

MDOT Use Only

Checked _____

Loaded _____

Keyed _____

21 -



SM No. CLWO3059260021

PROPOSAL AND CONTRACT DOCUMENTS

FOR THE CONSTRUCTION OF
(EXEMPT)

21

Site Improvements to the Rest Area on I-55 Northbound north of Durant, known as State Project No. LWO-3059-26(002) / 501920302, in the County of Holmes, State of Mississippi.

Project Completion: August 31, 2009

NOTICE

Bidder's Attention is directed to Notice To Bidders No. 2361
Regarding Mississippi Resident Agent Requirements

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TABLE OF CONTENTS

PROJECT: LWO-3059-26(002) / 501920302 – Holmes County

901--Advertisement

904--Notice to Bidders:

- Governing Specs. - # 1
- Final Cleanup - #3
- Fiber Reinforced Concrete - # 640
- On-The-Job Training Program - # 777
- Payroll Requirements - # 883
- Use of Precast Drainage Units - # 1321
- Errata & Modifications to 2004 Standard Specifications - #1405
- Advancement of Materials - # 1546
- Safety Apparel - # 1808
- Non-Quality Control / Quantity Assurance Concrete - # 1922
- Federal Bridge Formula - # 1928
- Petroleum Products Base Price - #2238
- Contract Time - # 2246
- Additional Construction Considerations - # 2290
- Mississippi Resident Agent Requirements - # 2361

- 907-105-3: Cooperation By Contractors, W/Supplement
- 907-107-1: Liability Insurance, W/Supplement
- 907-107-6: Legal Relations & Responsibilities to Public, W/Supplement
- 907-108-15: Cessation of Contract Time
- 907-108-17: Prosecution and Progress
- 907-109-3: Partial Payment, W/Supplement
- 907-225-1: Grassing, W/Supplement
- 907-230-2: Tree, Annual, Shrub and Groundcover Planting
- 907-230-4: Tree and Shrub Planting
- 907-233-1: Tree Bark Mulch
- 907-258-7: Miscellaneous Rest Area Facilities
- 907-259-4: Site Amenities
- 907-282-5: Irrigation System
- 907-290-3: Flag Pole
- 907-401-2: Hot Mix Asphalt (HMA), W/Supplement
- 907-403-4: Hot Mix Asphalt (HMA), W/Supplement
- 907-407-1: Tack Coat
- 907-501-3: Price Adjustment for Thickness
- 907-601-1: Structural Concrete
- 907-608-4: Stamped and Colored Concrete Sidewalk
- 907-626-3: Thermoplastic Markings
- 907-626-19: Thermoplastic Blue ADA Markings
- 907-628-3: Cold Plastic Thermoplastic Markings

-CONTINUED ON NEXT PAGE-

PAGE 2 - PROJECT NO. LWO-3059-26(002) / 501920302 – Holmes County

- 907-628-8: Cold Plastic Blue-ADA Pavement Markings
- 907-630-2: Remove and Reset Ground Mounted Signs
- 907-681-2: Submittal Data
- 907-683-8: Lighting Assembly
- 907-701-3: Hydraulic Cement, W/Supplement
- 907-708-5: Non Metal Drainage Structures
- 907-709-1: Metal Pipe
- 907-711-3: Synthetic Structural Fiber Reinforcement
- 907-713-1: Admixtures for Concrete
- 907-714-5: Miscellaneous Materials, W/Supplement
- 907-720-1: Pavement Marking Material
- 907-804-8: Concrete for Bridges and Structures, W/Supplement
- 906-3: MDOT On-the-Job Training Program
- 906-6: MDOT On-the-Job Training Program - Alternate Program

SECTION 905 - PROPOSAL,
PROPOSAL SHEET NOS. 2-1 THRU 2-8,
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)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 901 - ADVERTISEMENT

Sealed bids will be received by the Mississippi Transportation Commission in the Office of the Contract Administration Engineer, Room 1013, Mississippi Department of Transportation Administration Building, 401 North West Street, Jackson, Mississippi, until 9:30 o'clock A.M., Tuesday, February 24, 2009; thereafter, bids will be received in the First Floor Auditorium of the Mississippi Department of Transportation Administration Building, Jackson, Mississippi, until 10:00 o'clock A.M., Tuesday, February 24, 2009, and shortly thereafter publicly opened for:

Site Improvements to the Rest Area on I-55 Northbound north of Durant, known as State Project No. LWO-3059-26(002) / 501920302, in the County of Holmes, 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.

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

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

Plans may be acquired on a cost per sheet basis from MDOT Plans Print Shop, MDOT Shop Complex, Building C, Room 114, 2567 North West Street, Jackson, Mississippi 39216, Telephone (601) 359-7460 or e-mail at plans@mdot.state.ms.us or FAX (601) 359-7461. Plans will be shipped upon receipt of payment.

Bid bond, signed or countersigned by a Mississippi Resident Agent, with Power of Attorney attached or on file with the Contract Administration Engineer of the Department, a Cashier's check or Certified Check for five (5%) percent of bid, payable to STATE OF MISSISSIPPI, must accompany each proposal.

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

LARRY L. "BUTCH" BROWN
EXECUTIVE DIRECTOR

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Governing Specifications

The current (2004) Edition of the Standard Specifications for Road and Bridge Construction adopted by the Mississippi Transportation Commission is made a part hereof fully and completely as if it were attached hereto, except where superseded by special provisions, or amended by revisions of the Specifications contained herein. Copies of the specification book may be purchased from the MDOT Construction Division.

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

In the event the plans or proposal contain references to the 1990 Edition of the Standard Specifications for Road and Bridge Construction, it is to be understood that such references shall mean the comparable provisions of the 2004 Edition of the Standard Specifications.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 3

CODE: (SP)

DATE: 05/03/2004

SUBJECT: Final Clean-Up

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SECTION 904 - NOTICE TO BIDDERS NO. 640

CODE: (IS)

| DATE: 09/26/2005

SUBJECT: Fiber Reinforced Concrete

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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

CODE: (IS)

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

SUBJECT: On-The-Job Training Program

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 883

CODE: (IS)

DATE: 04/28/2006

SUBJECT: Payroll Requirements

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1321

CODE: (SP)

DATE: 01/22/2007

SUBJECT: Use of Precast Drainage Units

Bidders attention is brought to the content of Subsection 601.02.3 regarding precast units. The Contractor must make a request to the Project Engineer for approval to use precast units prior to installation. Even though the units have been pre-approved by MDOT, official request for use is required.

MDOT has pre-approved the following manufactures. Any other manufacturer must be pre-approved by MDOT Roadway Design Division prior to use.

Hanson Pipe & Products, Inc.
2840 W. Northside Drive
Jackson, MS 39213
(Formally Choctaw, Inc.)

Custom Precast Products, Inc.
125 International Boulevard
Lavergne, TN 37086-3326

Custom Precast Products, Inc.
P.O. Drawer #242
#68 Industrial Park
Lumberton, MS 39455

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1405

CODE: (IS)

DATE: 03/15/2007

SUBJECT: ERRATA AND MODIFICATIONS TO THE 2004 STANDARD SPECIFICATIONS

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1546

CODE: (SP)

DATE: 05/23/2007

SUBJECT: Advancement of Materials

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1808

CODE: (IS)

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>

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 1922

CODE: (SP)

DATE: 03/31/2008

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.

<u>Pay Item</u>	<u>Description</u>
221	Paved Ditches
601	Structural Concrete, 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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| 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 7th Street, SW
Washington, DC 20590
(202) 366-2212

or

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 2238

CODE: (SP)

DATE: 1/8/2009

SUBJECT: Petroleum Products Base Prices For Contracts Let in February, 2009

REFERENCE: Subsection 109.07

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

FUELS

	<u>Per Gallon</u>	<u>Per Liter</u>
Gasoline	\$1.6222	\$0.4285
Diesel	\$2.0002	\$0.5284

MATERIALS OF CONSTRUCTION

<u>ASPHALT CEMENT</u>	<u>Per Gallon</u>	<u>Per Ton</u>	<u>Per Liter</u>	<u>Per Metric Ton</u>
Viscosity Grade AC-5	\$2.1328	\$506.00	\$0.5634	\$557.76
Viscosity Grade AC-10	\$2.1602	\$512.50	\$0.5707	\$564.93
Viscosity Grade AC-20	\$2.1286	\$505.00	\$0.5623	\$556.66
Viscosity Grade AC-30	\$2.1075	\$500.00	\$0.5567	\$551.15
Grade PG 64-22	\$2.0894	\$495.71	\$0.5520	\$546.42
Grade PG 67-22	\$2.1196	\$502.86	\$0.5599	\$554.30
Grade PG 76-22	\$2.8030	\$665.00	\$0.7405	\$733.02
Grade PG 82-22	\$2.9927	\$710.00	\$0.7906	\$782.63

EMULSIFIED ASPHALTS, PRIMES, & TACK COATS

Grade EA-4 (SS-1)	\$2.2948	\$0.6062
Grade RS-2C (CRS-2)	\$2.0973	\$0.5540
Grade CRS-2P	\$2.4514	\$0.6476
Grade EA-1, MC-70 & AE-P	\$2.5593	\$0.6761
Grade SS-1 & 1H	\$2.2750	\$0.6010
Grade CSS-1 & 1H (Undiluted)	\$2.3000	\$0.6076
Grade CSS-1 & 1H (Diluted 1 to 1 Fog Seal)	\$1.4250	\$0.3764

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2246

CODE: (SP)

DATE: 01/08/2009

SUBJECT: Contract Time

PROJECT: LWO-3059-26(002) 501920302 -- Holmes County

The calendar date for completion of work to be performed by the Contractor for this project shall be **September 30, 2009** which date or extended date as provided in Subsection 108.06 shall be the end of contract time. It is anticipated that the Notice of Award will be issued by not later than **March 10, 2009**. The date for the Notice to Proceed / Beginning of Contract Time will be simultaneous with the execution of the contract.

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 2290

CODE: (SP)

DATE: 01/08/2009

SUBJECT: Additional Construction Considerations

PROJECT: LWO-3059-26(002) / 501920302 - Holmes County

Contractor shall begin immediately with the required demolition of site elements and installation of utilities to the existing building under construction. Demolition of site elements shall be coordinated with the Engineer and the Building Contractor, who is currently under a separate contract with the Department, to preserve existing parking areas for layout space, parking, and access for the Building Contract. The remaining site demolition shall not occur until approved by the Engineer.

The rest area building and site has been closed to the Public during construction and will not open until construction is complete with these site improvements and landscape maintenance has begun. Every effort shall be made to minimize conflicts between the Site and Building Contractors and minimize construction impacts to the site.

Contractor is also advised to plant trees, shrubs and grassing outside the irrigated areas as early as possible in order to provide the maximum time for plant material establishment. It is further advised that warm season grassing (Bermudagrass) is planted where possible during the allowable seasonal limitations, minimizing the need for cool season grassing (Ryegrass), and subsequent warm season grassing the following spring.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 - NOTICE TO BIDDERS NO. 2361

CODE: (SP)

DATE: 01/26/2009

SUBJECT: Mississippi Resident Agent Requirement

Bidders are advised of new changes in the proposal bond forms and required signatures. Commencing with the February 2009 letting, non-resident agents **WILL NOT** be allowed to sign contract documents, including bonds and insurance. Qualified non-resident agents that were allowed to sign contract documents in the January 2009 letting will not be allowed in future contracts until further notice. Only Mississippi Resident Agents will be allowed to sign contract documents.

Another change for the February 2009 letting is that the new performance bond and new payment bond that was utilized in the January 2009 proposals has been replaced with the one contract bond used by MODT prior to the January 2009 letting.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-105-3

CODE: (IS)

DATE: 02/14/2006

SUBJECT: Cooperation By Contractor

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-107-1

DATE: 03/21/2006

SUBJECT: *Liability Insurance*

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-107-1

CODE: (IS)

DATE: 05/03/2004

SUBJECT: Liability Insurance

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

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

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

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

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

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

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

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

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

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

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

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

Coverage shall include:

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-107-6

DATE: 11/16/2007

SUBJECT: Legal Relations and Responsibility to Public

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-107-6

CODE: (IS)

| DATE: 07/03/2007

| SUBJECT: Legal Relations and Responsibility to Public

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-108-15

CODE: (SP)

DATE: 09/20/2007

SUBJECT: Cessation of Contract Time

Section 108, Prosecution and Progress, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-108.06--Determination and Extension of Contract Time.

907-108.06.2--Based on Calendar Date Completion. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

| SPECIAL PROVISION NO. 907-108-17

CODE: (IS)

| DATE: 06/11/2008

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.

907-108.06.2--Based on Calendar Date Completion. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-109-3

DATE: 11/21/2006

SUBJECT: Changes in Material Costs

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-109-3

CODE: (IS)

DATE: 04/21/2006

SUBJECT: Partial Payment

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

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

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

907-109.06--Partial Payment.

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-225-1

DATE: 04/29/2008

SUBJECT: Grassing

Delete the first paragraph of Subsection 907-225.05 on page 1 and substitute the following:

Hard rock agricultural limestone will be paid for at the contract unit price per ton. Hard rock agricultural limestone with a relative neutralizing value (RNV), determined in accordance with Subsection 907-715-02.2.1.3, of between 60.0% and 62.9% will be paid for at half ($\frac{1}{2}$) the contract unit price per ton. No payment will be made for hard rock agricultural limestone with an RNV less than 60.0%.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-225-1

CODE: (IS)

DATE: 09/23/2004

SUBJECT: Grassing

Section 907-225, Grassing, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-225.04--Method of Measurement. After the second sentence of Subsection 225.04 on page 163, add the following:

Acceptable quantities of agricultural limestone will be measured by the ton.

907-225.05--Basis of Payment. After the first paragraph of Subsection 225.05 on page 163, add the following:

Agricultural limestone will be paid for at the contract unit price per ton. Grade "A" agricultural limestone with an equivalent neutralizing value (ENV), determined in accordance with Subsection 907-715-02.2.1.3, of between 60.0% and 62.9% will be paid for at half (1/2) the contract unit price per ton. No payment will be made for Grade "A" agricultural limestone with an ENV less than 60.0%.

Delete the first pay item listed on page 163 and substitute the following:

907-225-A: Grassing	- per acre
907-225-B: Agricultural Limestone	- per ton

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-230-2

CODE: (SP)

DATE: 06/01/2004

SUBJECT: Tree, Annual, Shrub and Groundcover Planting

Section 907-230, Tree and Shrub Planting, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable to Tree, Annuals, Shrub and Groundcover Planting Only.

907-230.01--Description. The work covered under this special provision consists of furnishing all labor, materials, tools, tests, royalties, services and other incidentals as may be required for the good and proper completion of the tree, annual, shrub and groundcover planting operations.

The extent of planting locations are shown on the plans.

The Contractor is responsible for notes on the plans which call attention to particular requirements or conditions. The fact that these requirements or conditions are not called out in the specifications does not relieve the Contractor of responsibility for these requirements or conditions.

907-230.01.1--Maintenance of Site During Planting. Sidewalks, roads and other paving adjacent to planting operations shall be kept clean and free of obstruction, mud and debris at all times. Wheels of vehicles used in the work shall be cleaned if necessary. Sidewalks shall be protected from damage and markings from wheels of vehicles used in the work.

Flushing of streets and disposal of dirt or debris into sewers or drainage ditches will not be permitted.

Dust shall be controlled by approved means to the satisfaction of the Engineer.

907-230.01.2--Quality Assurance. At least one person thoroughly familiar with the type of materials being installed and the proper materials and methods for their installation shall be present at all times during execution of this work and shall direct all work being performed.

All workers shall have sufficient skill and experience to properly perform the work assigned to them. Workers engaged in special work or skilled work shall have the sufficient experience in such work and in the operation of the equipment required to perform all work properly and satisfactory.

The selection of all materials and execution of all preparations required under the plans and specifications shall be subject to the approval of the Engineer. The Engineer shall have the right to reject any and all materials, any and all work, which in the opinion of the Engineer does not meet with the requirements of the specifications at any stage of the operations. All rejected materials shall be removed from the site at no additional cost to the State. Rejected work shall be replaced with

work of the specified quality or corrected as directed by the Engineer at no additional cost to the State.

All plants and their installation materials, shall meet or exceed the specifications of Federal, State, and County laws requiring inspection for plant disease and insect control.

Quality and size shall conform with the current edition of "Horticulture Standards" for number one grade nursery stock as adopted by the American Association of Nurserymen.

All plants shall be true to name. Each tree or planting lot shall be tagged with the name and size of the plants in accordance with the standards of practice of the American Association of Nurserymen. In all cases, botanical names shall take precedence over common names.

Plant nomenclature shall conform to Hortus Third, A Concise Dictionary of Plants Cultivated in the United States and Canada by MacMillan Publishing Company, Inc., New York.

907-230.01.3--Replacements of Plants. The Contractor shall make periodic inspections during the life of the project to determine what changes, if any, should be made in the City of Ridgeland's maintenance program. All such recommended changes shall be submitted, in writing, to the Engineer.

The Contractor shall replace, at no additional cost to the State, and as soon as weather conditions permit, all dead plants and all plants not in a vigorous, thriving condition, as determined by the Engineer. The plants shall be free of dead branches and dead branch tips, and shall bear foliage of a normal density, size and color. Replacements shall closely match adjacent specimens of the same species. Replacements shall be subject to all requirements stated in this specification.

The Contractor shall make all necessary repairs to grades, mulch or plant materials required because of plant replacements. Such repairs shall be done at no additional cost to the State.

907-230.02--Materials.

907-230.02.1--Soil Mix. Soil mix within all groundcover and annual planting beds shall be furnished at a 24-inch depth. Shrub planting pits shall be backfilled with soil mix as specified on the shrub planting drawing details. Soil mix furnished for all plant materials shall be fertile, friable, sandy loam soil mix complying with the following quantitative analysis:

- 1. Decomposed organic matter 5 to 8%
- 2. Silt 10 to 30%
- 3. Sand 25 to 75%
- 4. Clay 5 to 10%
- 5. pH 5.0 to 6.5

Soil mix shall not contain any substance or material inhibitory to plant growth, and shall be without admixture of clay, hardpan, mulch, marl, shale or other material which in the opinion of the Engineer

shall render it unsuitable for use. Soil mix shall also be free of stones, lumps, noxious weeds or their seeds, grasses or their seeds, other plants or their roots, branches, sticks, or other extraneous material larger than two inches in diameter. Soil mix found to contain any of the above-listed items shall be chemically or mechanically treated, or removed from the project at the discretion of the Engineer.

