6 -



SM No. CMP5043610101

# PROPOSAL AND CONTRACT DOCUMENTS

## FOR THE CONSTRUCTION OF (EXEMPT)

6

Keyed

Mill and Inlay US 43, from South of I-20 to North of US 80, known as State Project No. MP-5043-61(010) / 303909301, in the County of Rankin, State of Mississippi.

Project Completion: October 15, 2010

### **NOTICE**

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

Electronic addendum updates will be posted on 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 the Electronic Bid System, proposal sheets have been stapled and inserted into the proposal package.
 First sheet of SECTION 905PROPOSAL has been completed.
 Second sheet of SECTION 905PROPOSAL 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, <u>signed</u> , 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 <u>signed</u> .
 The last sheet of the bid sheets of SECTION 905PROPOSAL has been <u>signed</u> .
 Combination Bid Proposal of SECTION 905PROPOSAL 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 <u>signed</u> .
 The Certification regarding Non-Collusion, Debarment and Suspension, etc. has been <u>executed in duplicate</u> .
 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. A bid bond has been <u>signed by the bidder</u> and has also been <u>signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent for the Surety</u> with Power of Attorney attached.
 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. <u>DO NOT</u> 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.

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SECTION 905 - PROPOSAL,
PROPOSAL BID SHEETS,
COMBINATION BID PROPOSAL,
STATE BOARD OF CONTRACTORS REQUIREMENTS,
NON-COLLUSION CERTIFICATE,
SECTION 902 - CONTRACT FORM, AND SECTION 903 - CONTRACT BOND FORMS,

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

### **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 10:00 o'clock A.M., Tuesday, May 25, 2010; and shortly thereafter publicly opened on the Sixth Floor for:

Mill and Inlay US 43, from South of I-20 to North of US 80, known as State Project No. MP-5043-61(010) / 303909301, in the County of Rankin, 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 proposal 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 <a href="www.gomdot.com">www.gomdot.com</a>.

Bid bond, signed or countersigned by a Mississippi Agent or Qualified Nonresident 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) 3

CODE: (IS)

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

**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.

CODE: (SP)

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

**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 a glass, paper products, tires, wood products, metal, synthetic materials and other miscellaneous debris.

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

SECTION 904 - NOTICE TO BIDDERS NO. 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.

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.

CODE: (IS)

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

**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.

CODE: (IS)

### SECTION 904 - NOTICE TO BIDDERS NO. 1405

DATE: 03/15/2007

### SUBJECT: ERRATA AND MODIFICATIONS TO THE 2004 STANDARD SPECIFICATIONS

<u>Page</u>	Subsection	<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 " $\leq$ ".

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".		

CODE: (IS)

**SECTION 904 - NOTICE TO BIDDERS NO. 1808** 

**DATE:** 09/09/2008

**SUBJECT:** Safety Apparel

Bidders are advised that the Code of Federal Regulations CFR 23 Part 634 final rule was adopted November 24, 2006 with an effective date of November 24, 2008. This rule requires that "All workers within the right-of-way of a Federal-Aid Highway who are exposed either to traffic (vehicles using the highway for the purposes of travel) or to construction equipment within the work area shall wear high-visibility safety apparel". High-visibility safety apparel is defined in the CFR as "personnel protective safety clothing that is intended to provide conspicuity during both daytime and nighttime usage, and that meets the Performance Class 2 or 3 requirements of the ANSI/ISEA 107-2004 publication entitled American National Standard for High-Visibility Safety Apparel and Headwear". All workers on Mississippi State Highway right-of-way shall comply with this Federal Regulation. Workers are defined by the CFR as "people on foot whose duties place them within the right-of way of a Federal-Aid Highway, such as highway construction and maintenance forces, survey crews, utility crews, responders to incidents within the highway right-of-way, and law enforcement personnel when directing traffic, investigating crashes, and handling lane closures, obstructed roadways, and disasters within the right-of-way of a Federal-Aid Highway".

You can access this final rule at the following link: http://a257.g.akamaitech.net/7/257/2422/01jan20061800/edocket.access.gpo.gov/2006/pdf/E6-19910.pdf

**SECTION 904 - NOTICE TO BIDDERS NO. 1928** 

CODE: (IS)

**DATE:** 04/14/2008

**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/sw/brdgcalc/calc\_page.htm

SECTION 904 - NOTICE TO BIDDERS NO. 2818

CODE: (SP)

**DATE:** 10/01/2009

**SUBJECT:** Non-Quality Control / Quality Assurance Concrete

Bidders are advised that the following pay items will not be accepted based on the Quality Control / Quality Assurance (QC/QA) requirements of Section 804 of the specifications. The acceptance of these pay items will be based on sampling and testing at the project site by MDOT forces. The Contractor is required to submit mix designs to accomplish this work in accordance with Section 804 and perform normal Quality Control functions at the concrete plant. Acceptance will be in accordance with the requirements of 907-601, Structural Concrete, and TMD-20-04-00-000. At the discretion of the Engineer, the Contractor may request that the concrete be accepted based on QC/QA requirements.

Pay Item	<u>Description</u>
221	Paved Ditches
601	Minor Structures - manholes, inlets, catch basins, junction boxes, pipe
	headwalls, and pipe collars.
606	Guardrail Anchors
607	Fence Post Footings
608	Sidewalks
609	Curb and Gutter
614	Driveways
616	Median and Island Pavement
630	Sign Footings, except Overhead Sign Supports

**SECTION 904 - NOTICE TO BIDDERS NO. 2858** 

CODE: (SP)

**DATE:** 11/12/2009

**SUBJECT: Petroleum Products Base Prices** 

Bidders are advised that the Notice To Bidders entitled "Monthly Petroleum Products Base Prices" previously included in the proposal documents will no longer be a printed part of the proposal beginning with the January 2010 letting. Monthly petroleum products base prices will be available at the web site listed below. Current monthly prices will be posted to this web site on or before the 15<sup>th</sup> of each month. Bidders are advised to use the petroleum base prices on this web site when preparing their bids. The current monthly petroleum products base prices will become part of the contract during the execution of the contract.

Monthly Petroleum Products Base Prices can be viewed at:

http://www.gomdot.com/Applications/BidSystem/Home.aspx

### SECTION 904 – NOTICE TO BIDDERS NO. 2862

CODE: (SP)

**DATE:** 11/24/2009

**SUBJECT:** Standard Drawings

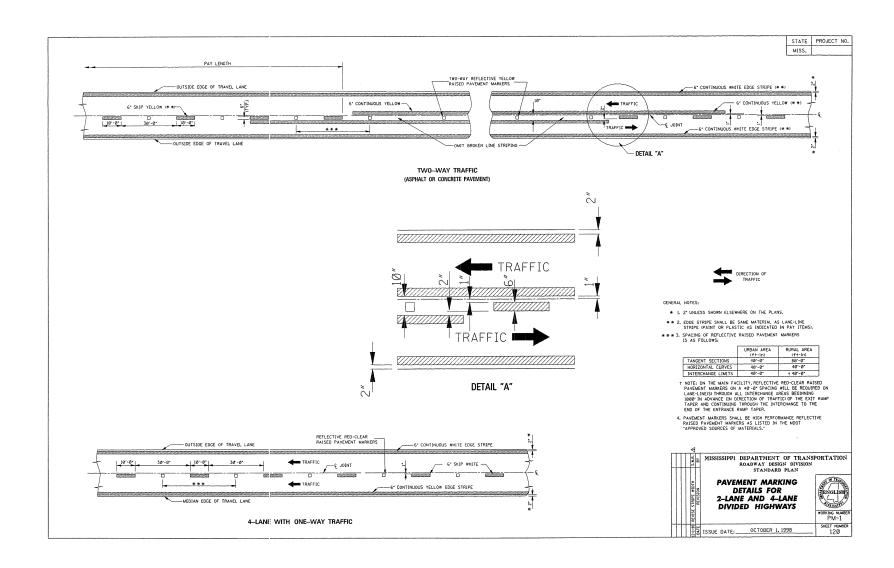
Standard Drawings attached hereto shall govern appropriate items of required work.

Larger copies of Standard Drawings may be purchased from:

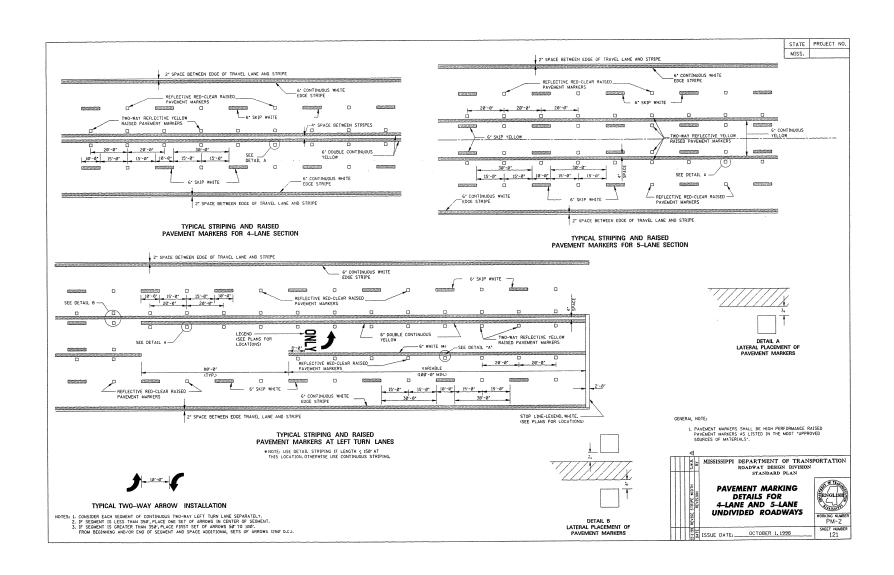
MDOT Plans Print Shop MDOT Shop Complex, Building C, Room 114 2567 North West Street P.O. Box 1850 Jackson, MS 39215-1850 Telephone: (601) 359-7460

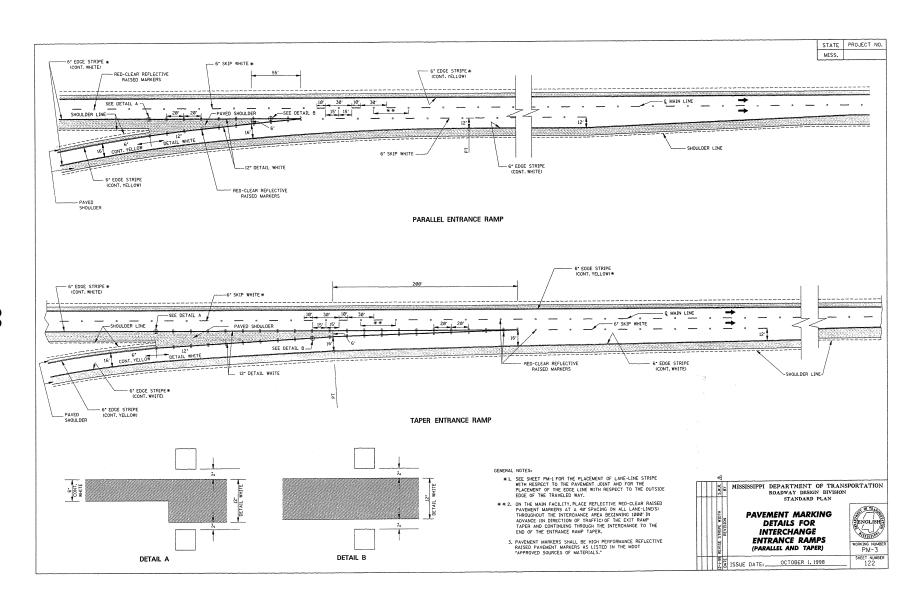
or FAX: (601) 359-7461

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

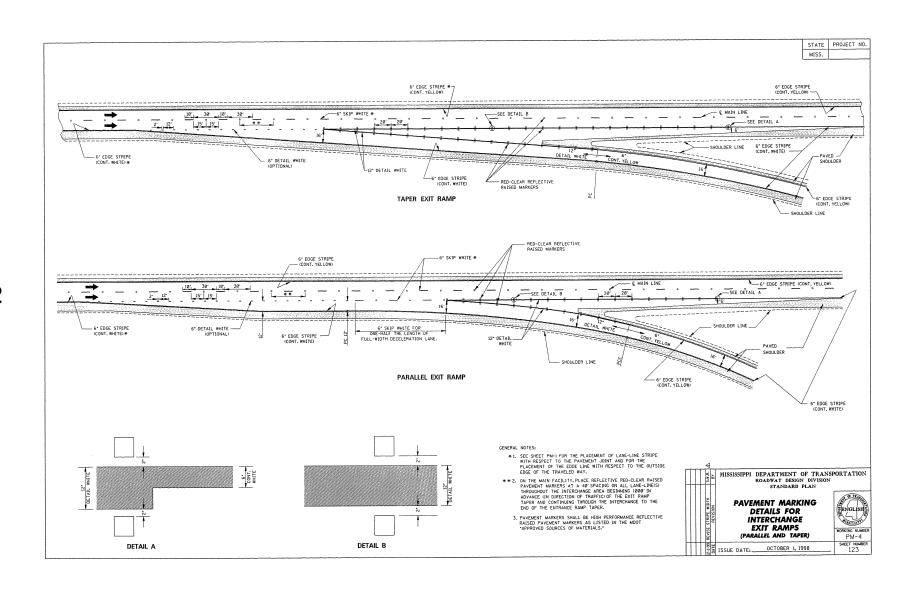


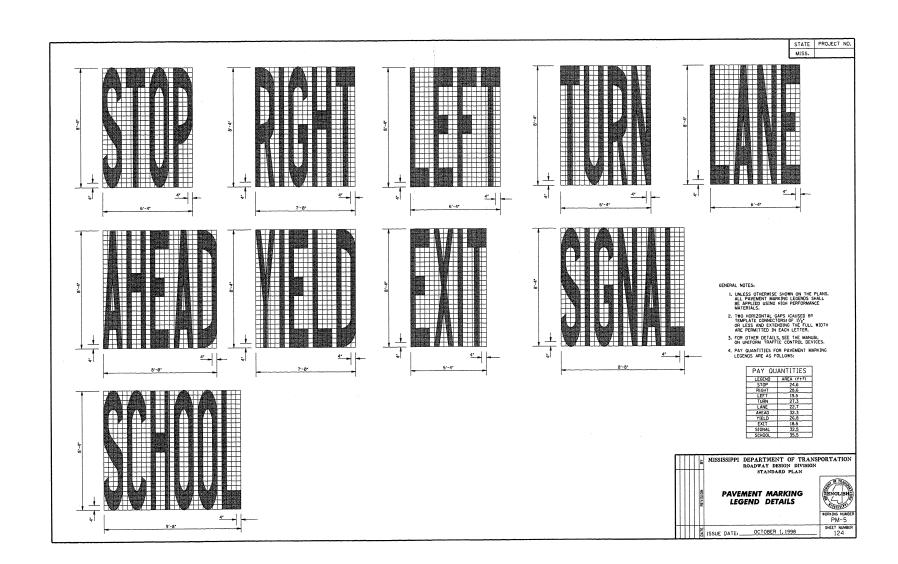
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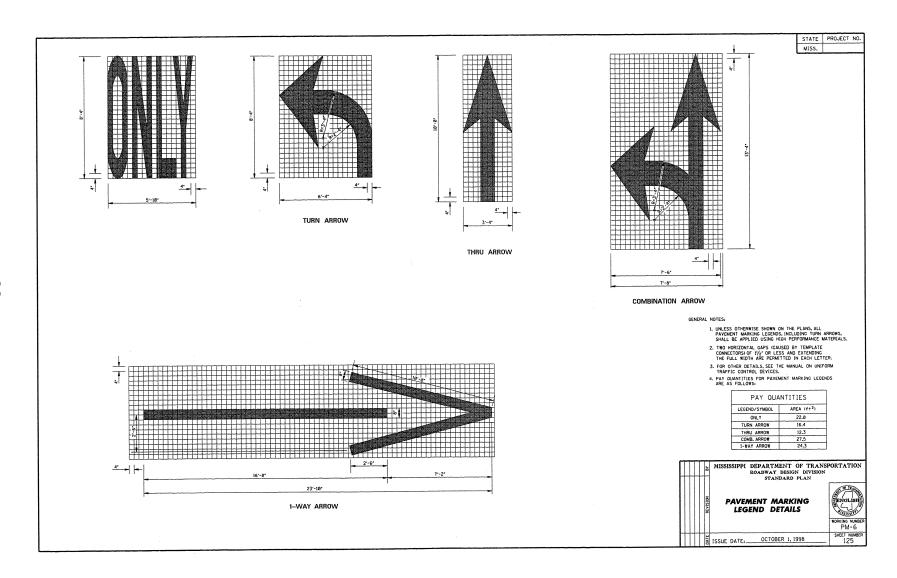




