P.E. 502350/102000

| STATE | PROJECT NO. | SHEET NO. |
|---|---|---|
| MISS. | LWO-9023-25(002) | 1 |

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

# PLAN OF PROPOSED

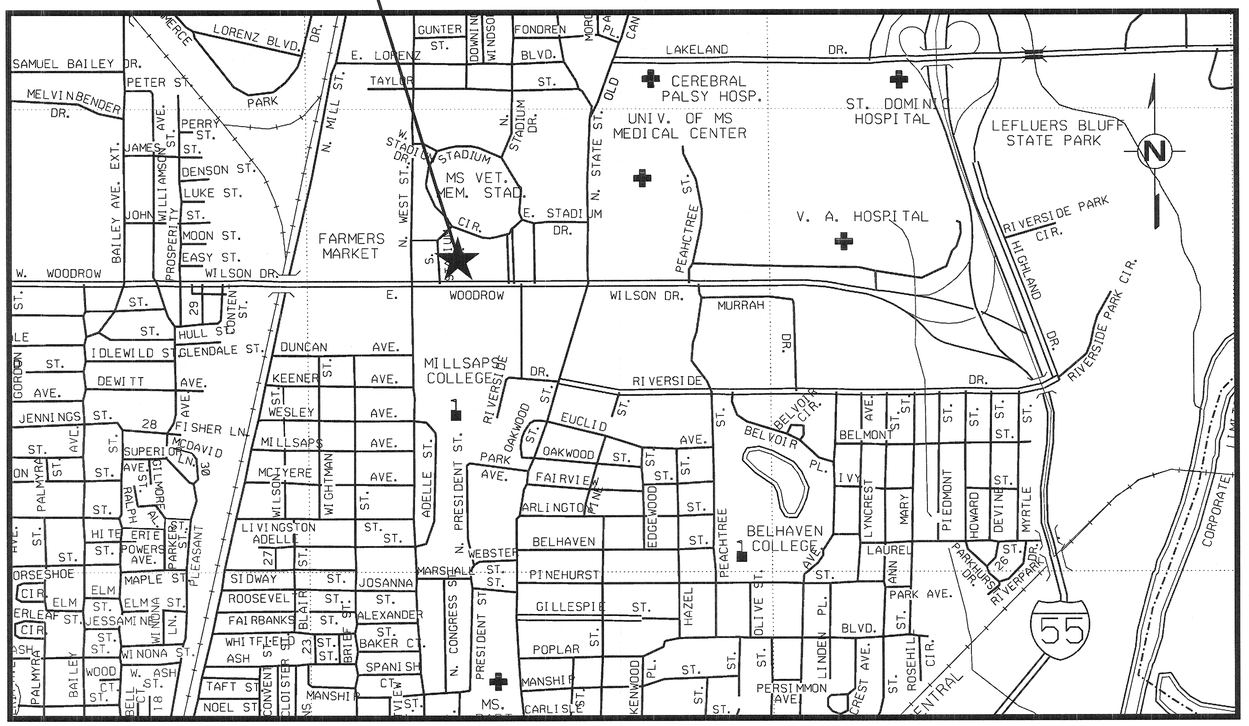
# UTILITY IMPROVEMENTS & SITE WORK FOR SHOP BUILDING AT MATERIALS LABORATORY

# PROJECT NO. LWO-9023-25(002)

FMS CONSTRUCTION NO.
502350/303000

DISTRICT 5 SHOP
101 SOUTH STADIUM DRIVE

HINDS COUNTY




## CONVENTIONAL SYMBOLS

COUNTY LINE .....

TOWN CORPORATION LINE .....

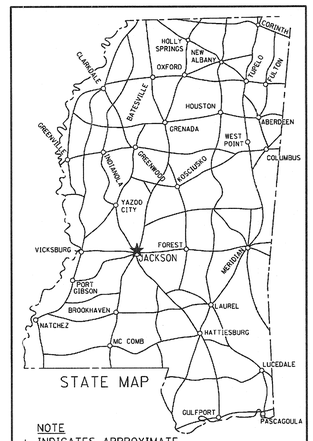
SECTION LINE .....

EXISTING ROAD OR TRAVELED WAY ....

RAILROAD .....

SURVEY LINE .....

BRIDGES .....




NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

LAT. 32°19'38.4882" N LONG. 90°10'49.8822" W
(APPROX. MIDDLE OF PROJECT)

**DESIGN CONTROL**

_____ MPH = V (SPEED DESIGN)

ADT (___) = _____ ; ADT (___) = _____

DHV = _____ : D = _____ % T = _____ %

**PERMITS ACQUIRED BY MDOT**

WETLANDS AND WATERS PERMITS
(NECESSARY FOR ULTIMATE IMPROVEMENTS ONLY):

| | WATERS | WETLANDS |
|---|---|---|
| NATIONWIDE #14 | N | N |
| NATIONWIDE (OTHER)* | N | N |
| GENERAL* | N | N |
| INDIVIDUAL (404)* | N | N |

* ACQUISITION OF PERMITS FOR TEMPORARY IMPACTS DURING CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR

STORMWATER PERMIT [S]

| | |
|---|---|
| Y | REQUIRED, CNOI SUBMITTED BY MDOT (DISTRIBUTED AREA = 5 ACRES + ) (NTB 586) |
| S | REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)(NTB 14) |
| N | NO STORMWATER PERMIT REQUIRED (<1 ACRE) |

APPROVED BY: _____ DATE: 2/26/13

DANNY M. RYALS
REGISTERED PROFESSIONAL ENGINEER
2/26/13
No. 10886
STATE OF MISSISSIPPI

APPROVED:

CHIEF ENGINEER — DATE 2/26/13

EXECUTIVE DIRECTOR — DATE 2/26/13

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

APPROVED:

DIVISION ADMINISTRATOR — DATE

FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

| BY | REVISIONS | DATE |
|---|---|---|
| | | |

TITLE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

2/26/2013 11:50:33 TITLE.DGN

## UTILITIES NOTES

1. GENERAL

The Site Contractor shall verify all dimensions with the most current data provided by the Owner.

All water and sanitary sewer services to be installed as per plans. All services shall be City standard or other approved material and installed per city specifications.

Minimum 36" cover required over all water lines.

The Site Contractor is specifically cautioned that the location and/or elevation of existing utilities as shown on these plans is based on records of the various utility companies, and where possible, measurements taken in the field. The information is not to be relied on as being exact or complete. The Site Contractor must call the appropriate utility company at least 48 hours before excavation to request exact field location of utilities. It shall be the responsibility of the Site Contractor to relocate all existing utilities which conflict with proposed improvements shown on the plans.

Reference Working Number C9.0 for Sanitary Sewer System Details.

Reference Working Number C10.0 for Standard Water System Details.

2. SANITARY SEWER AND WATER CONNECTIONS

Connection of sanitary sewer and water to the existing City of Jackson utilities shall be coordinated through the Water and Sanitary Sewer Division of the Public Works Department of the City of Jackson (601–960–2041). All fees will be the responsibility of the Site Contractor.

Site Contractor shall coordinate installation of utilities in such a manner as to avoid conflicts and assure proper depths are achieved as well as coordinating with the regulatory agency as to the location and connection to their facilities.

The Site Contractor shall coordinate the installation of all underground utilities with his work. All underground utilities (water, sanitary sewer, storm sewer, electrical conduit, irrigation systems, and any other misc. utilities) shall be in place prior to the placement of any appropriate soil stabilization.

Sewer pipe and fittings shall be PVC, ASTM D–3034, SDR–26 with elastometric gasket joints.

All water mains and service lines over 3" shall be PVC, AWWA std, C–900 class 150. All water service lines 3" and under shall be PB, AWWA Std, C–902, class 160.

Site Contractor shall be responsible for calling Mississippi 811 (Formerly Mississippi One–Call) at 1–800–227–6477 to verify the location of all existing utilities. Contractor shall be responsible for damages to existing utilities to remain and for all interruptions caused as a result of his work.

All sanitary sewer and water utilities shall be constructed and tested in accordance with state regulatory agency.

Existing utility information based on survey by Chris A. King of Maptech, Inc., P.L.S. No. 2481, dated 17 December, 2012.