The Contractor shall be required to have tests run on the soil mix proposed for use, to determine the soil mix's compliance with the above-listed quantitative analysis. In addition to the above tests, the Contractor shall be required to have tests run for soluble salt, nitrogen, phosphorus, potassium, calcium, and magnesium content, for percent organic matter, and pH. These soil tests shall be conducted by a soils testing laboratory approved by the Engineer.

Following initial soil testing and approval of soil mix for use, soil mixes placed on the project may be sampled and tested as specified above at random, as directed by the Engineer, at no additional cost to the State.

Additions of fertilizer and/or lime to the soil mix furnished, as may be recommended by the Soil Test Report issued by the soil testing laboratory, shall be done by the Contractor as part of the work. No additions of fertilizer, lime, conditioning, or placement of soil mix shall be done prior to furnishing, in writing to the Engineer, all initial soil test results and obtaining his approval of soil mixes tested.

907-230.02.1.1--Fertilizer. Fertilizer shall be a commercially available material conforming to Mississippi Fertilizer Laws. Fertilizer shall be uniform in composition, dry and free flowing, and shall be delivered to the site in the original unopened containers, each bearing the manufacturer's guaranteed analysis. Any fertilizer which becomes caked or otherwise damaged, making it, in the opinion of the Engineer, unsuitable for use, will not be accepted. Commercial balanced fertilizer of analysis 13-13-13 shall be provided for use in soil mixture conditioning.

907-230.02.1.2--Lime. Lime shall be crushed or ground so that 90 percent passes a 10-mesh screen and not less than 50 percent will pass a 60-mesh screen. All lime shall have a neutralizing value of 90 percent calcium carbonate or better. Lime which has become caked or otherwise damaged, making it, in the opinion of the Engineer, unsuitable for use, will not be accepted.

Lime shall be applied at the rate specified by the soil test reports.

907-230.02.1.3--Water. Potable water, furnished by the Contractor, shall be supplied to the plants in adequate quantities to insure their healthy survivability until final acceptance of the project. The Contractor shall make whatever arrangements may be necessary to insure an adequate supply of water. The Contractor shall also furnish all necessary hose, equipment, attachments and accessories as may be necessary to complete the work.

907-230.02.1.4--Organic Matter. Klumb's, or approved equal, decomposed pine bark soil conditioner shall be provided for use in planting soil mix.

907-230.02.1.5--Sand. Clean sharp builder's sand shall be provided for use in planting soil mix.

907-230.02.2—Plant Materials.

907-230.02.2.1--General. All plants as indicated on the plans and/or listed in the plant schedule shall be provided. Unless otherwise specifically permitted, plants shall be nursery-grown in accordance with the best modern horticultural practices.

Plants shall comply with State and Federal laws relating to inspection for diseases and insect infestation. Inspection certificates shall be filed with the State.

Substitutions of other plants shall not be permitted unless authorized in writing by the Engineer. If proof is submitted that any plant size specified is unobtainable, a proposal will be considered for use of the nearest equivalent size or variety.

Durable, legible labels stating the correct plant name and size specified in the Plant Schedule shall be securely attached to each plant or plant container delivered to the planting site for the purpose of inspection and plant identification.

907-230.02.2.2--Quality and Inspection. Plants shall conform to the requirements set forth in ANSI 260.1 Standard for Nursery Stock and shall be of standard quality, true to name and type and first-class representatives of their species and variety. Balled & Burlapped (B&B) materials shall have been root pruned within the last two years. Container grown plants shall have been grown in the delivery container for one growing season.

Plants shall have normal, well-developed branches and vigorous fibrous root systems. They shall be healthy, vigorous plants free from defects, decay, disfiguring roots, sun-scald injuries, abrasions of the bark, diseases, insect pests or their eggs, borers and any other form of infestation or objectionable disfigurements.

Plants lacking density or proper proportions, plants which are weak or thin, plants which have a damaged or crooked leader or multiple leaders unless specifically specified, or plants injured by too close planting in nursery rows will be rejected. Plant materials which have been cut back from larger grades to meet certain requirements will not be accepted. Plants shall not be pruned prior to delivery to the point of planting.

All plants shall be subject to inspection and approval by the Engineer at any place and at any time. Portions or parts of plants required for the work may be inspected at the place of growth, but inspection at the place of growth shall not in any way impair the right of rejection at the site.

907-230.02.2.3--Measurements. Trees shall be measured when branches are in their normal position. Height and spread dimensions specified refer to the main body of the plant and not from tip to tip. Caliper measurements shall be taken at a point on the tree trunk six inches above natural ground line for trees up to four inches in caliper. Caliper measurements for trees specified as greater than four inches in caliper shall be taken at a point on the trunk 12 inches above the natural ground line.

Shrubs and groundcover shall be measured by container size; however, additional dimensions are often given within the plant material schedule on the plans to verify that the container size is accurate for the spread & height of the plant, per the American Association of Nurserymen (AAN). These measurements are taken when branches are in the plant's normal position. Height and spread dimensions specified refer to the main body of the plant and not from tip to tip.

Annuals shall be measured by container size.

If a range of size is given, no plant shall be less than the minimum size and not less than 50% of the plants shall be as large as the maximum size acceptable and/or the measurements after pruning, where pruning is necessary.

Plants that meet the measurements specified, but do not possess a normal balance between height and spread, shall be rejected.

Plants larger than those specified and of equal quality to those specified may be accepted at no additional cost to the State.

907-230.02.2.4--Balled & Burlapped (B&B) Trees. Trees designated "B&B" in the Plant Schedule shall be adequately balled with firm, natural balls of soil in sizes as set forth in ANSI 260.1 Standard for Nursery Stock. Balls shall be firmly wrapped with jute burlap weighing not less than 7.2 ounces per square yard or other approved strong cloth of equal strength and resistance to tearing and laced with a suitable heavy jute twine. No B&B tree shall be planted if the root ball is cracked or broken before or during the process of planting or if the tree is loose in the root ball.

907-230.02.2.5--Container Grown Plants. Plants designated "container-grown" in the Plant Schedule shall be furnished in sound containers of the size specified. The plant materials contained therein shall conform to the requirements set forth in ANSI 260.1 Standard for Nursery Stock for container-grown plants. No container-grown plant shall be planted if the root and soil mass is cracked or broken either before or during the process of planting. Root bound container-grown stock will not be accepted. Containers shall be free of weeds and grasses. Containers found to contain objectionable weeds and/or grasses will be rejected.

907-230.02.2.6--Delivery, Handling and Temporary Storage. Trees designated "B&B" shall be freshly dug at the time of delivery. All trees shall be dug and/or handled with skill and care so as to prevent injuries to the trunk, branches and roots and shall be packed in an approved manner to ensure arrival at the project site in good condition.

Plants shall not be bound with wire or rope at any time in such a manner that injury to the plant results. Plants shall be handled and lifted from the bottom of the root ball, using whatever means is necessary.

Protective covering shall be provided for the plants during delivery and while in storage awaiting planting.

Until planted, all plants shall be protected from excessive moisture loss and/or freezing by covering the root balls or containers with sawdust or other approved mulch material. Adequate water shall be provided to all plants while in storage and awaiting planting.

907-230.02.2.7--Pine Bark Mulch. A three (3) inch depth layer of clean pine bark mulch, free of weed seeds, moss, stones, sticks, cones, or other debris shall be provided within the planting saucer of each tree. Pine bark mulch shall not contain materials or toxic substances which may adversely influence growth.

907-230.02.2.8--Antitranspirant. "Wilt-proof" antitranspirant or other approved wilt-proofing agent shall be provided for all trees in leaf.

907-230.02.2.9--Staking And Guying. Materials for staking and guying of trees shall be as called for by the planting details.

The Contractor will be responsible for removal of all tree guy wires. It will be up to the Contractor to determine when to remove guy wires to prevent girdling to tree trunks. The Contractor will re-guy trees if the tree is not yet mature enough to support its own weight, or not enough root growth has occurred to anchor it firmly. If damage occurs to trees from girdling of the trunks, or removal of guy wires too early, the Contractor will replace all such material at no additional cost to the State.

907-230.03--Construction Requirements.

907-230.03.1--Site Preparation. All construction debris shall be removed from the subgrade surface before beginning landscape operations. Subgrade shall be free of all brick, concrete, mortar, gravel, asphalt, lumber, sheetrock, and any other materials which would adversely influence plant growth.

907-230.03.2--Installation. The locations of all trees shall be staked and approval of the Engineer obtained before planting begins. The Engineer may adjust the locations of tree prior to planting.

Prior to planting, fluorescent marking paint shall be used to lay out each of the plant beds for location approval by the Engineer. The plant material in their original containers shall be positioned within the painted bed locations, for approval as well. The Engineer may adjust the locations of the plants prior to planting.

Existing site conditions shall be examined before work begins. The Contractor shall notify the Engineer of any unsatisfactory conditions. No work shall be performed until such conditions are satisfactory and acceptable.

Prior to planting, the Engineer shall be informed in writing of existing conditions which could be detrimental to the successful planting and subsequent growth and health of the plants, including but not limited to: subsurface drainage conditions, underground utility locations, and other subgrade conditions.

All plant pits shall be circular in outline. All excavations shall have vertical sides. The depths and widths shall be as specified on planting details.

907-230.03.3--Setting Plants. Trees shall be uniformly set two to four inches (2" to 4") higher than the surrounding grade or as necessary to provide adequate drainage away from the roots.

Annuals, shrubs and groundcover, as specified in the appropriate planting detail, shall be set to insure the plant material is high enough to promote positive water drainage away from the roots.

Planting areas and pits shall be prepared as specified and as shown on the plans, prior to inserting plants. Specified soil mixture shall be used to backfill beds and pits. When tree pits have been backfilled approximately 2/3 full, water shall be thoroughly incorporated before installing remainder of soil mix to top of pit.

Plants shall be set plumb and braced rigidly in position until the soil mix has been tamped solidly around the root ball.

Rope or strings shall be cut from the top of the root ball after the tree has been set. Burlap or cloth wrapping shall be left intact around balls. Portions of the burlap exposed at the top of root ball shall be turned under and buried.

Shallow saucers capable of holding water about each tree shall be formed by placing a mound of soil mix around the edge of each filled-in pit.

All plants shall be thoroughly watered by hose immediately after planting.

Tree saucers and bed areas shall be uniformly mulched with a three (3) inch layer of pine bark mulch.

Trees over two inches in caliper shall be guyed with a minimum of three guy wires spaced evenly around the tree. Each guy wire shall be attached to the tree with a single loop through a hose with an angle of 60 degrees to the tree trunk. The guy wire shall be attached in accordance with planting details. Guy wires shall be kept taut. Removal of guy wires will be the responsibility of the Contractor.

All trees shall be pruned, as necessary, at the site in accordance with standard modern horticultural practice as approved by the Engineer. Cuts over two inches in diameter shall be painted with flat black oil based enamel paint. Pruning shall be done with clean, sharp tools.

907-230.03.4--Site Maintenance. Excess and waste materials shall be continuously and promptly removed and disposed of as specified herein and all reasonable precaution taken to avoid damage to existing structures.

When all work has been completed in an area, the area shall be cleaned up to the satisfaction of the Engineer. Debris, rubbish, subsoil, soil mix and other waste material shall be cleaned up and

removed from the project site.

907-230.03.5--Protection Of The Work And The Public. The Contractor shall take all necessary precautions to adequately protect the work under construction from damage by the public and to protect the public from accident and unnecessary inconvenience.

In the event that pavement, structures, walls, sidewalks, curbs, substructures, or utilities are disturbed or damaged by the Contractor during execution of the work, the Contractor shall make repairs, at no additional cost to the State. If the damaged item is owned or operated by one of the several public utilities, repair shall be accomplished as directed by the utility. If the damaged item is the property of the State, repair shall be made in a manner acceptable to the Engineer.

907-230.03.6--Landscape Maintenance. Maintenance shall begin immediately after each plant is planted.

Maintenance of new plants shall consist of pruning, trimming, watering, cultivating, weeding, mulching, resetting to proper grades or upright position, restoration of the planting saucer, litter removal from bed areas and furnishing and applying such sprays as are necessary to keep the plants free of insects and diseases. This will be required until final acceptance of the work.

Planting areas and plants shall be protected at all times against trespassing damage of any kind for the duration of the maintenance period. If any plants become damaged or injured, they shall be treated or replaced as directed by the Engineer at no additional cost to the State. No work shall be done within, adjacent to, or over any planting area without proper safeguards and protection to the plant.

The Contractor shall be responsible for keeping all plants and work incidental thereto, in good condition by planting replacements, watering, weeding, pruning and spraying, and by performing all other necessary operations of care for promotion of root growth and plant life, so that all work is in a satisfactory condition at the final inspection of the project.

All leaves, litter, gravel, or other debris shall be removed from all landscaped areas at weekly intervals until final acceptance. Such materials shall be collected and properly disposed of off the project site.

The root system of all plants shall be watered at such intervals as will keep the surrounding soil in the best condition for promotion of root growth and the overall healthy life of the plant.

907-230.3.7--Inspection And Final Acceptance. After the completion of all items of work, and upon written request of the Contractor, the Engineer will inspect all work for final acceptance. Upon completion of any deficiencies, the Engineer will certify in writing as to the final acceptance of the project. The Contractor's responsibility for maintenance will terminate the day after final acceptance of the work.

907-230.04--Method of Measurement. Tree planting, annual planting, shrub and groundcover

planting, complete and accepted, will be measured per each as indicated on the plans and in the bid schedule of the contract.

907-230.05--Basis of Payment. Tree planting, annual planting, shrub and groundcover planting, measured as prescribed above, will be paid for at the contract unit price bid per each, which price shall be full compensation for furnishing all planting soil mix, soil lab testing and reports, fertilizer, lime, herbicide treatment, nursery tagging and associated trips, tree staking and guying, mulches, watering, plant material, labor and equipment, storing and protection and incidentals necessary to complete the work.

Payment will be made under:

- 907-230-A: Tree Planting, Description - per each
- 907-230-F: Shrub and Groundcover Planting, Description - per each
- 907-230-G: Annuals Planting, Description - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-230-4

CODE: (SP)

DATE: 09/19/2005

SUBJECT: Tree and Shrub Planting

Section 230, Tree and Shrub Planting, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-230.2--Materials. Delete Subsection 230.02.14 on page 165 and substitute the following:

907-230.02.14--Mulch. Tree Bark Mulch shall meet the requirements of Subsection 907-233.02.

907-230.02.15--Bed Edging. Bed edging shall be steel edging, 3/16-inch by 4-inch in size, green in color with steel stakes, manufactured by Ryerson, Gardener's Supply Company, Sure-loc Edging, or approved equal.

907-230.03--Construction Requirements.

907-230.03.7--Planting, Backfilling, and Watering. After the first paragraph of Subsection 230.03.7 on page 166, add the following:

Plant pits are plant bed areas which are bound all around by bed edging and/or paving, or as noted on the drawings. Bed preparation shall be required within plant pits, which shall consist of stripping the proposed bed area of existing grass or plant material, unless designated to remain; removal and disposal of existing soil in order that finished grade of bed, not including surface mulch, is no higher than surrounding grades/pavement edges unless noted otherwise on the drawings; spreading a 4-inch layer of Tree Bark Mulch, Type III throughout the area, and tilling in the Tree Bark Mulch, Type III to a depth of six inches uniformly throughout the area; and excavating plant holes in accordance with this special provision. The entire bed area shall receive Tree Bark Mulch, Type V as a surface mulch.

Within plant pits, additional Tree Bark Mulch, Type III for each tree, shrub and groundcover plant hole is not necessary beyond the uniform layer of application tilled into the soil as noted on the vegetation schedule. Within each tree and shrub plant hole within a plant pit, backfill with a 50/50 mix of existing soil amended with Type III mulch and topsoil. Groundcover plant holes do not require any other backfill material other than the amended existing soil with Type III mulch incorporated.

Backfill for tree and shrub plant holes outside of plant pits shall be a 50/50 mix of existing soil and topsoil, after applying the 4-inch layer of Tree Bark Mulch, Type III.

907-230.04--Method of Measurement: Delete the last five paragraphs of Subsection 230.04 on pages 169 & 170 regarding the sequence for measurement of payment and substitute the following:

Measurement for payment will be made in the following sequence:

When plants have been planted and are in a healthy condition in accordance with the contract, seventy-five percent (75%) of the bid price for that species of plant material meeting the requirements of the contract will be allowed.

When the inspection of plants at the end of the growing season has been conducted and the replacement of any dead or unsatisfactory plant material has been made, ninety percent (90%) of the bid price for that species of plant material meeting the requirements of the contract will be allowed.

When the final inspection of the project has been conducted and the replacement of any dead or unsatisfactory plant material has been made, and upon final release of maintenance, one-hundred percent (100%) of the bid price will be allowed for plant material meeting the requirements of the contract.

The Plant Establishment Period shall begin upon the date that the Engineer determines plant material installation has been acceptably completed, including staking/ guying and mulching, and continues through the dates noted below:

PLANT ESTABLISHMENT PERIOD

Date of Installation Completion, From and Including	Establishment Period Beyond Installation Completion, (Growing Season) To and Including
August 2 nd - November 1 st	240 calendar days
November 2 nd - January 1 st	180 calendar days
January 2 nd - May 1 st	120 calendar days
May 2 nd - August 1 st	90 calendar days

Where feasible in the opinion of the Engineer, the Contractor may install plant material well in advance of project completion, in order that the Plant Establishment Period may run concurrent with the Contract Time. However, no matter what date the Plant Establishment Period conclude, the Contractor will be required to maintain healthy plants until final inspection of the entire project.

No contract time or liquidated damages will be charged during the plant establishment period if, and only if, all items of work on the project have been completed.

Bed edging, complete in place and accepted, will be measured per linear foot. Excavation, backfilling, and miscellaneous fittings will not be measured for separate payment.

Bed preparation within plant pits, complete in place and accepted, will be measured per square foot. Stripping of existing vegetation, excavation of existing soil, providing and incorporating the designated layer of Tree Bark Mulch Type III, Tree Bark Mulch Type V as a surface mulch, and weeding will not be measured for separate payment.

Tree Bark Mulch will be measured for payment in accordance with Subsection 907-233.04.

907-230.05--Basis of Payment. After the first paragraph of Subsection 230.05 on page 170, add the following:

Accepted quantities for bed edging and bed preparation will be paid for at the contract unit price per linear foot and square foot, respectively. Prices paid shall be full compensation for completing the work.

Add the "907" prefix to the pay items numbers listed on page 170.