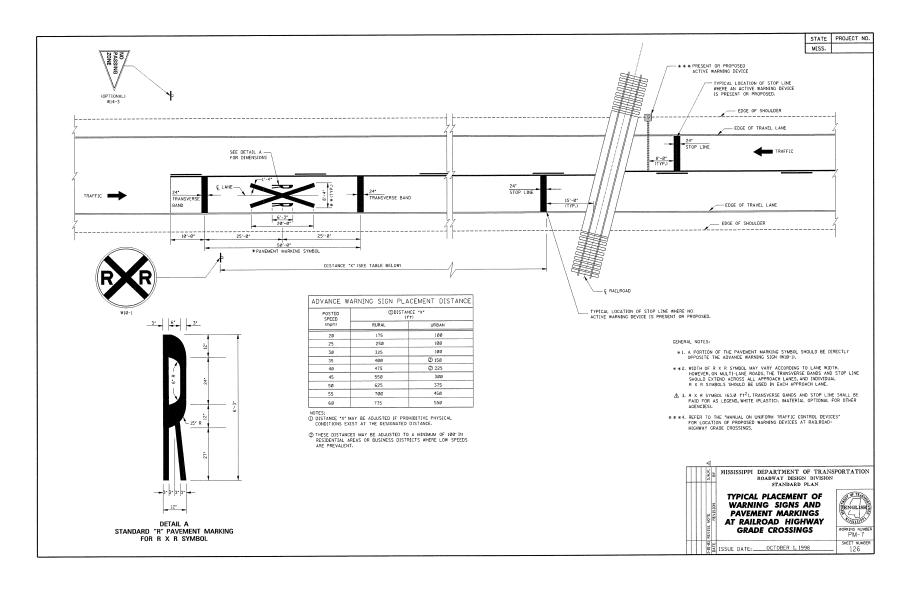
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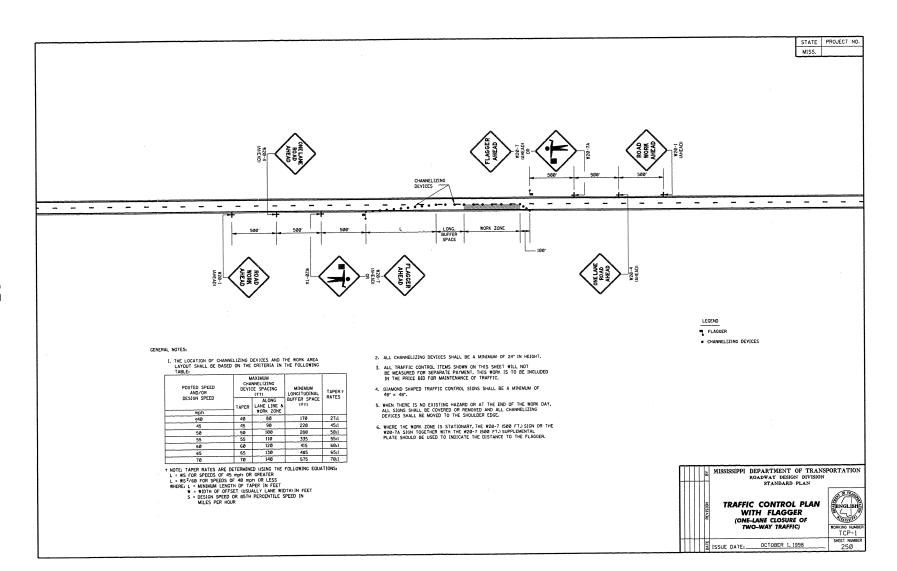


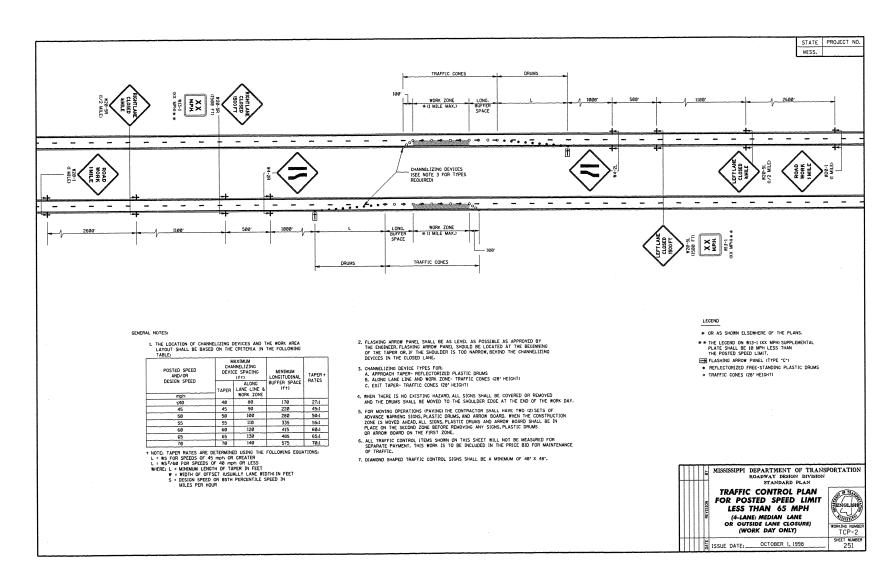


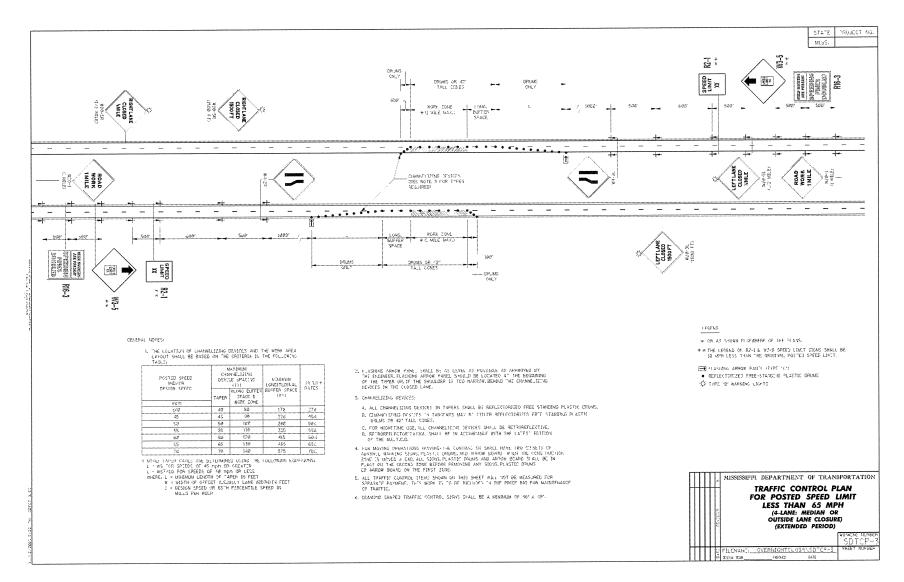


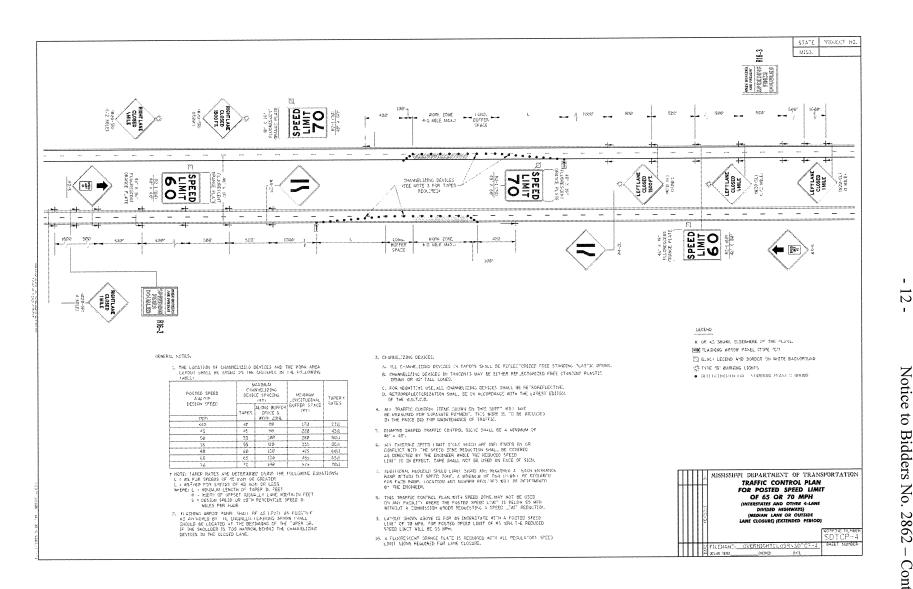
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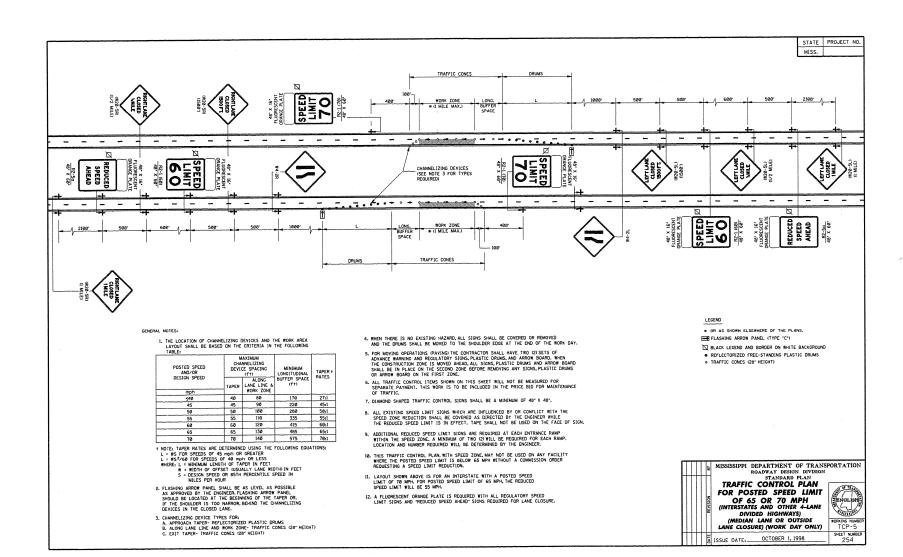






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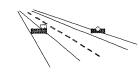


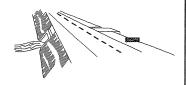
TYPE I











STATE PROJECT NO. MISS.

### STANDARD BARRICADES

- A TYPE I BARRICADE CONSISTS OF ONE (I) 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 ANTERIALS.
- A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT "A" FRAME, TYPE II BARRICADES
  ARE INTENDED FOR USE ON EXPRESSMAYS 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 ROADMAY, 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, NINGED 'A' FRAME.
- 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.
- THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
- 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.

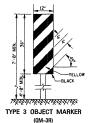
## 18" CHEVRON SIGN

- 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.
- CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OF MORE LANCS ARE CLOSED FOR CONSTRUCTION OF MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2"-0" BEHIND THE LANE TRANSITION STRIPE.

### BARRICADE CHARACTERISTICS

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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 Inf OF REFLECTIVE AREA FACING TRAFFIC.



- TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
- 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.

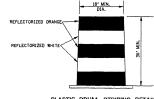
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### VERTICAL PANEL

- 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 LICHTMASS POST.
- 3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 In OF RETROREFLECTIVE AREA FACING TRAFFIC.
- 4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

### GENERAL NOTES:

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



WING BARRICADES 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 WARRING SIGNS OR FLASHERS.

2. WING BARRICADES SHOULD BE USED:
A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.

### PLASTIC DRUM STRIPING DETAIL

- PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTEN WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE GRANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 GRANGE & 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.



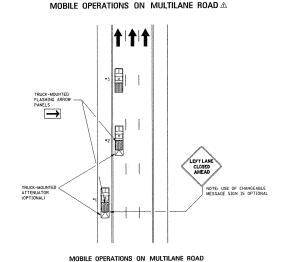
**PROJECTS** 



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ISSUE DATE: OCTOBER 1, 1998

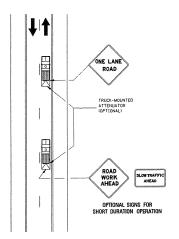
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- VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
- PROTECTION VEHICLE "I SHOULD BE EQUIPPED WITH AN ARROW PANEL.
   AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON PROTECTION
   VEHICLE "I SO AS NOT TO OBSCURE THE ARROW PANEL.
- PROTECTION VEHICLE \*2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).

- 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:

  BEFORETICAL MID WHEN NEEDED THE WORK AND PROTECTION VEHICLES

  AND PULL OVER PETRODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN

  NOT BE DONE PROJECTIVE, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE

  PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LAME.
- 2. THE DISTANCE BETWEEN THE WORK AND PROTECTION VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT ORNING TIME, AND OTHER PACTORS, POTECTION VEHICLES ARE USED TO WARH IRAFFIC OF THE OPERATION AHEAD, WHENEVER ADGULATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE PROTECTION VEHICLE SHOULD MAINTAIN THE MINIMAN OTSTANCE AND PROCEDE AT THE SAME SPEED AS THE WORK VEHICLE, HE PROTECTION THAT PROTECTION OF THE P
- 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.
- 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 COUPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, PAJACENT TO THE STOK, 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 LEGEMOS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
- 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION STANDARD PLAN PENGLISH S TRAFFIC CONTROL PLAN MOBILE OPERATIONS

AND TWO-LANE ROADS

ISSUE DATE: OCTOBER 1, 1998

MULTILANE ROADS ORKING NUMBE TCP-11

STATE PROJECT NO. MISS.

NOTES:

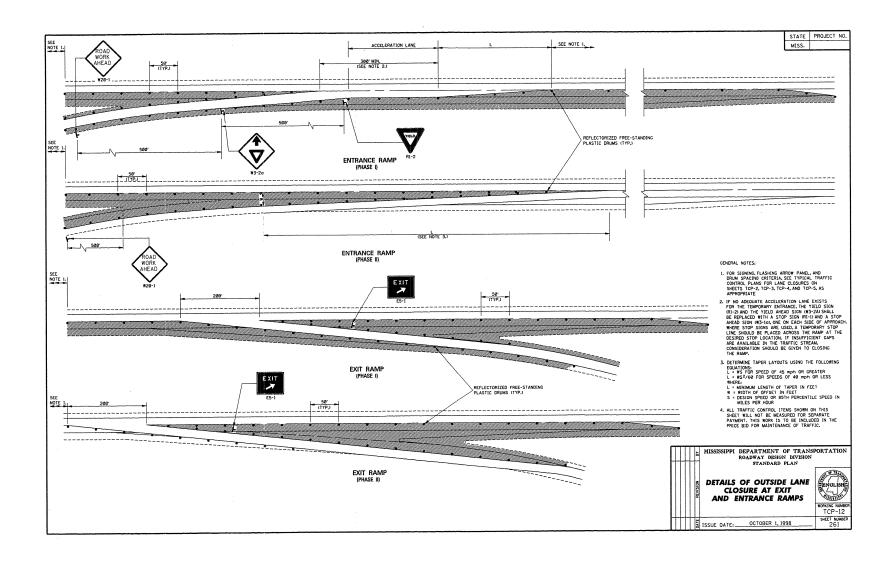
PROTECTION VEHICLE \*I SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.

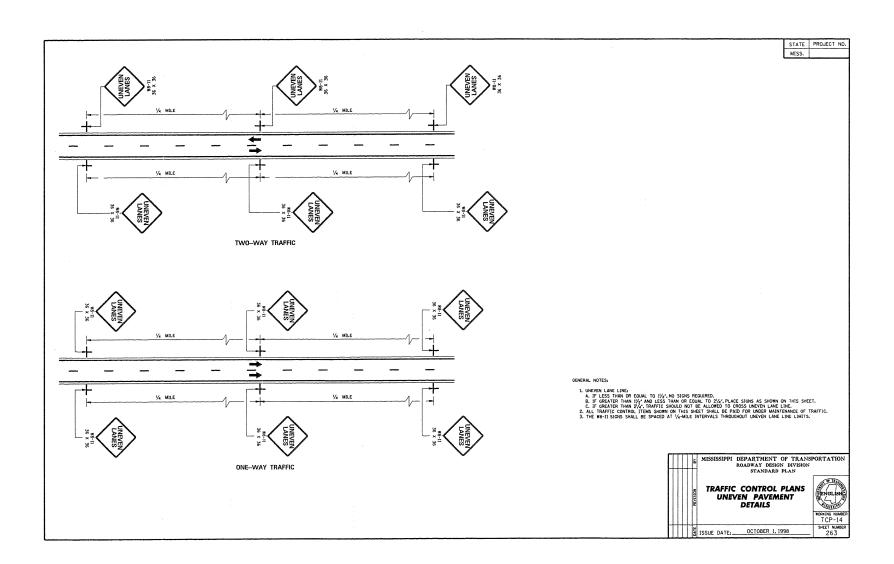
WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, PROTECTION VEHICLE \*I SHOULD BE ELIMINATED.

