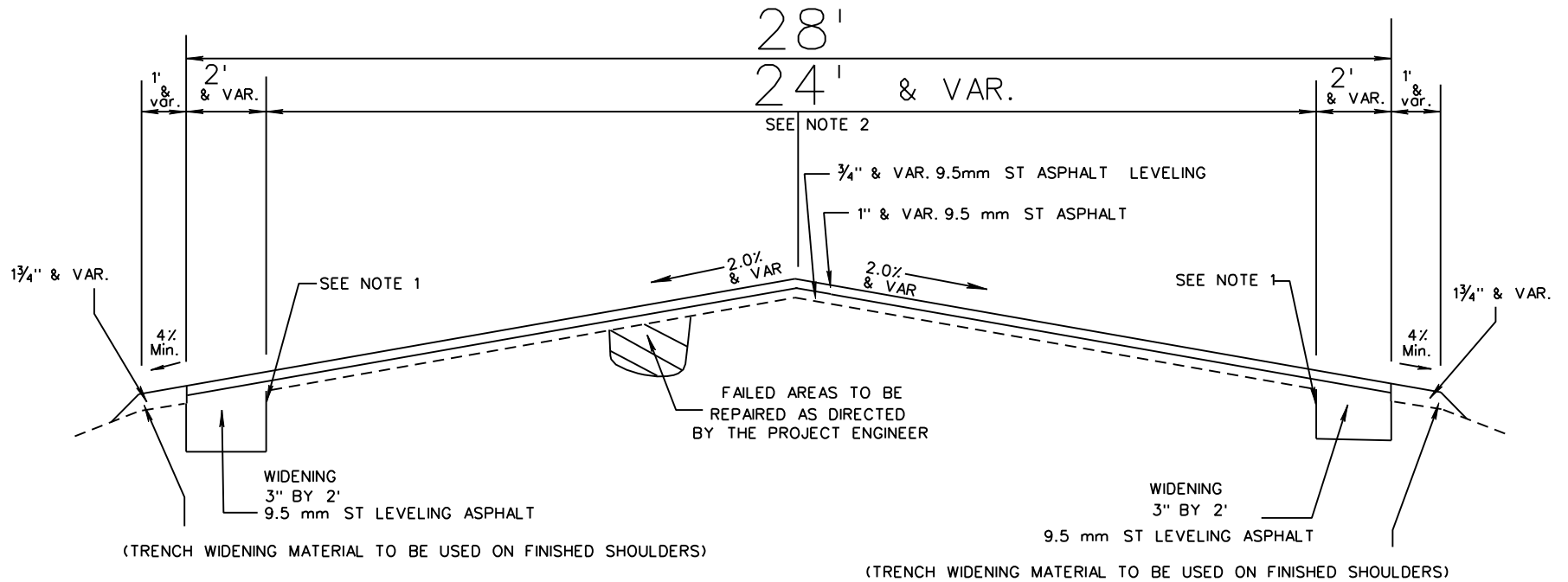
75

-17-

Notice to Bidders No. 1555 -- Cont'd

# TYPICAL FOR PAVED TAPER AT LOCAL ROADS

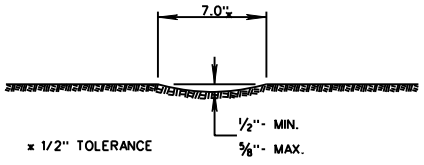




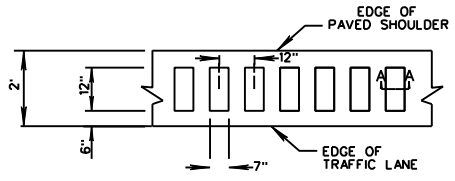
NOTES:

- (1) THE EXISTING PAVEMENT EDGE SHALL BE CUT TO A SMOOTH AND NEAR VERTICAL FACE WITH AN APPROVED CUTTING DEVICE. (NOTO MEASURED FOR SEPARATE PAY.)
- (2) TRUE CENTERLINE PAVEMENT ALIGNMENT SHALL BE DETERMINED BY THE CONTRACTOR BY MEASURING THE EXISTING ROADWAY AT 500ft. INTERVALS IN TANGENT SECTIONS, AND 100ft. INTERVALS IN HORIZONTAL CURVES.
- (3) THE ASPHALT FOR THE WIDENING SHALL BE PLACED AT THE SAME TIME AS THE 3/4" LEVELING COURSE.  
9.5mm ST (3/4" LEVELING)
- (4) 9.5mm ST (1" & VARIABLE SURFACE COURSE)

STATE	PROJECT NO.
MISS.	

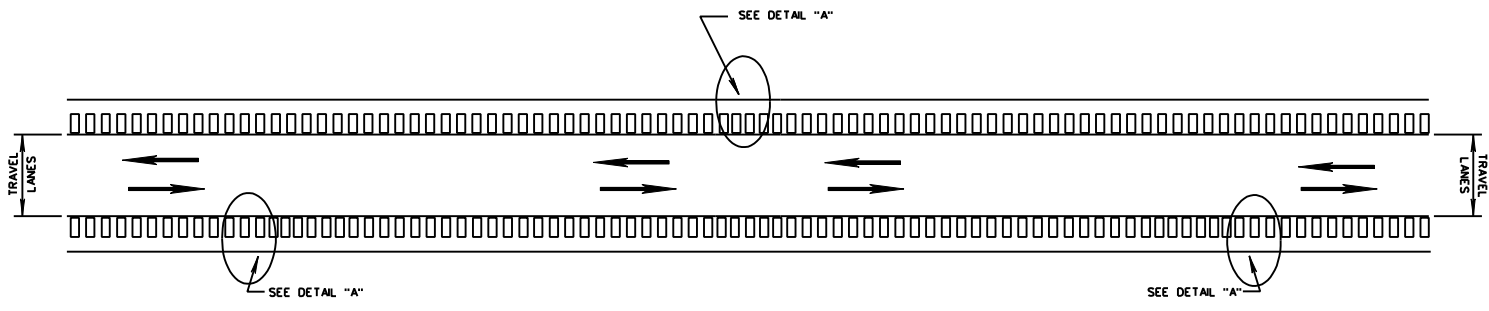


SECTION "A-A"



DETAIL "A"

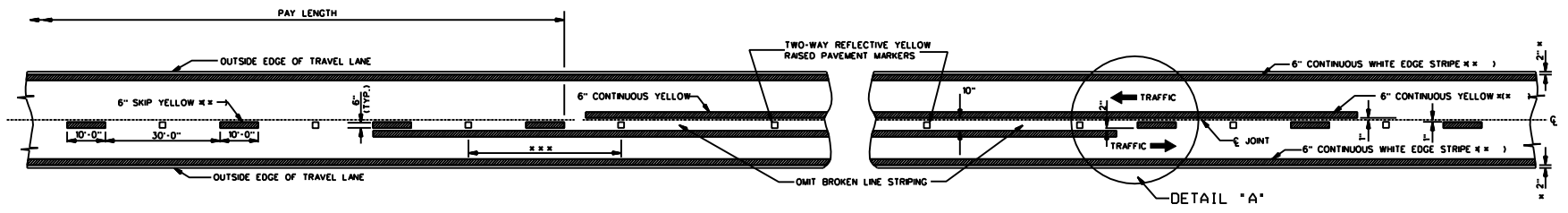
- GENERAL NOTES
1. GROUND-IN RUMBLE STRIPS SHALL BE OMITTED ACROSS PRINCIPAL INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
  2. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED TO MAINLINE ONLY.



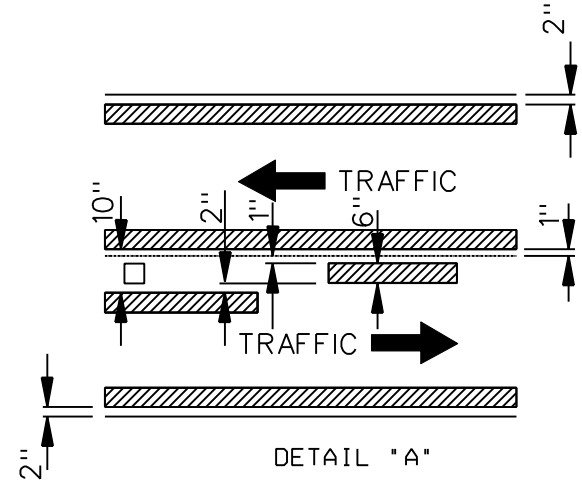
PLAN  
NOT TO SCALE  
DETAIL OF  
RUMBLE STRIPS  
(GROUND-IN)

DATE		REVISION		MISSISSIPPI DEPARTMENT OF TRANSPORTATION TYPICAL SECTION RUMBLE STRIPS (GROUND-IN)	
FILENAME:		WORKING NUMBER		RS	
DESIGN TEAM		CHECKED		DATE	
				SHEET NUMBER	

STATE	PROJECT NO.
MISS.	



TWO-WAY TRAFFIC  
(ASPHALT OR CONCRETE PAVEMENT)

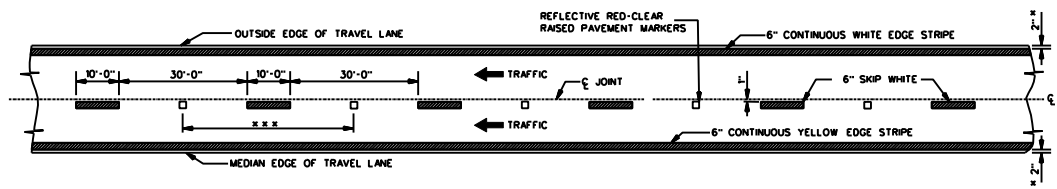


DETAIL "A"

- GENERAL NOTES:
- \* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS.
  - \*\* 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 (11-in)	RURAL AREA (11-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

DATE	BY	REVISION	<p>MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN</p> <p>PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED HIGHWAYS</p>	
27-100	REVISION	<p>WORKING NUMBER PM-1</p> <p>SHEET NUMBER 120</p>		
ISSUE DATE: OCTOBER 1, 1998				

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SECTION 904 – NOTICE TO BIDDERS NO. 1785**

**CODE: (SP)**

**DATE: 12/7/2007**

**SUBJECT: Petroleum Products Base Prices For Contracts Let in January, 2008**

**REFERENCE: Subsection 109.07**

The following base prices are to be used for adjustment in compensation due to changes in costs of petroleum products:

FUELS

	<u>Per Gallon</u>	<u>Per Liter</u>
Gasoline	\$2.5361	\$0.6700
Diesel	\$3.0785	\$0.8133

MATERIALS OF CONSTRUCTION

<u>ASPHALT CEMENT</u>	Per Gallon	Per Ton	Per Liter	Per Metric Ton
Viscosity Grade AC-5	\$1.2856	\$305.00	\$0.3396	\$336.20
Viscosity Grade AC-10	\$1.3032	\$309.17	\$0.3443	\$340.80
Viscosity Grade AC-20	\$1.2926	\$306.67	\$0.3415	\$338.04
Viscosity Grade AC-30	\$1.2821	\$304.17	\$0.3387	\$335.28
Grade PG 64-22	\$1.2784	\$303.29	\$0.3377	\$334.31
Grade PG 67-22	\$1.2687	\$301.00	\$0.3352	\$331.79
Grade PG 76-22	\$1.7036	\$404.17	\$0.4500	\$445.51
Grade PG 82-22	\$1.9389	\$460.00	\$0.5122	\$507.05

EMULSIFIED ASPHALTS

Grade EA-4 (SS-1)	\$1.3344	\$0.3525
Grade RS-2C (CRS-2)	\$1.2987	\$0.3431
Grade CRS-2P	\$1.5422	\$0.4074

PRIMES

Grade EA-1 & MC-70	\$1.7299	\$0.4570
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**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION NO. 907-105-3**

**CODE: (IS)**

**DATE: 02/14/2006**

**SUBJECT: Cooperation By Contractor**

Section 105, Control of Work, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is modified as follows:

**907-105.05--Cooperation by Contractor.** In the third sentence of the second paragraph of Subsection 105.05 on page 35, change “Notice to Proceed” to “Notice of Award”.