After the last pay item listed on page 170, add the following:

- 907-230-C: Bed Edging - per linear foot
- 907-230-D: Bed Preparation - per square foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-233-1

CODE: (SP)

DATE: 02/01/2005

SUBJECT: Tree Bark Mulch

Section 233, Mulch for Woody Plant Material, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

907-233.02--Materials. After the first paragraph of Subsection 233.02 on page 176, add the following:

Tree Bark Mulch, Type III used for plant pits (multiple plants in one bed area) and plant holes outside of plant pit areas shall meet the requirements of Subsection 715.07. Tree Bark Mulch, Type V used for the surface mulching plant holes and plant pits shall be shredded cedar, cypress, pine, or hardwood bark strip (pole peelings), commercial type, with no pieces larger than 1½ inches across the surface. Once or twice hammered material is not acceptable for Tree Bark Mulch, Type V. The Contractor shall submit samples of all mulches to the Engineer and receive approval prior to delivery to site.

907-233.04--Method of Measurement. After the first paragraph of Subsection 233.04 on page 176, add the following:

Tree Bark Mulch, Type III, complete in place and accepted, will be measured per cubic yard for tree plant holes and for shrub plant holes outside of plant pit areas.

Tree Bark Mulch, Type V, complete in place and accepted, will be measured per cubic yard for tree and shrub plant holes outside of plant pit areas requiring bed preparation; and in unplanted areas where the mulch is utilized as a surface treatment. Tree Bark Mulch, Type V within plant pit areas will not be measured for payment.

907-233.05--Basis of Payment. After the first paragraph of Subsection 233.04 on page 176, add the following:

Accepted quantities for Tree Bark Mulch, Type V used as a surface mulch for tree and shrub plant holes not within plant pit areas, and in unplanted areas as a surface treatment will be paid for at the contract unit price per cubic yard. Prices paid shall be full compensation for completing the work.

Delete the first pay item listed on page 176, and substitute the following:

907-233-A: Tree Bark Mulch, Type - per cubic yard

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-258-7

CODE: (SP)

DATE: 01/08/2009

SUBJECT: Miscellaneous Rest Area Facilities

PROJECT: LWO-3059-25(002) / 501920302 -- Holmes County

Section 907-258, Miscellaneous Rest Area Facilities, is hereby added to and made a part of the 2004 Edition of the Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-258 - MISCELLANEOUS REST AREA FACILITIES

907-258.01--Description. This item shall consist of constructing and installing concrete picnic tables and benches, wooden picnic tables and benches, charcoal grills, drinking fountains, trash receptacles, sewage dump station, sign (masonry and stone), and cast stone benches, each complete in place, in accordance with these Specifications and in reasonably close conformity with the locations, lines, grades, configurations, dimensions and other requirements shown on the plans or established.

907-258.02--Materials.

A. **General.** Unless otherwise stipulated, the materials used in this construction, in addition to the general requirements of these Specifications and the plans shall conform to the provisions and requirements prescribed in the sections of the Standard Specifications for the several items which constitute the complete structure.

All items will require approval by the Engineer from the manufacturer. Submit six (6) copies of brochures or shop drawings for approval prior to ordering manufactured items. Other items may require testing as directed by the Engineer.

B. **Concrete Picnic Table and Benches.**

1. **Concrete.** Concrete for table top, seat top, and end supports shall be Class "A" Concrete. Concrete for table slabs will be paid for as concrete sidewalks - Pay Item No. 907-608.
2. **Reinforcing Steel.** Reinforcing steel shall conform to Section 711.
3. **Paint for Table top and Seats.** Paint or coating for table top and seats shall be an approved chlorinated rubber paint conforming to or exceeding Federal Specifications Number TT-P-91-D.

C. **Wooden Picnic Tables.** Wooden Picnic Tables shall be the model number 238-6GT, 6 feet long with galvanized pipe frame and treated wood top and seats, as manufactured by Iron

Mountain Forge, Farmington, Missouri, or approved equal.

Picnic tables shall be secured to the existing pavilion floor with lead shields, anchors, or other means as approved by the Engineer.

D. Charcoal Grill.

1. Charcoal Grill. Charcoal Grill shall be the Model 200-X Rotating Grill with post as manufactured by Iron Mountain Forge, Farmington, MO 63640, or approved equal. Post shall be set within a Class C concrete footing, size as recommended by manufacturer.

E. Drinking Fountain.

1. Waste Pipe. Waste pipe shall be of the size and type as shown on the plans and shall be standard PVC drain waste and vent piping.
2. Drain Pipe. Drain pipe shall be the size shown on the plans and shall conform to or exceed Commercial Standard CS 272-65 or CS 272.65.
3. Drinking Fountain. The drinking fountain shall be designed similar to the details shown on the plans, freeze-proof, and conforming to approved Handicapped Standards by the Engineer.
4. Concrete. Concrete, unless otherwise specified, shall be paid for as sidewalk, and have an approved exposed aggregate finish to match the finish on the adjacent sidewalk.
5. Valves (Stop and Drain). The cut-off valve shall be a standard brass stop and drain cut-off valve of the proper size and type as shown on the plans.

F. Trash Receptacle.

1. Trash Receptacle. The trash receptacle shall be the Aspen Series R-38 Standard with hinged top, leveling devices, galvanized metal liner, and hardware to secure the receptacle to the sidewalk, Empire Green in color with desert brown stone panels, model #R-38HT-202, as manufactured by United Receptacle, Inc., Pottsville, PA 17901-0870, or approved equal.
2. Concrete. Concrete, unless otherwise specified, shall be paid for as sidewalk, and have an approved broom finish to match the finish on the sidewalk.

G. Water Hydrant.

1. Water Hydrant. Steel body, self – closing, anti – freezing hydrant with heavy stainless operating springs, with ¾ inch supply as the model M-175 hydrant as manufactured by Murdock, Cincinnati, OH 45204, or approved equal. Color shall be selected by the Engineer.

2. Concrete. Concrete unless otherwise specified shall be paid for as sidewalk and have an approved broom finish to match the finish on the sidewalk.
3. Valves (Stop and Drain). The cut-off valve shall be standard brass stop and drain globe – type cut-off valve, in the same size as the supply line, located within a plastic valve box.

H. Travel Trailer Sewage Dump Station (Modifications).

1. Sewage Dump Station. The sewage dump station shall be constructed similar to the details shown on the plans, with Schedule 40 galvanized steel pipe and fittings complete with vacuum breaker, and hose, in accordance with the plan details, and State Health Department min. standards.
2. Concrete. Concrete unless otherwise specified shall be Class "B" conforming to Section 804 of the Standard Specifications and have an approved trowel finish.
3. Stand Pipe. Water stand pipe shall be standard galvanized Schedule 40 of the size shown on the plans.
4. Vent Pipe. Vent pipe shall be standard galvanized Schedule 40 of the size shown on the plans.
5. Signs. The signs shall be designed as shown on the details on the plans, constructed of .080 aluminum or 14 Ga. galvanized steel. the signs shall be manufactured by an approved sign company. Submit shop drawings.

I. Cast Stone Bench. Cast stone benches shall be constructed from the same material or an approved equal material as concrete picnic tables and benches.

J. Sign (Masonry and Stone).

1. Brick and Mortar. Brick and mortar shall be produced by the same manufacturer(s), and the be same type and kind (including bullnose and watertable units), and shall match the existing brick used on the Welcome Center Building, or approved equal.
2. Concrete Masonry Units. Hollow non-load bearing, light-weight aggregate, concrete masonry units conforming to ASTM C331-64T. Units shall be normal modular size for typical 3/8 inch mortar joint.
3. Concrete. Concrete unless otherwise specified shall be Class "B" conforming to Section 804 of the Standard Specifications.
4. Reinforcing Steel. Reinforcing steel shall conform to Section 711.
5. Precast Architectural Panel.

a. General:

Cement: Portland Cement conforming to ASTM C-150, Type I or III.

Fine and coarse aggregate: Conform to ASTM C-33. Variations from aggregate gradations are permissible for the facing mix.

Reinforcement shall conform to ASTM C-185 for welded wire fabric.

Hot-dip galvanizing shall conform to ASTM A-153

Anchoring devices, inserts, etc., shall be either galvanized or corrosion resistant types approved by the Architect and as detailed on the drawings.

b. Textures and Finishes.

Precast architectural concrete shall be honed finish, lightly textured, approximating finish of limestone, with color as selected by Owner and Architect.

c. Fabrication.

Precast architectural concrete shall be sufficiently reinforced to withstand conditions on the sign, including handling and erection stresses. Deformed bars with 1 inch or less clearance to an exterior face shall be galvanized.

Fabricate units straight, smooth, and true to size and shape, with exposed edges and corners precise and square unless otherwise indicated.

Provide reglets, slots, holes, and other accessories in units to receive cramps, dowels, reglets, waterstops, flashings, and other similar work as indicated.

Arises, inscriptions and details shall be faithfully executed to the Engineer's design.

Mark each precast item to correspond to identification mark on shop drawings.

Location of anchors, inserts and blockouts shall be +/- 3/8 inch from center line of location shown on drawings.

At welded connections apply rust-inhibitive coating on damaged areas, same as shop-applied material. Use galvanizing repair coating on galvanized surfaces.

d. Mixes.

Standard 6 inch by 12 inch cylinder strength of precast concrete shall not be less than 5,000 psi at 28 days when tested in accordance with ASTM C-39.

Absorption shall not be less than 3 percent and not more than 7 percent when tested in accordance with ASTM C-97.

Minimum thickness of facing mix shall be 1 1/2 inches thick.. Backup concrete may be made with grey cement and aggregates conforming to requirements for cast-in-place concrete.

- e. Joint Material. Joint material shall be as recommended by the precast architectural concrete manufacturer, and as approved by the Engineer.
- 6. Letters and Symbols. Letters (including custom letters) and symbols shall be brass, in the shapes and sizes noted on the drawings, as manufactured by Metal Arts, A. R. K. Ramos, or Matthews.

The Engineer will provide camera ready art work of the symbols and custom letters to the Contractor for the manufacturer.

Method(s) of attaching letters and symbols to precast architectural concrete panel shall be approved by the Engineer.

- K. Metal Bench. Garden – Style all – steel bench, 6 feet long, color – green, as Bench 118 series as manufactured by DuMor, Inc., Mifflintown, PA 17059-0142, or approved equal.

Bench shall be secured to concrete. Method of securing shall be reviewed with and approved by the Engineer.

- L. Car Stop. 6 foot long concrete curb (car) stops as manufactured by Jackson Ready Mix Company, Jackson, MS, or approved equal. Curb stops shall be secured to pavement with number 3 reinforcing bars, 24 inches long.

907-258.03--Construction Requirements.

- A. General. The method of construction, unless otherwise stipulated, shall conform to the provisions and requirements where applicable, prescribed in the standard specifications with the additions shown hereafter. All work shall be performed in a good workmanlike manner, to the satisfaction of the Engineer.
- B. Concrete Picnic Tables and Benches. Concrete picnic tables and benches shall be constructed to the detailed dimensions shown on the plans. The handling and placing of concrete shall conform to Subsection 804.10. The top and edge surfaces of the table and benches shall receive a slick smooth finish.

The concrete shall be free of honeycomb and air pockets and in no case have a slump greater than one and one-half inches.

The ground under the slab shall be graded or shaped and compacted when necessary to insure a smooth, firm foundation for the slab. The ground adjacent to the slab shall be sloped to drain away from the slab in a manner so as to preserve the natural shape of the terrain as close as possible.

The concrete slab shall be poured around the table and benches in place and correctly aligned. Care shall be taken to place the expansion joint material around the top and bench supports as shown on the plans in a neat, secure manner. The slab shall be sloped to drain and receive an approved exposed aggregate finish to match the finish on the sidewalk.

The placing and fastening of reinforcement shall conform to Subsection 805.05.

The table shall be located as shown on the plans and as directed by the Engineer.

- C. Wooden Picnic Tables and Benches. Wooden picnic tables and benches shall be constructed to the dimensions and details shown on the plans. The tables shall be constructed by skilled carpenters in an approved manner so as to provide a strong, neat, well constructed table.

The table shall be located and secured in an approved manner as shown on the plans and as directed by the Engineer.

- D. Charcoal Grill. The charcoal grill shall be mounted securely to the support pipe in an approved manner as recommended by the manufacturer of the grill, with a locking device to make it as vandal proof as possible. The support pipe shall be set plumb and to the height as shown on the plans. The support pipe shall be set in concrete picnic table slab and shelter building slab during the placement of concrete. The grill shall be located as shown on the plans or as directed by the Engineer. The design of the grill proposed for use shall be submitted to the Engineer for approval.

- E. Drinking Fountain. The drinking fountain shall be installed by skilled plumbers, concrete finishers, and workmen in an approved manner to the satisfaction of the Engineer, to the dimensions and details shown on the plans, or approved by the Engineer.

The fountain drain shall be located to drain to the existing drain field or an approved ditch as directed by the Engineer.

The concrete base shall be constructed as shown on the plans or as directed by the Engineer. The concrete will be paid for under Pay Item 907-608.

- F. Trash Receptacle. The trash receptacle shall be installed on and secured to a square concrete pad 4 inches thick, with outside dimensions 6 inches greater than the width of the trash receptacle, in locations designated by the Engineer.

The excavation when required to place the trash receptacle into the ground shall be disposed of as directed by the Engineer.

The concrete shall be placed and brought to a broom finish to match the sidewalk in an approved manner. On locations adjacent to existing sidewalks, top of concrete pad for the receptacle shall meet flush with existing walk. Slope elevation of pads no more than 1/8 inch per foot in order that water will not stand.

The method to secure the trash receptacle to the concrete pad shall be submitted to the Engineer for approval.

- G. Water Hydrant. The hydrant shall be installed on and secured to a square concrete pad 4 inches thick, with outside dimensions 6 inches greater than the width of the hydrant, in locations designated by the Engineer.

The excavation when required to place the hydrant into the ground shall be disposed of as directed by the Engineer.

The concrete shall be placed and brought to a broom finish to match the sidewalk in an approved manner. On locations adjacent to existing sidewalks, top of concrete pad for the hydrant shall meet flush with existing walk. Slope elevation of pads no more than 1/8 inch per foot in order that water will not stand.

The method to secure the hydrant to the concrete pad shall be submitted to the Engineer for approval.

- H. Cast Stone Bench. The cast stone benches shall be a similar design and size as shown on the plans (submit brochures or shop drawings).

The benches shall be secured to the sidewalk or bench pad in an approved manner with epoxy cement or other approved cement, to the satisfaction of the Engineer.

- I. Travel Trailer Sewage Dump Station. The travel trailer sewage dump station shall be constructed by skilled plumbers, concrete finishers, and workmen in an approved manner to the satisfaction of the Engineer, to the details and dimensions shown on the plans.

- J. Sign (Masonry and Stone).

The excavation required to place the sign into the ground shall be disposed of as directed by the Engineer.

The concrete base shall be constructed as shown on the plans or as directed by the Engineer. The placing and fastening of reinforcement shall conform to Subsection 805.05.

Concrete Masonry Unit and Brick construction shall be in accordance with Section 611, and to the satisfaction of the Engineer.

Set precast architectural concrete panels straight, plumb, level, and square. Clean exposed facings to remove dirt and stains which may be on the units after erection and completion of

joint treatments. Wash and rinse in accordance with precast manufacturer's recommendations. Protect other work from damage due to cleaning operations. Do not use cleaning materials or processes which could change the character of exposed concrete finishes.

Attach letters and symbols in accordance with the drawings, approved shop drawings, and to the satisfaction of the Engineer.

K. Metal Bench. Install bench in strict accordance with the manufacturer's written instructions.

The method to secure the trash receptacle to the concrete pad shall be submitted to the Engineer for approval.

L. Car Stop. Drive reinforcing bars through holes in car stop and through new asphalt pavement. Top of reinforcing bar shall be driven to a point ¼ inch below the top of the car stop.

907-258.04--Method of Measurement. Miscellaneous Rest Area Facilities, constructed and complete in accordance with the requirements of the contract, and accepted, will be measured by the unit quantity (per each unit).

A unit of concrete picnic tables and benches shall consist of one table, two benches, the concrete slab shall be as indicated on the plans.

A unit of wooden picnic tables and benches shall consist of one table, two attached benches, and the concrete anchor and chain when required.

A unit of cast stone bench shall consist of one bench seat and three bench supports.

A unit of travel trailer sewage dump station shall consist of one tower, one drain, signs and concrete as shown in the plan details.

A unit of sign (masonry and stone) shall consist of all concrete, steel, masonry elements, letters, as symbols shown on the plans.

A unit of metal bench shall consist of one bench.

Separate measurement for excavation and other individual items will not be made, it being understood that the cost thereof is included in one contract price bid per complete items.

907-258.05--Basis of Payment. Charcoal grills, drinking fountains, concrete picnic tables and benches, wooden picnic tables and benches, trash receptacles, water hydrants, travel trailer sewage dump station, sign (masonry and stone), cast stone benches, and car stops each unit shall be paid for at the contract unit price bid per each, which price shall be full compensation for furnishing all materials and supplies; for performing all work necessary for each completed unit; and for all equipment, tools, labor and incidentals necessary to complete the work.

Payment will be made under:

907-258-A: Charcoal Grill	- per each
907-258-B: Drinking Fountain	- per each
907-258-C: Concrete Picnic Table and Benches	- per each
907-258-D: Wooden Picnic Table and Benches	- per each
907-258-E: Trash Receptacle	- per each
907-258-F: Water Hydrant	- per each
907-258-G: Travel Trailer Sewage Dump Station	- per each
907-258-H: Cast Stone Bench	- per each
907-258-I: Sign (Masonry and Stone)	- per each
907-258-J: Metal Bench	- per each
907-258-K: Car Stop	- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-259-4

CODE: (SP)

DATE: 05/19/2006

SUBJECT: Site Amenities

PROJECT: LWO-3059-26(002) 501920302 -- Holmes County

Section 907-259, Site Amenities, is hereby added to and made a part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-259 -- SITE AMENITIES

907-259.01--Description. This item shall consist of installing unlighted and lighted bollards, flag pole lights, sign lights and column uplights, each complete in place, in accordance with these Specifications and in reasonably close conformity with the locations, lines, grades, configurations, dimensions and other requirements shown on the plans or established.

907-259.02--Materials. Unless otherwise stipulated, the materials used in this construction, in addition to the general requirements of these specifications and the plans, shall conform to the provisions and requirements prescribed in the sections of the Standard Specifications for the several items which constitute the complete structure.