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).

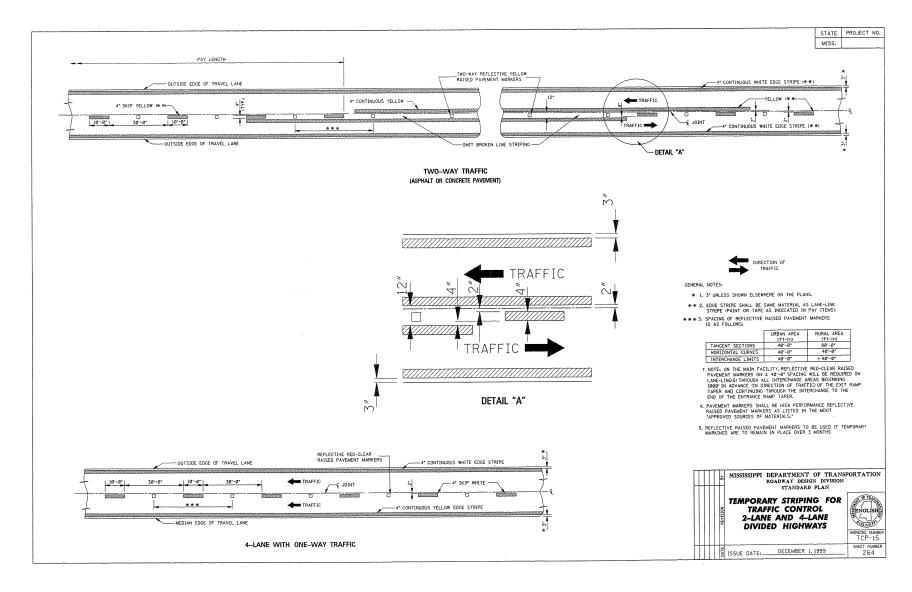
ARROW PANELS SHALL BE AS A MINIMUM TYPE B, 60° X 30° IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCO.

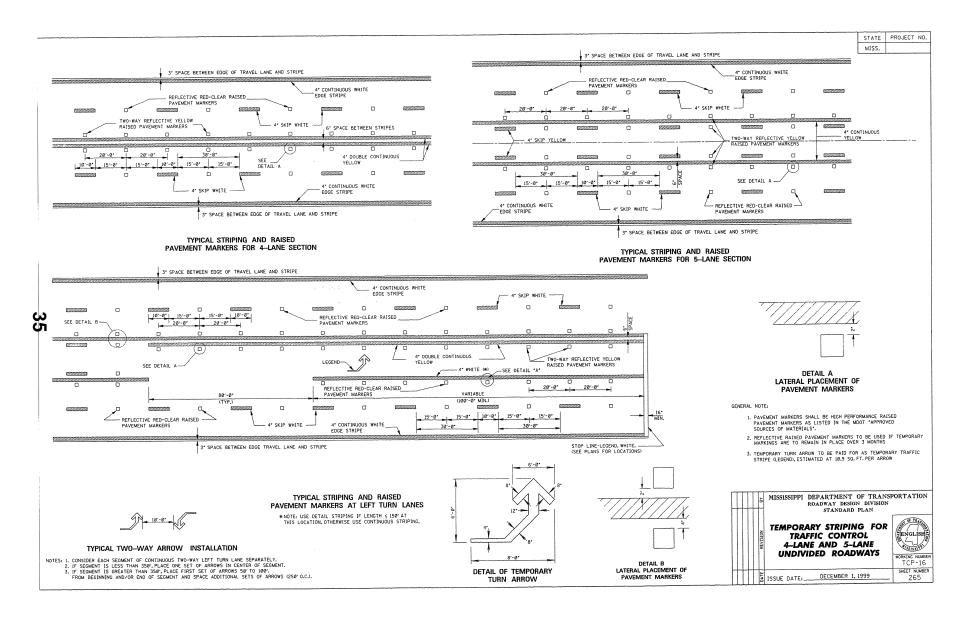
8. WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.





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SECTION 904 - NOTICE TO BIDDERS NO. 2937

CODE: (SP)

**DATE:** 01/11/2010

**SUBJECT:** Reduced Speed Limit Signs

Bidders are advised that all black and white speed limits signs that are used to reduce the speed limit through construction zones shall be covered or removed during times when the Contractor is not performing work. If the Contractor has a routine daytime operation and is not working at night, the signs shall be covered or removed during the nighttime when there is no work activity.

# **SECTION 904 - NOTICE TO BIDDERS NO. 3038**

CODE: (SP)

**DATE:** 03/22/2010

**SUBJECT:** Warm Mix Asphalt

Bidders are advised that the following products and processes are approved for the production of Warm Mix Asphalt.

Advera® WMA

Aqua Foam

Aspha-min<sup>®</sup>

Astec Double Barrel® Green

Evotherm<sup>TM</sup>

Gencor Industries Ultrafoam GX Systems

Rediset<sup>TM</sup> WMX

 $Sasobit^{\mathbb{R}}$ 

Terex Warm Mix System

WAM Foam

SECTION 904 - NOTICE TO BIDDERS NO. 3039 CODE: (SP)

**DATE:** 03/23/2010

**SUBJECT:** Alternate Asphalt Mixture Bid Items

Bidders are advised that the asphalt mixture used on this project will be bid as an alternate pay item: Hot Mix Asphalt (HMA) or Warm Mix Asphalt (WMA). Bidders must select one of the alternates at the time of bid. The Contractor must use the selected asphalt mixture, HMA or WMA, throughout the entire project.

SECTION 904 - NOTICE TO BIDDERS NO. 3057

CODE: (SP)

**DATE:** 04/07/2010

**SUBJECT:** Contract Time

**PROJECT:** MP-5043-61(010) / 303909301 – Rankin County

The calendar date for completion of work to be performed by the Contractor for this project shall be <u>October 15, 2010</u> which date or extended date as provided in Subsection 108.06 shall be the end of contract time. It is anticipated that the Notice of Award be issued no later than <u>June 8, 2010</u>. This completion date is based on a Notice to Proceed / Beginning of Contract Time of <u>July 8, 2010</u>.

The effective date of the Notice to Proceed / Beginning of Contract Time shall be when the contractor requests, in writing, to begin work between the dates of <u>July 8, 2010</u> and <u>August 8, 2010</u>. Contract time will begin on August 8, 2010 whether the contractor has requested to begin work or not. If the contractor elects to begin work after July 8, 2010, then the completion date as stated above shall be extended by the same number of calendar days from July 8, 2010 to the actual Notice to Proceed / Beginning of Contract Time date.

A progress schedule as referenced to in Subsection 108.03 will not be required for this contract.

CODE: (SP)

SECTION 904 – NOTICE TO BIDDERS NO. 3058

**DATE:** 04/07/2010

**SUBJECT:** Scope of Work

**PROJECT:** MP-5043-61(010) / 303909301 - Rankin 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:

Mill and inlay approximately 1.25 miles on SR 43 from the BOP at Station 0+00, south of the I-20 Overpass, to the pavement change and EOP just north of US 80 at Station 67+87.

The existing lanes shall be milled two (2) inches and variable on the existing slope to remove rutted and cracked asphalt from the BOP to the EOP. Milling shall be paid under item 406-A001, Cold Milling of Bituminous Pavement (All Depths).

Approved mix designs must be on hand prior to milling. Asphalt placement must begin within 24 hours of beginning milling operations. The Contractor shall coordinate activities to insure that traffic will not be allowed to run on milled surfaces for more than 24 hours. Weep holes shall be cut in order to prevent the ponding of water on surfaces that are open to traffic prior to paving operation and will be considered an absorbed item. Also, milling operations will not commence until such time that, in the opinion of the Engineer, weather conditions have been consistently suitable enough to allow the placement of the asphalt after the milling operations. Any damage to the roadway that occurs as a result of the Contractor's failure to overlay milled areas within the specified time shall be repaired at the Contractor's expense.

The Reclaimed Asphalt Pavement (RAP) material removed by the milling operation shall become the property of the contractor with the exception of 10,000 tons or 50% of the total anticipated quantity, whichever is less, to be delivered to the MDOT Maintenance Office located at 3769 Hwy. 468, Pearl, MS. Unless the Contractor desires otherwise, the Contractor's RAP shall be obtained first. Sufficient advance notice shall be given to ensure that MDOT personnel and equipment are available to handle the delivery. All costs associated with the hauling, placing, and stockpiling the RAP shall be included in the price bid for cold milling.

Milling will also be required at the I-20 & US 80 on/off ramps, county roads, city streets, paved shoulders and driveway pads as directed by Engineer. At the intersection of US 80 and SR 43, the mill/inlay work shall skip US 80. No milling/overlay work will be required on US 80.

After milling and prior to overlay, 12.5-mm Mix, MT, Leveling shall be placed in locations with significant grade distortions as directed by the Engineer.

Potholes that may exist or occur in the existing pavement are to be patched in a timely manner and prior to beginning the asphalt inlay. Patching of potholes shall be considered an absorbed item.

The overlay shall consist of two (2) inches and variable, 12.5-mm Mix, MT. The width of the overlay is 24 linear feet and variable. Where required, the overlay shall correct the cross slope to 2 % by placing two (2) inches at center line and (1½) inches at the edge of pavement. Payment shall be made under item 907-403, MT, 12.5-mm Mixture. Publicly maintained roads or streets shall be paved to the existing Right-of-Way; privately owned entrances shall be paved as per the typical drawings.

Ramp aprons shall be paved to the shoulder line or to a 5-foot minimum. Unpaved turnouts, county roads, ramps, and widened areas are to be bladed, shaped and compacted prior to paving as directed by the Engineer. Following placement of asphalt, material bladed aside for widened areas shall be pulled back to the asphalt pavement edge as directed. All costs are to be included in the price of items bid.

Failed areas of the existing asphalt roadway are to be removed full depth (7½) inches and backfilled with 19-mm Mix, MT, to the elevation of the milled surface as directed by the Engineer. Payment for removal and disposal of failed areas will be made under 202-B005, Removal of Asphalt Pavement, All Depths, for asphalt removal full depth and 203-G, Excess Excavation, FM, AH, for removal of sub-base material as directed.

Shoulder are to be paved two (2) feet wide on each outside lane as shown on the typical sections and as directed. Asphalt for shoulder paving is to be placed full depth 4½ inches during placement of mainline overlay if shoulder width allows, and shall be 12.5-mm Mix, MT. Prior to placement of the asphalt, the shoulders are to be bladed 2½ inches below the milled surface. Concrete or asphalt driveways that join the edge of pavement shall not receive widening. The cost for blading is to be included in the price of items bid. Any excess material excavated from the existing shoulder shall be used to raise the existing shoulder to match the new pavement elevation and shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Engineer and shall be considered an absorbed item.

A significant pavement distortion on SR 43 exists under the Eastbound I-20 overpass from approximately station 5+24 to station 7+74. This distortion shall be corrected by removing the existing pavement and undercutting three feet (3') below the sub-grade elevation from finished shoulder to finished shoulder to remove the high volume change soil. The new pavement structure shall consist of three feet (3') of Class B-15 Borrow Material, Type V Geo-textile fabric on untreated sub-grade and six (6) inches of Size 825-B Stone. The asphalt pavement shall consist of 2", 12.5-mm Mix, MT over 5½", 19-mm Mix, MT (2 at 2.75"). The Contractor is advised that once repair of this area begins, work shall continue 24/7 until the second lift of 19-mm Mix has been placed. The Contractor shall be responsible for furnishing a sequence of

operations and traffic control plan to the Engineer for approval prior to beginning this work. Traffic will be allowed to travel on the stone surface with advisory speed signs and Type B warning lights per the included signing detail. Guardrail under the overpass shall be removed and replaced. The final grade profile will be furnished to the Contractor who will be responsible for all calculations, staking and other work necessary for proper prosecution of all items of work in this undercut section. Payment will be made under Pay Item 699-A001, Roadway Construction Stakes.

The existing Guard Rail and Terminal End sections shall be removed and replaced as directed. The new guard rail shall attach to the existing bridge railing. Payment for the removal and replacement of Guard Rail and Terminal End sections shall be made under pay items 202-B087, 606-B001, 606-E001, and 606-E002.

Existing asphalt for the guardrail pads is to be milled after the guardrails have been removed. The Contractor shall coordinate his activities so that the guardrails are removed, pads milled, overlaid, and guard rails replaced in the same day. Guardrail pads shall be replaced with 12.5-mm Mix, MT, and shall extend two (2) feet behind the guardrail post at all existing guardrail locations maintaining guardrail height requirements. If no guardrail pad exists, then three (3) inches and variable depth of existing shoulder material shall be removed prior to placement of the guardrails and asphalt. Any excess material excavated from the existing shoulder shall be used to raise the existing shoulder to match the new pavement elevation and shall be spread along the edge of the shoulders, fore slopes, or other adjacent areas as directed by the Engineer and shall be considered an absorbed item.

Delineators will be required on all guardrails within the project. Existing guardrail delineators shall be removed and replaced. The cost of removal shall be included in the price of items bid. All delineators shall be installed as directed. Payment for delineators shall be made under item 619-F3004.

Object markers shall be removed and replaced at bridge ends as directed. Payment shall be made under pay items 202-B150 and 630-G006.

Prior to inlay, the broken concrete curb and gutter around the nose points at the I-20 Eastbound on ramp island, Station 3+00 shall be removed and replaced as directed by the Engineer. The cost for repairing the concrete curb and gutter shall be paid under pay item 202-B093 and 609-D003.

The existing shoulders shall be raised to match the new pavement elevation by placing (2) inches and variable depth of Class 5, Group C, granular material on the remainder of the existing shoulders. Placement of the granular material on the finished asphalt course shall not be permitted and the material shall be bladed, rolled and compacted to a finish slope of four percent (4%). Shoulders with adequate shoulder material in place shall be bladed to a slope of four percent (4%), the cost of which shall be included in the prices of items bid. Payment for the granular material shall be made under item 304-A, Granular Material, Cl. 5 Group C, (LVM).

Temporary stripe, either paint or tape will be required immediately after overlaying and prior to opening area to traffic. Separate payment will be made for temporary traffic stripe, Pay Item No. 619-A1 through 619-A6. **Temporary stripe is to be placed in the same location and layout as permanent stripe.** 

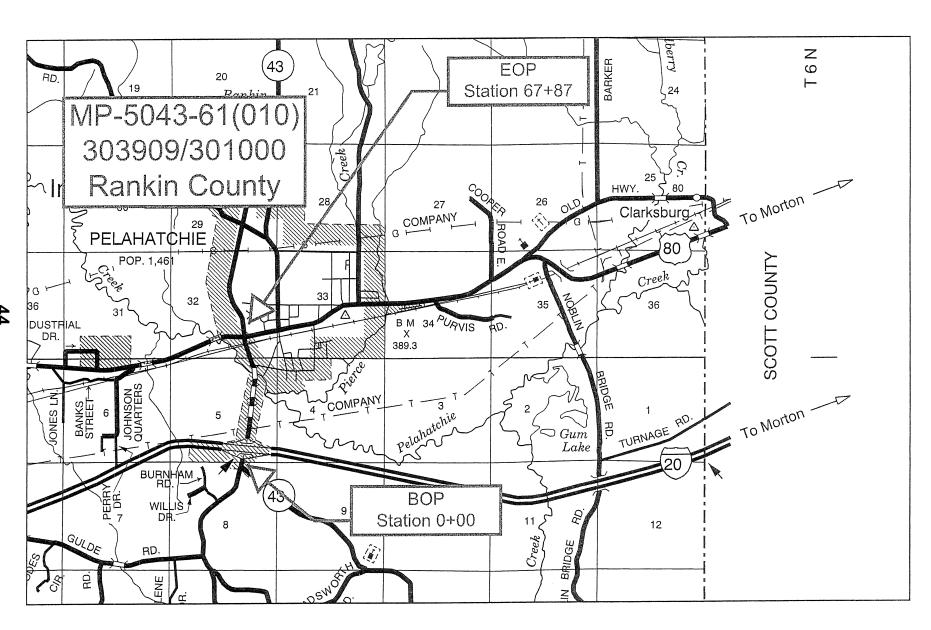
All permanent striping will be Double Drop Thermoplastic. Edge lines will be placed so as to maintain the original lane width. Left turn legend arrows with the word "Only" shall be used for the turn lanes at East Rankin Academy. In addition to these markings, raised pavement markers will be placed at 80 feet intervals in tangents, 40 feet intervals in curves as directed. Two-way Clear Raised Pavement Markers shall be placed on city and county roads as per typical drawing. Payment for permanent stripe and raised pavement markers shall be made under the appropriate pay items.