Delete the fourth paragraph of Subsection 105.05 on page 35, and substitute the following.

The Contractor shall also designate a responsible person whose primary duty shall be to monitor and maintain the effectiveness of the erosion control plan, including NPDES permit requirements. This responsible person must be a Certified Erosion Control Person certified by an organization approved by the Department. Prior to or at the pre-construction conference, the Contractor shall designate in writing the Certified Erosion Control Person to the Project Engineer. The designated Certified Erosion Control Person shall be assigned to only one (1) project. When special conditions exist, such as two (2) adjoining projects or two (2) projects in close proximity, the Contractor may request in writing that the State Construction Engineer approve the use of one (1) Certified Erosion Control Person for both projects. The Contractor may request in writing that the Engineer authorize a substitute Certified Erosion Control Person to act in the absence of the Certified Erosion Control Person. The substitute Certified Erosion Control Person must also be certified by an organization approved by the Department. A copy of the Certified Erosion Control Person's certification must be included in the Contractor's Protection Plan as outlined in Subsection 907-107.22.1. This in no way modifies the requirements regarding the assignment and availability of the superintendent.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT TO SPECIAL PROVISION NO. 907-107-1**

**DATE:** 03/21/2006

**SUBJECT:** *Liability Insurance*

In the first sentence of the first paragraph of Subsection 907-107.14.2.1 on page 1, change "\$300,000 each occurrence" to "\$500,000 each occurrence".



## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-1

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Liability Insurance

Section 107, Legal Relations and Responsibility to Public, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-107.14.2--Liability Insurance.** Delete in toto Subsection 107.14.2 beginning on page 60 and substitute:

**907-107.14.2.1--General.** The Contractor shall carry Contractor's liability, including subcontractors and contractual, with limits not less than: \$300,000 each occurrence; \$1,000,000 aggregate; automobile liability - \$500,000 combined single limit - each accident; Workers' Compensation and Employers' Liability - Statutory & \$100,000 each accident; \$100,000 each employee; \$500,000 policy limit. Each policy shall be signed or countersigned by a Mississippi Resident Agent of the insurance company.

The Contractor shall have certificates furnished to the Department from the insurance companies providing the required coverage. The certificates shall be on the form furnished by the Department and will show the types and limits of coverage.

**907-107.14.2.2--Railroad Protective.** The following provisions are applicable to all work performed under a contract on, over or under the rights-of-way of each railroad shown on the plans.

The Contractor shall assume all liability for any and all damages to work, employees, servants, equipment and materials caused by railroad traffic.

Prior to starting any work on railroad property, the Contractor shall furnish satisfactory evidence to the Department that insurance of the forms and amounts set out herein in paragraphs (a) and (b) has been obtained. Also, the Contractor shall furnish similar evidence to the Railroad Company that insurance has been obtained in accordance with the Standard Provisions for General Liability Policies and the Railroad Protective Liability Form as published in the Code of Federal Regulations, 23 CFR 646, Subpart A. Evidence to the Railroad Company shall be in the form of a Certificate of Insurance for coverages required in paragraph (b), and the original policy of the Railroad Protective Liability Insurance for coverage required in paragraph (a).

All insurance herein specified shall be carried until the contract is satisfactorily complete as evidenced by a release of maintenance from the Department.

The Railroad Company shall be given at least 30 days notice prior to cancellation of the Railroad Protective Liability Insurance policy.

For work within the limits set out in Subsection 107.18 and this subsection, the Contractor shall provide insurance for bodily injury liability, property damage liability and physical damage to property with coverages and limits no less than shown in paragraphs (a) and (b). Bodily injury shall mean bodily injury, sickness, or disease, including death at anytime resulting therefrom. Property damage shall mean damages because of physical injury to or destruction of property, including loss of use of any property due to such injury or destruction. Physical damage shall mean direct and accidental loss of or damage to rolling stock and their contents, mechanical construction equipment or motive power equipment.

(a) **Railroad Protective Liability Insurance** shall be purchased on behalf of the Railroad Company with limits of \$2,000,000 each occurrence; \$6,000,000 aggregate applying separately to each annual period for lines without passenger trains. If the line carries passenger train(s), railroad protective liability insurance shall be purchased on behalf of the Railroad Company with limits of \$5,000,000 each occurrence; \$10,000,000 aggregate applying separately to each annual period.

Coverage shall be limited to damage suffered by the railroad on account of occurrences arising out of the work of the Contractor on or about the railroad right-of-way, independent of the railroad's general supervision or control, except as noted in paragraph 4 below.

Coverage shall include:

- (1) death of or bodily injury to passengers of the railroad and employees of the railroad not covered by State workmen's compensation laws,
- (2) personal property owned by or in the care, custody or control of the railroads,
- (3) the Contractor, or any of the Contractor's agents or employees who suffer bodily injury or death as a result of acts of the railroad or its agents, regardless of the negligence of the railroads, and
- (4) negligence of only the following classes of railroad employees:
  - (i) any supervisory employee of the railroad at the job site
  - (ii) any employee of the railroad while operating, attached to, or engaged on, work trains or other railroad equipment at the job site which are assigned exclusively to the Contractor, or
  - (iii) any employee of the railroad not within (i) or (ii) above who is specifically loaned or assigned to the work of the Contractor for prevention of accidents or protection or property, the cost of whose services is borne specifically by the Contractor or Governmental authority.

(b) **Regular Contractor's Liability**, including subcontractors, XCU and railroad contractual with limits of \$1,000,000 each occurrence; \$2,000,000 aggregate. **Automobile** with limits of \$1,000,000 combined single limit any one accident; **Workers' Compensation and Employer's Liability** - statutory and \$100,000 each accident; \$100,000 each employee; \$500,000 policy limit. **Excess/Umbrella Liability** \$5,000,000 each occurrence; \$5,000,000 aggregate. All coverage to be issued in the name of the Contractor shall be so written as to furnish protection to the Contractor respecting the Contractor's operations in performing work covered by the contract. Coverage shall include protection from damages arising out of bodily injury or death and damage or destruction of property which may be suffered by persons other than the Contractor's own employees.

In addition, the Contractor shall provide for and on behalf of each subcontractor by means of a separate and individual liability and property damage policy to cover like liability imposed upon the subcontractor as a result of the subcontractor's operations in the same amounts as contained above; or, in the alternative each subcontractor shall provide same.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT TO SPECIAL PROVISION NO. 907-107-6**

**DATE:** 11/16/2007

**SUBJECT:** Legal Relations and Responsibility to Public

After Subsection 907-107.15 on page 1, add the following:

**907-107.17--Contractor's Responsibility for Work.** Delete the fifth sentence of the fifth paragraph of Subsection 107.17 on page 63 and substitute the following:

The eligible permanent items shall be limited to traffic signal systems, changeable message signs, roadway signs and sign supports, lighting items, guard rail items, delineators, impact attenuators, median barriers, bridge railing or pavement markings. The eligible temporary items shall be limited to changeable message signs, guard rail items, or median barriers.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-107-6

CODE: (IS)

| DATE: 07/03/2007

| SUBJECT: Legal Relations and Responsibility to Public

Section 107, Legal Relations and Responsibility to Public, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-107.02--Permits, Licenses and Taxes.** Delete in toto Subsection 107.02 on page 49 and substitute the following:

The Contractor or any Subcontractor shall have the duty to determine any and all permits and licenses required and to procure all permits and licenses, pay all charges, fees and taxes and issue all notices necessary and incidental to the due and lawful prosecution of the work. At any time during the life of this contract, the Department may audit the Contractor's or Subcontractor's compliance with the requirements of this section.

The Contractor or any Subcontractor is advised that the "Mississippi Special Fuel Tax Law", Section 27-55-501, et seq. and the Mississippi Use Tax Law, Section 27-67-1, et seq., and their requirements and penalties, apply to any contract or subcontract for construction, reconstruction, maintenance or repairs, for contracts or subcontracts entered into with the State of Mississippi, any political subdivision of the State of Mississippi, or any Department, Agency, Institute of the State of Mississippi or any political subdivision thereof.

The Contractor or any Subcontractor will be subject to one or more audits by the Department during the life of this contract to make certain that all applicable fuel taxes, as outlined in Section 27-55-501, et seq., and any sales and/or use taxes, as outlined in Section 27-67-1, et seq. are being paid in compliance with the law. The Department will notify the Mississippi State Tax Commission of the names and addresses of any Contractors or Subcontractors.

| **907-107.15--Third Party Beneficiary Clause.** In the first sentence of the first paragraph of Subsection 107.15 on page 61, change "create the public" to "create in the public".

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT TO SPECIAL PROVISION NO. 907-108-11**

**DATE:** 12/07/2007

**SUBJECT:** Contract Time Assessment

Before the first sentence of Subsection 907-108.06.1.2 on page 1, add the following:

Delete the sixth paragraph of Subsection 108.06.1.2 on page 81.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SPECIAL PROVISION NO. 907-108-11**

**CODE: (IS)**

**DATE: 04/21/2006**

**SUBJECT: Prosecution and Progress**

Section 108, Prosecution and Progress, of the 2004 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.** At the end of the last paragraph of Subsection 108.01.1 on page 73, add the following:

The Engineer will have the authority to suspend the work wholly or in part and to withhold payments because of the Contractor's failure to make prompt payment within 15 calendar days as required above, or failure to submit the required OCR-484 Form, Certification of Payments to Subcontractors, which is also designed to comply with prompt payment requirements.

**907-108.02--Notice To Proceed.** Delete the fourth paragraph of Subsection 108.02 on page 75 and substitute the following:

Upon written request from the Contractor and if circumstances permit, the Notice to Proceed may be issued at an earlier date subject to the conditions stated therein. The Contractor shall not be entitled to any monetary damages or extension of contract time for any delay claim or claim of inefficiency occurring between the early issuance Notice To Proceed date and the Notice to Proceed date stated in the contract.

**907-108.06.1.2--Contract Time Assessment.** At the end of the eighth paragraph of Subsection 108.06.1.2 on page 81, add the following:

When the approved progress schedule indicates that a controlling phase(s) is to be completed prior to December 1 and the physical features of the phase(s) have not been satisfactorily completed, beginning on December 1 the miscellaneous phase will be shown as the only active phase during the months of December, January, and February. Under this condition, time units, monthly time units divided by monthly calendar days, will be assessed in accordance with the applicable column in the TABLE OF TIME UNITS. If the physical features of the phase(s) have not been completed by March 1, the phase will resume as a controlling phase and time assessment will be made accordingly.