All items will require approval by the Engineer from the manufacturer. The Contractor submit six (6) copies of brochures or shop drawings for approval prior to ordering manufactured items. Other items may require testing as directed by the Engineer

- A. **Non-lighted Bollards.** Bollards shall be Charleston Model Number BOL/CH44/12/DT/CA/DB, as manufactured by Holophane or other accepted models by Gardco, American Pole or approved equal.
- B. **Lighted Bollards.** Bollards shall be Charleston Model Number BOL/CH44/12/DTL/CA/DB/S100/208, as manufactured by Holophane or other accepted models by Gardco, American Pole or approved equal.
- C. **Flag Pole Lights.** Flag pole lights shall be Model Number DF7-SP(W/ST) – HFL 250 HPS-208-BRP as manufactured by GARDCO or other accepted models by Kim, Greenlee or approved equal.
- D. **Sign Lights.** Sign lights shall be Model Number DF7-SP(W/ST) – HFL-175-208-BRP as manufactured by GARDCO or other accepted models by Kim, Greenlee or approved equal.
- E. **Fluorescent Light @ Kiosk.** Fluorescent lights (2' x 4' - 2 lamp) shall be Model Number

SWN 232 120 1/2 LT as manufactured by Day-Brite or other accepted models by Lithonia, Cooper or approved equal.

F. Weatherproof GFCI Receptacles. Weatherproof GFCI receptacle shall be commercial specification grade 20A 125V GFCI receptacle(s) as manufactured by Hubbell or other accepted models by Pass & Seymour, Leviton or approved equal. Color shall be black and verified with Project Engineer.

G. Column Uplights. Column lights shall be Model Number LTV10 NF 70MH208/RG10/GM10 as manufactured by KIM or other accepted models by Gardco, Greenlee or approved equal.

907-259.03--Construction Requirements. The Contractor shall provide and install site amenities in accordance with the drawings, special provisions, and the standard specifications. All work shall be performed in a good workmanlike manner, to the satisfaction of the Engineer.

907-259.04--Method of Measurement. Site Amenities of the type specified, constructed and complete in accordance with the requirements of the contract, will be measured by the unit quantity per each.

907-259.05--Basis of Payment. Site Amenities of the type specified shall be paid for at the contract unit price bid per each, which price shall be full compensation for furnishing all materials and supplies; for performing all work necessary for each completed unit; and for all equipment, tools, labor and incidentals necessary to complete the work.

Payment will be made under:

- 907-259-A: Lighting Assembly, Non-lighted Bollards -per each
- 907-259-B: Lighting Assembly, Bollards - per each
- 907-259-C: Lighting Assembly, Flag Pole Lighting - per each
- 907-259-D: Lighting Assembly, Sign Lighting - per each
- 907-259-E: Lighting Assembly, Kiosk - per each
- 907-259-F: Weatherproof GFCI Receptacle - per each
- 907-259-G: Lighting Assembly, Column Uplights - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-282-5

CODE: (SP)

DATE: 01/23/2009

SUBJECT: Irrigation System

PROJECT: LWO-3059-26(002) / 501920302 -- Holmes County

Section 907-282, Irrigation System, is added to and made a part of the 2004 Edition of the Standard Specifications for Road and Bridge Construction as follows.

SECTION 907-282 - IRRIGATION SYSTEM

907-282.01--Description. Lawn and shrub bed irrigation systems, complete, constructed to the grades and conforming to the areas and locations shown on the drawings.

Irrigation lines shown on the drawings are essentially diagrammatic. Specific locations of equipment shall be established by the Contractor at the time of construction. Exceed spacing of heads as shown on the drawings only with the permission of the Engineer.

907-282.01.1--Irrigation Operations. Performed by a firm having a minimum of two consecutive years experience in this area of work and having installed other jobs of similar size and scope. Contractor to provide a minimum of 3 references and a list of similar projects with the Client's names, addresses, and telephone numbers, when requested by the Engineer.

907-282.01.2--Field Investigations: Visit the job site and become familiar with the nature and location of the work, existing conditions, and other conditions that you will be obligated to operate in the performance of the work.

907-282.01.3--Substitutions and Submittals. Substitutions shall be made only with the written approval of the Engineer. Substitutions will not be considered prior to opening of bids. Substitution of an irrigation head shall be accompanied by a Contractor prepared piping diagram noting pipe sizes, pressure loss calculations, and head locations necessary to achieve the desired watering provided by the system as designed.

Submittals: Submit 8 copies of manufacturer's product data of materials specified herein for review and approval by the Engineer.

907-282.01.4--Department's Instruction and Maintenance Data. General: Furnish the following instructions and maintenance data. Final Acceptance will not be made until the Work has been reviewed and approved by the Engineer.

As-built drawings: 2 sets, noting exact locations of elements and changes to the drawings in red.

Operation Manual: 2 copies, bound in 1 inch diameter three ring binders, indexed and tabbed for easy reference, and labeled on spine and cover. Manual to include:

- A. Approved submittals,
- B. Installation instructions, including mounting details for control valves.
- C. Operating Instructions, including winterization procedures, recommended operation sequence, frequency, and length of operation cycle, as per relationship to estimated absorption rate, evaporation rate and anticipated GPM.
- D Maintenance Instructions: Items requiring manufacturer's product data and installation instructions. Complete warranty information, mail to manufacturer, and provide copies to the Department.

Extra Stock: Provide in addition to installed system 1 sprinkler head of each size and type, 1 valve key (per valve) for operating manual valves, 1 key per valve box, 2 wrenches for each type of head cover, and 2 wrenches for removing and installing each type of head.

907-282.02--Materials.

907-282.02.1--General: Materials shall be new and without flaws or defects, and of quality and performance as specified. Overages at completion are property of the Contractor, to be removed from the site.

Materials and equipment specified by "Proprietary Specification" as manufactured by a particular company, etc., shall be for the express purpose of establishing minimum acceptable performance requirements. Acceptable manufacturers shall include:

- A. The Toro Company - Irrigation Division
- B. Rain Bird Sales, Inc. - Turf Division
- C. Hunter Irrigation

The provision of providing other acceptable manufacturer's as potential substitutions shall not disregard the requirements of paragraph 907-282.01.3.

907-282.02.2--Delivery and Storage. Damaged materials will not be accepted. Deliver packaged materials to the site in the original, unopened containers. Store materials delivered to site prior to actual usage in a place not to interfere with other trades or construction operations and protect from damage by weather or other elements as needed.

907-282.02.3--Pipe and Pipe Fittings.

907-282.02.3.1--Plastic Piping. Class 160 SDR 26-ASTM D2241 Polyvinyl Chloride (PVC) pipe NSF approved. Pipe up to and including 2-1/2 inches in diameter shall have bell and socket joints. Pipe greater than 2-1/2 inches in diameter shall have snap connections with rubber gasket joints.

907-282.02.3.2--Sleeves. In the size as noted on the drawings, shall be schedule 40 PVC pipe.

907-282.02.3.3--Plastic Fittings and Risers. Schedule 40 or Schedule 80 PVC. Risers above finished grade shall receive 2 coats of black exterior semi-gloss enamel paint.

907-282.02.3.4--PVC Solvent Cement. As per ASTM specification D 2564-67

907-282.02.3.5--Polyethylene Pipe and Fittings. Installed between supply lines and heads. Thick wall, flexible, polyethylene pipe, with fittings that have male barbs on one end and either male or female screw ends opposite (glue fittings and female barb adapters not allowed). Pipe and fittings shall be Toro Funny Pipe and Fittings as manufactured by Toro-Irrigation Division, Riverside, California, or an approved equal.

907-282.02.4--Valves.

907-282.02.4.1--Electric Control Valves. PEB Series as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California, or approved equal.

Provide water-tight connectors as Scotch Lock or Rain Bird Snap Tight connectors with sealant for wiring connections at electric valves.

Valve box for electric valves shall be the 12 inch Standard Box with snap lock cover as manufactured by Armor Access Boxes, Sheboygan, WI 53081, or an approved equal.

907-282.02.4.2--Quick Couplers. Quick couplers, each with Key and Hose Swivel, shall be the 44 Series Coupler and Coupler Key, and SH series swivel hose connector, as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, CA, or approved equal.

Install quick coupler inside a valve box as noted on the drawings.

907-282.02.4.3--Isolation Valves. Gate valves shall be manufactured in accordance with AWWA C500 and shall have a rated water working pressure of 200 PSI. Gate valves shall be iron body, bronze mounted, double disc, parallel seat, non-rising stem type. Each valve shall have "O" ring type stem seal, standard 2 inch AWWA square operating nut, and shall be opened by COUNTER-CLOCKWISE stem rotation. Except where otherwise specified, indicated, or required for the application involved, gate valves ends shall be AWWA Specification C111 mechanical joint type, with plain rubber gaskets. Gate valves shall be manufactured by Waterous, Clow, or an approved equal.

Provide 1 key for every 3 valves installed.

With each valve install a valve box which shall be standard cast iron two-piece 5-1/4 inch inside shaft diameter screw adjustable type, consisting of a cover marked WATER, and upper telescoping section, and a lower section. Where necessary to provide extra depth, provide cast iron extension pieces as required.

907-282.02.5--Sprinkler Heads.

907-282.02.5.1--Full or part Circle Pressure Regulating Pop-Up Fixed Spray Sprinkler.

1800 Series with pressure regulators and nozzles as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California, or approved equal.

907-282.02.5.2--Full or Part Circle Pop-up Gear Driven Rotor Sprinkler.

R-50 Series with Seal-A-Matic anti-drainage check valve feature (SAM) as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California, or approved equal.

907-282.02.6--Control Wire. Control Wire (and common) shall be Number 14 size, (minimum) copper wire suitable for direct burial.

907-282.02.7--Low Point Drains: Automatic Valve model number 290-02 as manufactured by Toro, or an approved equal. Provide 2 at lowest points of each zone, with each atop an 8 inch by 8 inch by 8-inch area of coarse gravel.

907-282.02.8--Automatic Controller. Model ESP-LX Plus controller with internal transformer and lockable cabinet, as manufactured by Rain Bird Sprinkler Mfg. Corp., Glendora, California, or approved equal. With each controller, provide 1 Automatic Rain/ Freeze Switch, the Mini-Flic 2 Rain Sensor #502, as manufactured by Glen Hilton, or approved equal.

907-282.02.9--Backflow Preventer. See Mechanical drawings and specifications.

907-282.02.10--Meter. See Mechanical drawings and specifications.

907-282.03--Construction Requirements.

907-282.03.1--Pressure/Flow Test. Immediately after installation of meters, and before installing pipe, test and provide written results to the Engineer of the static pressure, dynamic pressure, and gallons per minute. Perform tests at the beginning tap or meter and note as such on the written results.

Receive approval from the Engineer to proceed with construction along with proposed revisions (if required due to test results) prior to installation.

907-282.03.2--Execution and Trenching. Excavate trench to pipe grade depth. Make width of trench at least 3-1/2 inches. Backfill and hand tamp over-excavation prior to installing piping. Excavate trenches deeper than required in soils containing rock or other hard material that might damage pipe. Backfill to pipe grade with selected fine earth or sand. Keep trenches free of obstructions and debris that would damage pipe.

More than 1 pipe may utilize the same trench, however, pipe arrangement in the trench shall remain continuous throughout the run of pipe/ trench and the amount of cover shall not be reduced to accommodate additional pipe.

907-282.03.3--Piping System.

907-282.03.3.1--Cover. Lawn and planting areas: 14 inches below finish grade. Roadways: 36 inches below finish grade. Parking areas: 24 inches below finish grade.

907-282.03.3.2--Clearances. Maintain a minimum 1-inch vertical clearance between lines crossing at an angle greater than 45 degrees.

907-282.03.4--Piping Erections.

907-282.03.4.1--Threaded Plastic Pipe. Do not use solvent cement on threaded joints. Wrap joints with teflon tape. When threaded pipe is used, material shall be Schedule 80 PVC.

907-282.03.4.2--Cemented Joints for PVC bell end pipe and PVC pipe with socket fittings. ASTM D 2855-70.

907-282.03.5--Valves. Install plumb to within 1/16 inch. Install Scotch Lock connectors to wiring in accordance with the manufacturer's written instructions. Wrap a 2-foot section beginning at the Scotch Lock connector around a minimum 1/2-inch diameter pipe to protect against electrical surges from lightning.

907-282.03.6--Sprinklers. Sprinklers: Install plumb to within 1/16 inch. Heads along walks and curbs: Set flush to within 1/8 inch. Other Heads: Set as per details and drawings.

907-282.03.7--Control Wire. Bury beside pipe in same trench and bundle and tape together at not more than 10-foot intervals.

907-282.03.8--Backfill: Do not backfill until system, or that portion thereof, has been tested and approved. Fill trench to within 3 inches of top with excavated soil and water to compact soil. Fill top 3 inches with existing topsoil in planting areas and wheel roll until compaction of backfill is same as surrounding soil.

907-282.03.9--Electrical Connections. Shall be in strict accordance with the latest edition of the National Electrical Code. Provide the electrical connection to the system as designated on the drawings and as specified herein. Splices to electrical wire between the controller to valves or power supply shall be made within watertight junction boxes.

907-282.03.10--Automatic Controller. Location and installation shall be as per drawings, and approved by Engineer PRIOR to installation.

Rain – Freeze device shall be located where approved by the Engineer.

907-282.03.12--Flushing. Following installation of piping, risers and valves, but prior to installation of sprinkler heads, thoroughly flush piping system under a full head of water. Maintain flushing for 3 minutes through furthestmost valve. After flushing, cap risers.

907-282.03.13--Testing. Conduct tests in presence of Engineer.

907-282.03.13.1--Pressure Test. Hydrostatically test the main piping system between meter and valves in place prior to backfilling. Maintain a minimum pressure of 50 PSI without pumping for period of one hour. Test is acceptable if no leakage or loss of pressure is evident during test period. Detect and repair leaks. Retest until test pressure can be maintained for duration of test. It is assumed that a water supply with a 50-PSI pressure is available on site, wherein no mechanical pumping equipment is required.

907-282.03.13.2--Operation Test. At conclusion of pressure test, install sprinkler heads and test entire system for operation under normal operating pressure. Adjust heads as noted on drawings. Retest entire system. Test is acceptable if system operates in a satisfactory manner, with uniform coverage of areas to be irrigated.

907-282.03.14--Guarantee. Guarantee Work for one year from date of final acceptance against defects in material, equipment and workmanship. Repair damage to the premises resulting from leaks or other defects in material, equipment and workmanship to the satisfaction of the Department. Repairs, if required, shall be done promptly at no cost to the Department.

907-282.03.15--Final Acceptance. Contractor shall achieve final acceptance when systems are fully operational, approved by both the Engineer and Department, and As-Built Drawings and project manuals have been accepted and approved.

907-282.04--Method of Measurement.

907-282.04.1--Sprinkler Heads. Where noted on the drawings, sprinkler heads accepted in place will be measured per each for type of head (Pop – up fixed spray) including nozzle.

Excavation, fittings to lateral pipe (including risers if necessary), adjustment of spray pattern, setting to proper grade, and backfilling, will not be measured for separate payment.

907-282.04.2--Piping. Where noted on the drawings and as adjusted by the Contractor in the field, piping accepted in place will be measured per linear foot for each size as shown on the drawings.

Miscellaneous fittings, PVC cleaner and glue, and operations necessary to fit and contour pipe to the trench will not be measured for separate payment.

907-282.04.3--Sleeves. Where noted on the drawings and as adjusted by the Contractor in the field, sleeves accepted in place will be measured per linear foot for each size as required.

Boring under existing pavement, miscellaneous fittings, PVC cleaner and glue, and operations necessary to install the sleeves will not be measured for separate payment.

907-282.04.4--Valve Control Wire. As needed for power supply and control of the electric control valves from the electric controllers, valve control wire accepted in place shall be measured per linear foot.

Miscellaneous fittings, water – tight junction boxes (if necessary), and curling of wire at valves will not be measured for separate payment.

907-282.04.5--Trench Excavation and Backfill. As needed for piping and wiring, trenching and backfill accepted in place will be measured per linear foot.

Depth or width of trench will not be considered regarding separate payment.

907-282.04.6-- Electric Controller. Where noted on the drawings, electric controllers, complete and in place, will be measured per each.

Connection to power supply, installation of rain-freeze switch, rigid galvanized conduit above grade with straps, ground rod and ground wire will not be measured for separate payment.

907-282.04.7--Electric Control Valve, Isolation Valve, and Quick Coupler Valve. Where noted on the drawings, electric control valves, isolation valves, and quick coupler valves, complete and in place, will be measured per each.

Excavation, installation of valve box, backfilling, scotch lock protectors, and connection to valve wiring will not be measured for separate payment.

907-282.05--Basis of Payment.

907-282.05.1--Sprinkler Heads. Accepted quantities for each type of sprinkler head will be paid for at the contract unit price per each. Prices paid shall be full compensation for completing the work.

907-282.05.2--Piping and Sleeves. Accepted quantities for each size of piping and sleeves will be paid for at the contract unit price per linear foot. Prices paid shall be full compensation for completing the work.

907-282.05.3--Valve Control Wire and Trench Excavation and Backfill. Accepted quantities for valve control wire and trench excavation and backfill will be paid for at the contract unit price per linear foot. Prices paid shall be full compensation for completing the work.

907-282.05.4--Electric Controller, Electric Control Valve, Isolation Valve, and Quick Coupler with Key and Hose Swivel. Accepted quantities for electric controller, electric control

valve, and quick coupler valve will be paid for at the contract unit price per each. Prices paid shall be full compensation for completing the work.

Payment will be made under:

- 907-282-A: Sprinkler Head, Type - per each
- 907-282-B: Piping, Size - per linear foot
- 907-282-C: Sleeves, Size - per linear foot
- 907-282-D: Valve Control Wire - per linear foot
- 907-282-F: Electric Controller - per each
- 907-282-G: Electric Control Valve, Size - per each
- 907-282-H: Isolation Valve - per each
- 907-282-I; Backflow Flow Preventer, Size - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-290-3

CODE: (SP)

DATE: 01/08/2009

SUBJECT: Flagpole

Section 907-290, Flagpole, is added to and made part of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as follows:

SECTION 907-290--FLAGPOLE

907-290.01--Description. This work shall consist of furnishing all materials and erecting a flagpole as indicated on the plans or established.

907-290.02--Materials.

907-290.02.1--General. Unless otherwise stipulated, the materials used in this construction, in addition to the general requirements of this Special Provision, shall conform to the applicable sections of the Standard Specifications.

907-290.02.2--Concrete for Flagpole Footing. Concrete for the flagpole footing shall conform to Class "B" Concrete, meeting the requirements of applicable subsections of Section 804 of the Standard Specifications.