Cold Plastic Stripe on all bridges within the project shall be removed. Payment for removal of the Cold Plastic Stripe shall be made under pay items 202-B076. Permanent striping for all bridges on the project shall be Double Drop Thermoplastic (90 Mil. Min). An epoxy from the MDOT approved list shall be used prior to placement of the bridge thermoplastic. The cost for the epoxy shall be included in the price of the items bid. Payment for the bridge striping shall be made under items 907-626-C005, 907-626-D004, and 907-626-F007.

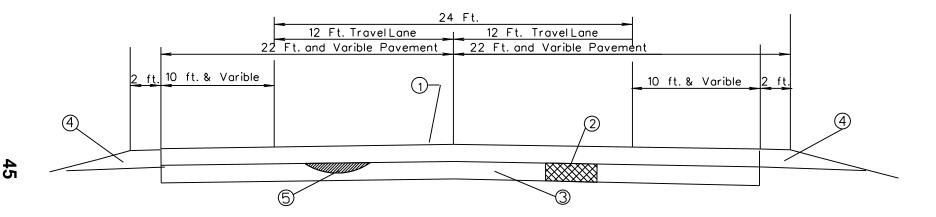
The Contractor shall erect and maintain construction signing and barricades as directed by the Engineer, as per attached drawings, and in accordance with the MUTCD (2003). Payment for construction signing shall be under items 619-D1001, 619-D2001, and 619-G4005. The Contractor shall erect and maintain construction signing and provide all signs and traffic handling devices necessary to safely maintain traffic around and through the work areas in accordance with the <u>Traffic Control Plan</u> and the MUTCD (2003). The cost is to be included in the price bid for Pay Item No. 618-A, Maintenance of Traffic.

Litter shall be removed from the project right-of-way and properly disposed of by the Contractor at the end of the project. Litter shall include, but not be limited to, solid waste such as glass, paper products, tires, wood products, metal, synthetic materials, and other miscellaneous debris. In addition to litter removal, the Contractor shall, on a daily basis, remove all debris from within the roadway and a 30-foot clear zone which, in the opinion of the Engineer, is a hazard to the traveling public. No direct payment will be made for the litter and/or debris removal: the cost is to be included in the prices of items bid. Failure of the Contractor to remove litter and/or debris as prescribed herein shall be cause for withholding the monthly progress estimate payment until the litter and/or debris is satisfactorily removed by the Contractor.

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

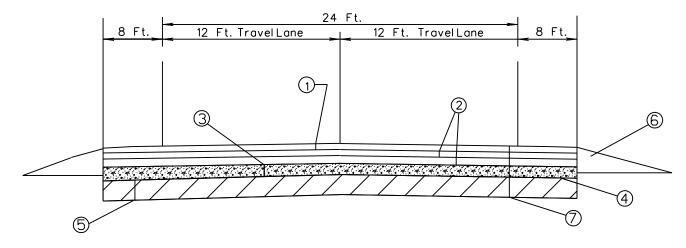


# RANKIN COUNTY MP-5043-61(010)/303909-301000 B.O.P. to Sta. 5+24 and Sta. 7+74 to 14+94 Typical Section



- ① Mill 2" on existing slope and inlay with 2" HMA 12.5 mix, MT (If crossslope is not 2%, correct to 2% by placing 2" at centerline & 1 1/2" at edge of pavement).
- ② Failed Areas to be removed and backfilled with HMA, 19mm Mix, MT as directed.
- 3 Existing pavement structure
- (4) Cl. 5, Grp. C required whenever edge drop offs exceed 2".
- (5) Prior to overlay, Pre-level with 12.5mm, MT Mix to correct pavement distortions as directed.

# RANKIN COUNTY MP-5043-61(010)/303909-301000 STA 5+24 - STA 7+74 Typical Section

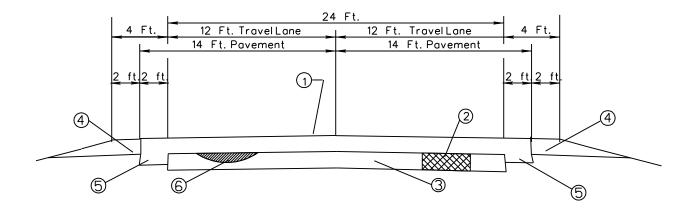


- (1) Overlay with 2" HMA MT 12.5 mix, MT
- (2) Place 5 1/2" (2 @ 2.75") of HMA, MT, 19mm MIX.
- (3) Place 6" of size 825-B crushed stone.
- (4) Place Type V GEOTEXTILE FABRIC
- (5) Place 3' of Class B-15 borrow material.
- (6) Class 5 Group C shoulder material required whenever drop offs exceed 2".
- Remove existing pavement and undercut 3' below subgrade elevation from finish shoulder to finish shoulder

# RANKIN COUNTY

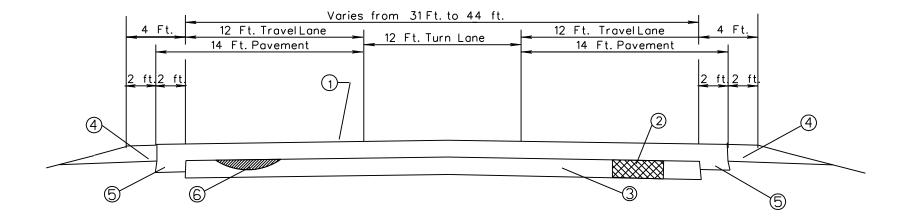
MP-5043-61(010)/303909-301000

Sta. 14+94 to Sta. 43+82 and Sta. 55+57 to Sta. 67+87 Typical Section



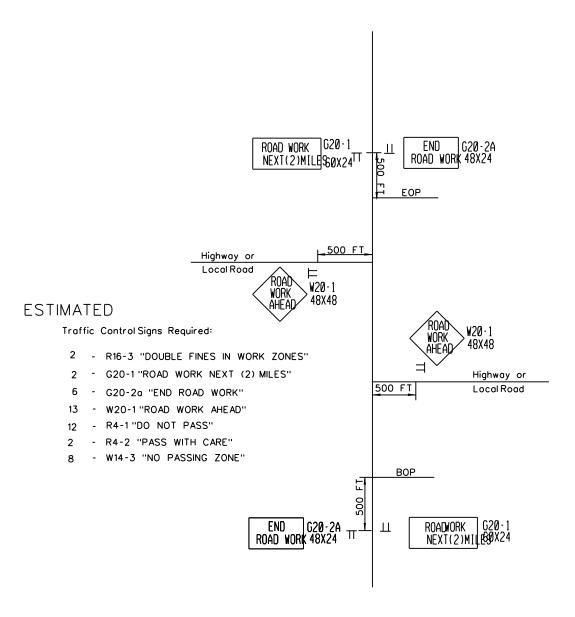
- ① Mill 2" on existing slope and inlay with 2" HMA 12.5 mix, MT (If crossslope is not 2%, correct to 2% by placing 2" at centerline & 1 1/2" at edge of pavement).
- ② Failed Areas to be removed and backfilled with HMA, 19mm Mix, MT as directed.
- (3) Existing pavement structure
- (4) Cl. 5, Grp. C required whenever edge drop offs exceed 2".
- (5) 2' Shoulder paving 4 1/2" thick placed during placement of mainline overlay
- 6 Prior to overlay, Pre-level with 12.5mm, MT Mix to correct pavement distortions as directed.

# RANKIN COUNTY MP-5043-61(010)/303909-301000 Sta. 43+82 to Sta. 55+57 Typical Section



- ① Mill 2" on existing slope and inlay with 2" HMA 12.5 mix, MT (If crossslope is not 2%, correct to 2% by placing 2" at centerline & 1 1/2" at edge of pavement).
- (2) Failed Areas to be removed and backfilled with HMA, 19mm Mix, MT as directed.
- 3 Existing pavement structure
- (4) Cl. 5, Grp. C required whenever edge drop offs exceed 2".
- (5) 2' Shoulder paving 4 1/2" thick placed during placement of mainline overlay
- (6) Prior to overlay, Pre-level with 12.5mm, MT Mix to correct pavement distortions as directed.

# CONSTRUCTION SIGNING DETAIL



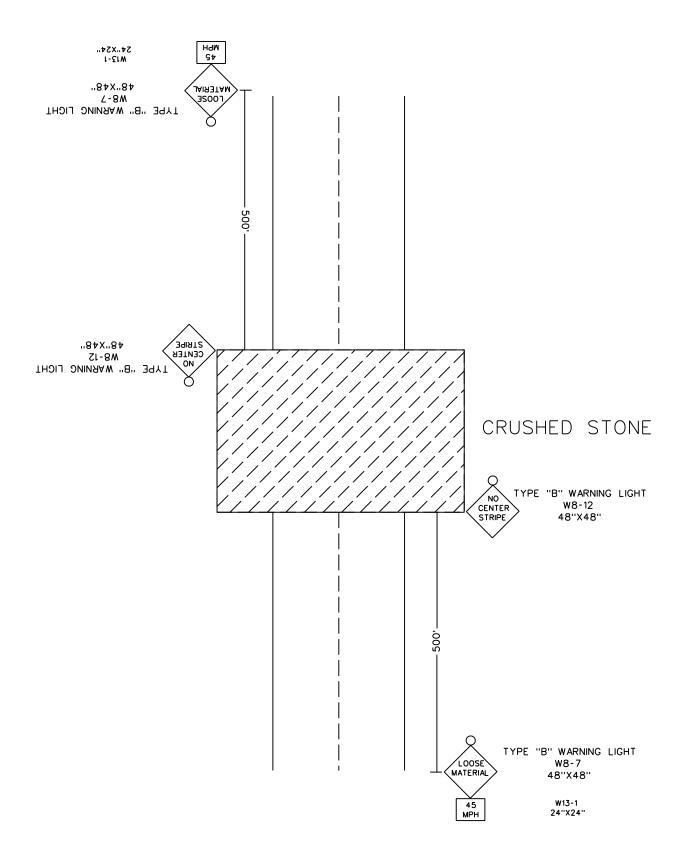
NOTES: One (1) W20-1 "ROAD WORK AHEAD" Sign is Required at each Local Road, Street or Highway Entering the Project.

G20-1 and G20-2a signs mounted on Type III Double Faced Barricade.

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 MUTCD. If No Passing zones are 1000 ft or more, install additional "DO NOT PASS" signs on maximum spacing of 750 ft.

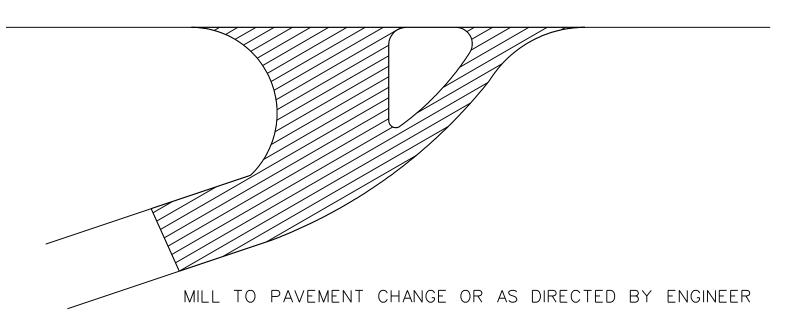
Payment for these signs will be under the appropriate pay item numbers in the summary of quantities

# DETAIL OF CONSTRUCTION SIGNING FOR UNDERCUT AREA



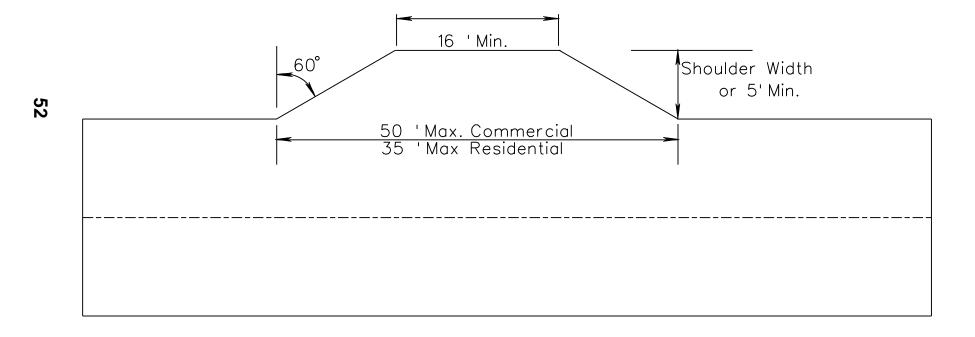
# TYPICAL RAMP MILLING AT I-20 AND HWY 43