## DEMOLITION NOTES

1. Site Contractor shall be responsible for removing any and all existing structures designated to be removed within the property limits, including but not limited to structures, foundations, slabs, curbs, all existing pavements and driveways, existing fences, utilities, unless otherwise indicated and debris.
2. Site Contractor shall be responsible for any and all damages that might occur to improvements shown hereon to remain.
3. Site Contractor shall remove all debris from the site that is found to exist prior to his work or that is generated as a result of his work.
4. Site Contractor will not be responsible for demolishing or removing any existing above or underground telephone or power but shall coordinate with all local utility companies.
5. Site Contractor shall be responsible for calling Mississippi 811 (Formerly Mississippi One–Call) at 1–800–227–6477), by law, to locate all existing utilities on site prior to his work. Contractor shall be responsible for protecting all utilities not designated to be removed and shall be responsible for all damages that result from Contractor's work.
6. Limits of clearing and grubbing shall be property lines, unless specifically designated otherwise.
7. Site Contractor shall obtain and pay for all construction permits required to accomplish the work specified hereon.
8. Site Contractor shall be responsible for maintaining erosion control during the entire course of this work, per the Storm Water Pollution Prevention Plan.
9. The contractor is responsible for providing bracing, shoring, or any ground support system that is deemed necessary to prevent a failure from occurring during excavation. All costs for any protective measures including the materials, equipment, supplies, and labor, for designing, drawing, and constructing the facility, shall be included in the bid price for contract items.

## CONSTRUCTION SEQUENCE

The following construction sequence is planned to minimize the amount of sediment movement through the storm drain system, and the installation of a detention basin. Installation and maintenance of these measures are considered critical for controlling sediment movement at this project site.

Clearing of Area
Approximately 0.50 acres will be cleared and grubbed. The initial clearing should begin along the natural drain at the north and west boundary to allow immediate installation of the silt fences.

Construction Access
Access to the construction site shall be from Stadium Drive. At the egress point, it is required that stabilized gravel construction drives (about 50 feet) be established. This will provide an opportunity for trucks to clean mud from their wheels prior to entering adjacent streets.

Sediment Control Measures
This project will be constructed in one phase utilizing associated sediment control measures. Silt fences and storm drain systems will be utilized and shall be installed in the following sequence to minimize soil movement and loss:

1. Silt Fence: Silt fence is to be installed according to manufacturer's recommendations.
   a. Install a single line of silt fence as shown on the drawings before any clearing and grubbing of this fenced area is completed.
   b. Remove silt fence upon completion of site improvements and after permanent erosion control measures are well–established.
2. Storm Drain System: Install the storm drain system to the grades and elevations at the locations shown on the plans. Care shall be taken to minimize movement of sediment into the storm drain inlets until the road/parking area surface topping is applied. A perimeter silt fence with wattles or sandbags is the recommended method of inlet protection.
   a. Install a local drainage depressional storage area around all storm drain inlets for sediment collection.
   b. Place a silt fence barrier around each storm drain inlet as soon as it is installed. These may need some reworking later as curb lines are installed.
   c. When area is ready for final compaction, remove sediment collected around inlet, bring to grade with compacted fill and place surface topping.

Vegetation
Vegetate and/or landscape all graded areas as soon as possible during the construction operations.

## MAINTENANCE PLAN

Both the short–term (during construction) and long term (after construction) maintenance needs must be addressed.

Short Term
All erosion and sediment control practices will be checked for stability and operation following every rainfall event but in no case, less than every week. Any needed repairs will be made immediately.

The access road exit area shall be maintained in a smooth, well compacted condition. Excess soil and debris shall be removed as needed to maintain a gravel exposed surface.

Sediment will be removed from the upstream face of the silt fence when it exceeds 6–inch depth at the fence. The silt fence will be replaced as necessary to maintain a barrier.

All vegetated areas will be fertilized, and re–vegetated as needed to maintain a vigorous and dense vegetative cover.

Long Term
All vegetated areas will be maintained in adequate condition to provide proper ground cover and reduce any areas of potential erosion. Where vegetation is lost, the area will be fertilized and seeded or other acceptable methods used to restore proper cover.

As needed, new employees responsible for working the area will be informed about the requirements of the Maintenance Plan.