Delete the fourth and fifth sentence of the thirteenth paragraph of Subsection 108.06.1.2 on page 82, and substitute the following:

In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of 25 calendar days following the Contractor's receipt of the monthly report in question to file a protest Notice of Claim in accordance with the provisions of Subsection 105.17. Otherwise, the Engineer's assessment shall be final unless mathematical errors of assessment are subsequently found to exist.



**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT TO SPECIAL PROVISION NO. 907-109-3**

**DATE:** 11/21/2006

**SUBJECT:** Changes in Material Costs

After the last paragraph of Subsection 907-109.06.1 on page 1, add the following:

**907-109.07--Changes in Material Costs.** Delete the second sentence of the first paragraph of Subsection 109.07 on page 95, and substitute the following:

When a pay item on the bid sheets indicate that an adjustment is allowed and when a notice to bidders is included in the contract showing current monthly base prices, an adjustment will be provided as follows:

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

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

**CODE: (IS)**

**DATE: 04/21/2006**

**SUBJECT: Partial Payment**

Section 109, Measurement and Payment, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-109.04--Extra and Force Account Work.** Delete the first sentence of the second paragraph of Subsection 109.04 under (d) on page 92 and substitute the following:

In the event an agreement cannot be reached for a particular piece of equipment, the book entitled "Rental Rate Blue Book For Construction Equipment" as published by EquipmentWatch® and is current at the time the force account work is authorized will be used to determine equipment ownership and operating expense rates.

**907-109.06--Partial Payment.**

**907-109.06.1--General.** Delete the fourth and fifth sentences of the third paragraph of Subsection 109.06.1 on page 94, and substitute the following:

In the event mutual agreement cannot be reached, the Contractor will be allowed a maximum of 25 calendar days following the Contractor's receipt of the monthly estimate in question to file in writing, a protest Notice of Claim in accordance with the provisions Subsection 105.17. Otherwise, the Engineer's estimated quantities shall be considered acceptable pending any changes made during the checking of final quantities.

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

## SUPPLEMENT TO SPECIAL PROVISION NO. 907-401-2

**DATE:** 03/30/2007

**SUBJECT:** Hot Mix Asphalt (HMA)

After Subsection 907-401-02.6.2 on page 2, add the following:

**907-401.02.6.4.1--Roadway Density.** Delete subparagraphs 1., 2., & 3. on page 251 and substitute the following:

1. For all leveling lifts, when full lane width and with a thickness as specified in the table in Subsection 401.02.4, the required lot density shall be 92.0 percent of maximum density.
2. For all single lift overlays, with or without leveling and/or milling, the required lot density shall be 92.0 percent of maximum density.
3. For all multiple lift overlays of two (2) or more lifts excluding leveling lifts, the required lot density of the bottom lift shall be 92.0 percent of maximum density. The required lot density for all subsequent lifts shall be 93.0 percent of maximum density.
4. For all pavements on new construction, the required lot density for all lifts shall be 93.0 percent of maximum density.

**907-401.03.1.4--Density.** Delete the first sentence of the first paragraph of Subsection 401.03.1.4 on page 259 and substitute the following:

The lot density for all dense graded pavement lifts, except as provided below for preleveling, wedging [less than fifty percent (50%) of width greater than minimum lift thickness], ramp pads, irregular shoulder areas, median crossovers, turnouts, or other areas where the established rolling pattern cannot be performed, shall not be less than the specified percent (92.0% or 93.0%) of the maximum density based on AASHTO Designation: T 209 for the day's production. For all leveling lifts, when full lane width and with a thickness as specified in the table in Subsection 401.02.4, the required lot density shall be 92.0 percent of maximum density.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SPECIAL PROVISION NO. 907-401-2**

**CODE: (IS)**

**DATE: 11/04/2005**

**SUBJECT: Hot Mix Asphalt (HMA)**

Section 401, Hot Mix Asphalt (HMA) - General, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete in toto Subsection 401.02.6.2 on pages 248 and 249, and substitute:

**907-401.02.6.2--Assurance Program for Mixture Quality.** The Engineer will conduct a quality assurance program. The quality assurance program will be accomplished as follows:

- 1) Conducting verification tests.
- 2) Validate Contractor test results.
- 3) Periodically observing Contractor quality control sampling and testing.
- 4) Monitoring required quality control charts and test results.
- 5) Sampling and testing materials at any time and at any point in the production or laydown process.

The rounding of all test results will be in accordance with Subsection 700.04.

The Engineer will conduct verification tests on samples taken by the Contractor under the direct supervision of the Engineer at a time specified by the Engineer. The frequency will be equal to or greater than ten percent (10%) of the tests required for Contractor quality control and the data will be provided to the Contractor within two asphalt mixture production days after the sample has been obtained by the Engineer. At least one sample shall be tested from the first two days of production. All testing and data analysis shall be performed by a Certified Asphalt Technician-I (CAT-I) or by an assistant under the direct supervision of the CAT-I. Certification shall be in accordance with the *MDOT HMA Technician Certification Program* chapter in the Materials Division Inspection, Testing, and Certification Manual. The Department shall post a chart giving the names and telephone numbers for the personnel responsible for the assurance program.

The Engineer shall be allowed to inspect Contractor testing equipment and equipment calibration records to confirm both calibration and condition. The Contractor shall calibrate and correlate all testing equipment in accordance with the latest versions of the Department's Test Methods and AASHTO Designation: R 18.

Random differences between the Engineer's verification tests and the current running average of four quality control tests at the time of obtaining the verification sample will be considered acceptable if within the following limits:

Item	Allowable Differences
Sieve - % Passing	
3/8-inch and above	6.0
No. 4	5.0
No. 8	4.0
No. 16, for 4.75 mm mixtures ONLY	3.5
No. 30	3.5
No. 200	2.0
AC Content	0.4
Specimen Bulk SG, Gmb @ N <sub>Design</sub>	0.030
Maximum SG, Gmm	0.020

If four quality control tests have not been tested prior to the time of the first verification test, the verification test results will be compared to the average of the preceding quality control tests. If the verification test is the first material tested on the project or if a significant process adjustment was made just prior to the verification test, the verification test results will be compared to the average of four subsequent quality control test results. For all other cases after a significant process adjustment, the verification test results will be compared to the average of the preceding quality control tests (taken after the adjustment) as in the case of a new project start-up when four quality control tests are not available.

In the event that; 1) the comparison of the Contractor’s running average quality control data and Engineer’s quality assurance verification test results are outside the allowable differences in the above table, or 2) if a bias exists between the results, such that one of the results is predominately higher or lower than the other, and the Engineer’s results fail to meet the JMF control limits, the Engineer will investigate the reason immediately. As soon as the need for an investigation becomes known, the Engineer will increase the quality assurance sampling rate to the same frequency required for Contractor testing. The additional samples obtained by the Engineer may be used as part of the investigation process or for routine quality assurance verification tests. The Engineer's investigation may include testing of the remaining quality control split samples, review and observation of the Contractor's testing procedures and equipment, and a comparison of split sample test results by the Contractor quality control laboratory, Department quality assurance laboratory and the Materials Division laboratory. The procedures outlined in the latest edition of MDOT’s Field Manual for HMA may be used as a guide for the investigation. In the event that the Contractor’s results are determined to be incorrect, the Engineer's results will be used for the quality control data and the appropriate payment for the mixture will be based on the procedures specified in Subsection 401.02.5.8(j).

The Engineer will periodically witness the sampling and testing being performed by the Contractor. The Engineer, both verbally and in writing, will promptly notify the Contractor of any observed deficiencies. When differences exist between the Contractor and the Engineer which cannot be resolved, a decision will be made by the State Materials Engineer, acting as the referee. The Contractor will be promptly notified in writing of the decision. If the deficiencies are not corrected, the Engineer will stop production until corrective action is taken.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SUPPLEMENT TO SPECIAL PROVISION NO. 907-403-4**

**DATE: 03/30/2007**

**SUBJECT: Hot Mix Asphalt (HMA)**

Before Subsection 907-403-05.2 on page 1, add the following:

Delete Subsection 403.03.5.5 on page 273 and substitute the following:

**907-403.03.5.5--Preliminary Leveling.** All irregularities of the existing pavement, such as ruts, cross-slope deficiencies, etc., shall be corrected by spot leveling, skin patching, feather edging or a wedge lift in advance of placing the first overall lift.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

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

**CODE: (IS)**

**DATE: 11/04/2005**

**SUBJECT: Hot Mix Asphalt (HMA)**

Section 403, Hot Bituminous Pavement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-403.05.2--Pay Items.** Add the "907" prefix to the pay items listed on page 275 & 276.

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

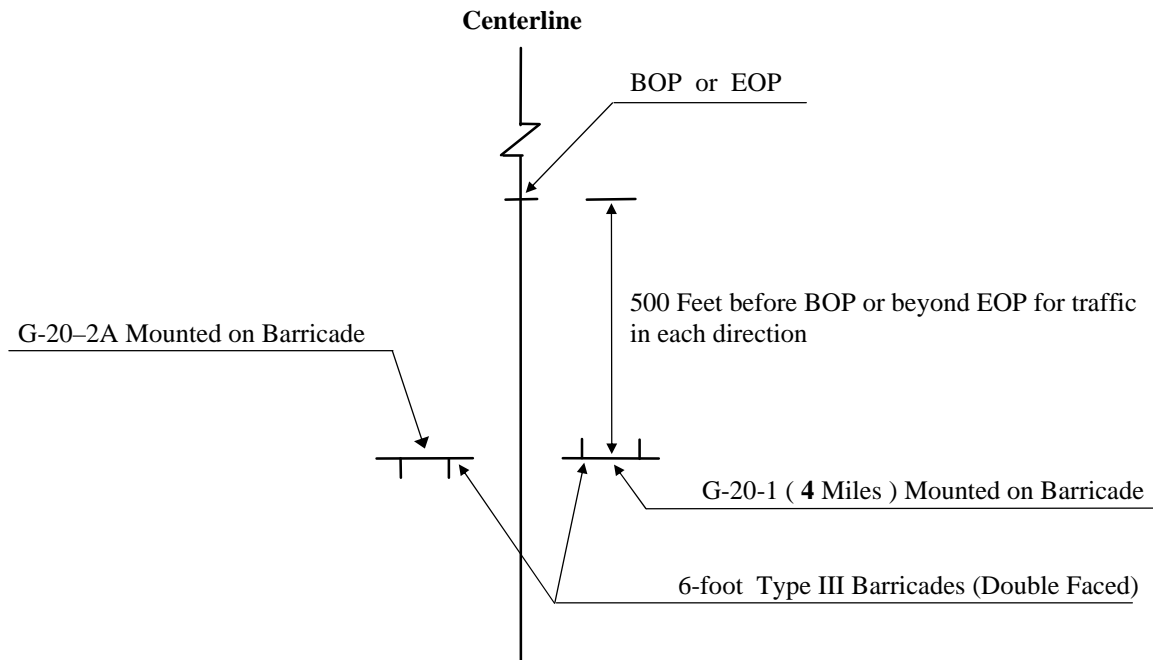
## SUPPLEMENT TO SPECIAL PROVISION NO. 907-618-1

**DATE:** 12/10/2007

**PROJECT:** MP-6528-31(010) / 303276301 -- Jasper County

After the first paragraph of Subsection 907-618.01.2 on page 1, add the following:

Additional signs will be required as follows:



### ADDITIONAL TRAFFIC CONTROL SIGNS REQUIRED:

- 28 - W20-1 (AHEAD) signs required. One (1) W20-1 (AHEAD) sign is required at each local road or street entering the project.
- 56 - R4 -1 "DO NOT PASS" signs required.
- 7 - R4 -2 "PASS WITH CARE" signs required.
- 9 - W14 -3 "NO PASSING ZONE" signs required.