SR 43

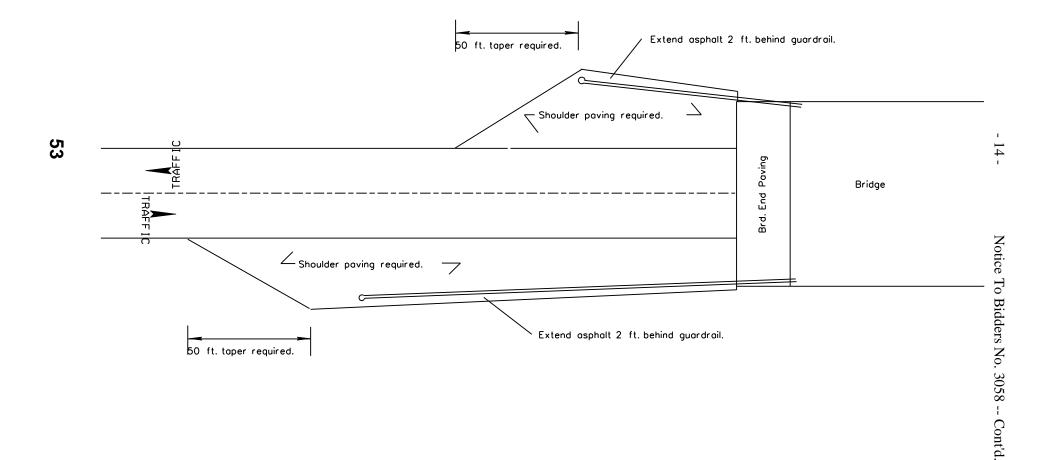


# RANKIN COUNTY

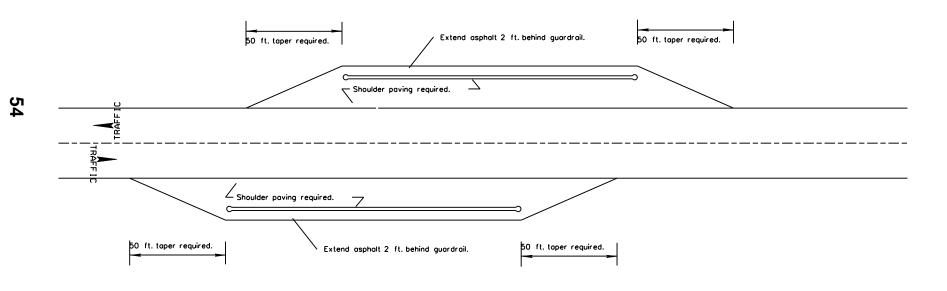
# TYPICAL RAMP/PAD DETAIL



# Typical Section of Additional Shoulder Paving Required at Guardrail Locations



# Typical Section of Additional Shoulder Paving Required at Guardrail Locations



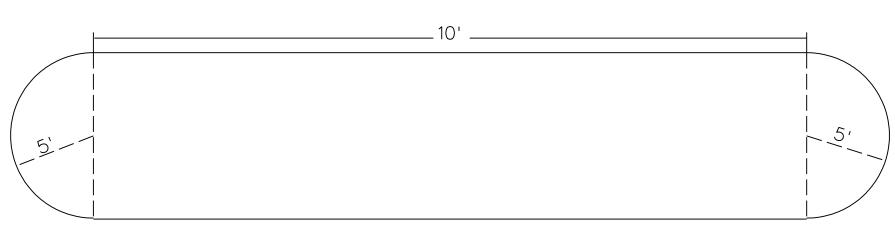
STA 17+69 W

STA 53+06 E

STA 57+13 W

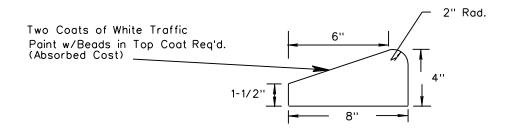
STA 59+17 W

# RANKIN COUNTY

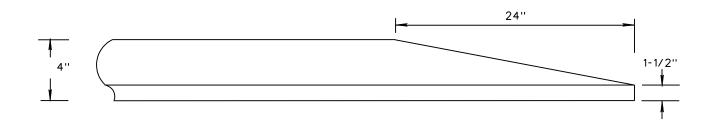


# RANKIN COUNTY

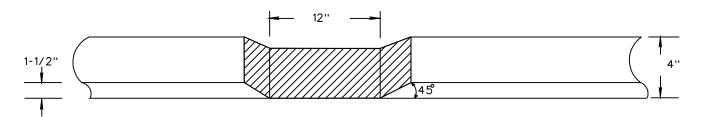
# Detail of Bituminous Curb

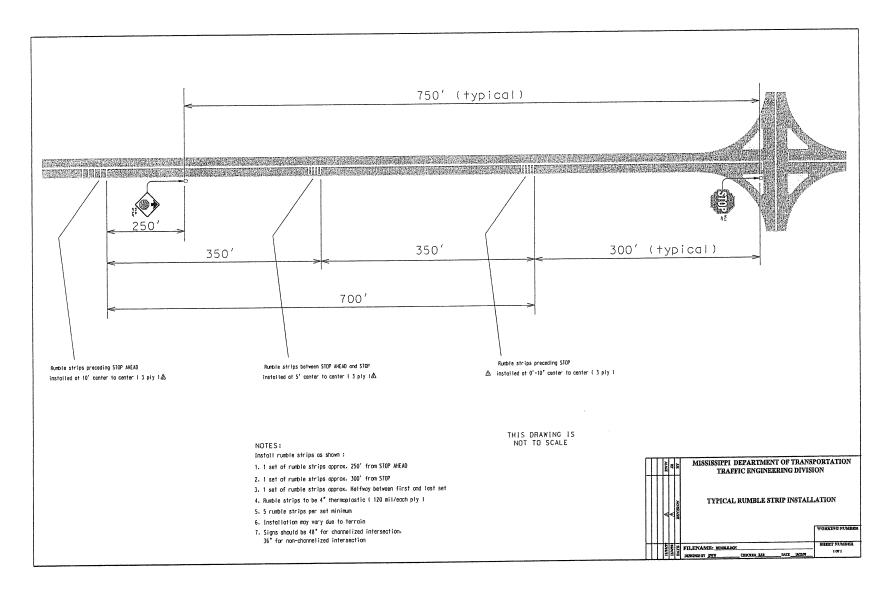


# Detail of Curb Terminus



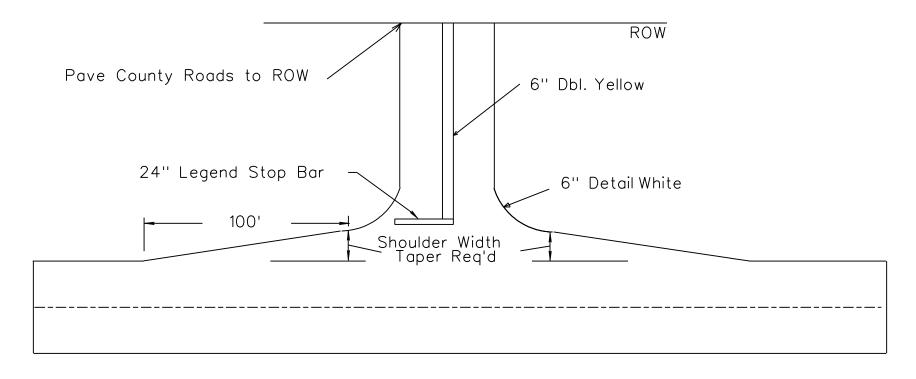
# Detail of Spill Thru



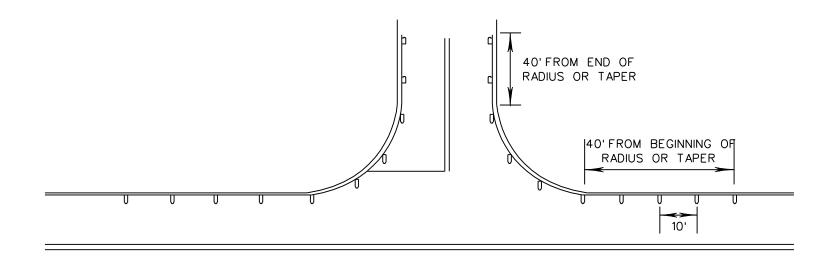


# RANKIN COUNTY

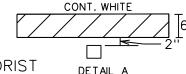
# Typical Section - County Roads & City Streets



# TYPICAL FOR RAISED PAVEMENT MARKERS PLACED ON SIDE ROAD RADIUS



NOTE 1. MARKERS SHALL BE PLACED EVERY 10 FEET.



- NOTE 2. MARKERS SHALL BE VISIBLE FROM THE TRAVELING MOTORIST ON STATE DESIGNATED HIGHWAYS.
- NOTE 3. MARKERS SHALL BE HIGH PERFORMANCE TWO WAY CLEAR.
- NOTE 4. FIVE (5) MARKERS SHALL BE PLACED ALONG MAINLINE EDGE STRIPE.
- NOTE 5. MARKERS FOR COUNTY ROADS SHALL CONTINUE DOWN THE EDGE STRIPE A DISTANCE OF 40 FEET.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-101-4

DATE: 11/05/2008

**SUBJECT:** Definitions

Section 101, Definitions and Terms, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

**907-101.02--Definitions.** Replace the following definitions in Subsection 101.02 on pages 3 through 13.

**Contract** - The written agreement between the Mississippi Transportation Commission and the Contractor setting forth the obligations of the parties thereunder, including but not limited to, the performance of the work, the furnishing of labor and materials, and the basis of payment.

The contract includes the invitation for bids, proposal, contract form and contract bonds, specifications, supplemental specifications, interim specifications, general and detailed plans, special provisions, notices to bidders, notice to proceed, and also any agreements that are required to complete the construction of the work in an acceptable manner, including authorized extensions thereof, all of which constitute one instrument.

**Contract Bonds** - The approved form of security, executed by the Contractor and the Contractor's Surety(ies), guaranteeing complete execution of the contract and all supplemental agreements pertaining thereto and the payment of all legal debts pertaining to the construction of the project. This term includes Performance and Payment Bond(s).

**Surety** - A corporate body, qualified under the laws of Mississippi, which is bound with and for the successful bidder by "contract bond(s)" to guarantee acceptable performance of the contract and payment of all legal taxes and debts pertaining to the construction of the project, including payment of State Sales Tax as prescribed by law, and any overpayment made to the Contractor.

Add the following to the list of definitions in Subsection 101.02 on pages 3 through 13.

**Performance Bond** - The approved form of security, executed by the Contractor and issued by the Contractor's Surety(ies), guaranteeing satisfactory completion of the contract and all supplemental agreements pertaining thereto.

**Payment Bond** - The approved form of security, executed by the Contractor and issued by the Contractor's Surety(ies), guaranteeing the payment of all legal debts pertaining to the construction of the project including, but not limited to, the labor and materials of subcontractors and suppliers to the prime contractor.

### SUPPLEMENT TO SPECIAL PROVISION NO. 907-102-4

**DATE:** 12/10/2009

**SUBJECT:** Bidding Requirements and Conditions

Delete the first sentence of the second paragraph of 907-102.08 on page 2, and substitute the following:

If a bid bond is offered as guaranty, the bond must be on a form approved by the Executive Director, made by a Surety acceptable to the Executive Director and signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent and the Bidder.

CODE: (IS)

SPECIAL PROVISION NO. 907-102-4

DATE: 11/25/2008

**SUBJECT: Bidding Requirements and Conditions** 

<u>907-102.06--Preparation of Proposal.</u> Delete the fifth, sixth, and seventh paragraphs of Subsection 102.06 on page 18 and substitute the following:

Bid sheets generated by the Department's Electronic Bid System (Trns•port Expedite Bid) along with a completed proposal package will constitute the official bid and shall be signed on the last sheet of the Expedite Bid generated bid sheets and delivered to the Department in accordance with the provisions of Subsection 102.09.

Bidders are cautioned that using other versions of the Expedite Bid may result in improperly printed bid sheets. The correct version of Expedite Bid can be obtained at no cost from the MDOT Contract Administration Division or at the MDOT website, www.gomdot.com.

If bidders submit Expedite Bid generated bid sheets, then the bid sheets included in the proposal should not be completed. The Expedite Bid generated bid sheets should be stapled together, signed and included in the bid proposal package in the sealed envelope. If both the forms in the proposal and the Expedite Bid generated bid sheets are completed and submitted, only the Expedite Bid generated sheets will be recognized and used for the official bid. The USB Flash Drive containing the information printed on the Expedite Bid generated bid sheets should be placed in the padded envelope included with the bid proposal package and enclosed in the sealed envelope. Bid sheets printed from Expedite Bid should be a representation of the data returned on the flash drive. To have a true representation of the bid sheets, the Bidder must copy the EBS and EBS amendment files used to prepare the bid sheets to the flash drive. Otherwise, the unit prices bid will not be recorded to the flash drive. Bidders are cautioned that failure to follow proper flash drive handling procedures could result in the Department being unable to process the flash drive. Any modification or manipulation of the data contained on the flash drive, other than entering unit bid prices and completing all required Expedite Bid sections, will not be allowed and will cause the Contractor's bid to be considered irregular.

<u>907-102.08--Proposal Guaranty</u>. Delete the first and second paragraphs in Subsection 102.08 on page 20 and substitute the following:

No proposal will be considered unless accompanied by certified check, cashier's check or bid bond, made payable to the State of Mississippi, in an amount of not less than five percent (5%) of the total amount of the proposal offered. The guaranty shall be evidence of good faith that, if awarded the contract, the bidder will execute the contract and give performance and payment contract bond(s) as stipulated in Subsection 907-103.05.1, 907-103.05.2, and as required by law.

If a bid bond is offered as guaranty, the bond must be on a form approved by the Executive Director, made by a Surety acceptable to the Executive Director and signed or countersigned by a qualified Mississippi resident agent or qualified nonresident agent and the bidder. Such bid bond shall also conform to the requirements and conditions stipulated in Subsection 907-103.05.2 as applicable.

CODE: (SP)

SPECIAL PROVISION NO. 907-103-8

**DATE:** 12/15/2009

**SUBJECT:** Award and Execution of Contract

Section 103, Award and Execution of Contract, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>**907-103.04--Return of Proposal Guaranty**</u>. Delete the second paragraph of Subsection 103.04 on page 23 and substitute the following:

Certified checks or cashier's checks submitted as proposal guaranties, except those of the two lowest bidders, will be returned within 10 days of contract award. The retained proposal guaranty of the unsuccessful of the two lowest bidders will be returned within ten days following the execution of a contract with the successful low bidder. The retained proposal guaranty of the successful bidder will be returned after satisfactory performance and payment bonds have been furnished and the contract has been executed.

In the event all bids are rejected by the Commission, certified checks or cashier's checks submitted as proposal guaranty by all bidders will be returned within 10 days of rejection.

Delete Subsection 103.05 on page 23 and substitute the following:

### **907-103.05--Contract Bonds**.

<u>907-103.05.1--Requirement of Contract Bonds</u>. Prior to the execution of the contract, the successful bidder shall execute and deliver to the Executive Director a performance and payment bond(s), in a sum equal to the full amount of the contract as a guaranty for complete and full performance of the contract and the protection of the claimants and the Department for materials and equipment and full payment of wages in accordance with Section 65-1-85 Miss. Code Ann. (1972 as amended). In the event of award of a joint bid, each individual, partnership, firm or corporation shall assume jointly the full obligations under the contract and the contract bond(s).

907-103.05.2--Form of Bonds. The form of bond(s) shall be that provided by or acceptable to the Department. These bonds shall be executed by a Mississippi agent or qualified nonresident agent and shall be accompanied by a certification as to authorization of the attorney-in-fact to commit the Surety company. A power of attorney exhibiting the Surety's original seal supporting the Mississippi agent or the qualified nonresident agent's signature shall be furnished with each bond. The Surety company shall be currently authorized and licensed in good standing to conduct business in the State of Mississippi with a minimum rating by A.M. Best of (A-) in the latest printing "Best's Key Rating Guide" to write individual bonds up to ten percent of the policy holders' surplus or listed on the current list of "Companies Holding Certificates of Authority as Acceptable Sureties on Federal Bonds and as Acceptable Reinsuring Companies" as

published by the United States Department of the Treasury, Financial Management Service, Circular 570 (latest revision as published and supplemented on the Financial Management Service Web site and in the Federal Register) within the underwriting limits listed for that Surety. All required signatures on the bond(s) and certifications shall be original signatures, in ink, and not mechanical reproductions or facsimiles. The Mississippi agent or qualified nonresident agent shall be in good standing and currently licensed by the Insurance Commissioner of the State of Mississippi to represent the Surety company(ies) executing the bonds.

Surety bonds shall continue to be acceptable to the Commission throughout the life of the Contract and shall not be canceled by the Surety without the consent of the Department. In the event the Surety fails or becomes financially insolvent, the Contractor shall file a new Bond in the amount designated by the Executive Director within thirty (30) days of such failure, insolvency, or bankruptcy. Subsequent to award of Contract, the Commission or the Department may require additional security for any supplemental agreements executed under the contract or replacement security in the event of the surety(ies) loss of the ratings required above. Suits concerning bonds shall be filed in the State of Mississippi and adjudicated under its laws without reference to conflict of laws principles.

<u>907-103.08--Failure to Execute Contract.</u>. In the first sentence of Subsection 103.08 on page 24, change "bond" to "performance and payment bonds".

# **SUPPLEMENT TO SPECIAL PROVISION NO. 907-105-3**

**DATE:** 03/31/2008

**SUBJECT:** Cooperation By Contractor

Delete the first sentence of the first paragraph under 907-105-05 on page 1, and substitute the following:

On projects that include erosion control pay items, 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.

CODE: (IS)

SPECIAL PROVISION NO. 907-105-3

**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:

<u>907-105.05--Cooperation by Contractor.</u> 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. 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.

# SUPPLEMENT TO SPECIAL PROVISION NO. 907-107-7

**DATE:** 12/10/2009

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

Delete the last sentence of the first paragraph of Subsection 907-107.14.2.1 on page 1, and substitute the following:

Each policy shall be signed or countersigned by a Mississippi Agent or Qualified Nonresident Agent of the Insurance Company.

CODE: (IS)

SPECIAL PROVISION NO. 907-107-7

DATE: 11/05/2008

**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:

<u>907-107.02--Permits, Licenses and Taxes</u>. 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.

<u>907-107.14.2--Liability Insurance</u>. 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: \$500,000 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 or qualified nonresident 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.

<u>907-107.14.2.2--Railroad Protective.</u> 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.

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

**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.

CODE: (SP)

SPECIAL PROVISION NO. 907-107-8

**DATE:** 01/22/2010

**SUBJECT:** Contractor's **Erosion Control Plan** 

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:

Delete in toto Subsection 107.22.1 on pages 65 and 66, and substitute the following:

<u>907-107.22.1--Contractor's Erosion Control Plan</u>. At the preconstruction conference or prior to starting any work on the project, the Contractor shall submit to the Project Engineer for concurrence a comprehensive erosion and siltation control plan utilizing temporary measures and permanent erosion control features to provide acceptable controls during all stages of construction.

The contract time for this project has allowed 60 calendar days for the submittal and concurrence of the Contractor's erosion control plan, MDOT's review of the plan, and any revisions that may be necessary. The original contract time should be included the contractor's erosion control plan.

As a minimum, the plan shall include the following:

- 1. Erosion Control Plan (ECP) sheets or the plan profile sheets, 11" x 17" or larger, of all areas within the rights-of-way from the Beginning of the Project (BOP) to the End of the Project (EOP) showing the location of all temporary erosion control devices. Erosion control devices should be identified by exact type, temporary or permanent, configuration, and placement of each item to prevent erosion and siltation.
  - A detailed description, including locations (station numbers) of the Contractor's proposed sequence of operations including, but not limited to, clearing and grubbing, excavation, drainage, and structures.
  - A detailed description, including locations, and best management practices (BMP) that
    will be used to prevent siltation and erosion from occurring during the Contractor's
    proposed sequence of operations.
- 2. A copy of the certification for the Contractor's Certified Erosion Control Person whose primary duty shall be monitoring and maintaining the effectiveness of the erosion control plan, BMPs, and compliance with the NPDES permit requirements.
- 3. A plan for the disposal of waste materials on the project right-of-way which shall include but not be limited to the following:
  - containment and disposal of materials resulting from the cleaning (washing out) of concrete trucks that are delivering concrete to the project site.
  - containment and disposal of fuel / petroleum materials at staging areas on the project.