## SITE PLAN NOTES

1. All unsurfaced areas (excluding future parking, building and curb & gutter areas) are to receive sod with four inches of topsoil and be watered until a healthy stand of grass is obtained.
2. Contractor is responsible for protecting existing benchmarks.
3. All necessary permits and approvals from agencies governing the construction of this work shall be secured prior to beginning construction by the Contractor.
4. The Contractor is responsible for repairs of damage to any existing improvements during construction, such as, but not limited to, drainage, utilities, pavement, striping, curbs, etc. Repairs shall be equal to or better than existing conditions.
5. Construction shall comply with all governing codes and be constructed to the same.

## SITE PREPARATION

(WORK INCLUDED, BUT NOT LIMITED TO)

Site Clearing
Site Grading
Excavation for structures
Trenching
Inspection and testing

1. GENERAL
The Contractor shall remove all infrastructure and vegetation from the area to be excavated, filled or graded.

2. REFERENCE POINTS
The Contractor shall locate benchmarks, monuments, and other reference points for elevation and location of improvements. Notify Owner's Site Representative of apparent discrepancies in indicated locations. Protect reference points from dislocation or damage. Replace or repair immediately any points damaged, destroyed or dislocated. Do not proceed with construction work until reference points have been reviewed and accepted by the Owner's Site Representative.

3. CLEARING
Prior to cut and placement of fill on the site, approximately 6 inches of topsoil should be removed where the topsoil is encountered. Remove brush, roots, grass, rocks and weeds before stripping.

- Store topsoil approved for reuse in planting areas in neat piles at designated locations on site. Arrange storage to avoid interference with building operations. No debris, stones larger than 2 inches, nor an excessive amount of subsoil shall be allowed in stored topsoil.

4. GRUBBING
Remove asphalt, concrete curbs, lighting poles and foundations, trash, stumps, old lumber, structures, etc. located either above, on the new surface, or below the ground which may interfere with the new construction.

5. TREE REMOVAL
Remove all trees and stumps from area indicated on the drawings. Use methods of removal which will prevent injury to adjacent natural growth.

6. CLEAN-UP
Upon completion of work of this section, remove from premises, and dispose of all related debris.

7. SITE GRADING
Proofrolling with a loaded dump truck or scraper should be performed to locate potential soft spots in the subgrade and/or natural ground before any fill is placed. Soft spots should be removed and replaced with compacted stable silty clay (CL). The top 6 inches of existing ground should be scarified and compacted to 95% ASTM D698 at a moisture content between optimum and +4% of optimum prior to fill placement.

Cut or fill and machine grade site as shown on the drawings to drain as indicated, allowing for the thickness of paving subbase and the paving. Where fill is required, use borrow excavation, Class B9–6. Place in horizontal lifts not in excess of 8" thick after compaction by rolling and/or tamping to 95% of maximum density.

The geotechnical report referred to on these drawings shall be the report prepared by Mississippi Department of Transportation entitled "BWO–9718–25(001) 502350/101000 Geotechnical Rept. 11–25–51" dated January 21, 2011.

8. MATERIALS FOR FILLING AND BACKFILLING
Use borrow excavation, Class B9–6, for all select fill on site. Refer to MDOT Standard Specifications for Road and Bridge Construction, latest Edition for more information.

All bedding for reinforced concrete pipe shall meet the requirements of Class "B" bedding according to the latest Edition of the Mississippi Standard Specifications for Road and Bridge Construction. The cost of bedding shall be absorbed.

NOTE:

Before undertaking each part of the work, the Site Contractor shall carefully study and compare the plans and specifications and check and verify pertinent figures shown thereon and all applicable field measurements. If any conflicts, errors, discrepancies, or other unsatisfactory conditions are discovered either on the construction documents or in the field conditions, the Contractor shall promptly report in writing to the Engineer, and shall obtain a written interpretation of clarification from the Engineer before proceeding with any work affected thereby.

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|---|---|
| MISS. | LWO-9023-25(002) |

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DANNY M. RYALS REGISTERED PROFESSIONAL ENGINEER No. 10889 STATE OF MISSISSIPPI 2/24/13

NEEL-SCHAFFER
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BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

**Utility Improvements & Site Work for Shop Building at Materials Laboratory, Hinds County, Mississippi**

**General Notes and Index of Drawings**

LWO-9023-25(002) HINDS COUNTY

WORKING NUMBER C0.1

FILENAME: 8396-GNI.dwg

DESIGN TEAM Neel-Schaffer, Inc. CHECKED DMR DATE 1/30/2013

SHEET NUMBER 2