907-290.02.3--Flagpole. The flagpole shall be an approved tapered aluminum flagpole, having an approximate 30-foot exposed height. The pole shall be complete with a 14 gauge aluminum ball gold finish finial, umbrella type revolving truck, tiedown cleat with matching (material) cover capable of being padlocked in position over the tiedown cleat, two No. 10 (5/16") polypropylene halyards with solid bronze swivel snaps per halyard, and ornamental base collar.

The pole shall be made from 6063T6 extruded aluminum tubing with approximately one inch every five to six feet straight taper, with a butt diameter of approximately six inches and top diameter of approximately three and one half inches and have an approved satin finish.

907-290.02.4--Descriptive Data. Six (6) copies of material descriptive data, in the form of brochures or shop drawings, shall be submitted for review and approval prior to installation of the materials.

907-290.03--Construction Requirements. The flagpole shall be erected plumb in an approved manner to the satisfaction of the Engineer and in accordance with the manufacturer's details and recommendations. Material excavated in flagpole construction shall be disposed of as directed by the Engineer.

907-290.04--Method of Measurement. Flagpole, complete in place and accepted, will be measured per each. Separate measurement for payment will not be made of any individual unit, operation, or incidental item involved in this construction.

907-290.05--Basis of Payment. Flagpole, measured as provided in Subsection 907-290.04, will be paid for at the contract unit price per each complete unit, which price shall be full compensation for furnishing all materials and supplies, for all excavation, backfilling and disposal of surplus material, and for any other work required to complete the flagpole installation.

Payment will be made under:

907-290-A: Flagpole

- per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-401-2

DATE: 05/09/2008

SUBJECT: Hot Mix Asphalt (HMA)

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

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

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

907-401.03.1.2--Tack Coat. 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.

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

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

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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-401-2

CODE: (IS)

DATE: 11/04/2005

SUBJECT: Hot Mix Asphalt (HMA)

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

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

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

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

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

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-403-4

DATE: 03/30/2007

SUBJECT: Hot Mix Asphalt (HMA)

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

Delete Subsection 403.03.5.5 on page 273 and substitute the following:

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-403-4

CODE: (IS)

DATE: 11/04/2005

SUBJECT: Hot Mix Asphalt (HMA)

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-407-1

CODE: (SP)

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:

907-407.02.1--Bituminous Material. 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

* Grade may be specified

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-501-3

CODE: (SP)

DATE: 08/31/2007

SUBJECT: Price Adjustment For Thickness

Section 907-501, Portland Cement Concrete Pavement, of the 2004 Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-501-05.1--General. Delete pay item nos. 501-A, 501-B & 501-C on page 326 and substitute the following.

- 907-501-A: ___ " Reinforced Cement Concrete Pavement,
 _____ Finish - per square yard

- 907-501-B: ___ " Plain Cement Concrete Pavement, _____ Finish - per square yard

- 907-501-C: ___ " Continuously Reinforced Cement Concrete
Pavement, _____ Finish - per square yard

907-501-05.2--Price Adjustment for Thickness. Delete the table in Subsection 501.05.2 on page 327 and substitute the following:

Thickness Deficiency Inches	Proportional Part of Contract Price Allowed
0.0, 0.1, 0.2	100 percent
0.3	80 percent
0.4	72 percent
0.5	68 percent
0.6, 0.7, 0.8	57 percent
0.9, 1.0	50 percent

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-601-1

CODE: (IS)

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.

907-601.02.1--General. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-608-4

CODE: (SP)

DATE: 12/8/2003

SUBJECT: Stamped and Colored Concrete Sidewalk

PROJECT: LWO-3059-26(002) / 501920302 -- Holmes County

Section 608, Concrete Sidewalks, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction as amended by this special provision is applicable to Stamped And Colored Concrete Sidewalks Only.

907-608.01--Description. The work covered under this special provision consists of furnishing all labor, materials, tools, tests, royalties, services and other incidentals as may be required for the good and proper completion of the Stamped and Colored Concrete Sidewalk operations.

The extent of colored and imprinted sidewalk locations are shown on the drawings. These locations are generally limited to all proposed concrete traffic islands and concrete median end noses.

The Contractor is responsible for notes on the drawings which call attention to particular requirements or conditions. The fact that these requirements or conditions are not called out in the specifications does not relieve the Contractor of responsibility for these requirements or conditions.

907.608.01.1--Quality Assurance. Installation shall be performed by an installer with at least one year experience in the placement of stamped and colored concrete sidewalk paving systems.

907-608.02--Materials. After the last paragraph of Subsection 608.02 on page 608-1, add the following:

Colored concrete materials and imprinting tool release agents shall be manufactured by L. M. Scofield Company, Douglasville, GA 30133-1525, or an approved equal, meeting the following requirements.

- A. Coloring Agents: Contractor may elect to color the concrete integrally using CHROMIX Admixture for color-conditioned concrete, or may apply dry-shake LITHOCHROME COLOR HARDNER to the surface of the freshly poured concrete.

Colors for Colored and Imprinted Concrete shall be selected by the Engineer from the Scofield (or approved manufacturer) Standard or Designer color charts.

- B. Curing and Finishing Material: Contractor shall utilize LITHOCHROME COLORWAX, a color-matched curing and finishing material. Curing materials or methods for uncolored concrete shall not be used with Colored and Imprinted Concrete.
- C. Release Agent: Contractor shall utilize a dry-shake powder to facilitate the release of the concrete imprinting tools. The color of the release agent shall match the selected main coloring agent chosen by the Engineer for the concrete.
- D. Imprinting Tools: Tools shall be of high quality and shall provide uniform control of joint depth.
- E. Imprint Tool Pattern: The imprint pattern to be used for all concrete imprinting shall be a 4" x 8" brick running bond pattern, with a 4" x 8" matching soldier course border used along the perimeter of all proposed concrete traffic islands and median end noses. Refer to the drawings for pattern layout and orientation of the imprint patterns.

Once the color, method of coloring, and the imprinting tools have received approval from the Engineer, the Contractor shall provide a 4-foot square panel, separate from proposed traffic island and median end nose areas, to be reviewed and approved by the Engineer. Engineer will evaluate color as compared to color chart and texture of broom finish.

Subsequent panels may be required, if finish, imprint quality, or color are unacceptable to the Engineer. The Contractor shall remove unaccepted panels immediately from site. Accepted panel shall remain until all colored concrete traffic islands and median end noses have been completed by the Contractor, at which time the Contractor shall remove the panel from the site.

907-608.03.4--Handling, Measuring, Proportioning, and Mixing Materials. After the first paragraph of Subsection 608.03.4 on page 608-1, add the following:

Should an integral coloring method be selected by the Contractor, the Contractor shall mix coloring agent in strict accordance with the Scofield Chromix Admixture Tech-Data Bulletin A-304.08, or the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

Should a dry-shake applied coloring method be selected by the Contractor, the Contractor shall measure and apply coloring agent in strict accordance with the Scofield Lithochrome Color Hardener Tech-Data Bulletin A-104.10, or the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

907-608.03.4--Protection and Curing. After the second paragraph of Subsection 608.03.7 on page 608-2, add the following:

Protection and curing materials and methods of application for stamped and colored concrete sidewalk shall be in strict accordance with the Scofield Lithochrome Colorwax Tech-Data

Bulletin A-514.04, or the approved manufacturer's written instructions. Copies of the manufacturer's written instructions shall be furnished to the Engineer prior to manufacture and placement of colored concrete.

907-608.04--Method of Measurement. After the last paragraph of Subsection 608.04 on page 608-3, add the following:

Stamped and Colored Concrete Sidewalk, completed and accepted, will be measured by the square foot. Sample panels will not be measured for separate payment.

907-608.05--Basis of Payment. After the first paragraph of Subsection 608.05 on page 608-3, add the following:

Stamped and Colored Concrete Sidewalk will be paid for at the contract unit price of square foot, which shall be full compensation for completing the work.

After the last pay item listed on page 608-3, add the following:

907-608-D: Stamped and Colored Concrete Sidewalk - per square foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-3

CODE: (SP)

DATE: 07/21/2004

SUBJECT: Thermoplastic Markings

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

907-626.03.1.2--Construction Details. After the first sentence of the eighth paragraph of Subsection 626.03.1.2 on Page 445, add the following:

For 4-inch stripe, additional beads by the drop-on method shall be applied at a rate of not less than two pounds of beads per 100 feet of four-inch stripe.

907-626.04--Method of Measurement. After the second paragraph of Subsection 626.04 on Page 445, add the following:

Four-inch equivalent detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than four inches in width will be converted to equivalent lengths of four-inch stripe.

After the last paragraph of Subsection 626.04 on Page 446, add the following:

When transverse railroad bands, pedestrian crosswalks and stop lines are measured by the linear foot of 4-inch equivalent stripe, stripes more than four inches in width will be converted to equivalent lengths of four-inch widths.

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

- | | |
|---|---------------------------|
| 907-626-A: 4" Thermoplastic Traffic Stripe, Skip White | - per linear foot or mile |
| 907-626-B: 4" Thermoplastic Traffic Stripe, Continuous White | - per linear foot or mile |
| 907-626-C: 4" Thermoplastic Edge Stripe, Continuous White | - per linear foot or mile |
| 907-626-D: 4" Thermoplastic Traffic Stripe, Skip Yellow | - per linear foot or mile |
| 907-626-E: 4" Thermoplastic Traffic Stripe, Continuous Yellow | - per linear foot or mile |
| 907-626-F: 4" Thermoplastic Edge Stripe, Continuous Yellow | - per linear foot or mile |

907-626-G: Thermoplastic Detail Stripe, <u>Color</u> , 4" Equivalent Length	- per linear foot
907-626-H: Thermoplastic Legend, <u>Color</u> , 4" Equivalent Length	- per linear foot or square foot

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-626-19

CODE: (SP)

DATE: 01/08/2009

SUBJECT: Thermoplastic Blue ADA Markings

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

907-626.02--Materials. After the first paragraph of Subsection 626.02.1 on page 443, add the following:

Blue-ADA thermoplastic marking material shall meet the requirements of Subsection 720.02 with the exception that the color shall be blue-ADA.

907-626.04--Method of Measurement. After the last paragraph of Subsection 626.04 on page 446, add the following:

For pay items indicated to be 4-inch equivalents, the detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than four inches in width will be converted to equivalent lengths of four-inch stripe. Legend, which is to include railroad markings, pedestrian crosswalks and stop lines, will be measured by the square foot or linear foot. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square foot. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than four inches in width will be converted to equivalent lengths of four-inch widths. Cold Plastic Legend, Handicap Symbol of the color specified will be measured per each as determined by actual count in place.

907-626.05--Basis of Payment. Delete the first sentence under Subsection 626.05 on page 446 and substitute the following:

Thermoplastic traffic markings will be paid for at the contract unit price per mile, linear foot, square foot or each, as applicable, which shall be full compensation for completing the work.

Add the following pay items after pay item 626-G on page 446.

907-626-G: Thermoplastic Detail Stripe, Blue-ADA - per linear foot

907-626-H: Thermoplastic Legend, Blue-ADA - per square foot

907-626-H: Thermoplastic Legend, Handicap Symbol, Color - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-628-3

CODE: (SP)

DATE: 06/14/2004

SUBJECT: Cold Plastic Pavement Markings

Section 628, Cold Plastic Pavement Markings, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction, is hereby amended as follows:

907-628.04--Method of Measurement. After the first sentence of Subsection 628-04 on page 451, add the following.

Four-inch traffic stripe shall be measured from end-to-end of individual stripes. In the case of skip lines the measurement will include skips. The length used to measure centerline, lane lines and edge stripes will be the horizontal length computed along the stationed control line.

Four-inch equivalent detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than four inches in width will be converted to equivalent lengths of four-inch stripe.

When transverse railroad bands, pedestrian crosswalks and stop lines are measured by the linear foot of 4-inch equivalent stripe, stripes more than four inches in width will be converted to equivalent lengths of four-inch widths.

907-628.05--Basis of Payment. Add the following pay items to the list of pay items on pages 451 & 452.

- | | |
|--|-------------------------------------|
| 907-628-A: 4" Cold Plastic Traffic Stripe, Skip White | - per mile or linear foot |
| 907-628-B: 4" Cold Plastic Traffic Stripe, Continuous White | - per mile or linear foot |
| 907-628-D: 4" Cold Plastic Traffic Stripe, Skip Yellow | - per mile or linear foot |
| 907-628-E: 4" Cold Plastic Traffic Stripe, Continuous Yellow | - per mile or linear foot |
| 907-628-G: Cold Plastic Detail Stripe, <u>Color</u> , 4" Equivalent Length | - per linear foot |
| 907-628-H: Cold Plastic Legend, <u>Color</u> , 4" Equivalent Length | - per square foot
or linear foot |

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-628-8

CODE: (SP)

DATE: 01/08/2009

SUBJECT: Cold Plastic Blue-ADA Pavement Markings

Section 628, Cold Plastic Pavement Markings, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction, as amended by this special provision is applicable to Blue-ADA Pavement Marking only.

907-628.02--Materials. Blue-ADA cold plastic marking material shall meet the requirements of Subsection 720.04 with the exception that the material color shall be blue-ADA.

907-628.04--Method of Measurement. Detail traffic stripe will be measured by the linear foot from end-to-end of individual stripes. Measurements will be made along the surface of each stripe and will exclude skip intervals where skips are specified. Stripes more than four inches in width will be converted to equivalent lengths of four-inch stripe.

Legend, which is to include railroad markings, pedestrian crosswalks and stop lines, will be measured by the square foot or linear foot. Pay areas of individual letters and symbols will usually be shown on the plans and measured by the square foot. Transverse railroad bands, pedestrian crosswalks and stop lines will generally be measured by the linear foot, in which case, stripes more than four inches in width will be converted to equivalent lengths of four-inch widths. Cold Plastic Legend, Handicap Symbol of the color specified will be measured per each as determined by actual count in place.

907-628.05--Basis of Payment. Cold plastic pavement markings will be paid for at the contract unit price per linear foot, square foot or each, as applicable, which shall be full compensation for completing the work.

Add the following pay items between pay item nos. 628-G and 628-H on page 451.

907-628-G: Cold Plastic Detail Stripe, Blue-ADA - per linear foot

907-628-H: Cold Plastic Legend, Blue-ADA - per square foot or linear foot

907-628-H: Cold Plastic Legend, Handicap Symbol, Color - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-630-2

CODE: (SP)

DATE: 6/30/2003

SUBJECT: Remove and Reset Ground Mounted Signs

Section 630, Traffic Signs and Delineators of the Mississippi Standard Specifications for Road and Bridge Construction, 2004 Edition, is hereby amended as follows:

907-630.01--Description. After the last paragraph of Subsection 630.01 on page 454, add the following:

Selected existing, temporarily installed, and/or permanently installed ground mounted sign assemblies other than construction traffic control sign assemblies shall be removed and reset as directed by the Engineer. Removing and resetting of ground mounted sign assemblies shall include provision of continuous sign visibility by the traveling public before, during, and after the operation. The Contractor shall provide all materials necessary to effect the removal and resetting, including footings, supports, brackets, hardware, breakaway features and other incidentals. All installations within 30 feet of the pavement edge of temporary or permanent through lanes shall include breakaway support features certified to meet NCHRP Report 350 prior to the removal and resetting of the sign assembly.

907-630.04--Method of Measurement. After the last paragraph of Subsection 630.04 on page 463, add the following:

Removing and resetting existing, temporarily installed, and/or permanently installed ground mounted sign assemblies will be measured as a unit quantity per each consisting of work as described above. Each removal and resetting of a sign assembly as described herein will be measured for payment. No separate measurement will be made for removal only of a sign assembly, as said removal shall be included in the appropriate pay item for removal of signs. If a sign assembly is removed and temporarily placed in storage, then later reset as directed by the Engineer, measurement for payment will be made one time only, after the stored sign is reset. No separate measurement will be made for any materials necessary to effect the removal and resetting, including footings, supports, brackets, hardware, breakaway features and other incidentals.

907-630.05--Basis of Payment. After the first paragraph of Subsection 630.05 on page 463, add the following:

Removing and resetting existing, temporarily installed, and/or permanently installed ground mounted sign assemblies, measured as prescribed above, will be paid for at the respective contract unit price per each, which price shall be full compensation for furnishing and placing all materials necessary to effect the removal and resetting, including footings, supports, brackets,

hardware, breakaway features; and for all labor, equipment, tools and incidentals necessary to complete the work.

Add the following to the list of pay items on page 463.

907-630-O: Remove and Reset Signs, Description - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-681-2

CODE: (IS)

DATE: 12/02/2004

SUBJECT: Submittal Data

Section 681, Roadway Lighting System, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

Delete the first paragraph of Subsection 681.04.2 on page 568 and substitute the following:

907-681.04--Basic Materials and Methods. The Contractor shall submit to the Engineer eight (8) copies of submittal data for all electrical materials and equipment proposed for use not later than forty-five (45) days prior to beginning any lighting work.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-683-8

CODE: (SP)

DATE: 01/23/2009

SUBJECT: Lighting Assembly

PROJECT: LWO-3059-26(002) / 501920302 -- Holmes County

Section 683, Lighting Assemblies, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows.

Delete in toto Section 683 and substitute the following.

907-683.01--Description.

907-683.01.1--General. All items of labor, materials and equipment, not specified in detail or shown on drawings but necessary for complete installation and proper operation of work described or implied, shall be furnished and installed.

Test all electrical conductors, after completion of installation of wiring and apparatus, to insure continuity, proper splicing, freedom from grounds, except "made grounds" and those required for protection and insulation resistance. Use testing instruments, i.e. megger. Activation of each circuit will be required as final test. Testing shall be done at no additional expense to MDOT. Drawings are indicative of work to be installed but do not indicate all bends, fittings, boxes, etc. that will be required in this Contract. The structural and finished conditions of the project shall be investigated prior to construction.

Coordinate work with other trades to avoid interference between piping, ducts, equipment, architectural or structural features. In case of interference, the Engineer decides which work is to be relocated, regardless of which is first installed. Visit the site to determine actual conditions. No extra compensation will be allowed by failure to determine existing conditions.

907-683.01.1.1--References.

- NEC - National Electrical Code of National Fire Protection Association
- ASTM - American Society for Testing and Materials
- UL - Underwriters' Laboratories
- IPCEA - Insulated Power Cable Engineers Association
- NEMA - National Electrical Manufacturers Association
- IEEE - Institute of Electrical and Electronic Engineers
- ANSI - American National Standards Institute, Inc.
- IBC - International Building Code
- ISA - Instrument Society of America
- NESC - National Electrical Safety Code

ADA - Americans with Disabilities Act

907-683.01.1.2--Design Requirements. The installation must comply with all Federal and State, municipal or other authority's laws, rules and/or regulations.