R4 -1 " DO NOT PASS ", R4 -2 " PASS WITH CARE" , and W14 -3 "NO PASSING ZONE" signs are required in accordance with Subsection 618.03.3 and as specified in the Manual on Uniform Traffic Control Devices. If no passing zones are 1,000 feet or more, install additional "DO NOT PASS" signs on maximum spacing of 750 feet.

All Construction signing is included in the bid for Pay Item 618-A, Maintenance of Traffic. Fluorescent orange sheeting shall be used on all construction and traffic control signs except for R4-1 and R4-2 signs which shall be black legend and border on white background.



**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION NO. 907-618-1**

**CODE: (SP)**

**DATE: 04/29/2004**

**SUBJECT: Additional Signing Requirements**

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

**907-618.01.2--Traffic Control Plan.** At the end of Subsection 618.01.2 on page 413, add the following:

For compliance with the traffic control plan, the Contractor will be required to install and maintain construction signs at various location throughout the project. Payment for these signs will be included in the price bid for pay item no. 618-A, Maintenance of Traffic per lump sum.

# MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**SPECIAL PROVISION NO. 907-618-4**

**CODE: (SP)**

**DATE: 12/12/2006**

**SUBJECT: Placement of Temporary Traffic Stripe**

Section 618, Maintenance of Traffic and Traffic Control Plan, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-618.03.3--Safe Movement of Traffic.** Delete subparagraphs (2) and (3) of Subsection 618.03.3 on pages 415 & 416, and substitute the following:

- (2) Temporary edge lines on projects requiring shoulders constructed of granular material may be delayed for a period not to exceed three (3) days.

Temporary edge lines placed on the final pavement course of projects requiring paved shoulders with surface treatment may be placed on the adjacent shoulder in as near the permanent location as possible until the surface treatment is placed. When the edge lines are obliterated by the placement of the surface treatment, the edge lines shall be placed in the permanent stripe location. The replacement of edge lines may be delayed for a period not to exceed three (3) days for a two or three-lane roads.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION NO. 907-626-12**

**CODE: (SP)**

**DATE: 03/02/2007**

**SUBJECT: Double Drop Thermoplastic Markings**

Section 626, Thermoplastic Traffic Markings, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-626.03.1.1--Equipment.** After the second paragraph of Subsection 626.03.1.1 on page 444, add the following:

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

**907-626.03.1.2--Construction Details.** After the second sentence of the first full paragraph of Subsection 626.03.1.2 on page 445 and add the following:

When edge lines are placed on rumble strips, the thickness of the edge line shall be 60 mils.

After the last sentence of the third full paragraph of Subsection 626.03.1.2 on page 445, add the following:

When double drop thermoplastic stripe is called for in the contract, additional beads by the drop-on method shall be applied as follows:

Class A glass beads at a rate of not less than three pounds of beads per 100 feet of six-inch stripe.  
Class B glass beads at a rate of not less than three pounds of beads per 100 feet of six-inch stripe.

The Class B glass beads shall be applied to the newly placed stripe first, followed by the application of the Class A glass beads.

**907-626.05--Basis of Payment.** Add the following to the list of pay items on page 446.

907-626-C: 6" Thermoplastic Double Drop Edge Stripe,  
Continuous White, \_\_\_\* - per linear foot or mile

907-626-F: 6" Thermoplastic Double Drop Edge Stripe,  
Continuous Yellow, \_\_\_\* - per linear foot or mile

\* Thickness may be specified

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-701-3

CODE: (SP)

DATE: 11/30/2007

SUBJECT: Hydraulic Cement

Section 701, Hydraulic Cement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 701.01 on pages 595 & 596, and substitute the following:

**907-701.01--General.** The following requirements shall be applicable to hydraulic cement:

Only hydraulic cements conforming to Section 701 shall be used. Hydraulic cements shall not be listed or designated as meeting more than one AASHTO or Department type.

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

The Contractor shall provide suitable means for storing and protecting the hydraulic cement against dampness. Hydraulic cement, which for any reason, has become partially set or which contains lumps of caked hydraulic cement will be rejected. Hydraulic cement salvaged from discarded or used bags shall not be used.

The temperature of bulk hydraulic cement shall not be greater than 165°F at the time of incorporation in the mix.

Acceptance of hydraulic cement will be based on the certification program as described in the Department's Materials Division Inspection, Testing, and Certification Manual and job control sampling and testing as established by Department SOP.

Retests of hydraulic cement may be made for soundness and expansion within 28 days of test failure and, if the hydraulic cement passes, it may be accepted. Hydraulic cement shall not be rejected due to failure to meet the fineness requirements if upon retests after drying at 212°F for one hour, it meets such requirements.

Delete Subsection 701.02 on page 596, and substitute the following:

**907-701.02--Portland Cement.**

**907-701.02.1--General.**

**907-701.02.1.1--Types of Portland Cement.** Portland cement (cement) shall be either Type I or Type II conforming to AASHTO Designation: M85 or Type I(MS), as defined by the description below Table 1. Type III cement conforming to AASHTO Designation: M85 or Type III(MS), as defined by the description below Table 1, may be used for the production of precast or precast-prestressed concrete members.

**907-701.02.1.2--Alkali Content.** All cement types in this Subsection shall meet the Equivalent alkali content requirement for low-alkali cements listed in AASHTO Designation: M85, Table 2.

**907-701.02.2--Replacement by Other Cementitious Materials.** The maximum replacement of cement by weight is 25% for fly ash or 50% for ground granulated blast furnace slag (GGBFS). The minimum tolerance for replacement shall be 5% below the maximum replacement content. Replacement contents below this minimum tolerance by fly ash or GGBFS may be used, but shall not be given any special considerations, like the maximum acceptance temperature for Portland cement concrete containing pozzolans. Special considerations shall only apply for replacement of cement by fly ash or GGBFS.

**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, GGBFS, metakaolin, or silica fume shall be as follows in Table 1.

**Table 1- Cementitious Materials for Soluble Sulfate Conditions**

Sulfate Exposure	Water-soluble sulfate (SO4) in soil, % by mass	Sulfate (SO4) in water, ppm	Cementitious material required*
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type II **, ***, **** cement, or Type I cement with one of the following replacements of cement by weight: 25% Class F fly ash, 50% GGBFS, 10% metakaolin, or 8% silica fume
Severe	0.20 - 2.00	1,500 - 10,000	Type II ** cement with one of the following replacements of cement by weight: 25% Class F fly ash, 50% GGBFS, 10% metakaolin, or 8% silica fume

\* The values listed in this table for replacement of Portland cement by the cementitious materials listed are maximums and shall not be exceeded. The minimum tolerance for replacement shall be 0.5% below the maximum replacement content. Replacement contents below this minimum tolerance by the cementitious materials listed in this table do not meet the requirements for the exposure conditions listed and shall not be allowed.

\*\* Type I cement conforming to AASHTO Designation: M85 with a maximum 8% tricalcium aluminate (C3A) may be used in lieu of Type II cement; this cement is given the designation "Type I(MS)". Type III cement conforming to AASHTO Designation: M85 with a maximum 8% tricalcium aluminate (C3A) may be used in lieu of Type II cement as allowed in Subsection 907-701.02.1; this cement is given the designation "Type III(MS)".

\*\*\* Blended cement meeting the sulfate resistance requirements of Subsection 907-701.04 may be used in lieu of Type II as allowed in Subsection 907-701.04. No additional cementitious materials shall be added to or as a replacement for blended cement.

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

Class C fly ash shall not be used as a replacement for cement in any of the sulfate exposure conditions listed above.

**907-701.02.2.2--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 907-701.02.2.1. Neither metakaolin nor silica fume shall be used to bring the cementitious materials into compliance with the requirements of Table 1.

Delete Subsection 701.03 on page 596, and substitute the following:

**907-701.03--Masonry Cement.** Masonry cement shall conform to ASTM Designation: C 91 and shall only be used in masonry applications.

Delete Subsection 701.04 on page 596, and substitute the following:

**907-701.04--Blended Hydraulic Cement.**

**907-701.04.1--General.**

**907-701.04.1.1--Types of Blended Cement.** Blended hydraulic cements (blended cements) shall be of the following types and conform to AASHTO Designation: M 240:

- Type I(SM) – Slag-modified Portland cement
- Type IS – Portland blast-furnace slag cement
- Type I(PM) – Pozzolan-modified Portland cement
- Type IP – Portland-pozzolan cement

Blended cement for use in Portland cement concrete or soil stabilization exposed to the moderate soluble sulfate condition or exposure to seawater as defined in Table 1 shall meet the Sulfate resistance requirement listed in AASHTO Designation: M 240, Table 2 and the “(MS)” suffix shall be added to the type designation.

**907-701.04.1.2--Alkali Content.** All blended cement types in this Subsection shall meet the Mortar expansion requirements listed in AASHTO Designation: M 240, Table 2.

**907-701.04.2--Replacement by Other Cementitious Materials.** No additional cementitious materials, such as Portland cement, performance hydraulic cement, fly ash, GGBFS, metakaolin, or others, shall be added to or as a replacement for blended cement.

**907-701.04.3--Exposure to Soluble Sulfate Conditions or Seawater.** When Portland cement concrete or blended cement for soil stabilization is exposed to moderate soluble sulfate conditions or to seawater, where the moderate soluble sulfate condition is defined in Table 1, the

blended cement shall meet the sulfate resistance requirement listed in AASHTO Designation: M 240, Table 2.

When Portland cement concrete or blended cement for soil stabilization is exposed to severe soluble sulfate conditions, where the severe soluble sulfate condition is defined in Table 1, blended cements shall not be used.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-3

CODE: (IS)

DATE: 09/26/2005

SUBJECT: Synthetic Structural Fiber Reinforcement

Section 711, Reinforcement and Wire Rope, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After Subsection 711.03.4.3 on page 665, add the following:

907-711.04--Synthetic Structural Fiber. Synthetic structural fibers shall meet the requirements of ASTM Designation: C 1116, Section 4.1.3, Note 3. The fibers shall be monofilament made of polypropylene or polypropylene/polyethylene blend meeting the following conditions:

<u>Property</u>	<u>Results</u>
Length, minimum .....	1.5 inches
Aspect Ratio (length / equivalent diameter) .....	90
Breaking tenacity, minimum * .....	530 mN/tex
(Tensile Strength, minimum .....	70 ksi)
Chord modulus, minimum * .....	980 cN/tex
(Modulus of Elasticity, minimum .....	1,300 ksi)

\* When tested in accordance with ASTM Designation: D 3822

The dosage rate for the fibers shall be a minimum of three pounds per cubic yard (3 lb / yd<sup>3</sup>). The dosage rate for the fibers when used in pile encasements shall be a minimum of four pounds per cubic yard (4 lb / yd<sup>3</sup>).