The erosion and siltation control plan shall be maintained on the project site at all times, updated as work progresses to show changes due to revisions in the sequences of construction operations, replacement of inadequate BMPs, and the maintenance of BMPs. Work shall not be started until an erosion control plan has been concurred with by the MDOT. The Engineer will have the authority to suspend all work and/or withhold payments for failure of the Contractor to carry out provisions of MDEQ's Storm Water Construction General Permit, the erosion control plan, updates to the erosion control plan, and /or proper maintenance of the BMPs.

# **VOID**

#### SUPPLEMENT TO SPECIAL PROVISION NO. 907-108-18

**DATE:** 02/24/2010

**SUBJECT: Prosecution and Progress** 

Before the sentence in 907-108.02 on page 1, add the following:

Delete the second paragraph of Subsection 108.02 on page 75 and substitute the following:

The anticipated date of the Notice to Proceed (NTP) / Beginning of Contract Time (BCT) will be specified in the proposal.

After Subsection 907-108.02 on page 1, add the following:

<u>907-108.03.2--Preconstruction Conference</u>. Delete the first paragraph of Subsection 108.03.2 on page 76 and substitute the following:

Prior to commencement of the work, a preconstruction conference shall be held for the purpose of discussing with the Contractor essential matters pertaining to the prosecution and satisfactory completion of the work. The Contractor will be responsible for scheduling the preconstruction conference. The Contractor will advise the Project Engineer in writing 14 days prior to the requested date that a conference is requested. When the contract requires the Contractor to have a certified erosion control person, the Contractor's certified erosion control person shall be at the preconstruction conference. The Department will arrange for utility representatives and other affected parties to be present.

# SPECIAL PROVISION NO. 907-108-18

CODE: (IS)

DATE: 11/05/2008

**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--Determination and Extension of Contract Time.

# **907-108.06.1--Based on Time Units.**

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.

<u>907-108.06.2--Based on Calendar Date Completion.</u> After Subsection 108.06.2.1 on page 85, add the following:

907-108.06.2.2--Cessation of Contract Time. When the Engineer by written notice schedules a final inspection, time will be suspended until the final inspection is conducted and for an additional 14 calendar days thereafter. If after the end of the 14-day suspension all necessary items of work have not been completed, time charges will resume. If the specified completion date had not been reached at the time the Contractor called for a final inspection, the calendar day difference between the specified completion date and the date the Contractor called for a final inspection will be added after the 14-day period before starting liquidation damages. If a project is on liquidated damages at the time a final inspection is scheduled, liquidated damages will be suspended until the final inspection is conducted and for seven (7) calendar days thereafter. If after the end of the 7-day suspension all necessary items of work have not been completed, liquidated damages will resume. When final inspection has been made by the Engineer as prescribed in Subsection 105.16 and all items of work have been completed, the daily time charge will cease.

<u>907-108.10--Termination of Contractor's Responsibility</u>. In the last sentence of Subsection 108.10 on page 88, change "bond" to "performance and payment bond(s)".

# SUPPLEMENT TO SPECIAL PROVISION NO. 907-109-4

**DATE:** 12/02/2009

**SUBJECT:** Measurement and Payment

Delete Subsection 907-109.07 on page 1, and substitute the following:

<u>907-109.07--Changes in Material Costs</u>. Delete the third full paragraph of Subsection 109.07 on page 96 and substitute the following:

A link to the established base prices for bituminous products and fuels will be included in the contract documents under a Notice to Bidders entitled "Petroleum Products Base Prices."

SPECIAL PROVISION NO. 907-109-4

CODE: (IS)

**DATE:** 11/05/2008

**SUBJECT: Measurement and 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. In the last sentence of subparagraph (b) in Subsection 109.04 on page 91, change "bond" to "bond(s)".

Delete the first sentence of the second paragraph of subparagraph (d) in Subsection 109.04 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.

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:

CODE: (IS)

#### SPECIAL PROVISION NO. 907-304-12

**DATE:** 06/01/2009

**SUBJECT:** Granular Courses

Section 907-304, Granular Courses, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-304.02--Materials.</u> After the first paragraph of Subsection 304.02.1 on page 183, add the following:

When the contract includes pay item 907-304-E, Granular Material, LVM, RAP, it shall be milled recycled asphalt pavement and shall be visually inspected by the Engineer to insure it is free from chunks and deleterious materials.

Crushed concrete meeting the requirements of Subsection 907-703.04.4 may be used in lieu of other crushed courses specificed in the contract.

## 907-304.03--Construction Requirements.

<u>907-304.03.5--Shaping, Compacting and Finishing.</u> Delete the sixth paragraph of Subsection 304.03.5 on page 185.

Delete the first table in Subsection 304.03.5 on page 186 and substitute the following:

Granular Material	Lot	Individual
<u>Class</u>	<u>Average</u>	<u>Test</u>
7,8,9 or 10	97.0	93.0
5 or 6	99.0	95.0
3 or 4	100.0	96.0
1 or 2	102.0	98.0
Crushed Courses*	99.0	95.0

<sup>\*</sup> When placed on filter fabric on untreated subgrade, the individual tests and the average of the five (5) tests shall equal or exceed the following values:

Lot Average	<b>Individual Test</b>
96.0	92.0

Before the last paragraph of Subsection 304.03.5 on page 186, add the following:

Unless otherwise specified, density for granular material, RAP, shall be achieved by two passes of an approved roller and density tests will not be required.

907-304.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 187.

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

**DATE:** 06/25/2009

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

Add the following before 907-401.02.6.2 on page 1.

<u>907-401.02.4--Substitution of Mixture</u>. Delete the table in Subsection 401.02.4 on page 242, and substitute the following:

	Single Lift Laying Thickness Inches	
Mixture	Minimum	Maximum
25 mm	3	4
19 mm	2 1/4	3 ½
12.5 mm	1 ½	2 ½
9.5 mm	1	1 ½
4.75 mm	1/2	3/4

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

<u>907-401.02.6.4.1--Roadway Density.</u> 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.

<u>907-401.03.1.2--Tack Coat.</u> Delete the three sentences of Subsection 401.03.1.2 on page 259, and substitute the following:

Tack coat shall be applied to previously placed HMA and between lifts, unless otherwise directed by the Engineer. Tack coat shall be applied with a distributor spray bar. A hand wand

will only be allowed for applying tack coat on ramp pads, irregular shoulder areas, median crossovers, turnouts, or other irregular areas. Bituminous materials and application rates for tack coat shall be as specified in Table 410-A on page 293. Construction requirements shall be in accordance with Subsection 407.03 of the Standard Specifications.

<u>907-401.03.1.4--Density</u>. 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.

**907-401.03.9--Material Transfer Equipment.** Delete the paragraph in Subsection 401.03.9 on page 264 and substitute the following:

Excluding the areas mentioned below, the material transferred from the hauling unit when placing the top lift, or the top two (2) lifts of a multi-lift HMA pavement with density requirements, shall be remixed prior to being placed in the paver hopper or insert by using an approved Materials Transfer Device. Information on approved devices can be obtained from the State Construction Engineer. Areas excluded from this requirement include: leveling courses, temporary work of short duration, detours, bridge replacement projects having less than 1,000 feet of pavement on each side of the structure, acceleration and deceleration lanes less than 1,000 feet in length, tapered sections, transition sections for width, shoulders less than 10 feet in width, crossovers, ramps, side street returns and other areas designated by the Engineer.

CODE: (IS)

SPECIAL PROVISION NO. 907-401-2

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:

<u>907-401.02.6.2--Assurance Program for Mixture Quality.</u> 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.

CODE: (SP)

#### SPECIAL PROVISION NO. 907-401-4

**DATE:** 03/22/2010

**SUBJECT:** Warm Mix Asphalt (WMA)

Section 401, Hot Mix Asphalt (HMA) - General, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable to Warm Mix Asphalt Only.

<u>907-401.01--Description.</u> Delete the first and second paragraphs of Subsection 401.01 on page 236, and substitute the following:

These specifications include general requirements for all types of WMA.

This work consists of the construction of one or more lifts of WMA in accordance with these specifications and the specific requirements for the mixture to be produced and in reasonably close conformity with the lines, grades, thicknesses and typical sections shown on the plans or established by the Engineer.

907-401.02--Materials. Delete Subsection 401.02.2 on page 239, and substitute the following:

<u>907-401.02.2--WMA Products and Processes.</u> The Department will maintain a list of qualified WMA products and processes. No product or process shall be used unless it appears on this list.

The Contractor may propose other products or processes for approval by the Product Evaluation Committee. Documentation shall be provided to demonstrate laboratory performance, field performance, and construction experience.

### 907-401.03--Construction Requirements.

<u>907-401.03.1.1--Weather Limitations.</u> Delete the second sentence of the first paragraph and the Temperature Limitation Table in Subsection 401.03.1.1 on page 258, and substitute the following:

The air and pavement temperature at the time of placement shall equal or exceed 40°F, regardless of compacted lift thickness.

<u>907-401.03.1.2--Tack Coat.</u> Delete the first sentence of the first paragraph of Subsection 401.03.1.2 on page 259 and substitute the following:

Tack coat shall be applied to previously placed WMA and between lifts, unless otherwise directed by the Engineer.

**907-401.03.8--Preparation of Mixture.** Delete the sentence in Subsection 401.03.8 on page 264, and substitute the following:

The temperature of the WMA mixture, when discharged from the mixer, shall not exceed 280° F.

# 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:

<u>907-403.03.5.5--Preliminary Leveling.</u> 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.

# 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.

CODE: (SP)

#### SPECIAL PROVISION NO. 907-403-9

DATE: 03/15/2010

**SUBJECT:** Warm Mix Asphalt (WMA)

Section 403, Hot Bituminous Pavement, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable to Warm Mix Asphalt Only.

<u>907-403.01--Description.</u> Delete the first sentence of Subsection 403.01 on page 266, and substitute the following:

This work consists of constructing one or more lifts of WMA pavement meeting the requirements of Section 401 on a prepared surface in accordance with the requirements of this section and in reasonably close conformity with the lines, grade, thicknesses, and typical cross sections shown on the plans or established by the Engineer.

## 907-403.05--Basis of Payment.

907-403.05.2--Pay Items. After the last pay item listed on page 276, add the following:

SPECIAL PROVISION NO. 907-407-1

**DATE:** 02/26/2008

**SUBJECT:** Tack Coat

Section 407, Tack Coat, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-407.02.1--Bituminous Material</u>. Delete the second sentence of the first paragraph of Subsection 407.02.1 on page 281, and substitute the following:

When not specified, the materials shall be as specified in Table 410-A on page 293.

**907-407.03.3--Application of Bituminous Material**. Delete the first paragraph of Subsection 407.03.3 on page 281, and substitute the following.

Tack coat shall be applied with a distributor spray bar. A hand wand will only be allowed for applying tack coat on ramp pads, irregular shoulder areas, median crossovers, turnouts, or other irregular areas. Bituminous materials and application rates for tack coat shall be as specified in Table 410-A on page 293. Tack coat shall not be applied during wet or cold weather, after sunset, or to a wet surface. Emulsions shall be allowed to "break" prior to superimposed construction.

**907-407.05--Basis of Payment**. Delete the pay item at the end of Subsection 407.05 on page 282, and substitute the following:

907-407-A: Asphalt for Tack Coat \*

- per gallon

CODE: (SP)

\* Grade may be specified

CODE: (IS)

#### SPECIAL PROVISION NO. 907-601-1

DATE: 08/29/2007

**SUBJECT:** Structural Concrete

Division 600, Incidental Construction, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After the heading **DIVISION 600 - INCIDENTAL CONSTRUCTION**, add the following:

Unless otherwise specified, all testing of Portland cement concrete in Division 600 shall be in accordance with the requirements of Subsection 907-601.02.1.

# 907-601.02--Materials.

<u>907-601.02.1--General.</u> Delete the second and third sentence of the first paragraph of Subsection 601.02.1 on page 348, and substitute the following:

Sampling and testing will be in accordance with TMD-20-04-00-000 or TMD-20-05-00-000, as applicable.

**907-601.03.6.3--Removal of Falsework, Forms, and Housing.** Delete the first paragraph, the table and second paragraph of Subsection 601.03.6.3 on pages 349 and 350, and substitute the following:

The removal of falsework, forms, and the discontinuance of heating, shall be in accordance with the provisions and requirements of Subsection 907-804.03.15, except that the concrete shall conform to the following compressive strength requirements:

Wingwall and Wall Forms not Under Stress	1000 psi
Wall Forms under Stress	2200 psi
Backfill and Cover clear	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 Subsection 907-804.03.15. Procedures for using the maturity meter and developing the strength/maturity relationship shall follow the requirements of Subsection 907-804.03.15. Technicians using the maturity meter or calculating strength/maturity graphs shall meet the requirements of Subsection 907-804.03.15.

**907-601.05--Basis of Payment.** Add the "907" prefix to the pay items listed on page 352.

CODE: (SP)

# SPECIAL PROVISION NO. 907-618-4

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.

# SPECIAL PROVISION NO. 907-626-15

CODE: (IS)

**DATE:** 03/17/2008

**Thermoplastic Traffic Markings SUBJECT:** 

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

907-626.05--Basis of Payment. Add the "907" prefix to the pay items listed on page 446.

CODE: (SP)

SPECIAL PROVISION NO. 907-626-22

**DATE:** 04/06/2010

**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:

**<u>907-626.03.1.1--Equipment.</u>** 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.

<u>907-626.03.1.2--Construction Details.</u> After the second sentence of the first full paragraph of Subsection 626.03.1.2 on page 445 add the following:

When edge lines are placed on rumble strips, the thickness of the edge line shall be 90 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 dropon 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-A: 6" Thermoplastic Double Drop Traffic Stripe,

Skip White \* - per linear foot or mile

907-626-B: 6" Thermoplastic Double Drop Traffic Stripe,

Continuous White \* - per linear foot or mile

907-626-C: 6" Thermoplastic Double Drop Edge Stripe,

Continuous White \* - per linear foot or mile

907-626-D: 6" Thermoplastic Double Drop Traffic Stripe,	
Skip Yellow	- per linear foot or mile

907-626-E: 6" Thermoplastic Double Drop Traffic Stripe,
Continuous Yellow - per linear foot or mile

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

907-626-G: Thermoplastic Double Drop Detail Stripe, <u>Color</u> - per linear foot

907-626-H: Thermoplastic Double Drop Legend, White - per linear foot or square foot

<sup>\*</sup> Thickness may be specified

# **SUPPLEMENT TO SPECIAL PROVISION NO. 907-701-3**

DATE: 11/25/2009

**SUBJECT:** Hydraulic Cement

Delete Subsection 907-701.02.2.1 on pages 2, 3, & 4, and substitute the following:

<u>907-701.02.2.1--Portland Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater.</u> 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, or silica fume shall be as follows in Table 1.

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

Sulfate Exposure	Water-soluble sulfate (SO <sub>4</sub> ) in soil, % by mass	Sulfate (SO <sub>4</sub> )in water, ppm	Cementitious material required*
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type II **, ***, **** cement, or Type I cement with one of the following replacements of cement by weight: 25% Class F fly ash, 50% GGBFS, or 8% silica fume
Severe	0.20 - 2.00	1,500 - 10,000	Type I cement with a replacement by weight of 50% GGBFS, or Type II ** cement with one of the following replacements of cement by weight:  25% Class F fly ash, 50% GGBFS, or 8% silica fume

<sup>\*</sup> 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

- -2 -
- 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 (C<sub>3</sub>A) 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 (C<sub>3</sub>A) 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.

SPECIAL PROVISION NO. 907-701-3

CODE: (IS)

**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.

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

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

<u>907-701.02.2--Replacement by Other Cementitious Materials</u>. 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.

<u>907-701.02.2.1--Portland Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater.</u> 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.

Sulfate Exposure	Water-soluble sulfate (SO <sub>4</sub> ) in soil, % by mass	Sulfate (SO <sub>4</sub> )in water, ppm	Cementitious material required*
Moderate and Seawater	0.10 - 0.20	150 - 1,500	Type 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

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

- \* 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 (C<sub>3</sub>A) 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 (C<sub>3</sub>A) 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.

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

<u>907-701.03--Masonry Cement</u>. 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.

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

<u>907-701.04.2--Replacement by Other Cementitious Materials</u>. 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.

<u>907-701.04.3--Exposure to Soluble Sulfate Conditions or Seawater.</u> 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.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-703-8

**DATE:** 06/01/2009

**SUBJECT:** Aggregates

Section 703, Aggregates, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-703.03.2.4--Gradation</u>. Delete the last sentence of the last paragraph of Subsection 703.03.2.4 on page 611.