Inspections by the required authorities shall be made. Original final wiring certificates with two copies shall be submitted to the Engineer, at no additional cost to Owner.

The electrical inspections shall be made by the local inspection agency for compliance with the National Electrical Code. Obtain certificates of acceptance, compliance and approval for delivery to MDOT. Furnish copies to the Engineer for review.

All electrical equipment and its components and materials shall meet all applicable UL criteria and bear the appropriate label of the Underwriters' Laboratory. All control panels, etc. shall bear the UL-508A listing. All complete assemblies shall be UL listed.

All electrical equipment or apparatus of any one system shall be of the same quality as produced by one or more manufacturers, suitable for use in a unified system. The term "manufacturer" shall be understood as applying to a reputable firm who assumes full responsibility for its products.

Qualification: When more than one name of manufacturer is listed in these specifications, the first manufacturer and number determine the style and quality. Other manufacturers named have been included based on their ability to furnish (fabricate, construct and test) equipment which will provide similar quality and performance. Products from these manufacturers will be reviewed by the Engineer providing the physical and performance attributes provide equivalence to those of the first named manufacturers. The Engineer shall provide sole determination to this equivalency. If such products are acceptable to the Engineer but differ from those named in the Specification or on the Drawings to the extent that their proper incorporation into the Work requires changes to the structural piping, mechanical, electrical, instrumentation, or any other changes of whatsoever nature, the Contractor must be responsible for such changes.

907-683.01.1.3--Submittals. All shop drawings shall be submitted to the Engineer for review. If incorrect, they shall be resubmitted in quantity according to Contract conditions until satisfactory. Work shown on shop drawings shall not be executed until such drawings are approved. See related sections for complete listing of all required equipment submittal.

All shop drawing submittals shall clearly indicate, using arrows and/or highlighting on all copies, which item(s) are being submitted and that each item being submitted is in compliance with all requirements on the drawings and in these specifications. All pertinent specification and drawing requirements shall be indicated on the manufacturer's drawings.

See specific section for further breakdown of shop drawing items.

Submit certification with shop drawing submittal that all equipment is UL listed.

Shop drawings shall indicate adequate clearance for operation, maintenance and replacement of operating equipment devices.

This specification does not necessarily include all items of shop drawings required. The Engineer reserves the right to request additional shop drawings.

907-683.01.1.4--Delivery, Storage And Handling. Deliver, store, protect and handle products to site. Protect all unfinished installations, construction materials and equipment.

907-683.01.2--Electrical Requirements. Furnish all labor and materials required to energize all equipment supplied and installed under this Contract.

907-683.01.3--Conduit. Furnish all labor and materials required to install conduit under this Contract.

907-683.01.3.1--References.

- ANSI C80.1 - Rigid Steel Conduit, Zinc Coated.
- ANSI C80.3 - Electrical Metallic Tubing, Zinc Coated.
- ANSI/NEMA FB 1 - Fittings, Cast Metal Boxes, and Conduit Bodies for Conduit and Cable Assemblies.
- ANSI/NFPA 70 - National Electrical Code, Latest Edition. NECA "Standard of Installation."
- NEMA RN 1 - Polyvinyl Chloride (PVC) Externally Coated Galvanized Rigid Steel Conduit and Intermediate Metal Conduit.
- NEMA TC 3 - PVC Fittings for Use with Rigid PVC Conduit and Tubing.
- ACI Standard 318 - American Concrete Institute Building Code Requirements for Structural Concrete

907-683.01.3.2--Design Requirements. Conduit Size: ANSI/NFPA 70, unless otherwise noted or specified.

907-683.01.3.3--Submittals. Product Data: Provide for metallic conduit, PVC coated metal conduit, nonmetallic conduit, fittings, conduit bodies and accessories.

907-683.01.3.4--Project Record Documents. Accurately record actual routing of conduits where concealed in floors or below grade.

907-683.01.3.5--Regulatory Requirements. Conform to requirements of ANSI/NFPA 70, NEC. Furnish products listed and classified by Underwriters Laboratories, Inc. or testing firm acceptable to authority having jurisdiction as suitable for purpose specified and shown.

907-683.01.3.6--Delivery, Storage, And Handling. Deliver, store, protect, and handle Products to site. Protect conduit from corrosion and entrance of debris by storing above grade. Provide appropriate covering. Protect PVC conduit from sunlight.

907-683.01.3.7-Project Conditions. Verify that field measurements are as shown on Drawings. Conduit routing is shown on Drawings in approximate locations unless dimensioned. Route as required to complete wiring system.

907-683.01.4--Duct Banks.

907-683.01.4.1--References.

- IEEE C2 - National Electrical Safety Code.
- NFPA 70 - National Electrical Code, Latest Edition.
- ACI Standard 318 - American Concrete Institute Building Code Requirements for Structural Concrete.

907-683.01.4.2--Submittals.

Product Data: Provide for handholes and accessories.

Shop Drawings: Provide layout shop drawings of the ductbank systems for review and approval. Drawings to be to scale and shall indicate existing conditions and features. Maintain all field revisions and alterations on the approved set; submit as part of final acceptance documentation, prior to final payment. Shop drawings to indicate the installed conductor systems. Manufacturer's Instructions: Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

907-683.01.4.3--Regulatory Requirements. Conform to requirements of NFPA 70, N.E.C.

Products: Listed and classified (as applicable) by Underwriters Laboratories, Inc. or other testing firm acceptable to the authority having jurisdiction as suitable for the purpose specified and indicated.

907-683.01.4.4--Field Measurements. Verify that field measurements are as indicated. Verify routing and termination locations of duct bank prior to excavation for rough-in. Verify locations of handholes prior to excavating for installation. Ductbank routing is shown in approximate locations unless dimensions are indicated. Route as required to complete duct system. Handhole locations are shown in approximate locations unless dimensions are indicated. Locate as required to form a complete direct buried ductbank system. Conduit ductbank locations are shown in approximate locations unless dimensions are indicated. Locate as required to form a complete raceway system.

907-683.01.5--Low Voltage Conductors And Cables. Low voltage wire and cable conductors including building wire and associated connectors, splices, and terminations for wiring systems rated 600 V and less.

907-683.01.5.1--References.

- NECA (National Electrical Contractors Association) - Standard of Installation.
- NETA ATS (International Electrical Testing Association) - Acceptance Testing Specifications for Electrical Power Distribution Equipment and Systems.

907-683.01.5.2--Submittals. Product Data: For each type of product indicated in this Section.

907-683.01.5.3--Quality Assurance.

Testing Agency Qualifications: Testing agency as defined by OSHA in 29 CFR 1910.7 or a member company of the International Electrical Testing Association and that is acceptable to authorities having jurisdiction.

Testing Agency's Field Supervisor: Person currently certified by the International Electrical Testing Association or the National Institute for Certification in Engineering Technologies to supervise on-site testing specified in Part 3.

Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.

Comply with NFPA 70; National Electrical Code, Latest Edition.

907-683.01.6--Electrical Identification.

907-683.01.6.1--References.

NFPA 70 - National Electrical Code, Latest Edition.

907-683.01.6.2--Submittals For Review. Provide catalog data for labels, and markers.

907-683.01.6.3--Regulatory Requirements. Conform to requirements of NFPA 70 and OSHA.

907-683.01.7--Lighting Fixtures And Emergency Lighting Units. Shall consist of Lighting Fixtures and Accessories, Ballasts and Lamps.

907-683.01.7.1--References.

- ANSI C78.379 - Electric Lamps - Incandescent and High-Intensity Discharge Reflector Lamps - Classification of Beam Patterns.
- ANSI C82.4 - Ballasts for High-Intensity Discharge and Low Pressure Sodium Lamps (Multiple Supply Type).
- NEMA WD 6 - Wiring Devices-Dimensional Requirements.
- NFPA 70 - National Electrical Code, Latest Edition.

907-683.01.7.2--Submittals For Review.

Shop Drawings: Indicate dimensions and components for each luminaire that is not a standard product of the manufacturer.

Product Data: Provide dimensions, ratings, and performance data.

907-683.01.7.3--Submittals For Information. Submit manufacturer's installation instructions. Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, and installation of Product.

907-683.01.7.4--Qualifications Manufacturer: Company specializing in manufacturing the Products specified in this section with minimum three years documented experience.

907-683.01.7.5--Regulatory Requirements. Conform to requirements of NFPA 70.

Products: Listed and classified by Underwriters Laboratories, Inc. or testing firm acceptable to the authority having jurisdiction as suitable for the purpose specified and indicated.

907-683.02--Materials.

907-683.02.1--Conduit. Conduit shall be metal, PVC coated metal, or nonmetallic. The conduit shall meet the following requirements.

Minimum Size: 3/4 inch unless otherwise specified or indicated on Drawings.

Underground Installations: More than Five Feet from Foundation Wall: Unless otherwise indicated or specified, use Schedule 40 PVC nonmetallic conduit with PVC coated rigid steel conduit (RS) sweeps. Minimum size: 1½-inch unless specifically noted otherwise.

Within Five Feet from Foundation Wall: Use PVC coated steel conduit.

In (or Under Slab) on Grade: Use Schedule 40 PVC nonmetallic conduit with PVC coated RS Conduit sweeps to above slab or grade locations (physical and corrosion protection). Minimum Size: 1 inch. Note - wiring associated with this raceway to be general power and control wiring only.

Outdoor Locations, Above Grade: Use rigid galvanized steel (RGS), unless otherwise indicated on Drawing.

In Slabs and Above Grade: Use electrical metallic tubing for instrumentation and Class II circuit conductors. Use Schedule 40 PVC nonmetallic conduit for all other general power and control wiring.

Maximum Size Conduit in Slab: 1-inch; 3/4-inch for conduits crossing each other. Maintain a minimum concrete cover over and between parallel installed raceways as outlined in ACI Standard 318.

Dry Exposed and Concealed Locations (process related areas): Use rigid galvanized steel (RGS) conduit for feeders; EMT for branch circuits.

907-683.02.1.1--Metal Conduit.

Manufacturers:

- Wheatland
- Allied Tube and Conduit
- Triangle
- Alcoa

Rigid Steel Conduit: ANSI C80.1.

Fittings and Conduit Bodies: ANSI/NEMA FB 1; material to match conduit. Conduit bodies to meet the requirements for Form 8; Form 7 not permitted.

907-683.02.1.2--PVC Coated Metal Conduit.

Manufacturers:

- Ocal
- Robroy

Description: NEMA RN 1; rigid steel conduit with external PVC coating, 40 mil thick.

Fittings and Conduit Bodies: ANSI/NEMA FB 1; steel fittings with external PVC coating to match conduit, Form 8 design only; Form 7 fittings not permitted. Acceptable manufacturers include Ocal and Robroy.

907-683.02.1.3--Nonmetallic Conduit.

Manufacturers:

- Carlon
- Cantex, Inc.

Description: NEMA TC 2; Schedule 40 PVC.

Fittings and Conduit Bodies: NEMA TC 3.

907-683.02.2--Duct Banks. As identified on Drawings and Contract Documents.

Polymer Concrete Handholes (Non-highway/roadway loading applications).

Manufacturers: Quazite Model PC Style.

Materials: The pull/splice box shall be constructed of polymer concrete consisting of sand and aggregate bound together with a polymer resin. Internal reinforcement may be provided by means of steel, fiberglass, or a combination of the two. The use of chopped fiberglass strands applied with a chopper gun or the use of high density polyethylene or high density polystyrene is prohibited. To assure consistent production from part to part, only matched metal tooling is to be used to manufacture the product. Loading: Boxes and covers shall be (concrete gray or green) and sustain a minimum vertical test load of 12,000# over a 10" square. (non-deliberate vehicular traffic loading entry) Size as required.

Covers: Covers shall be provided with stainless steel bolts for when applicable. The logo shall be permanently recessed in the cover.

907-683.02.3--Low Voltage Conductors And Cables.

907-683.02.3.1--Conductors And Cables.

Manufacturers:

- American Insulated Wire Corp.; a Leviton Company.
- General Cable Corporation.
- Southwire Company.
- Okonite
- Or Equal

Conductor Material: Copper complying with NEMA WC 5 or 7; stranded conductor for No. 10 AWG and smaller as well as stranded for No. 8 AWG and larger.

Conductor Insulation Types: Type XHHW or XHHW-2 as specified complying with NEMA WC 5 or 7. (Note - Type THHN/THWN conductors are not to be utilized on this project.)

907-683.02.3.2--Connectors And Splices.

Description: Factory-fabricated connectors and splices of size, ampacity rating, material, type, and class for application and service indicated. Note: Split-bolt connectors are NOT permitted for use on this project. Utilize compression type connectors for all terminations and splices. Spring-nut connectors may be utilized for branch circuit terminations / splices on wire sizes # 10 AWG and smaller.

Solderless Pressure Connectors:

- Burndy
- Thomas & Betts

Compression Connectors:

- Burndy
- Thomas & Betts

Multilug:

- Burndy
- Thomas & Betts
- Ilsco

Tape: Low voltage tape to be as manufactured by 3M, 33 plus.

Low Voltage Motor Termination / Insulation Kits: Utilize lug connectors, insulated by means of Raychem Corporation, RVC Series pre-manufactured “roll-on” type insulation kits; voltage rating as required by the installation.

Exposed and Concealed (in raceway) Feeders: Type XHHW or XHHW-2, single conductors in raceway only.

Feeders and Branch Circuits Concealed in Concrete, below Slabs-on-Grade, and in Underground Ductbanks: Type XHHW or XHHW-2, single conductors in raceway.

907-683.02.4--Electrical Identification.

907-683.02.4.1--Wire Markers Manufacturers.

- Brady
- Seton
- LEM
- Panduit

Description: Tubing/sleeve type wire marker system. Identification labeling shall utilize sleeve identification labeling system with numbers (and/or letters) permanently printed using HEAT TRANSFER technology. Dot Matrix type print on vinyl sleeves is NOT considered acceptable.

Locations: In general, each conductor or cable required to be labeled shall be identified in every panelboard gutter space, pull box, and at the load connection termination.

Legend: Power and Lighting Circuits, branch circuit or feeder number indicated.

907-683.02.4.2--Wiring Color Code. All wiring shall conform to the following color code:

<u>Phase</u>	<u>480/277 Volts 3 Ph, 4 W Sys</u>	<u>208/120 Volts 3 Ph, 4 W Sys</u>	<u>240/120 Volts 1 Ph, 3 W Sys</u>
A	Brown	Black	Black
B	Orange	Red	-----
C	Yellow	Blue	Red
Neutral	Gray	White	White
Equip. Ground	Green	Green	Green

907-683.03.1--General Installation.

Protection of Installation: All equipment shall be protected during construction. All damaged equipment caused by noncompliance with this requirement shall be repaired at no expense to MDOT.

Openings and Chases: Determine locations of chases and openings prior to construction, if openings or chases are made, such cutting and repairing of the building shall be made by this Contractor in complete coordination with other trades on the job site to match original conditions in quality, color and type of materials used, and at no additional expense to MDOT.

Methods and Materials: All work shall be installed in a first-class, neat and workmanlike manner by skilled mechanics. All materials shall be new unless otherwise indicated. Firmly support all materials and equipment. Any materials or workmanship found to be of inferior quality, damaged, improperly installed, or having been exposed to harmful substances or conditions at any time in the construction work, shall be immediately replaced upon notification of the Contractor by MDOT that such condition has been observed by MDOT or his representatives. The Contractor shall at all times provide protective equipment as may become necessary to protect all parts of the work from damage or exposure to harmful conditions or contaminating substances.

Cutting, Repairing and Finishing: All cutting, repairing, finishing and painting required for the installation of work under this Contract shall be performed under this Contract. All disturbed surfaces shall be repaired and finished to match adjacent surfaces by skilled mechanics working in their respective fields.

Excavation, Backfilling and Blasting: Excavation, backfilling and blasting work shall be as required to complete the work according to details on drawings.

Concrete: Concrete work shall be in accordance with the requirements to complete the work according to details on drawings.

Cutting and Patching of Macadam and Concrete Areas: Openings in concrete or macadam required for Electrical construction shall be made by taking extreme precautions to prevent excessive damage to existing facilities. Prior to completion, all disturbed areas shall be closed, restored to normal and finished to match surrounding areas.

Access: Install all conduit, wire, cable, wiring devices and equipment to preserve access to all equipment installed under this Contract.

Layout of Wiring: The layout of wiring as shown on the drawings shall not be considered as absolute; it shall be subject to changes where necessary to overcome obstacles in construction. Where a major deviation from the plans is indicated by practical consideration, shop drawings shall be submitted showing all deviations in detail to clearly indicate the necessity or desirability for the change.

Furnish and install all necessary steel angles, beams, channels, hanger rods or other supports for equipment and piping furnished under this Contract requiring support or suspension from building structure, except support steel where otherwise noted on the plans.

Clean Up: Upon completion of all work under electrical specifications, furnish labor, materials and incidentals to accomplish the following: remove all dirt, foreign materials, stains, fingerprints, etc. from all lighting fixtures, floors, walls adjacent to the above equipment and leave the electrical work in such a condition that no cleaning will be required by MDOT. The complete system shall be subject to inspection and approval by the Engineer.

Training: The Contractor shall provide training sessions for the operation, maintenance, and troubleshooting procedures.

907-683.03.2--Electrical Installation. Conduit and power wiring of required size and voltage, from a panelboard or similar source, shall be furnished and installed.

907-683.03.3--Conduit Installation. Install conduit in accordance with NECA "Standard of Installation" and in accordance with manufacturer's instructions. Conduit installation and acceptable usage shall be in accordance with the N. E. C.

Install PVC coated conduit in accordance with manufacturer's installation procedures utilizing acceptable materials. Manufacturer to provide certified letter outlining Contractor has received training on installation procedures with shop drawing submittal for product.

Do not support conduit with wire or perforated pipe straps. Remove wire used for temporary supports.

Route exposed conduit parallel and perpendicular to walls.

Do not cross conduits in slab except as permitted in Article 2.01.D of this Section or approved by the Engineer prior to installation.

Maintain adequate clearance between conduit and piping.

Cut conduit square using saw or pipe cutter; de-burr cut ends.

Bring conduit to shoulder of fittings; fasten securely.

Join nonmetallic conduit using cement as recommended by manufacturer. Wipe nonmetallic conduit dry and clean before joining. Apply full even coat of cement to entire area inserted in fitting. Allow joint to cure for 20 minutes, minimum.

Use conduit hubs to terminate conduit to enclosures and cabinets in damp and wet locations. Cast boxes to utilize hub connections.

Install no more than equivalent of three 90 degree bends between boxes.