The manufacturer shall furnish the Engineer three copies of the certified test report(s) showing results of all required tests, and certification that the material meets the specifications.

## MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-713-1

CODE: (SP)

DATE: 08/29/2007

SUBJECT: Admixtures for Concrete

Section 713, Concrete Curing Materials and Admixtures, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete Subsection 713.02 on pages 676 & 677, and substitute the following:

**907-713.02--Admixtures for Portland Cement Concrete.** Admixtures shall only be approved by the Department for classification as a single type following the applicable types from AASTHO Designation: M 154 or M 194, or the definition of a mid-range water reducer listed below with the following exception: when requested by the manufacturer the Department will consider classifying an admixture as both a Type A and a Type D. Admixtures shall only be used in accordance with the manufacturer's recommended dosage range for that type. Where an admixture is classified as both a Type A and Type D, the dosage range for use as a Type A shall not overlap the dosage range for use as a Type D.

Air-entraining admixtures shall comply with AASHTO Designation: M 154. Set-retarding, accelerating, and/or water-reducing admixtures shall comply with AASHTO Designation: M 194. Mid-range water-reducers are classified as water-reducing admixtures that reduce the mix water a minimum of 8% when compared to a control mix with no admixtures when tested in accordance with the requirements in AASHTO Designation: M 194. The type designation for admixtures approved by the Department and classified as meeting the requirements of a mid-range water-reducer shall be "MR".

**907-713.02.1--Source Approval.** In order to obtain approval of an admixture, the Producer/Suppliers shall submit to the State Materials Engineer the following for review: certified test reports, made by an acceptable independent laboratory regularly inspected by the Cement and Concrete Reference Laboratory of the National Institutes of Standards and Technology, which show that the admixture meets all the requirements of the applicable AASHTO or Department Specification for the specific type and the dosage range for the specific type of admixture.

**907-713.02.2--Specific Requirements.** Admixtures containing chlorides will not be permitted.

**907-713.02.3--Acceptance.** The Department reserves the right to sample, for check tests, any shipment or lot of admixture delivered to a project.

The Department reserves the right to require tests of the material to be furnished, using the specific cement and aggregates proposed for use on the project, as suggested in AASHTO Designation: M 154 and outlined in AASHTO Designation: M 194.

Failure to maintain compliance with any requirement of these specifications shall be cause for rejection of any previously approved source or brand of admixture.

With each new lot of material shipped the Contractor shall submit to the State Materials Engineer, a notarized certification from the manufacturer showing that the material complies with the requirements of the applicable AASHTO or Department Specification.

When an admixture is used, it shall be the responsibility of the Contractor to produce satisfactory results.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION NO. 907-714-4**

**CODE: (SP)**

**DATE: 05/08/2007**

**SUBJECT: Miscellaneous Materials**

Section 714, Miscellaneous Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-714.05--Fly Ash.** Delete Subsections 714.05.1 & 714.05.2 on pages 680 & 681, and substitute the following:

**907-714.05.1--General.** The fly ash source must be approved for listing in the Department's "Approved Sources of Materials" prior to use. The acceptance of fly ash shall be based on certified test reports, certification of shipment from the supplier, and tests performed on samples obtained after delivery in accordance with the Department's Materials Division Inspection, Testing, and Certification Manual and Department SOP.

Different classes of fly ash or different sources of the same class shall not be mixed or used in the construction of a structure or unit of a structure without written permission from the Engineer.

The Contractor shall provide suitable means for storing and protecting the fly ash from dampness. Separate storage silos, bins, or containers shall be provided for fly ash. Fly ash which has become partially set or contains lumps of caked fly ash shall not be used.

The temperature of the bulk fly ash shall not be greater than 165°F at the time of incorporation into the work.

All classes of fly ash shall meet the supplementary option chemical requirement for available alkalis listed in AASHTO Designation: M 295, Table 2.

The replacement of Portland cement with fly ash shall be in accordance with the applicable replacement content specified in Subsection 907-701.02.2.

In addition to these requirements, fly ash shall meet the following specific requirements for the intended use.

**907-714.05.2--Fly Ash for Use in Concrete.** When used with Portland cement in the production of concrete or grout, the fly ash shall meet the requirements of AASHTO Designation: M 295, Class C or F, with the following exceptions:

The loss on ignition shall not exceed 6.0 percent.

The strength activity index with Portland cement shall be at least 55 percent of the control

mix at seven days.

No additional cementitious materials, such as blended hydraulic cement, GGBFS, metakaolin, or others, shall be added to or as a replacement for Portland cement when used with fly ash.

**907-714.06--Ground Granulated Blast Furnace Slag (GGBFS).** Delete Subsection 714.06.1 on page 681, and substitute the following:

**907-714.06.1--General.** The GGBFS source must be approved for listing in the Department's "Approved Sources of Materials" prior to use. The acceptance of GGBFS shall be based on certified test reports, certification of shipment from the supplier, and tests performed on samples obtained after delivery in accordance with the Department's Materials Division Inspection, Testing, and Certification Manual and Department SOP.

The Contractor shall provide suitable means for storing and protecting the GGBFS against dampness and contamination. Separate storage silos, bins, or containers shall be provided for GGBFS. GGBFS which has become partially set, caked or contains lumps shall not be used.

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

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

No additional cementitious materials, such as blended hydraulic cement, fly ash, metakaolin, or others, shall be added to or as a replacement for Portland cement when used with GGBFS in the production of concrete. The replacement of Portland cement with GGBFS shall be in accordance with the applicable replacement content specified in Subsection 907-701.02.2.

Delete Subsection 714.07 on page 682, and substitute the following:

**907-714.07--Additional Cementitious Materials.**

**907-714.07.1--Metakaolin.**

**907-714.07.1.1--General.** Metakaolin shall only be used as a supplementary cementitious material in Portland cement concrete for compliance with the requirements for cementitious materials exposed to soluble sulfate conditions. Metakaolin from different sources shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer. No additional cementitious materials, such as blended hydraulic cement, fly ash, GGBFS, or others, shall be added to or as a replacement for Portland cement when used with metakaolin in the production of concrete.

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

**907-714.07.1.2--Source Approval.** The approval of each metakaolin source shall be on a case by case basis as determined by the State Materials Engineer. In order to obtain approval of a metakaolin source, the Producer/Suppliers shall submit to the State Materials Engineer the following for review: certified test reports, made by an acceptable, independent laboratory regularly inspected by the Cement and Concrete Reference Laboratory of the National Institutes of Standards and Technology, which show that the metakaolin meets all the requirements of AASHTO Designation: M295, including the Effectiveness in contributing to sulfate resistance, Procedure A, listed in AASHTO Designation: M295, Table 4 for Supplementary Optional Physical Requirements, and other requirements listed herein.

In order to demonstrate effectiveness in contributing to sulfate resistance, included in this test data shall be results of metakaolin from the proposed source tested in accordance with ASTM Designation: C 1012. There shall be two sets of test specimens per the following:

- a. One set of test specimens shall be prepared using a Type I Portland cement meeting the requirements of AASHTO Designation: M85 and having a tricalcium aluminate ( $C_3A$ ) content of more than 8.0%,
- b. One set of test specimens shall be prepared using a Type II Portland cement meeting the requirements of AASHTO Designation: M85.
- c. The proposed metakaolin shall be incorporated at the rate of 10% cement replacement in each set of test specimens and shall meet both of the acceptance criteria listed below for source approval.

The requirement for acceptance of the test sample using Type I Portland cement is an expansion of 0.10% or less at the end of six months. The requirement for acceptance of the test sample using Type II Portland cement is an expansion of 0.05% or less at the end of six months.

**907-714.07.1.3--Storage.** The Contractor shall provide suitable means for storing and protecting the metakaolin against dampness and contamination. Metakaolin which has become partially set, caked, or contains lumps shall not be used.

**907-714.07.1.4--Specific Requirements.** Metakaolin shall meet the requirements of AASHTO Designation: M 295, Class N with the following modifications:

1. The sum of  $SiO_2 + Al_2O_3 + Fe_2O_3$  shall be at least 85%. The Material Safety Data Sheet shall indicate that the amount of crystalline silica, as measured by National Institute of Occupation Safety and Health (NIOSH) 7500 method, after removal of the mica interference, is less than 1.0%.
2. The loss on ignition shall be less than 3.0%.
3. The available alkalies, as equivalent  $Na_2O$ , shall not exceed 1.0%.
4. The amount of material retained on a No. 325 mesh sieve shall not exceed 1.0%.
5. The strength activity index at seven (7) days shall be at least 85%.

**907-714.07.1.5--Acceptance.** With each new lot of material shipped the Contractor shall submit to the State Materials Engineer a certified test report from the manufacturer showing that the material meets the requirements AASHTO Designation: M295, Class N and the requirements of this Subsection.

The Department reserves the right to sample, for check tests, any shipment or lot of metakaolin delivered to a project.

**907-714.07.2--Silica Fume.**

**907-714.07.2.1--General.** Silica fume shall only be used as a supplementary cementitious material in Portland cement concrete for compliance with the requirements for cementitious materials exposed to soluble sulfate conditions. Silica fume from different sources shall not be mixed or used alternately in any one class of construction or structure without written permission from the Engineer. No additional cementitious materials, such as blended hydraulic cement, performance hydraulic cement, fly ash, GGBFS, or others, shall be added to or as a replacement for Portland cement when used with silica fume in the production of concrete.

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

**907-714.07.2.2--Source Approval.** The approval of each silica fume source shall be on a case by case basis as determined by the State Materials Engineer. In order to obtain approval of a silica fume source, the Producer/Suppliers shall submit to the State Materials Engineer the following for review: certified test reports, made by an acceptable, independent laboratory regularly inspected by the Cement and Concrete Reference Laboratory of the National Institutes of Standards and Technology, which show that the silica fume meets all the requirements of AASHTO Designation: M307, Table 3, including the Sulfate resistance expansion, listed in the table for Optional Physical Requirements, and other requirements listed herein.

In order to demonstrate effectiveness in contributing to sulfate resistance, included in this test data shall be results of silica fume from the proposed source tested in accordance with ASTM Designation: C 1012. There shall be two sets of test specimens per the following:

- a. One set of test specimens shall be prepared using a Type I Portland cement meeting the requirements of AASHTO Designation: M85 and having a tricalcium aluminate ( $C_3A$ ) content of more than 8.0%,
- b. One set of test specimens shall be prepared using a Type II Portland cement meeting the requirements of AASHTO Designation: M85.
- c. The proposed silica fume shall be incorporated at the rate of 8% cement replacement in each set of test specimens and shall meet both of the acceptance criteria listed below for source approval.