# 907-703.04--Aggregate for Crushed Stone Courses.

<u>907-703.04.1--Coarse Aggregate.</u> Delete the first sentence of the first paragraph of Subsection 703..04.1 on page 611, and substitute the following:

Coarse aggregate, defined as material retained on No. 8 sieve, shall be either crushed stone, slag, granite, shell, gravel, concrete, or combination thereof.

<u>907-703.04.2--Fine Aggregate.</u> Delete the first sentence of the first paragraph of Subsection 703..04.2 on page 611, and substitute the following:

Fine aggregate, defined as material passing no. 8 sieve, shall be material resulting from the crushing of stone, slag, gravel, concrete, or combination thereof.

<u>**907-703.04.3--Gradation.**</u> Add the following to the "TABLE OF SIZES AND GRADATION OF CRUSHED STONE AGGREGATE" in Subsection 703.04.3 on page 613.

	Percent Passing By Weight	
Sieve Size	Size No. 825	<b>Crushed Stone</b>
2 inch	100	
1 1/2 inch	90 - 100	100
1 inch	75 - 98	90 - 100
3/4 inch		
1/2 inch	60 - 85	62 - 90
3/8 inch		
No. 4	40 - 65	30 - 65
No. 8	28 - 54	
No. 10		15 - 40
No. 16	19 - 42	
No. 40		
No. 50	9 - 27	
No. 200	4 - 18	3 - 16

After the "TABLE OF SIZES AND GRADATION OF CRUSHED STONE AGGREGATE" in Subsection 703.04.3 on page 613, add the following:

<u>907-703.04.4--Crushed Concrete.</u> Crushed reclaimed concrete shall also be allowed as a crushed aggregate course provided it meets the requirements of Subsection 703.04 and the following.

# **Crushed Concrete**

Sieve Size	Percent Passing By Weight
2 inch	
1 1/2 inch	100
1 inch	90 - 100
3/4 inch	
1/2 inch	60 - 85
3/8 inch	
No. 4	40 - 65
No. 8	28 - 54
No. 10	
No. 16	19 - 42
No. 40	
No. 50	9 - 27
No. 200	2 - 18

CODE: (IS)

SPECIAL PROVISION NO. 907-711-4

**DATE:** 06/26/2009

**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.** The synthetic structural fibers shall be approved for listing in the Department's "Approved Sources of Materials" prior to use. The synthetic structural fibers shall be added to the concrete and mixed in accordance with the manufacturer's recommended methods.

<u>907-711.04.1--Material Properties.</u> The fibers shall meet the requirements of ASTM Designation: C 1116, Section 4.1.3. The fibers shall be made of polypropylene, polypropylene/polyethylene blend, nylon, or polyvinyl alcohol (PVA).

<u>907-711.04.2--Minimum Dosage Rate.</u> The dosage rate shall be such that the average residual strength ratio ( $R_{150,3.0}$ ) of fiber reinforced concrete beams is a minimum of 20.0 percent when the beams are tested in accordance with ASTM Designation: C 1609. The dosage rate for fibers shall be determined by the following.

The fiber manufacturer shall have the fibers tested by an acceptable, independent laboratory acceptable to the Department and regularly inspected by the Cement and Concrete Reference Laboratory of the National Institutes of Standards and Technology and approved to perform ASTM Designations: C 39, C 78, and C192.

The laboratory shall test the fibers following the requirements of ASTM Designation: C 1609 in a minimum of three (3) test specimens cast from the same batch of concrete, molded in 6 x 6 x 20-inch standard beam molds meeting the requirements of ASTM Designation: C 31. The beams shall be tested on an 18-inch span. The tests for  $R_{150,3.0}$  shall be performed when the average compressive strength of concrete used to cast the beams is between 3500 and 4500 psi. The tests for compressive strength shall follow the requirements of ASTM Designation: C 39. The average compressive strength shall be determined from a minimum of two (2) compressive strength cylinders.

The value for  $R_{150,3}$  shall be determined using the following equation:

$$R_{150,3.0} = \frac{f_{150,3.0}}{f_1} \times 100$$

The residual flexural strength ( $f_{150,3,0}$ ) shall be determined using the following equation:

$$f_{150,3.0} = \frac{P_{150,3.0} \times L}{b \times d^2}$$

#### where:

 $f_{150,3,0}$  is the residual flexural strength at the midspan deflection of L/150, (psi),

 $P_{150,3.0}$  is the residual load capacity at the midspan deflection of L/150, (lbf),

L is the span, (in),

b is the width of the specimen at the fracture, (in), and

d is the depth of the specimen at the fracture, (in).

For a 6 x 6 x 20-inch beam, the  $P_{150,3.0}$  shall be measured at a midspan deflection of 0.12 inch.

Additionally,  $R_{150,3.0}$ ,  $f_{150,3.0}$ , and  $P_{150,3.0}$  may also be referred to as  $R_{150}^{150}$ ,  $f_{150}^{150}$ , and  $P_{150}^{150}$  respectively.

At the dosage rate required to achieve the minimum  $R_{150,3}$ , the mixture shall both be workable and the fibers shall not form clumps.

The manufacturer shall submit to the State Materials Engineer certified test reports from the independent laboratory showing the test results of each test specimen.

<u>907-711.04.3--Job Control Requirements.</u> The synthetic structural fibers shall be one from the Department's "Approved Sources of Materials."

At the required dosage rate, the mixture shall both be workable and the fibers shall not form clumps to the satisfaction of the Engineer. If the mixture is determined by the Engineer to not be workable or have clumps of fibers, the mixture may be rejected.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-713-1

**DATE:** 12/11/2007

**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:

After the second paragraph of Subsection 713.01.2 on page 676, add the following.

Type 1-D compound may be used on bridge rails, median barriers, and other structures requiring a spray finish. When Type 1-D compound is used, it will be the Contractor's responsibility to assure that the compound has dissipated from the structure prior to applying the spray finish and that the spray finish adheres soundly to the structure.

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

<u>907-713.02--Admixtures for Portland Cement Concrete</u>. 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 midrange water-reducer shall be "MR".

<u>907-713.02.1--Source Approval.</u> 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.

<u>907-713.02.3--Acceptance.</u> 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.

#### SUPPLEMENT TO SPECIAL PROVISION NO. 907-714-5

**DATE:** 04/21/2009

**SUBJECT:** Miscellaneous Materials

Delete the second exception under the first paragraph in Subsection 907-714.05.2 regarding the strength activity index.

Delete Subsection 907-714.11.6 on page 5, and substitute the following:

Delete Subsection 714.11.6 on pages 690 and 691, and substitute the following:

907-714.11.6--Rapid Setting Cementitious Patching Compounds for Concrete Repair. Rapid setting concrete patching compounds must be approved for listing in the Department's "Approved Sources of Materials" prior to use. Upon approval, a product must be recertified every four (4) years to remain on the "Approved Sources of Materials" list. Each product shall be pre-measured and packaged dry by the manufacturer. All liquid solutions included by the manufacturer as components of the packaged material shall be packaged in a watertight container. The manufacturer may include aggregates in the packaged material or recommend the addition of Contractor furnished aggregates.

The type, size and quantity of aggregates, if any, to be added at the job site shall be in accordance with the manufacturer's recommendations and shall meet the requirements of Subsection 703.02 for fine aggregate and Subsection 703.03 for coarse aggregate. Required mixing water to be added at the job site shall meet the requirements of Subsection 714.01.2.

Only those bonding agents, if any, recommended by the manufacturer of the grout or patching compounds may be used for increasing the bond to old concrete or mortar surfaces.

Patching compounds containing soluble chlorides will not be permitted when in contact with steel.

Site preparation, proportioning of materials, mixing, placing and curing shall be performed in accordance with the manufacturer's recommendation for the specific type of application, and the Contractor shall furnish a copy of these recommendations to the Engineer.

Rapid setting cementitious concrete patching compounds, including components to be added at the job site, shall conform to the following physical requirements:

Non-shrink cementitious grouts shall not be permitted for use.

Compressive strength shall equal or exceed 3000 psi in 24 hours in accordance with ASTM C 928 for Type R2 concrete or mortar.

Bond strength shall equal or exceed 1000 psi in 24 hours in accordance with ASTM C 928 for Type R2 concrete or mortar.

The material shall have a maximum length change of  $\pm 0.15\%$  in accordance with ASTM C 928 for Type R2 concrete or mortar.

The Contractor shall furnish to the Engineer three copies of the manufacturer's certified test report(s) showing results of all required tests and certification that the material meets the specifications when mixed and place in accordance with the manufacturer's instructions. When the mixture is to be placed in contact with steel, the certification shall further state that the packaged material contains no chlorides. Certified test report(s) and certification shall be furnished for each lot in a shipment.

The proportioning of materials must be approved by the State Materials Engineer and any subsequent change in proportioning must also be approved. A sample of each component shall be submitted to the Engineer along with the quantity or percentage of each to be blended. At least 45 days must be allowed for initial approval.

The proportioning of materials for subsequent lots may be approved by the State Materials Engineer upon receipt of certification from the manufacturer that the new lot of material is the same composition as that originally approved by the Department and that the material has not been changed or altered in any way.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-714-5

**DATE:** 06/18/2008

**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:

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

<u>907-714.05.1--General.</u> 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 alkalies listed in AASHTO Designation: M 295, Table 2. Class F fly ash shall have a calcium oxide (CaO) content of less than 6.0%. Class C fly ash shall have a CaO content of greater than or equal to 6.0%.

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.

<u>907-714.05.2--Fly Ash for Use in Concrete</u>. 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.

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

<u>907-714.06.1--General.</u> 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.

<u>907-714.07.1.1--General.</u> 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.

<u>907-714.07.1.2--Source Approval.</u> 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<sub>3</sub>A) 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.

<u>907-714.07.1.3--Storage</u>. 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.

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

- 1. The sum of SiO<sub>2</sub> + Al<sub>2</sub>O<sub>3</sub> + Fe<sub>2</sub>O<sub>3</sub> 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<sub>2</sub>O, 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%.

<u>907-714.07.1.5--Acceptance.</u> 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.

<u>907-714.07.2.1--General.</u> 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.

<u>907-714.07.2.2--Source Approval.</u> 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<sub>3</sub>A) 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.

<u>907-714.07.2.3--Storage.</u> 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.

<u>907-714.07.2.4--Acceptance.</u> 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.

<u>907-714.11.6--Rapid Setting Commercial Grouts and Concrete Patching Compounds.</u> Delete the first sentence of the first paragraph of Subsection 714.11.6 on page 690 and substitute the following:

Rapid setting commercial grouts and concrete patching compounds must be approved for listing in the Department's "Approved Sources of Materials" prior to use. Upon approval, a product must be recertified every four (4) years to remain on the "Approved Sources of Materials" list. Each product shall be pre-measured and packaged dry by the manufacturer.

**907-714.11.7--Commercial Grout for Anchoring Doweled Tie Bars in Concrete.** Before Subsection 714.11.7.1 on page 691, add the following:

Approved Non-"Fast Set" Epoxy anchor systems as specified below may be used for the repair of concrete pavements that do not involve permanent sustained tension applications or overhead applications.

"Fast Set Epoxy" may not be used for any Adhesive Anchor Applications. Adhesive Anchor Systems (Fast Set epoxy or otherwise) shall not be used for permanent sustained tension applications or overhead applications. "Fast Set Epoxy" refers to an epoxy produced by the Sika Corporation called Sikadur AnchorFix-3 and repackaged for sale under a variety of names/companies listed at the Federal Highway Administration web site at the following link:

http://www.fhwa.dot.gov/Bridge/adhesives.cfm

<u>907-714.11.7.4--Acceptance Procedure</u>. After the last sentence of the first paragraph of Subsection 714.11.4 on page 691, add the following:

Upon approval, a product must be recertified every four (4) years to remain on the "Approved Sources of Materials" list.

#### 907-714.11.8--Epoxy Joint Repair System.

**907-714.11.8.1--General.** After the last sentence of the first paragraph of Subsection 714.11.8.1 on page 692, add the following:

Upon approval, a product must be recertified every four (4) years to remain on the "Approved Sources of Materials" list.

CODE: (IS)

SPECIAL PROVISION NO. 907-715-3

**DATE:** 01/25/2008

**SUBJECT:** Roadside Development Materials

Section 715, Roadside Development Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-715-02.2.1--Agricultural Limestone.</u> Delete the first sentence of Subsection 715-02.2.1 on page 704 and substitute the following.

Agricultural limestone shall be either a hard-rock limestone material or a marl or chalk agricultural liming material as addressed in the latest amendment to the Mississippi Agricultural Liming Material Act of 1993, published by the Mississippi Department of Agriculture and Commerce.

**907-715.02.2.1.1--Screening Requirements**. Delete the first sentence of Subsection 715.02.2.1.1 on page 704.

Delete Subsection 715.02.2.1.2 or pag 70 and be tue the llowing:

907-715-02.2.1.2--Calcium Carbonate Equivalent. In or chalk liming material shall not have less than 70% calcium and magnesium carbonate calculated as calcium carbonate equivalent when expressed on a dry weight basis.

<u>907-715-02.2.1.3--Neutralizing Values.</u> Hard-rock limestone material shall have a minimum Relative Neutralizing Value (RNV) of 63.0%, which is determined as follows:

% RNV = CCE x (% passing #10 mesh + % passing #50 mesh)/2

Where: CCE = Calcium Carbonate Equivalent

#### 907-715.03--Seed.

**907-715.03.2--Germination and Purity Requirements.** Add the following to Table B on page 705.

Name (K	(ind) Na	ne (Variety)	Percent	Percent
		Ge	rmination	Purity
GRASS	SES			
Rye Grass	Annual		80	98

CODE: (IS)

#### SPECIAL PROVISION NO. 907-720-1

**DATE:** 3/17/2008

**SUBJECT:** Pavement Markings Materials

Section 720, Pavement Marking Materials, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

<u>907-720.02--Thermoplastic Pavement Markings.</u> Delete the first paragraph of Subsection 720.02 on page 730 and substitute the following:

The thermoplastic material shall be lead free and conform to AASHTO Designation: M 249 except the glass beads shall be moisture resistant coated.

After the first sentence of the second paragraph of Subsection 720.02 on page 730, add the following:

In addition, the certification for the thermoplastic material shall state that the material is lead free.

#### SUPPLEMENT TO SPECIAL PROVISION NO. 907-804-8

**DATE:** 06/09/2008

**SUBJECT:** Concrete Bridges and Structures

Before the first sentence of 907-804.02.1 on page 1, add the following:

Delete the third and fourth sentences of the first paragraph of Subsection 804.02.1 on page 846, and substitute the following:

For projects with 1000 cubic yards and more, quality control and acceptance shall be achieved through statistical evaluation of test results. For projects of more than 200 but less than 1000 cubic yards, quality control and acceptance shall be achieved by individual test results.

Before the first sentence of Subsection 907-804.02.10 on page 2, add the following:

Delete the first sentence of the first paragraph of Subsection 804.02.10 on page 850 and substitute the following:

At least 30 days prior to production of concrete, the Contractor shall submit to the Engineer proposed concrete mix designs complying with the Department's *Concrete Field Manual*.

Delete the second paragraph of Subsection 907-804.02.11 on page 3 and substitute the following:

For projects with 1000 cubic yards and more, 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 projects of more than 200 but less than 1000 cubic yards the plant can be equipped for manual batching with a fine aggregate moisture meter visible to the plant operator.

Delete Subsection 907-804.02.13 on page 4 and substitute the following:

**907-804.02.13--Quality Assurance Sampling and Testing.** Delete subparagraph c) in Subsection 804.02.13 on page 858 and substitute the following:

c) For concrete, the Contractor's QC and Department's QA testing of concrete compressive strengths compare when using the data comparison computer program with an alpha value of 0.01 for projects with 1000 cubic yards and more; or, strength comparisons are within 990 psi for projects of more than 200 but less than 1000 cubic yards.

In Table 5 of Subsection 804.02.13 on page 858, delete "and FM" from the requirements on line A.3.

After Subsection 907-804.02.13.1.4 on page 4, add the following:

<u>907-804.02.13.1.5--Compressive Strength.</u> Delete the heading of the second paragraph of Subsection 804.02.13.1.5 on page 860 and substitute the following:

## Projects with 1000 Cubic Yards and More.

Delete the second heading in Subsection 804.02.13.1.5 on page 860 and substitute the following:

Projects of More Than 200 but Less Than 1000 Cubic Yards.