Avoid moisture traps; provide junction box with drain fitting at low points in conduit system. Provide suitable non-metallic pull string in each empty conduit except sleeves and nipples.

Use suitable caps to protect installed conduit against entrance of dirt and moisture. Provide removable plugs at each end on all spare underground conduit runs.

Identify conduit under provisions of Subsection 907-683.02.4.

Install PVC coated raceway and fittings as recommended by manufacturer. Utilize appropriate methods, materials and equipment to prevent damage to PVC coating.

All conduit duct banks to buildings and structure shall be installed in such a manner as to eliminate damage due to shear force. Utilize sheaves with appropriate sealants or other means reviewed by the Engineer/Architect.

Space supports for conduit not more than five (5) feet apart.

Bend conduit only by use of an approved pipe bending machine or hickey so the conduit will always retain its cylindrical shape; PVC coated conduit shall be bent and threaded only with tools manufactured for that purpose. Contractor to submit evidence of manufacturer training prior to installations. The use of touch-up coating material is limited to the provisions established by the manufacturer. Improper installations will be removed and replaced by the Contractor without extra compensation when directed by the Engineer/Architect.

Install conduit so wires may be removed and replaced at a later date.

907-683.03.4--Duct Bank Installation. Install duct to locate top of ductbank at depths as indicated on drawings. Wipe nonmetallic duct dry and clean before joining. Apply full even coat of adhesive to entire area inserted in fitting. Allow joint to cure for 20 minutes, minimum. Install no more than equivalent of three 90-degree bends between pull points. Provide suitable fittings to accommodate expansion and deflection where required. Terminate duct at handhole entries using sweep bends up into handhole. Provide suitable non-metallic pull string in each empty duct except sleeves and nipples. Swab duct. Use suitable caps to protect installed duct against entrance of dirt and moisture. Interface installation of underground warning tape with backfilling. Install tape as required on drawings below finished surface.

Polymer Handhole Installation. Install handholes in accordance with manufacturer's instructions. Install handholes plumb; provide adequate stone backfill material under handhole to provide support and drainage. Install concrete support ring around handhole assembly – slope away from lid to provide nominal drainage (approximately 1”).

907-683.03.5--Low Voltage Conductors And Cables.

907-683.03.5.1--Conductor And Insulation Applications. Completely and thoroughly swab raceway before installing wire. Route wire and cable to meet Project conditions. Install wire and cable in accordance with NECA "Standard of Installation."

Neatly train and lace wiring inside boxes, equipment, and panelboards. Use manufacturer-approved pulling compound or lubricant where necessary; compound used must not deteriorate conductor or insulation. Do not exceed manufacturer's recommended maximum pulling tensions and sidewall pressure values. Use pulling means, including fish tape, cable, rope, and basket-weave wire/cable grips, that will not damage cables or raceway.

Support cables as required by the National Electrical Code. Identify according to Division 26, Section 26 19 50, Electrical Identification. Identify each conductor with its circuit number or other designation indicated. Color-code conductors and cables in accordance with Specification.

The voltage drop at the end of any circuit shall not exceed 3% of the normal line voltage under full load.

907-683.03.5.2--Connections. Tighten electrical connectors and terminals according to manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A and UL 486B.

Make splices and taps that are compatible with conductor material and that possess equivalent or better mechanical strength and insulation ratings than unspliced conductors. Clean conductor surfaces before installing lugs and connectors. Make splices, taps, and terminations to carry full ampacity of conductors with no perceptible temperature rise. Tape uninsulated conductors and connectors with electrical tape to 150 percent of insulation rating of conductor.

Utilize pre-manufactured insulated splice covers and terminations as previously specified, installed in accordance with the manufacturer's installation instructions. Where otherwise applicable, insulate uninsulated conductors and connectors with electrical tape to 150 percent of insulation rating of conductor.

Install lug connectors for copper conductor on conductors # 6 AWG and larger. Splices and taps to utilize UL Listed and Labeled compression type splice kits.

Install solderless pressure connectors with insulating covers for copper conductor splices and taps, 8 AWG and smaller.

Install insulated spring wire connectors with plastic caps for copper conductor splices and taps, 10 AWG and smaller.

Install stranded conductors for feeder and branch wiring.

Make electrical connections in accordance with equipment manufacturer's instructions.

Connect heat producing equipment using wire and cable with insulation suitable for temperatures encountered.

907-683.03.5.3--Wire Color. For wire sizes 10 AWG and smaller, install wire colors in accordance with this specification. For wire sizes 8 AWG and larger, identify wire with colored tape at terminals, splices and boxes in accordance with this specification.

Neutral Conductors: Color code in accordance with this specification. When two or more neutrals are located in one conduit, individually identify each with proper circuit number.

Branch Circuit Conductors: Install three or four wire home runs with each phase uniquely color coded. Do not gang branch circuits associated with clean power® / electronic equipment circuits; maintain use of individual neutral conductor with each branch circuit installed.

Feeder Circuit Conductors: Uniquely color code each phase with the appropriate color coded tape at both ends and visible points including junction boxes.

Ground Conductors:

For 6 AWG and smaller: Utilize wire with insulation color coded in accordance with this specification.

For 4 AWG and larger: Identify with green tape at both ends and visible points including junction boxes.

Isolated (insulated) Ground Conductors: (where applicable)

For 6 AWG and smaller: Utilize wire with insulation color coded in accordance with this specification.

For 4 AWG and larger: Identify with green and yellow tape at both ends and visible points including junction boxes.

907-683.03.5.4--Field Quality Control.

Testing: Engage a qualified NETA Certified testing agency to perform the following field quality-control testing. After installing conductors and cables and before electrical circuitry has been energized, test for compliance with requirements.

Perform each electrical test in accordance with NETA ATS, except Section 4. Perform visual and mechanical inspections as stated in NETA ATS, Section 7.3.1. Certify compliance with test parameters.

Test Reports: Prepare a written report to record the following:

- Document all Test procedures used and submit to the Engineer for review.
- Verify that all Test results comply with the stated requirements and criteria.
- Test results that do not comply with requirements shall be reported and corrective action taken shall be documented. Re-test to achieve compliance with the requirements outlined by these Documents.

907-683.03.6--Electrical Identification. Identify underground conduits and ductbanks using one underground warning tape per trench as indicated below finished grade. For trenches over 24 inches in width, provide two parallel warning tapes installed nominally 6 to 12 inches from each side at depth noted above.

907-683.03.7--High Intensity Discharge (HID) Ballasts and Lamps. Make wiring connections to branch circuit using building wire with insulation suitable for temperature conditions within luminaire.

Bond products and metal accessories to branch circuit equipment grounding conductor. Contractor shall furnish supports for light fixtures. The fixture manufacturer's catalog numbers describing the various types of fixtures shall be used as a guide only and do not include all the required accessories or hardware that may be required for a complete installation. The Contractor shall be responsible for furnishing, at no additional cost to MDOT, all the required accessories and hardware for a complete installation. Install accessories furnished with each luminaire.

907-683.03.7.1--Field Quality Control. Operate each luminaire after installation and connection. Inspect for proper connection and operation.

907-683.03.7.2--Adjusting. Aim and adjust luminaires as indicated.

907-683.03.7.3--Cleaning. Clean electrical parts to remove conductive and deleterious materials. Remove dirt and debris from enclosures. Clean finishes and touch up damage. Clean photometric control surfaces as recommended by manufacturer.

907-683.03.7.4--Protection Of Finished Work. Relamp luminaires that have failed lamps at Final Inspection.

907-683.4--Method of Measurement. Lighting assembly, of the type specified, will be measured as a unit quantity per each, which measurement shall include the pole, lowering device, luminaires, lamps, pole wiring, conduit, anchors, and all other items necessary to complete installation.

907-683.5--Basis of Payment. Lighting assembly, measured as prescribed above, will be paid for at the contract unit price per each, which price shall be full compensation for furnishing all materials, and for all construction, placing, erecting, installing, connecting, and testing; for poles, lowering device, luminaires, lamps, conduits, cable, wiring and all hardware; for final cleaning up; and for all equipment, labor, tools, and incidentals necessary for completion of the work.

Payment will be made under:

907-683-B: Lighting Assembly, High Mast, Type - per each

907-683-B: Lighting Assembly, Low Mast, Type - per each

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-701-3

DATE: 10/01/2008

SUBJECT: Hydraulic Cement

In Subsection 907-701.02.2.1 on page 3, delete the line in Table 1 addressing Severe Soluble Sulfate Conditions, and substitute the following:

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, 10% metakaolin, or 8% silica fume
--------	-------------	----------------	---

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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.

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

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

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

907-701.02.2.1--Portland Cement Concrete Exposed to Soluble Sulfate Conditions or Seawater. When Portland cement concrete is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash, GGBFS, metakaolin, or silica fume shall be as follows in Table 1.

Table 1- Cementitious Materials for Soluble Sulfate Conditions

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

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

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

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

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

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

907-701.02.2.2--Cement for Soil Stabilization Exposed to Soluble Sulfate Conditions or Seawater. When Portland cement for use in soil stabilization is exposed to moderate or severe soluble sulfate conditions, or to seawater, cement types and replacement of cement by Class F fly ash or GGBFS shall meet the requirements of Subsection 907-701.02.2.1. Neither metakaolin nor silica fume shall be used to bring the cementitious materials into compliance with the requirements of Table 1.

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

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

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

907-701.04--Blended Hydraulic Cement.

907-701.04.1--General.

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

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-708-5

CODE: (IS)

DATE: 05/12/2008

SUBJECT: Non-Metal Drainage Structures

Section 708, Non-Metal Structures and Cattlepasses, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

907-708.02.1.2--Fly Ash. In the first sentence of Subsection 708.02.1.2 on page 639, change “20 percent” to “25%”.

907-708.02.3.2--Marking. Delete the second sentence of Subsection 708.02.3.2 on page 640, and substitute the following:

Machine made pipe shall be marked in accordance with one of the following methods: 1) the pipe shall be inscribed on the outside of the pipe and stenciled on the inside of the pipe, or 2) the pipe shall be inscribed on the inside of the pipe, only. All other pipe may be stenciled.

907-708.17--Corrugated Plastic Pipe Culverts.

907-708.17.1--Corrugated Polyethylene Pipe Culverts. Delete the first sentence of the first paragraph of Subsection 708.17.1 on page 645 and substitute the following.

Corrugated polyethylene pipe shall conform to the requirements of AASHTO Designation: M 294, Type S and/or SP, as applicable, and shall have soil tight joints, unless otherwise specified.

Delete the last sentence of the second paragraph of Subsection 708.17.1 on page 645.

After Subsection 708.17.1 on page 645, add the following:

907-708.17.1.1--Inspection and Final Acceptance of Corrugated Polyethylene Pipe Culverts.

Approximately 50% of the installed length of corrugated polyethylene pipe shall be inspected for excess deflection no sooner than 30 days after the embankment material over the pipe is placed to the required subgrade elevation or the maximum required fill height. The inspection shall be performed using either electronic deflectometers, calibrated television or video cameras, or a “go, no-go” mandrel that has an effective diameter of 95% of the nominal inside diameter of the pipe.

Pipe found to have deflection values greater than 5% shall be removed and replaced at no cost to the State.

907-708.17.2--Corrugated Poly (Vinyl Chloride) (PVC) Pipe Culverts. Delete the first sentence of the first paragraph of Subsection 708.17.2 on page 645 and substitute the following.

Corrugated poly (vinyl chloride) (PVC) pipe shall conform to the requirements of AASHTO Designation: M 304 and shall have soil tight joints, unless otherwise specified. Non-perforated PVC pipe used in underdrains shall either be manufactured with an ultra-violet light inhibitor or be fully coated with an ultra-violet light inhibitor.

After Subsection 708.17.2 on page 645, add the following:

907-708.17.2.1--Inspection and Final Acceptance of Poly (Vinyl Chloride) (PVC) Pipe Culverts. Approximately 50% of the installed length of PVC pipe shall be inspected for excess deflection no sooner than 30 days after the embankment material over the pipe is placed to the required subgrade elevation or the maximum required fill height. The inspection shall be performed using either electronic deflectometers, calibrated television or video cameras, or a “go, no-go” mandrel that has an effective diameter of 95% of the nominal inside diameter of the pipe.

Pipe found to have deflection values greater than 5% shall be removed and replaced at no cost to the State.

907-708.18--Sewer Pipe Used for Underdrains.

907-708.18.1--General. After the second paragraph of Subsection 708.18.1 on page 645 add the following:

In lieu of the pipe listed in this subsection, pipe meeting the requirements of Subsection 708.19 may also be used for plastic underdrain pipe.

907-708.18.3--Type PSM Poly (Vinyl Chloride) (PVC) Sewer Pipe. After the first sentence of Subsection 708.18.3 on page 645, add the following.

Non-perforated PVC pipe shall either be manufactured with an ultra-violet light inhibitor or be fully coated with an ultra-violet light inhibitor.

907-708.18.4--Poly (Vinyl Chloride) (PVC) Corrugated Sewer Pipe. Delete the paragraph in Subsection 708.18.4 on page 645 and substitute the following.

This pipe shall conform to the following requirements. For pipe sizes less than or equal to six inches ($\leq 6''$), the pipe shall be Class PS46 meeting the requirements of AASHTO Designation: M 278. For pipe sizes greater than six inches ($> 6''$), the pipe shall meet the requirements of AASHTO Designation: M 304. Non-perforated PVC pipe shall either be manufactured with an ultra-violet light inhibitor or be fully coated with an ultra-violet light inhibitor.

Delete Subsection 708.19 on page 645 and substitute the following:

907-708.19--Corrugated Polyethylene Pipe. This pipe shall be high density polyethylene pipe or drainage tubing meet the requirements of AASHTO Designation: M 294, Type S or SP, or

AASHTO Designation: M 252, Type S or Type SP, as applicable.

907-708.22.2--Exceptions to AASHTO. Delete the sixth paragraph of Subsection 708.22.2 on page 647.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-709-1

CODE: (SP)

DATE: 05/05/2008

SUBJECT: Metal Pipe

Section 709, Metal Pipe, of the 2004 Edition of the Mississippi Standard Specifications for Road and Bridge Construction is hereby amended as follows:

After Subsection 709.02 on page 649, add the following:

907-709.02.1--Aluminized Corrugated Metal Culvert Pipe and Pipe Arches. All aluminized metal pipe and arches shall be manufactured from Type 2 corrugated metal pipe and arches in accordance with the requirements of Subsection 709.02.

907-709.03--Bituminous Coated Corrugated Metal pipe and Pipe Arches.

907-709.03.1--Materials. Delete the first sentence of the first paragraph of Subsection 709.03.1 on page 649, and substitute the following:

Bituminous coated corrugated metal pipe and arches shall conform to the requirements of AASHTO Designation: M 190 and be completely coated inside and out with an asphalt cement which will meet the performance requirements hereinafter set forth.

907-709.05--Polymer Coated Corrugated Metal Pipe and Pipe Arches. Delete the first sentence of the first paragraph of Subsection 709.05 on pages 649 and 650, and substitute the following:

Polymer coated corrugated metal pipe and arches shall conform to the requirements of AASHTO Designation: M 245, except the minimum gauge thickness shall be as shown on the plans or in the contract; however, corrugated metal pipe manufactured from sheets thicker than that specified will be acceptable when approved by the Engineer. The internal diameter of corrugated metal pipe will be determined by inside measurement between the crests of the corrugations. Corrugations greater than 3" x 1" will not be allowed in arch pipe.

907-709.06--Corrugated Metal Pipe for Underdrains. Delete the sentence in Subsection 709.06 on page 650, and substitute the following:

Corrugated metal pipe shall conform to AASHTO Designation: M 36, Type III. Type I pipe which has been perforated to permit the in-flow or out-flow of water may be used in lieu of Type III pipe.

907-709.06.1--Aluminized Corrugated Metal Culvert Pipe For Underdrains. All aluminized corrugated metal pipe for underdrains shall be manufactured from Type 2 corrugated metal pipe

and arches in accordance with the requirements of AASHTO Designation: M 36, Type III. Manufacturer must repair any damaged coating caused from perforating the pipe.

907-709.07--Bituminous Coated Corrugated Metal Pipe for Underdrains. Delete the sentence in Subsection 709.07 on page 650, and substitute the following:

Bituminous coated corrugated metal pipe shall conform to the requirements of AASHTO Designation: M 190, Type A with a bituminous coating applied in accordance with the requirements of Subsection 709.03. Manufacturer must repair any damaged coating caused from perforating the pipe.

907-709.08--Polymer Coated Corrugated Metal Pipe for Underdrains. Delete the sentence in Subsection 709.08 on page 650, and substitute the following:

The metal pipe for underdrains shall conform to the requirements of AASHTO Designation: M 245, Type III and the polymer coating shall conform to the requirements of Subsection 709.05. Type I pipe which has been perforated to permit the in-flow or out-flow of water may be used in lieu of Type III pipe. Manufacturer must repair any damaged coating caused from perforating the pipe.

907-709.09--Corrugated Aluminum Alloy Culvert Pipe and Arches. Delete the first sentence in Subsection 709.09 on page 650, and substitute the following:

Corrugated aluminum culvert pipe and arches shall conform to the requirements of AASHTO Designation: M 196, Type IA.

907-709.10--Corrugated Aluminum Alloy Pipe for Underdrains. Delete the first sentence in Subsection 709.10 on page 650, and substitute the following:

Corrugated aluminum pipe underdrains shall conform to the requirements of AASHTO Designation: M 196, Type III. Type I pipe which has been perforated to permit the in-flow or out-flow of water may be used in lieu of Type III pipe.

907-709.11--Bituminous Coated Corrugated Aluminum Alloy Culvert Pipe and Arches. Delete the sentence in Subsection 709.11 on page 650, and substitute the following:

Bituminous coated aluminum culvert pipe and arches shall conform to AASHTO Designation: M 196, Type IA, and in addition shall be coated inside and out as specified in Subsection 709.03. Manufacturer must repair any damaged coating caused from perforating the pipe.

907-709.13--Bituminous Coated Corrugated Aluminum Alloy Pipe for Underdrains. Delete the sentence in Subsection 709.13 on page 650, and substitute the following:

This pipe shall conform to AASHTO Designation: M 196, Type III, and shall be coated with bituminous material conforming to AASHTO Designation: M 190, type coating as specified. Manufacturer must repair any damaged coating caused from perforating the pipe.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-711-3

CODE: (IS)

DATE: 09/26/2005

SUBJECT: Synthetic Structural Fiber Reinforcement

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

After Subsection 711.03.4.3 on page 665, add the following:

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

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

* When tested in accordance with ASTM Designation: D 3822

The dosage rate for the fibers shall be a minimum of three pounds per cubic yard (3 lb / yd³). The dosage rate for the fibers when used in pile encasements shall be a minimum of four pounds per cubic yard (4 lb / yd³).