The requirement for acceptance of the test sample using Type I Portland cement is an expansion of 0.10% or less at the end of six months. The requirement for acceptance of the test sample using Type II Portland cement is an expansion of 0.05% or less at the end of six months.

**907-714.07.2.3--Storage.** The Contractor shall provide suitable means for storing and protecting the silica fume against dampness and contamination. Silica fume which has become partially set, caked, or contains lumps shall not be used.

**907-714.07.2.4--Acceptance.** With each new lot of material shipped, the Contractor shall submit to the State Materials Engineer a certified test report from the manufacturer showing that the material meets the Chemical and Physical Requirements of AASHTO Designation: M307.

The Department reserves the right to sample, for check tests, any shipment or lot of silica fume delivered to a project.



**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**SPECIAL PROVISION NO. 907-804-7**

**CODE: (SP)**

**DATE: 11/30/2007**

**SUBJECT: Concrete Bridges And Structures**

Section 804, Concrete Bridges And Structures, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-804.02-- Materials.**

**907-804.02.1--General.** Add the following materials to the list of materials in Subsection 804.02.1 on page 847.

Blended Cement.....	907-701.01 and 907-701.04
Ground Granulated Blast Furnace Slag (GGBFS).....	907-714.06
Metakaolin.....	907-714.07
Silica Fume.....	907-714.07.2

**907-804.02.8--Laboratory Accreditation.** In Table 1 of Subsection 804.02.8 on page 849, substitute AASHTO: R 39 - Making and Curing Concrete Test Specimens in the Laboratory for AASHTO: T 126 - Making and Curing Concrete Test Specimens in the Laboratory.

**907-804.02.10--Portland Cement Concrete Mix Design.** Delete the Notes under Table 3 of Subsection 804.02.10 on pages 850 & 851, and substitute the following:

- \* Maximum size aggregate shall conform to the concrete mix design for the specified aggregate.
- \*\* The replacement limits of Portland cement by weight by other cementitious materials (such as fly ash, GGBFS, metakaolin, silica fume, or others) shall be in accordance with the values in Subsection 907-701.02. Other hydraulic cements may be used in accordance with the specifications listed in Section 701.
- \*\*\* The slump may be increased up to six (6) inches with an approved mid-range water reducer or up to eight (8) inches with an approved type F or G high range water reducer, in accordance with 907-713.02. Minus slump requirements shall meet those set forth in Table 3 of AASHTO M157 specifications.
- \*\*\*\* Entrained air is not required except for concrete exposed to seawater. For concrete exposed to seawater, the total air content shall be 3.0 % to 6.0%. For concrete not exposed to seawater, the total air content shall not exceed 6.0%.
- \*\*\*\*\* Class DS Concrete for drilled shafts shall have an 8±1-inch slump. In the event the free fall method of concrete placement is used, the slump shall be 7.5±1.5-inches.

Delete the last paragraph of Subsection 804.02.10 on page 851 and substitute the following:

Either Type A, D, F, G or mid-range chemical admixture, shall be used in all classes of concrete. Any combinations of water reducing admixtures shall be approved by the Engineer before their use.

**907-804.02.10.1.1--Proportioning on the Basis of Previous Field Experience of Trial Mixtures.** Delete the first sentence of the first paragraph of Subsection 804.02.10.1.1 on page 851, and substitute the following:

Where a concrete production facility has a record, based on at least 10 consecutive strength tests from at least 10 different batches within the past 12 months from a mixture not previously used on Department projects, the standard deviation shall be calculated.

**907-804.02.11--Concrete Batch Plants.** Delete the first three paragraphs of Subsection 804.02.11 on page 854, and substitute the following:

The concrete batch plant shall meet the requirements of the National Ready Mixed Concrete Association *Quality Control Manual, Section 3, Plant Certification Checklist* as outlined in the latest edition of the Department's *Concrete Field Manual*. The Contractor shall submit a copy of the approved checklist along with proof of calibration of batching equipment, i.e., scales, water meter, and admixture dispenser, to the Engineer 30 days prior to the production of concrete.

For large volume projects the concrete batch plant shall meet the requirements for an automatic system capable of recording batch weights. It shall also have automatic moisture compensation for the fine aggregate. For small volume projects, the concrete batch plant can be equipped for manual batching with a fine aggregate moisture meter visible to the plant operator.

The concrete batch plant shall have available adequate facilities to cool concrete during hot weather.

Mixer trucks to be used on the project are to be listed in the checklist and shall meet the requirements of the checklist.

**907-804.02.12--Contractor's Quality Control.** Delete the fourth paragraph of Subsection 804.02.12 on page 854 & 855, and substitute the following:

The Contractor's Quality Control program shall encompass the requirements of AASHTO Designation: M 157 into concrete production and control, equipment requirements, testing, and batch ticket information. The requirement of AASHTO Designation: M 157, Section 11.7 shall be followed except, on arrival to the job site, a maximum of 1½ gallons per cubic yard is allowed to be added. Water shall not be added at a later time. If the maximum permitted slump is exceeded after the addition of water at the job site, the concrete shall be rejected.

**907-804.02.12.3--Documentation.** After the second sentence of the second paragraph of Subsection 804.02.12.3 on page 856, add the following:

Batch tickets and gradation data shall be documented in accordance with Department requirements. Batch tickets shall contain all the information in AASHTO Designation: M157, Section 16 including the additional information in Subsection 16.2 with the following exception:

the information listed in paragraphs 16.2.7 and 16.2.8 is not required. Batch tickets shall also contain the concrete producer's permanent unique mix number assigned to the concrete mix design.

**907-804.02.12.5--Non-Conforming Materials.** In Table 4 of Subsection 804.02.12.5 on page 857, delete “/ FM” from the requirements on line B.3.a.

**907-804.02.13--Quality Assurance Sampling and Testing.** In Table 5 of Subsection 804.02.13 on page 858, delete “and FM” from the requirements on line A.3.

**907-804.02.13.1.4--Temperature.** Delete the first paragraph of Subsection 804.02.13.1.4 on pages 859 & 860, and substitute the following:

Cold weather concreting shall follow the requirements of Subsection 907-804.03.16.1. Hot weather concreting shall follow the requirements of Subsection 804.03.16.2 with a maximum temperature of 95°F for Class DS concrete or for concrete mixes containing cementitious materials meeting the requirements of Subsection 907-701.02.2 as a replacement of Portland cement. For other concrete mixes, the maximum concrete temperature shall be 90°F. Concrete with a temperature more than the maximum allowable temperature shall be rejected and not used in Department work.

**907-804.03--Construction Requirements.**

**907-804.03.15--Removal of Falsework, Forms, and Housing.** Delete the first sentence of the second paragraph of Subsection 804.03.15 on page 871, and substitute the following:

Concrete in the last pour of a continuous superstructure shall have attained a compressive strength of 2,400 psi, as determined by cylinder tests or maturity meter probe, prior to striking any falsework.

Delete the first sentence of the third paragraph of Subsection 804.03.15 on page 871, and substitute the following:

At the Contractor's option and with the approval of the Engineer, the time for removal of forms may be determined by cylinder tests, in accordance with the requirements listed in Table 6, in which case the Contractor shall furnish facilities for testing the cylinders.

Delete the fourth and fifth paragraphs of Subsection 804.03.15 on pages 871 & 872, and substitute the following:

The cylinders shall be cured under conditions which are not more favorable than those existing for the portions of the structure which they represent.

Delete the table in Subsection 804.03.15 on page 872, and substitute the following:

**Table 6**  
**Minimum Compressive Strength Requirements for Form Removal**

**Forms:**

Columns .....	1000 psi
Side of Beams .....	1000 psi
Walls not under pressure .....	1000 psi
Floor Slabs, overhead .....	2000 psi
Floor Slabs, between beams .....	2000 psi
Slab Spans .....	2400 psi
Other Parts .....	1000 psi

**Centering:**

Under Beams .....	2400 psi
Under Bent Caps .....	2000 psi

**Limitation for Placing Beams on:**

Pile Bents, pile under beam .....	2000 psi
Frame Bents, two or more columns .....	2200 psi
Frame Bents, single column .....	2400 psi

In lieu of using concrete strength cylinders to determine when falsework, forms, and housings can be removed, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure. The minimum number of maturity meter probes required for each structural component shall be in accordance with Table 7. Falsework, forms, and housings may be removed when maturity meter readings indicate that the required concrete strength is achieved. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO Designation: T 325 and ASTM Designation: C 1074 specifications. Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

**Table 7**  
**Requirements for use of Maturity Meter Probes**

<b>Structure Component</b>	<b>Quantity of Concrete</b>	<b>No. of Probes</b>
Slabs, beams, walls, & miscellaneous items	0 - 30 yd <sup>3</sup>	2
	> 30 to 60 yd <sup>3</sup>	3
	> 60 to 90 yd <sup>3</sup>	4
	> 90 yd <sup>3</sup>	5
Footings, Columns & Caps	0 - 13 yd <sup>3</sup>	2
	> 13 yd <sup>3</sup>	3
Pavement, Pavement Overlays	1200 yd <sup>2</sup>	2
Pavement Repairs	Per repair or 900 yd <sup>2</sup> Whichever is smaller	2

**907-804.03.16--Cold or Hot Weather Concreting.**

**907-804.03.16.1--Cold Weather Concreting.** After the third paragraph of Subsection 804.03.16.1 on page 873, add the following:

In lieu of the protection and curing of concrete in cold weather, at the option of the Contractor with the approval of the Engineer, when concrete is placed during cold weather and there is a probability of ambient temperatures lower than 40°F, an approved maturity meter may be used to determine concrete strengths by inserting probes into concrete placed in a structure. The minimum number of maturity meter probes required for each structural component shall be in accordance with Table 7. An approved insulating blanketing material shall be used to protect the work when ambient temperatures are less than 40°F and shall remain in place until the required concrete strength in Table 6 is achieved. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of AASHTO Designation: T 325 and ASTM Designation: C 1074 specifications. Technicians using the maturity meter or calculating strength/maturity graphs shall be required to have at least two hours of training prior to using the maturity equipment.

Rename the Table in Subsection 804.03.16.1 on page 874 from “Table 6” to “Table 8”.

**907-804.03.19--Finishing Concrete Surfaces.**

**907-804.03.19.7--Finishing Bridge Floors.**

**907-804.03.19.7.4--Acceptance Procedure for Bridge Deck Smoothness.** After the first sentence of the second paragraph of Subsection 804.03.19.7.4 on page 886, add the following:

Auxiliary lanes, tapers, shoulders and other areas that are not checked with the profilograph, shall meet a 1/8 inch in 10-foot straightedge check made transversely and longitudinally across the deck or slab.

**907-804.05--Basis of Payment.** Add the "907" prefix to the pay items listed on page 898.

### **SPECIAL PROVISION NO. 906-3**

#### **Training Special Provisions**

This Training Special Provision supersedes subparagraph 7b of the Special Provision entitled "Specific Equal Employment Opportunity Responsibilities," (Attachment 1), and is in implementation of 23 U.S.C. 140(a).

As part of the Contractor's equal employment opportunity affirmative action program training shall be provided as follows:

The Contractor shall provide on-the-job training aimed at developing full journeymen in the type of trade or job classification involved.