CODE: (IS)

#### SPECIAL PROVISION NO. 907-804-8

**DATE:** 02/05/2008

**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.

**907-804.02.9--Testing Personnel**. Delete Table 2 in this subsection and replace it with the following.

Table 2

Concrete Technician's Tasks	Test Method Required	Certification Required**
Sampling or Testing of	AASHTO Designation:T 23,	MDOT Class I certification
Plastic Concrete	T 119, T 121, T 141, T 152,	
	T 196, and ASTM Designation:	
	C 1064	
Compressive Strength	AASHTO Designation: T 22	MDOT Concrete Strength
Testing of Concrete	and T 231	Testing Technician
Cylinders		certification
Sampling of Aggregates	AASHTO Designation: T 2	Work under the supervision
		of an MDOT Class II
		certified technician
Testing of Aggregates	AASHTO Designation: T 19,	MDOT Class II certification
	T 27, T 84, T 85, T 248, and	
	T 255	
Proportioning of Concrete	AASHTO Designation: M 157	MDOT Class III
Mixtures*	and R 39	
Interpretation and	AASHTO Designation: T 325	MDOT Class III or Two
Application of Maturity	and ASTM Designation:	hours maturity method
Meter Readings	C 1074	training

- \* Technicians making concrete test specimens for meeting the requirements of Subsection 804.02.10.1.2 shall be MDOT Class I certified and under the direct supervision of an MDOT Class III certified technician.
- \*\* MDOT Class I certification encompasses the same test procedures and specifications as ACI Concrete Field Testing Technician Grade I. MDOT Class II certification encompasses the same test procedures and specifications as ACI Aggregate Testing Technician Level 1. MDOT Concrete Strength Testing Technician encompasses the same test procedures and specifications as ACI Concrete Strength Testing certification.

For specifics about the requirements for each level of certification, please refer to the latest edition of the Department's *Concrete Field Manual*. Technicians holding current MDOT Class I, MDOT Class II and/or MDOT Class III certifications shall be acceptable until those certifications expire. Upon a current certification expiration, recertification with the certifications listed in Table 2 shall be required. Technicians currently performing either specific gravity testing of aggregates or compressive strength tests shall be required to either:

- have the required MDOT certification listed in Table 2, or
- have a current MDOT Class III certification or work under the direct supervision of current MDOT Class III technician, and have demonstrated the specific gravity and/or compressive strength test during the inspection of laboratory equipment by the Materials Division, Concrete Section.

<u>907-804.02.10--Portland Cement Concrete Mix Design</u>. 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.

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.

<u>907-804.02.10.1.1--Proportioning on the Basis of Previous Field Experience of Trial Mixtures.</u> 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.

<u>907-804.02.10.3--Field Verification of Concrete Mix Design</u>. Delete the third sentence of the third paragraph of Subsection 804.02.10.3 on page 853, and substitute the following:

If the requirements of yield, slump, or total air content are not met within three (3) production days after the first placement, subsequent field verification testing shall not be permitted on department projects, and the mix design shall not be used until the requirements listed above are met

<u>907-804.02.10.4--Adjustments of Mixture Proportions</u>. Delete the paragraph in Subsection 804.02.10.4 on page 854, and substitute the following:

The mixture may be adjusted by the Class III Certified Technician representing the Contractor in accordance with the allowable revisions listed in the Department's Concrete Field Manual, paragraph 5.7. Written notification shall be submitted to the Engineer a minimum of seven (7) days prior to any source or brand of material change, aggregate size change, allowable material type change, or decrease in any cementitious material content. Any adjustments of the concrete mixture design shall necessitate repeat of field verification procedure as described in Subsection 804.02.10.3 and approval by the Engineer.

<u>907-804.02.11--Concrete Batch Plants.</u> 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.

<u>907-804.02.12--Contractor's Quality Control.</u> 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.

<u>907-804.02.13.1.4--Temperature.</u> 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.

<u>907-804.03.15--Removal of Falsework, Forms, and Housing</u>. 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:	
rorms.	Columns
	Side of Beams
	Walls not under pressure 1000 psi
	Floor Slabs, overhead
	Floor Slabs, between beams
	Slab Spans
	Other Parts
Centeri	ng:
	Under Beams 2400 psi
	Under Bent Caps
Limitat	ion for Placing Beams on:
	Pile Bents, pile under beam
	Frame Bents, two or more columns 2200 psi
	Frame Bents, single column

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

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

#### 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 that 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

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S.P. No. 906-3 -- Cont'd.

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

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S.P. No. 906-3 -- Cont'd.

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 <u>each</u> 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

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- 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**

- 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.

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#### 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.

#### SECTION 905 - PROPOSAL

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

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

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

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

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

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

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.

- 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 <u>five percent (5%) of total bid</u> and hereby agree that in case of my (our) failure to execute the contract and furnish bond within Ten (10) days after notice of award, the amount of this check (bid bond) will be forfeited to the State of Mississippi as liquidated damages arising out of my (our) failure to execute the contract as proposed. It is understood that in case I am (we are) not awarded the work, the check will be returned as provided in the Specifications.

Respectfully Submitted

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

Revised 11/24/2008

The following is my (our) itemized proposal.

 $Mill \ and \ In lay \ US \ 43, from \ South \ of \ I-20 \ to \ North \ of \ US \ 80, known \ as \ State \ Project \ No. \ MP-5043-61(010) \ / \ 303909301, in \ the \ County \ of \ Rankin, \ State \ of \ Mississippi.$ 

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			Description	Unit Price		Item Amo	unt		
No.		Code		Dollar	Ct	Dollar	Ct		
					Roadway Items				
0010	202-B005		1,100	Square Yard	Removal of Asphalt Pavement, All Depths				
0020	202-B076		1,207	Linear Feet	Removal of Traffic Stripe				
0030	202-B087		2,328	Linear Feet	Removal of Guard Rail, Including Rails, Posts and Terminal Ends				
0040	202-B093		50	Linear Feet	Removal of Curb & Gutter, All Types				
0050	202-B150		12	Each	Removal of Object Markers				
0060	203-EX029	(E)	1,000	Cubic Yard	Borrow Excavation, AH, FME, Class B15				
0070	203-G003	(E)	1,375	Cubic Yard	Excess Excavation, FM, AH				
0080	209-A001		1,100	Square Yard	Geotextile Stabilization, Type V				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	t
0090	305-B001	(GY)		Cubic Yard	Size I Stabilizer Aggregate, Coarse				ı
0100	406-A001		34,224	Square Yard	Cold Milling of Bituminous Pavement, All Depths				
0110	503-C007			Linear Feet	Saw Cut, Full Depth				
0120	606-B001		1,803	Linear Feet	Guard Rail, Class A, Type 1				
0130	606-E001		10	Each	Guard Rail, Terminal End Section				
0140	606-E002		2 1	Each	Guard Rail, Terminal End Section, Flared				
0150	609-D003	(S)		Linear Feet	Combination Concrete Curb and Gutter Type 3				
0160	609-E001			Linear Feet	Bituminous Curb				
0170	615-B001	(S)		Linear Feet	Precast Concrete Median Barrier				
0180	616-B002	(S)	80 3	Square Yard	Hot Bituminous Median and/or Island Pavement, 4-inch				
0190	618-A001		1 1	Lump Sum	Maintenance of Traffic	XXXXXXXX	XXX		
0200	619-A1002		4 ]	Mile	Temporary Traffic Stripe, Continuous White				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	;	Bid Amount	t
0210	619-A2002		3	Mile	Temporary Traffic Stripe, Continuous Yellow				
0220	619-A4001		3,690	Linear Feet	Temporary Traffic Stripe, Skip Yellow				
0230	619-A5001		10,972	Linear Feet	Temporary Traffic Stripe, Detail				
0240	619-A6001		857	Linear Feet	Temporary Traffic Stripe, Legend				
0250	619-A6002		280	Square Feet	Temporary Traffic Stripe, Legend				
0260	619-D1001		162	Square Feet	Standard Roadside Construction Signs, Less than 10 Square Feet				
0270	619-D2001		252	Square Feet	Standard Roadside Construction Signs, 10 Square Feet or More				
0280	619-F3004		80	Each	Delineators, Guard Rail, White				
0290	619-G4005		24	Linear Feet	Barricades, Type III, Double Faced				
0300	619-G7001		4	Each	Warning Lights, Type "B"				
0310	620-A001		1	Lump Sum	Mobilization	XXXXXXXX	XXX		
0320	627-J001		30	Each	Two-Way Clear Reflective High Performance Raised Markers				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	}	Bid Amount	
0330	627-K001		26	Each	Red-Clear Reflective High Performance Raised Markers				
0340	627-L001		311	Each	Two-Way Yellow Reflective High Performance Raised Markers				
0350	630-G006		12	Each	Type 3 Object Markers, OM-3R or OM-3L				
0360	699-A001		1	Lump Sum	Roadway Construction Stakes	XXXXXXXX	XXX		
0370	907-304-A001	(GY)	1,628	Cubic Yard	Granular Material, LVM, Class 5, Group C				
0380	907-304-G001	(GY)	375	Cubic Yard	Size 825B Crushed Stone Base, AEA				
0390	907-407-A001	(A2)	2,000	Gallon	Asphalt for Tack Coat				
0400	907-626-C003		2	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous White				
0410	907-626-C005		724	Linear Feet	6" Thermoplastic Double Drop Edge Stripe, Continuous White, 90 mi				
0420	907-626-D005		2,086	Linear Feet	6" Thermoplastic Double Drop Traffic Stripe, Skip Yellow				
0430	907-626-F003		2	Mile	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow				
0440	907-626-F007		242	Linear Feet	6" Thermoplastic Double Drop Edge Stripe, Continuous Yellow, 90 mil min				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount
0450	907-626-G004		7,270	Linear Feet	Thermoplastic Detail Stripe, White		
0460	907-626-G005		3,652	Linear Feet	Thermoplastic Detail Stripe, Yellow		
0470	907-626-H003		540	Linear Feet	Thermoplastic Legend, White, 4" Equivalent Length		
0480	907-626-H004		857	Linear Feet	Thermoplastic Legend, White		
0490	907-626-H005		280	Square Feet	Thermoplastic Legend, White		
					ALTERNATE GROUP AA NUMBER 1	•	
0500	907-403-A006	(BA1)	4,650	Ton	Hot Mix Asphalt, MT, 12.5-mm mixture		
0510	907-403-A007	(BA1)	578	Ton	Hot Mix Asphalt, MT, 19-mm mixture		
0520	907-403-B001	(BA1)	250	Ton	Hot Mix Asphalt, HT, 12.5-mm mixture, Leveling		
					ALTERNATE GROUP AA NUMBER 2		
0530	907-403-M002	(BA1)	4,650	Ton	Warm Mix Asphalt, MT, 12.5-mm mixture		
0540	907-403-M007	(BA1)	578	Ton	Warm Mix Asphalt, MT, 19-mm mixture		
0550	907-403-N006	(BA1)	250	Ton	Warm Mix Asphalt, MT, 12.5-mm mixture, Leveling		

	*** BID CERTIFICATION ***	
TOTAL BID	\$ <u> </u>	
BIDDER ACKNOWLEDGES THAT HE/SHE HAS CITHEREIN CONSTITUTE THEIR OFFICIAL BID.	*** SIGNATURE STATEMENT *** HECKED ALL ITEMS IN THIS PROPOSAL FOR ACCURACY	AND CERTIFIED THAT THE FIGURES SHOWN
	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:

<sup>\*</sup> Option to be shown as either (a), (b), or (c).

	Project No.	<u>County</u>	Project No.	<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.	T (GIII) CI		recueron	reduction	Trougerion
2.					
3.					
4					
4.					
5.					
6.					
7.					
8.					

## SECTION 905 - COMBINATION BID PROPOSAL (Continued)

II.

Project Number	Pay Item Number	Unit	Unit Price Reduction	Total Item Reduction	Total Contract Reduction		
9.							
10.							
		L					
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.							
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. By \_\_\_\_\_

# <u>CERTIFICATION</u> (Execute in duplicate)

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
(Name of Firm, Partnership, or Corporation)
on Project No. MP-5043-61(010) / 303909301 ,
in Rankin 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
(5/29/2008S)

# <u>CERTIFICATION</u> (Execute in duplicate)

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
(Name of Firm, Partnership, or Corporation)
on Project No. MP-5043-61(010) / 303909301 ,
in Rankin 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
(5/29/2008S)

#### SECTION 902

CONTRACT FORMP-5043-61(01)	0) / 303909301
LOCATED IN THE COUNTY(IES) OF	Rankin
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.

		W	itness	our signatures	this the	day of		
Contractor (s) By						MISSISSIPPI TRANSPORTATION COMMISSION		
TitleSigned and sealed in the presence of:				ee of:		Executive Director		
(names	and addresses	s of w	ritness	es)				
Award		-			-	Secretary to the Commission Commission in session on the day of, Page No		

Revised 8/06/2003

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

CONTRACT BOND FOR: MP-5043-61(010) / 303909301
LOCATED IN THE COUNTY(IES) OF: Rankin
STATE OF MISSISSIPPI,
COUNTY OF HINDS
Know all men by these presents: that we,
( Contractor )
Principal, a
residing at in the State of
and ( Surety )
residing at in the State of
authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bo
unto the State of Mississippi in the sum of
(\$) Dollars, lawful money of the United States of America, to be p
to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors
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
day of A.D hereto annexed, for the construction of certain project
in the State of Mississippi as mentioned in said contract in accordance with the Contract Documents therefor,
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 obser
do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contractions, guarantees and guarant
contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in manner and form and furnish all of the material and equipment specified in said contract in strict accordance v
the terms of said contract which said plans, specifications and special provisions are included in and form a par
said contract and shall maintain the said work contemplated until its final completion and acceptance as specified Subsection 100.11 of the approved appointed and some hormology and development of the approved appointed to the complete and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and some hormology are some hormology and some hormology and some hormology are some hormology and s
Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commiss from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fra
or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employee

#### **SECTION 903 - CONTINUED**

the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or employees, and shall promptly pay the said agents, servants and employees and all persons furnishing labor, material, equipment or supplies therefor, including premiums incurred, for Surety Bonds, Liability Insurance, and Workmen's Compensation Insurance; with the additional obligation that such Contractor shall promptly make payment of all taxes, licenses, assessments, contributions, damages, any liquidated damages which may arise prior to any termination of said principal's contract, any liquidated damages which may arise after termination of the said principal's contract due to default on the part of said principal, penalties and interest thereon, when and as the same may be due this state, or any county, municipality, board, department, commission or political subdivision: in the course of the performance of said work and in accordance with Sections 31-5-51 et seq. Mississippi Code of 1972, and other State statutes applicable thereto, and shall carry out to the letter and to the satisfaction of the Executive Director of the Mississippi Department of Transportation, all, each and every one of the stipulations, obligations, conditions, covenants and agreements and terms of said contract in accordance with the terms thereof and all of the expense and cost and attorney's fee that may be incurred in the enforcement of the performance of said contract, or in the enforcement of the conditions and obligations of this bond, then this obligation shall be null and void, otherwise to be and remain in full force and virtue.

Witness our signatures and seals this the	day of A.D
(Contractors) Principal	Surety
Ву	
	(Signature) Attorney in Fact
	Address
Title(Contractor's Seal)	(Printed) MS Agent
(Contractor's Scar)	(Timed) WS Agent
	(Signature) MS Agent
	Address
	9
	(Surety Seal)
	Mississinni Insurance ID Number



# **BID BOND**

KNOW ALL MEN BY THESE PRESENTS, that we	Contractor  Address  City, State ZIP  Surety	
	City, State ZIP	
	·	
	Surety	
as Principal, hereinafter called the Principal, and	Surety	
a corporation duly organized under the laws of the state of		
as Surety, hereinafter called the Surety, are held and firmly bound u	into <u>State of Wississippi, Jac</u>	ekson, wiississippi
As Obligee, hereinafter called Obligee, in the sum of <b>Five Per Cen</b>	t (5%) of Amount Bid	
	Dollars (\$	)
for the payment of which sum will and truly to be made, the sa executors, administrators, successors and assigns, jointly and severa	id Principal and said Surety, lly, firmly by these presents.	bind ourselves, our heirs,
WHEREAS, the Principal has submitted a bid for Mill and Inlay UState Project No. MP-5043-61(010) / 303909301, in the County of	,	•
said Principal will, within the time required, enter into a formal coperformance of the terms and conditions of the contract, then this will pay unto the Obligee the difference in money between the an which the Obligee legally contracts with another party to perform the in no event shall liability hereunder exceed the penal sum hereof.  Signed and sealed this day of, 20	obligation to be void; otherwis nount of the bid of the said Pri e work if the latter amount be in	e the Principal and Surety ncipal and the amount for
	(Principal)	) (Seal)
By: _	(Name)	(Title)
	(Surety)	(Seal)
D		
By: _	(Attorney-in-F	Fact)
	MS Agent	t
	Mississippi Insurance	ID Number