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-713-1

CODE: (IS)

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:

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

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

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

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

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

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

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

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

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUPPLEMENT TO SPECIAL PROVISION NO. 907-714-5

DATE: 10/27/2008

SUBJECT: Miscellaneous Materials

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

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-714-5

CODE: (IS)

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:

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

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

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

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

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

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

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

The loss on ignition shall not exceed 6.0 percent.

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

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

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

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

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

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

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

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

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

907-714.07--Additional Cementitious Materials.

907-714.07.1--Metakaolin.

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

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

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

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

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

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

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

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

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

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

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

907-714.07.2--Silica Fume.

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

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

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

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

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

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

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

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

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

907-714.11.6--Rapid Setting Commercial Grouts and Concrete Patching Compounds. 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>

907-714.11.7.4--Acceptance Procedure. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-720-1

CODE: (IS)

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:

907-720.02--Thermoplastic Pavement Markings. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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:

907-804.02.13.1.5--Compressive Strength. 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.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION NO. 907-804-8

CODE: (IS)

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 Plastic Concrete	AASHTO Designation: T 23, T 119, T 121, T 141, T 152, T 196, and ASTM Designation: C 1064	MDOT Class I certification
Compressive Strength Testing of Concrete Cylinders	AASHTO Designation: T 22 and T 231	MDOT Concrete Strength Testing Technician 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, T 27, T 84, T 85, T 248, and T 255	MDOT Class II certification
Proportioning of Concrete Mixtures*	AASHTO Designation: M 157 and R 39	MDOT Class III
Interpretation and Application of Maturity Meter Readings	AASHTO Designation: T 325 and ASTM Designation: C 1074	MDOT Class III or Two hours maturity method 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.

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

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

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

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

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

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

907-804.02.10.3--Field Verification of Concrete Mix Design. 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

907-804.02.10.4--Adjustments of Mixture Proportions. 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.

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

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

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

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

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

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

The Contractor's Quality Control program shall encompass the requirements of AASHTO Designation: M 157 into concrete production and control, equipment requirements, testing, and batch ticket information. The requirement of AASHTO Designation: M 157, Section 11.7 shall

be followed except, on arrival to the job site, a maximum of 1½ gallons per cubic yard is allowed to be added. Water shall not be added at a later time. If the maximum permitted slump is exceeded after the addition of water at the job site, the concrete shall be rejected.

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

Batch tickets and gradation data shall be documented in accordance with Department requirements. Batch tickets shall contain all the information in AASHTO Designation: M157, Section 16 including the additional information in Subsection 16.2 with the following exception: the information listed in paragraphs 16.2.7 and 16.2.8 is not required. Batch tickets shall also contain the concrete producer's permanent unique mix number assigned to the concrete mix design.

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

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

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

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

907-804.03--Construction Requirements.

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

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

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

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

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

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

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

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

Forms:

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

Centering:

Under Beams	2400 psi
Under Bent Caps	2000 psi

Limitation for Placing Beams on:

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

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

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

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

907-804.03.16--Cold or Hot Weather Concreting.

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

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

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

907-804.03.19--Finishing Concrete Surfaces.

907-804.03.19.7--Finishing Bridge Floors.

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

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

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

SPECIAL PROVISION NO. 906-3

Training Special Provisions

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

SPECIAL PROVISION NO. 906-6

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ON-THE-JOB TRAINING PROGRAM

ALTERNATE TRAINING SPECIAL PROVISION

PURPOSE

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

INTRODUCTION

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

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

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

FUNDING

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

DISBURSEMENT OF FUNDS

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

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

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

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

TRAINING PROGRAM APPROVAL

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

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

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

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

DEPARTMENT RESPONSIBILITY

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

CONTRACTOR RESPONSIBILITY

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

WAGE RATE

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

RECRUITMENT AND SELECTION PROCEDURES

A. Prerequisites for Trainees

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

B. Licenses

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

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

C. Recruitment

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

D. Selection

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

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 Supplemental Specifications.

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

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

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

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

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

SECTION 905 -- PROPOSAL (CONTINUED)

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

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

Respectfully Submitted,

DATE _____

Contractor

BY _____
Signature

TITLE _____

ADDRESS _____

CITY, STATE, ZIP _____

PHONE _____

FAX _____

E-MAIL _____

(To be filled in if a corporation)

Our corporation is chartered under the Laws of the State of _____ and the names, titles and business addresses of the executives are as follows:

President Address

Secretary Address

Treasurer Address

The following is my (our) itemized proposal.

Site Improvements to the Rest Area on I-55 Northbound north of Durant, known as State Project No. LWO-3059-26(002) / 501920302, in the County of Holmes, State of Mississippi.

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

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

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

*****BID SCHEDULE*****

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Item Amount	
						Dollar	Ct	Dollar	Ct
Roadway Items									
0010	202-B005		707	Square Yard	Removal of Asphalt Pavement, All Depths				
0020	202-B017		1,624	Linear Feet	Removal of Concrete Combination Curb & Gutter				
0030	202-B019		2	Each	Removal of Concrete Headwall				
0040	202-B025		4	Square Yard	Removal of Concrete Paved Ditch				
0050	202-B030		2,034	Square Yard	Removal of Concrete Pavement, All Depths				
0060	202-B035		470	Square Yard	Removal of Concrete Sidewalk				
0070	202-B064		260	Linear Feet	Removal of Pipe, 8" And Above				
0080	202-B098		5	Each	Removal of Inlet and Junction Box, All Types & Sizes				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0090	202-B099		28	Each	Removal of Existing Light and Foundation				
0100	202-B256		2	Each	Removal of Monument				
0110	211-C001	(E)	31	Cubic Yard	Topsoil for Plant Holes, Contractor Furnished				
0120	216-B004		4,000	Square Yard	Solid Sodding, Bermuda				
0130	219-A001		100	Thousand Gallon	Watering	20.	00	2,000.	00
0140	221-A001	(S)	6	Cubic Yard	Portland Cement Concrete Paved Ditch				
0150	602-A001	(S)	138	Pounds	Reinforcing Steel				
0160	603-CA002	(S)	88	Linear Feet	18" Reinforced Concrete Pipe, Class III				
0170	604-A001		79	Pounds	Castings				
0180	608-A001	(S)	234	Square Yard	Concrete Sidewalk, Without Reinforcement				
0190	608-B001	(S)	2	Square Yard	Concrete Sidewalk, With Reinforcement				
0200	609-C002	(S)	1,197	Linear Feet	Concrete Curb, Integral, Type 2				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0210	609-D001	(S)	462	Linear Feet	Combination Concrete Curb and Gutter Type 1				
0220	630-A001		43	Square Feet	Standard Roadside Signs, Sheet Aluminum, 0.080" Thickness				
0230	630-C001		70	Linear Feet	Steel U-Section Posts, 2.0 lb/ft				
0240	682-A031		3,380	Linear Feet	Underground Branch Circuit, AWG 6, 3 Conductor				
0250	682-D001		1	Each	Underground Pull Box				
0260	684-A001		1	Cubic Yard	Pole Foundation, 12" Diameter				
0270	699-A001		1	Lump Sum	Roadway Construction Stakes	XXXXXXXX	XXX		
0280	813-E010	(S)	18	Linear Feet	Pedestrian Railing				
0290	907-225-A001		4	Acre	Grassing				
0300	907-230-A001		100	Each	Shrub Planting, Asiatic Jasmine				
0310	907-230-A087		4	Each	Shrub Planting, Magnolia X Soulangiana				
0320	907-230-A088		6	Each	Shrub Planting, Lagerstroemia X				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0330	907-230-A089		4	Each	Shrub Planting, Prunus X Yedoensis				
0340	907-230-A090		4	Each	Shrub Planting, Cornus Kousa				
0350	907-230-A091		35	Each	Shrub Planting, Ilex Crenata				
0360	907-230-A092		10	Each	Shrub Planting, Nandina Domestica				
0370	907-230-A093		93	Each	Shrub Planting, Hemerocallis				
0380	907-230-C001		100	Linear Feet	Bed Edging				
0390	907-230-D001		2,471	Square Feet	Bed Preparation				
0400	907-230-F004		1,140	Each	Shrub and Groundcover Planting, Liriope Spicata				
0410	907-233-A002		31	Cubic Yard	Tree Bark Mulch, Type V				
0420	907-258-E001		8	Each	Trash Receptacle , Standard				
0430	907-258-E001		6	Each	Trash Receptacle , Washed Rock				
0440	907-258-J001		4	Each	Metal Bench				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0450	907-258-PP001		3	Each	Handicap Parking Sign and Post, Per Plans				
0460	907-259-C001		2	Each	Lighting Assembly, Flag Pole Lighting				
0470	907-282-A004		8	Each	Sprinkler Head, 1812-PRS-15EST				
0480	907-282-A007		1	Each	Sprinkler Head, 1804-PRS-15Q				
0490	907-282-A008		20	Each	Sprinkler Head, 1804-PRS-15H				
0500	907-282-A045		17	Each	Sprinkler Head, 1812-PRS-12Q				
0510	907-282-A058		2	Each	Sprinkler Head, 1804-PRS-15CST				
0520	907-282-B002		334	Linear Feet	Piping, 3/4" Diameter				
0530	907-282-B003		682	Linear Feet	Piping, 1" Diameter				
0540	907-282-B006		78	Linear Feet	Piping, 2" Diameter				
0550	907-282-D001		100	Linear Feet	Valve Control Wire				
0560	907-282-G007		1	Each	Electric Controller, 4 Station				

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price	Bid Amount	
0570	907-282-H001		3	Each	Electric Control Valve, 1"			
0580	907-282-I001		1	Each	Backflow Preventer, 2"			
0590	907-290-A001		2	Each	Flagpole			
0600	907-403-A003 (BA1)		1,700	Ton	Hot Mix Asphalt, HT, 25-mm mixture			
0610	907-403-A005 (BA1)		80	Ton	Hot Mix Asphalt, HT, 9.5-mm mixture			
0620	907-501-A001 (C)		6,520	Square Yard	8" Reinforced Cement Concrete Pavement, Broom Finish			
0630	907-601-B003 (S)		53	Cubic Yard	Class "B" Structural Concrete, Minor Structures			
0640	907-608-D002 (S)		357	Square Yard	Stamped and Colored Concrete Sidewalk, Per Plans			
0650	907-626-G001		145	Linear Feet	Thermoplastic Detail Stripe, Blue-ADA			
0660	907-626-G002		10,931	Linear Feet	Thermoplastic Detail Stripe, White, 4" Equivalent Length			
0670	907-626-H002		3	Each	Thermoplastic Legend, Blue-ADA Handicap Symbol			
0680	907-628-G002		300	Linear Feet	Cold Plastic Detail Stripe, White, 4" Equivalent Length			

Line No.	Item Code	Adj Code	Quantity	Units	Description	Unit Price		Bid Amount	
0690	907-628-H001		4	Square Feet	Cold Plastic Legend, Blue-ADA				
0700	907-628-H002		2	Each	Cold Plastic Legend, Blue-ADA Handicap Symbol				
0710	907-630-O001		3	Each	Remove and Reset Signs, Ground Mounted on Round Post(s)				
0720	907-630-O003		9	Each	Remove and Reset Sign, All Sizes				
0730	907-683-A001		8	Each	Lighting Assembly, High Mast, 400 W, Type V				
0740	907-683-B008		13	Each	Lighting Assembly, Low Mast, 250 W, Type III, Traditionaire Post Top				
0750	907-683-B008		9	Each	Lighting Assembly, Low Mast, 250 W, Type V, Traditionaire Post Top				

*** BID CERTIFICATION ***

TOTAL BID.....\$_____

*** SIGNATURE STATEMENT ***

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

BIDDER'S SIGNATURE

BIDDER'S COMPANY

BIDDER'S FEDERAL TAX ID NUMBER

CONDITIONS FOR COMBINATION BID

If a bidder elects to submit a combined bid for two or more of the contracts listed for this month's letting, the bidder must complete and execute these sheets of the proposal in each of the individual proposals to constitute a combination bid. In addition to this requirement, each individual contract shall be completed, executed and submitted in the usual specified manner.

Failure to execute this Combination Bid Proposal in each of the contracts combined will be just cause for each proposal to be received and evaluated as a separate bid.

COMBINATION BID PROPOSAL

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

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

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

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

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

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

SECTION 905 - COMBINATION BID PROPOSAL (Continued)

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

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

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

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

II. It is understood that the Mississippi Transportation Commission not only reserves the right to reject any and all proposals, but also the right to award contracts upon the basis of lowest separate bids or combination bids most advantageous to the State.

It is further understood and agreed that the Combination Bid Proposal is for comparison of bids only and that each contract shall operate in every respect as a separate contract in accordance with its proposal and contract documents.

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

SIGNED _____

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

CERTIFICATE

If awarded this contract, I (we) contemplate that portions of the contract will be sublet. I (we) certify that those subcontracts which are equal to or in excess of fifty thousand dollars (\$50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on January 13, 1999.

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

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

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

NOTE: Failure to complete the above DOES NOT preclude subsequent subcontracts. Subsequent subcontracts, if any, equal to or in excess of fifty thousand dollars (\$50,000.00) will be in accordance with regulations promulgated and adopted by the Mississippi State Board of Contractors on January 13, 1999.

Contractor _____

By _____

Title _____

CERTIFICATE MUST BE EXECUTED

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION
(Execute in duplicate)

I, _____,
(Name of person signing certification)

individually, and in my capacity as _____ of
(Title)

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

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

on Project No. **LWO-3059-26(002) / 501920302** _____,

in **Holmes** 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)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CERTIFICATION
(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
_____, Bidder
(Name of Firm, Partnership, or Corporation)

on Project No. **LWO-3059-26(002) / 501920302** _____,

in **Holmes** _____ 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)

S E C T I O N 9 0 2

CONTRACT FOR LWO-3059-26(002) / 501920302

LOCATED IN THE COUNTY(IES) OF Holmes

STATE OF MISSISSIPPI,
COUNTY OF HINDS

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

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

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

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

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

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

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

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

Witness our signatures this the _____ day of _____, _____.

Contractor (s)

By _____

MISSISSIPPI TRANSPORTATION COMMISSION

Title _____

By _____

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

Executive Director

Secretary to the Commission

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

S E C T I O N 9 0 3

CONTRACT BOND FOR: LWO-3059-26(002) / 501920302

LOCATED IN THE COUNTY(IES) OF: Holmes

STATE OF MISSISSIPPI,

COUNTY OF HINDS

Know all men by these presents: that we, _____

_____ Principal, a _____

residing at _____ in the State of _____

and _____

residing at _____ in the State of _____,

authorized to do business in the State of Mississippi, under the laws thereof, as surety, are held and firmly bound

unto the State of Mississippi in the sum of _____

_____ (\$ _____) Dollars, lawful money of the United States of America, to be paid

to it for which payment well and truly to be made, we bind ourselves, our heirs, administrators, successors, or

assigns jointly and severally by these presents.

Signed and sealed this the ____ day of _____ A.D. _____.

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

_____ principal, has (have) entered into a contract with the Mississippi Transportation Commission, bearing the date of

_____ day of _____ A.D. _____ hereto annexed, for the construction of certain projects(s)

in the State of Mississippi as mentioned in said contract in accordance with the Contract Documents therefor, on

file in the offices of the Mississippi Department of Transportation, Jackson, Mississippi.

Now therefore, if the above bounden _____

_____ in all things shall stand to and abide by and well and truly observe,

do keep and perform all and singular the terms, covenants, conditions, guarantees and agreements in said contract,

contained on his (their) part to be observed, done, kept and performed and each of them, at the time and in the

manner and form and furnish all of the material and equipment specified in said contract in strict accordance with

the terms of said contract which said plans, specifications and special provisions are included in and form a part of

said contract and shall maintain the said work contemplated until its final completion and acceptance as specified in

Subsection 109.11 of the approved specifications, and save harmless said Mississippi Transportation Commission

from any loss or damage arising out of or occasioned by the negligence, wrongful or criminal act, overcharge, fraud,

or any other loss or damage whatsoever, on the part of said principal (s), his (their) agents, servants, or employees in

the performance of said work or in any manner connected therewith, and shall be liable and responsible in a civil

action instituted by the State at the instance of the Mississippi Transportation Commission or any officer of the State

authorized in such cases, for double any amount in money or property, the State may lose or be overcharged or

otherwise defrauded of, by reason of wrongful or criminal act, if any, of the Contractor(s), his (their) agents or

SECTION 903 - CONTINUED

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

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

_____	_____
(Contractors) Principal	Surety
By _____	By _____
	(Signature) Attorney in Fact
	Address _____

Title _____	_____
(Contractor's Seal)	Mississippi Resident Agent
	(Signature) Mississippi Resident Agent
	Address _____

	(Surety Seal)



BID BOND

KNOW ALL MEN BY THESE PRESENTS, that we _____
Contractor

Address

City, State ZIP

as Principal, hereinafter called the Principal, and _____

a corporation duly organized under the laws of the state of _____

as Surety, hereinafter called the Surety, are held and firmly bound unto State of Mississippi, Jackson, Mississippi

As Obligee, hereinafter called Obligee, in the sum of **Five Per Cent (5%) of Amount Bid**
Dollars (\$ _____)

for the payment of which sum will and truly to be made, the said Principal and said Surety, bind ourselves, our heirs, executors, administrators, successors and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has submitted a bid for **Site Improvements to the Rest Area on I-55 Northbound north of Durant, known as State Project No. LWO-3059-26(002) / 501920302, in the County of Holmes, State of Mississippi.**

NOW THEREFORE, the condition of this obligation is such that if the aforesaid Principal shall be awarded the contract, the said Principal will, within the time required, enter into a formal contract and give a good and sufficient bond to secure the performance of the terms and conditions of the contract, then this obligation to be void; otherwise the Principal and Surety will pay unto the Obligee the difference in money between the amount of the bid of the said Principal and the amount for which the Obligee legally contracts with another party to perform the work if the latter amount be in excess of the former, but in no event shall liability hereunder exceed the penal sum hereof.

Signed and sealed this _____ day of _____, 2009

(Principal) (Seal)

(Witness)

By: _____
(Title)

(Surety) (Seal)

(Witness)

By: _____
(Attorney-in-Fact)

MS Resident Agent

Bid bond must be signed or countersigned by a qualified Mississippi resident agent and the bidder as per Section 102.08 of the Mississippi Standard Specifications for Road and Bridge Construction, 2004 edition.