The number of trainees to be trained under this special provision will be as indicated in the bid schedule of the contract.

In the event that a Contractor subcontracts a portion of the contract work, he shall determine how many, if any, of the trainees are to be trained by the subcontractor, provided, however, that the Contractor shall retain the primary responsibility for meeting the training requirements imposed by this special provision. The Contractor shall also insure that this training special provision is made applicable to such subcontract. Where feasible, 25 percent of apprentices or trainees in each occupation shall be in their first year of apprenticeship or training.

The number of trainees shall be distributed among the work classifications on the basis of the Contractor's needs and the availability of journeymen in the various classifications within a reasonable area of recruitment. Prior to commencing construction, the Contractor shall submit to the State highway agency for approval the number of trainees to be trained in each selected classification and training program to be used. Furthermore, the Contractor shall specify the starting time for training in each of the classifications. The Contractor will be credited for each trainee employed by him on the contract work who is currently enrolled or becomes enrolled in an approved program and will be reimbursed for such trainees as provided hereinafter.

Training and upgrading of minorities and women toward journeymen status is a primary objective of this Training Special Provision. Accordingly, the Contractor shall make every effort to enroll minority trainees and women (e.g., by conducting systematic and direct recruitment through public and private sources likely to yield minority and women trainees) to the extent that such persons are available within a reasonable area of recruitment. The Contractor will be responsible for demonstrating the steps that he has taken in pursuance thereof, prior to a determination as to whether the Contractor is in compliance with this Training Special Provision. This training commitment is not intended, and shall not be used, to discriminate against any applicant for training, whether a member of a minority group or not.

No employee shall be employed as a trainee in any classification in which he has successfully completed a training course leading to journeyman status or in which he has been employed as a

journeyman. The Contractor should satisfy this requirement by including appropriate questions in the employee application or by other suitable means. Regardless of the method used the Contractor's records should document the findings in each case.

The minimum length and type of training for each classification will be as established in the training program selected by the Contractor and approved by the State highway agency and the Federal Highway Administration. The State highway agency and the Federal Highway Administration shall approve a program if it is reasonably calculated to meet the equal employment opportunity obligations of the Contractor and to qualify the average trainee for journeyman status in the classification concerned by the end of the training period. Furthermore, apprenticeship programs registered with the U.S. Department of Labor, Bureau of Apprenticeship and Training, or with a State apprenticeship agency recognized by the Bureau and training programs approved but not necessarily sponsored by the U.S. Department of Labor, Manpower Administration, Bureau of Apprenticeship and Training shall also be considered acceptable provided it is being administered in a manner consistent with the equal employment obligations of Federal-aid highway construction contracts. Approval or acceptance of a training program shall be obtained from the State prior to commencing work on the classification covered by the program. It is the intention of these provisions that training is to be provided in the construction crafts rather than clerk-typists or secretarial-type positions. Training is permissible in lower level management positions such as office engineers, estimators, timekeepers, etc., where the training is oriented toward construction applications. Training in the laborer classification may be permitted provided that significant and meaningful training is provided and approved by the division office. Some offsite training is permissible as long as the training is an integral part of an approved training program and does not comprise a significant part of the overall training.

Except as otherwise noted below, the Contractor will be reimbursed 80 cents per hour of training given an employee on this contract in accordance with an approved training program. As approved by the engineer, reimbursement will be made for training persons in excess of the number specified herein. This reimbursement will be made even though the Contractor receives additional training program funds from other sources, provided such other does not specifically prohibit the Contractor from receiving other reimbursement. Reimbursement for offsite training indicated above may only be made to the Contractor where he does one or more of the following and the trainees are concurrently employed on a Federal-aid project; contributes to the cost of the training, provides the instruction to the trainee or pays the trainee's wages during the offsite training period.

No payment shall be made to the Contractor if either the failure to provide the required training, or the failure to hire the trainee as a journeyman, is caused by the Contractor and evidences a lack of good faith on the part of the Contractor in meeting the requirements of this Training Special Provision. It is normally expected that a trainee will begin his training on the project as soon as feasible after start of work utilizing the skill involved and remain on the project as long as training opportunities exist in his work classification or until he has completed his training program. It is not required that all trainees be on board for the entire length of the contract. A

Contractor will have fulfilled his responsibilities under this Training Special Provision if he has provided acceptable training to the number of trainees specified. The number trained shall be determined on the basis of the total number enrolled on the contract for a significant period.

Trainees will be paid at least 60 percent of the appropriate minimum journeyman's rate specified in the contract for the first half of the training period, 75 percent for the third quarter of the training period, and 90 percent for the last quarter of the training period, unless apprentices or trainees in an approved existing program are enrolled as trainees on this project. In that case, the appropriate rates approved by the Departments of Labor or Transportation in connection with the existing program shall apply to all trainees being trained for the same classification who are covered by this Training Special Provision.

The Contractor shall furnish the trainee a copy of the program he will follow in providing the training. The Contractor shall provide each trainee with a certification showing the type and length of training satisfactorily completed.

The Contractor will provide for the maintenance of records and furnish periodic reports documenting his performance under this Training Special Provision.



## **SPECIAL PROVISION NO. 906-6**

### **MISSISSIPPI DEPARTMENT OF TRANSPORTATION ON-THE-JOB TRAINING PROGRAM**

#### **ALTERNATE TRAINING SPECIAL PROVISION**

##### **PURPOSE**

The purpose of the On-The-Job Training (OJT) Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained.

##### **INTRODUCTION**

This voluntary OJT Program has been developed through the partnering efforts of the Road Builders of Mississippi, the Federal Highway Administration (FHWA) and the Mississippi Department of Transportation (MDOT).

The OJT Program has been designed for use by participating contractors and subcontractors in meeting their training needs. The objective of the OJT Program is to develop skilled workers in the skilled craft trade areas of highway construction who are sufficiently trained to be productive employees in the highway construction industry work force.

The success of the OJT Program will require that contractors and subcontractors take part in the program and follow uniform procedures in training and in tracking trainee's progress.

##### **FUNDING**

MDOT will establish an annual OJT Fund from which, contractors and subcontractors may bill the Department directly for hours worked by trainees. The funding source of this money will be state and federal funds for MDOT's OJT Program.

##### **DISBURSEMENT OF FUNDS**

MDOT will pay \$3.00 per hour toward the trainee's salary for each hour of training performed by each trainee in an approved training program. Program reimbursements will be made directly to the prime or sub contractor. Requests for payment will be submitted to the Office of Civil Rights for approval.

Contractors must provide a signed invoice providing the following information to be reimbursed.

- Contractor's Name
- Mailing Address
- Trainee Name
- Social Security Number

- Race
- Sex
- Project Number
- Job Classification
- Total Number of Hours Completed

### **TRAINING PROGRAM APPROVAL**

A. To use the OJT Program on highway construction projects, the contractor will notify the Department Office of Civil Rights using the On-the-Job Trainee Schedule Form. The notification must include the following information:

- Trainee Starting Date
- Project number (s) trainee starting on
- Training program (classification) to be used; and
- Number of Training Hours Required

B. If a contractor chooses to use a training program different from those listed in the OJT Program Manual, or desires to train in a different classification, the training program must be submitted in its entirety for approval by the Department and FHWA. The training proposal must include the following:

1. The primary objective of the program: To provide training for minority, female and economically disadvantaged individuals for development to full journey status in the work classifications in which they are being trained.
2. The minimum number of hours and type of training the trainee will receive as it relates to each specific task required to achieve journey status.
3. No less than minimum wage.
4. Trainee certification of completion.
5. Records and reports submitted to the Office of Civil Rights on a monthly basis.

### **DEPARTMENT RESPONSIBILITY**

1. Department project staff will monitor trainees on the project. They will monitor payrolls for payment of correct wage rates and fringe benefits. The Office of Civil Rights will maintain a master list by contractor name, project number, trainee name and trainee social security number to aid project staff in monitoring trainees who work on multiple projects.
2. The Office of Civil Rights may elect to interview trainees periodically during the training period to assess their performance and training program.

## **CONTRACTOR RESPONSIBILITY**

1. Trainees must be identified on payrolls (i.e. dragline trainee).
2. When any trainee completes a program, or is terminated for a reason or reasons other than successful completion, the contractor must include the date of completion or an explanation for the termination and date of termination on the OJT Termination Report.
3. The contractor will assign each trainee to a particular person--either a supervisor or a journeyman/woman who is proficient in the craft the trainee is being trained in, to ensure that timely instructional experience is received by the trainee. This person, cooperating with the appropriate company personnel, will see that proper records and the total intended training hours are completed during the allocated number of hours set up in the classification criteria.
4. The contractor has the prerogative of terminating the training period of the trainee and advancing the trainee to journey status. Approval requests must be submitted to the Office of Civil Rights with an explanation (*refer to 2 above*).
5. Upon notification from the contractor, the Department will issue a skill verification card and certificate of training to the trainee.
6. Trainees may be transferred to state-aid highway construction projects in order to complete the training program. If transfers are made the Office of Civil Rights must be notified on the Monthly Trainee Form. All of the training hours completed by trainees will count toward overall program completion.
7. Program reimbursements will be made directly to the prime or sub contractor.

## **WAGE RATE**

The wage rate for all trainees is [the current Minimum Federal Wage Rate](#), during their OJT training program. Trainees shall be paid full fringe benefit amounts, where applicable. At the completion of the training program, the trainee shall receive the wages of a skilled journey.

## **RECRUITMENT AND SELECTION PROCEDURES**

### A. Prerequisites for Trainees

To be qualified for enrollment in the OJT Program, trainees must possess basic physical fitness for the work to be performed, dependability, willingness to learn and ability to follow instructions.

### B. Licenses

Truck driver trainees must possess appropriate driver permits or licenses for the operation of Class A, B and C trucks. However, when an instructional permit is used in lieu of a license, the trainee must be accompanied by an operator who:

1. Holds a license corresponding to the vehicle being operated;
2. Has had at least one year of driving experience; and
3. Is occupying the seat next to the driver.

#### C. Recruitment

1. Notices and posters setting forth the contractor's Equal Employment Opportunity Policy and availability of training programs will be placed in areas readily accessible to employees, applicants for employment and potential employees.
2. The contractor must target minority, female or economically disadvantaged trainees.
3. The contractor will conduct systematic and direct recruitment through public and private employee referral sources. Contractors must submit the trainee's name and completed application form to the Office of Civil Rights for review and approval. Approval must be obtained before the trainee can begin work under the training program.
4. Present employees will be screened for upgrading.

#### D. Selection

1. The selection and employment of a person by participating contractor shall qualify the person for the OJT Program.
  2. Selection will be made without regard to race, color, religion, sex, age or national origin and shall be completely nondiscriminatory.
  3. Employment of trainees will be in accordance with the work force requirements of the contractor. Each contractor will hire and train the trainees for uses in their own organization.
  4. Written certification of individuals under the category of economically disadvantaged can be provided to the contractor at the time of the interview. This certification must then be provided to the Office of Civil Rights with the other required information as part of the approval process for trainees.
- **NOTE:** The OJT Program is to provide training for minority, female and economically disadvantaged individuals in order that they may develop marketable skills and gain journey status in the skilled craft classifications in which they are being trained. However, this program does not exclude trainees that are not members of the above groups.

**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 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.

Attached hereto is a certified check, cashier's check or Proposal Guaranty Bond in the amount as required in the Advertisement (or, by law).

**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.

**SECTION 905 -- PROPOSAL (CONTINUED)**

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) enclose 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.

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.

Widening and Overlaying SR 528 from Interstate 59 to US Highway 11, known as Maintenance Project No. MP-6528-31(010) / 303276301, in the County of Jasper, State of Mississippi.

I (We) agree to complete the entire project within the specified contract time.

**\*\*\* SPECIAL NOTICE TO BIDDERS \*\*\***

**BIDS WILL NOT BE CONSIDERED UNLESS BOTH UNIT PRICES AND ITEM TOTALS ARE ENTERED.  
 BIDS WILL NOT BE CONSIDERED UNLESS THE BID CERTIFICATION LOCATED AT THE END OF THE BID SHEETS IS SIGNED**

**\*\*\*BID SCHEDULE\*\*\***

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Item Amount	
						Dollar	Ct	Dollar	Ct
<b>Roadway Items</b>									
0010	202-B076		550	Linear Feet	Removal of Traffic Stripe				
0020	202-B078		950	Square Yard	Removal of Pavement, All Types and Depths				
0030	203-E103	(E)	1,000	Cubic Yard	Borrow Excavation, LVM, Class B7-6				
0040	406-A001		2,225	Square Yard	Cold Milling of Bituminous Pavement, All Depths				
0050	423-A001		7	Mile	Rumble Strips, Ground In				
0060	609-D002	(S)	1,790	Linear Feet	Combination Concrete Curb and Gutter Type 2				
0070	613-D010		7	Each	Adjustment of Manhole Cover and Water Valve				
0080	616-A001	(S)	75	Square Yard	Concrete Median and/or Island Pavement, 4-inch				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0090	616-A003	(S)	78	Square Yard	Concrete Median and/or Island Pavement, 10-inch				
0100	618-A001		1	Lump Sum	Maintenance of Traffic	XXXXXXXX	XXX		
0110	618-B001		1	Square Feet	Additional Construction Signs	10.	00	10.	00
0120	619-A1002		13	Mile	Temporary Traffic Stripe, Continuous White				
0130	619-A2002		14	Mile	Temporary Traffic Stripe, Continuous Yellow				
0140	619-A4006		3	Mile	Temporary Traffic Stripe, Skip Yellow				
0150	619-A5001		200	Linear Feet	Temporary Traffic Stripe, Detail				
0160	619-A6001		2,140	Linear Feet	Temporary Traffic Stripe, Legend				
0170	626-D002		2	Mile	6" Thermoplastic Traffic Stripe, Skip Yellow				
0180	626-E002		7	Mile	6" Thermoplastic Traffic Stripe, Continuous Yellow				
0190	626-G001		2,893	Linear Feet	Thermoplastic Detail Stripe, White				
0200	626-G002		1,398	Linear Feet	Thermoplastic Detail Stripe, Yellow				



Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0210	626-H001		126	Square Feet	Thermoplastic Legend, White				
0220	626-H002		2,126	Linear Feet	Thermoplastic Legend, White				
0230	627-L001		575	Each	Two-Way Yellow Reflective High Performance Raised Markers				
0240	628-J002		272	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Continuous White				
0250	628-L002		136	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Skip Yellow				
0260	628-M002		136	Linear Feet	6" High Performance Cold Plastic Traffic Stripe, Continuous Yellow				
0270	907-403-A012	(BA1)	350	Ton	Hot Mix Asphalt, ST, 19-mm mixture				
0280	907-403-A015	(BA1)	4,545	Ton	Hot Mix Asphalt, ST, 9.5-mm mixture				
0290	907-403-B009	(BA1)	4,691	Ton	Hot Mix Asphalt, ST, 9.5-mm mixture, Leveling				
0300	907-626-C003		7	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White				

\*\*\* BID CERTIFICATION \*\*\*

TOTAL BID.....\$\_\_\_\_\_

\*\*\* SIGNATURE STATEMENT \*\*\*

BIDDER ACKNOWLEDGES THAT HE/SHE HAS CHECKED ALL ITEMS IN THIS PROPOSAL FOR ACCURACY AND CERTIFIED THAT THE FIGURES SHOWN THEREIN CONSTITUTE THEIR OFFICIAL BID.

\_\_\_\_\_  
BIDDER'S SIGNATURE

\_\_\_\_\_  
BIDDER'S COMPANY

\_\_\_\_\_  
BIDDER'S FEDERAL TAX ID NUMBER

**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.

\*\*\*\*\*

**COMBINATION BID PROPOSAL**

I. 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).

<u>Project No.</u>	<u>County</u>	<u>Project No.</u>	<u>County</u>
1. _____	_____	6. _____	_____
2. _____	_____	7. _____	_____
3. _____	_____	8. _____	_____
4. _____	_____	9. _____	_____
5. _____	_____	10. _____	_____

A. If option (a) has been selected, then go to II, and sign Combination Bid Proposal.

B. If option (b) has been selected, then complete the following, go to II, and sign Combination Bid Proposal.

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. _____	_____ _____	_____ _____	_____ _____	_____ _____	

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction
9. _____	_____ _____	_____ _____	_____ _____	_____ _____	
10. _____	_____ _____	_____ _____	_____ _____	_____ _____	

C. If option (c) has been selected, then initial and complete one of the following, go to II. and sign Combination Bid Proposal.

\_\_\_\_\_ 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.

II. 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), the undersigned, agree to complete each contract on or before its specified completion date.

SIGNED \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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 January 13, 1999.

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

NOTE: Insert name and address of subcontractors. (Subcontracts equal to or in excess of fifty thousand dollars (\$50,000.00) ONLY.)

_____	_____
(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 January 13, 1999.

Contractor \_\_\_\_\_

By \_\_\_\_\_

Title \_\_\_\_\_

**CERTIFICATE MUST BE EXECUTED**

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

CERTIFICATION  
(Execute in duplicate)

State of Mississippi

County of \_\_\_\_\_

I, \_\_\_\_\_,  
(Name of person signing certification)

individually, and in my capacity as \_\_\_\_\_ of  
(Title)

\_\_\_\_\_ do hereby certify under  
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that  
\_\_\_\_\_, Bidder  
(Name of Firm, Partnership, or Corporation)

on Project No. **MP-6528-31(010) / 303276301**

in **Jasper** 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.

Initial here " \_\_\_\_\_ " if exceptions are attached and made a part thereof. 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 and attachments (when indicated) is true and correct.

Executed on \_\_\_\_\_  
Signature

(11/23/92S)

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

CERTIFICATION  
(Execute in duplicate)

State of Mississippi

County of \_\_\_\_\_

I, \_\_\_\_\_,  
(Name of person signing certification)

individually, and in my capacity as \_\_\_\_\_ of  
(Title)

\_\_\_\_\_ do hereby certify under  
(Name of Firm, Partnership, or Corporation)

penalty of perjury under the laws of the United States and the State of Mississippi that  
\_\_\_\_\_, Bidder  
(Name of Firm, Partnership, or Corporation)

on Project No. **MP-6528-31(010) / 303276301**

in **Jasper** 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.

Initial here " \_\_\_\_\_ " if exceptions are attached and made a part thereof. 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 and attachments (when indicated) is true and correct.

Executed on \_\_\_\_\_  
Signature

(11/23/92S)



S E C T I O N 9 0 2

CONTRACT FOR MP-6528-31(010) / 303276301

LOCATED IN THE COUNTY(IES) OF Jasper

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 \_\_\_\_\_

MISSISSIPPI TRANSPORTATION COMMISSION

Title \_\_\_\_\_

By \_\_\_\_\_

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

Executive Director

\_\_\_\_\_

\_\_\_\_\_  
Secretary to the Commission

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

**S E C T I O N   9 0 3**

CONTRACT BOND FOR: MP-6528-31(010) / 303276301

LOCATED IN THE COUNTY(IES) OF: Jasper

STATE OF MISSISSIPPI,

COUNTY OF HINDS

Know all men by these presents: that we, \_\_\_\_\_

\_\_\_\_\_ Principal, a \_\_\_\_\_

residing at \_\_\_\_\_ in the State of \_\_\_\_\_

and \_\_\_\_\_

residing at \_\_\_\_\_ in the State of \_\_\_\_\_,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, 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.

Signed and sealed this the \_\_\_\_\_ day of \_\_\_\_\_ A.D. \_\_\_\_\_.

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

**SECTION 903 - CONTINUED**

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.

Witness our signatures and seals this the \_\_\_\_\_ day of \_\_\_\_\_ A.D. \_\_\_\_\_.

_____ (Contractors) Principal	_____ Surety
By _____	By _____ (Signature) Attorney in Fact
	Address _____ _____ _____
Title _____ (Contractor's Seal)	_____ Local Mississippi Representative
	(Signature) Local Mississippi Representative
	Address _____ _____ _____
	_____ (Surety Seal)

PROGRESS SCHEDULE

PROJECT NUMBER MP-6528-31(010) / 303276301  
COUNTY Jasper County

WORK PHASE		REFERENCE NUMBERS	PHASE VALUE																													NO.	AVTU	
NO.	DESCRIPTION			20	40	60	80	100	120	140	160	180	200	220	240	260	280	300	320															
1	Miscellaneous	10-20 & 50-160	0																													36		
2	Mill Pave & Granular Material	30, 40 & 270-290	5																													32		
3	Permanent Striping	170-260 & 300																														32	36	
	LET:	January 22, 2008																																
	NOA:	February 12, 2008																																
	NTP/BCT:																																	
	T.U.:	36																																
	GCG																																	

This Progress Schedule does not indicate breaks in the contract time during December, January, and February.  
Per Section 108 of the Specifications, during the months of December, January, and February, time will only be assessed in the Miscellaneous Phase.

**MISSISSIPPI DEPARTMENT OF TRANSPORTATION**

**HAUL PERMIT FOR BRIDGES**

**WITH**

**POSTED WEIGHT LIMITS**

**DATE:** \_\_\_\_\_

**PROJECT: MP-6528-31(010) / 303276301**

**COUNTIES: Jasper**

**LOCATION: SR 528 from Interstate 59 to US Highway 11.**

A permit is issued to \_\_\_\_\_ for transporting loads exceeding the posted limit for any such bridge located on State designated routes within the project termini provided that such transport vehicles comply with all other governing statutory weight limits.

This permit is valid on all State designated routes from the point of origin to the point of delivery for materials and equipment utilized in construction of said project and also valid for sub-contractors and vendors upon written permission of the Contractor. The permit is non-transferable and no other haul permit for posted bridges will be issued to other individuals, vendors, or companies for construction of this project.

A copy of this signed permit shall be carried in all vehicles operating under the authority of this permit and also a copy of the Contractor's written permission when the vehicle is other than Contractor owned.

In accordance with State law, the above named Contractor will be liable for damages directly attributable to vehicles operating under this permit.

\_\_\_\_\_  
EXECUTIVE DIRECTOR