

SECTION 905 -- PROPOSAL (CONTINUED)

I (We) hereby certify by digital signature and electronic submission via Bid Express of the Section 905 proposal below, that all certifications, disclosures and affidavits incorporated herein are deemed to be duly executed in the aggregate, fully enforceable and binding upon delivery of the bid proposal. I (We) further acknowledge that this certification shall not extend to the bid bond or alternate security which must be separately executed for the benefit of the Commission. This signature does not cure deficiencies in any required certifications, disclosures and/or affidavits. I (We) also acknowledge the right of the Commission to require full and final execution on any certification, disclosure or affidavit contained in the proposal at the Commission's election upon award. Failure to so execute at the Commission's request within the time allowed in the Standard Specifications for execution of all contract documents will result in forfeiture of the bid bond or alternate security.

Bidder acknowledges receipt of and has added to and made a part of the proposal and contract documents the following addendum (addenda):

ADDENDUM NO. <u> 1 </u>	DATED <u> 3/29/2017 </u>	ADDENDUM NO. <u> 3 </u>	DATED <u> 4/5/2017 </u>
ADDENDUM NO. <u> 2 </u>	DATED <u> 4/3/2017 </u>	ADDENDUM NO. <u> 4 </u>	DATED <u> 4/5/2017 </u>

Number	Description
1	Revised NTB No. 2382; Amendment EBS Download Required.
2	Postponed until April 7, 2017; Amendment EBS Download Required.
3	Revise Advertisement with same; Revise NTB No. 6968 with same; Revise Bid Items; Amendment EBS Download Required.
4	Revised NTB No. 6968; Amendment EBS Download Required.

TOTAL ADDENDA: 4
 (Must agree with total addenda issued prior to opening of bids)

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.

SP-0020-01(065)/ 107480301000

Warren County(ies)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SECTION 904 – NOTICE TO BIDDERS NO. 6968

CODE (SP)

DATE: 4/4/2017

SUBJECT: Scope of Work

PROJECT: SP-0020-01(065) / 107480301 -- Warren County

The contract documents do not include an official set of construction plans but may, by reference, include some Standard Drawings when so specified in a Notice to Bidders entitled, “Standard Drawings”. All other references to plans in the contract documents and Standard Specification for Road and Bridge Construction are to be disregarded.

Work on the project shall consist of the following:

EMERGENCY SLIDE REPAIR ON I-20 SOUTH FRONTAGE ROAD IN WARREN COUNTY

The approximate coordinates for the 54 inch pipe under the south shoulder of the south frontage road are N 32° 20’ 13”, W 90° 51’ 07”. The Contractor should stake their pile locations out as to straddle this pipe during pile driving.

The MDOT District 3 Maintenance will have installed signage for a detour route upon the Contractor starting work on this project. These signs will be in place and covered. It is the Contractor’s responsibility to uncover these signs upon closing the frontage road. **NOTE: The Contractor will be responsible for their own road closure upon commencement of need. Before closing the frontage road to through traffic, the Contractor will be responsible for informing all pertinent entities, including, but not limited to: law enforcement, emergency response vehicles, schools, local public, and fire departments.**

The MDOT District 3 Maintenance has installed temporary concrete median barriers at the project site. These barriers will remain in place until the Contractor deems them not needed for safety reasons. The Contractor may have to handle these barriers twice, once to move them out of their working area, and once to load them on MDOT maintenance trucks. This will not be paid for directly and should be absorbed in other pay items.

Phase 1. The Contractor will begin work at this site by laying approximately 64 feet of 54-inch concrete pipe on the downstream end of the slide. This length shall be verified in the field and submitted to the Project Engineer for approval before pipe is ordered and delivered to the project. The Contractor shall be responsible for staking the right of way in this area and the flared end section of the pipe will be laid inside the right of way limits at five feet (5’). The Contractor will remove structure excavation for the pipe as directed by the Engineer. Under no circumstances will any structure excavation be removed without a truck on site at the time of excavation. Under no circumstances will structure excavation be stockpiled anywhere on this site. Upon

commencement of excavating the structure excavation, the Contractor will immediately load this material into a truck and haul it to an approved site. The Contractor shall install a flared end section with toewall first. Starting at the flared end section, the Contractor shall lay the pipe in an upstream direction to provide positive drainage in this area. The Contractor shall then construct a berm. The backslope of the berm shall have a 2:1 slope. The berm shall have a 15-foot wide flat working area on the top. The foreslope of the front of the berm will be at the Contractor's discretion. The elevation of the berm foreslope tying in with natural ground should be approximately 220 feet in elevation. The Contractor may build this fill above 220 feet elevation if possible. The approximate plan profile elevation of the centerline at station 199+00 is 236.2 feet. All of the work mentioned in this phase shall be complete before the Contractor starts to drive the H-piles. This work should be pursued immediately upon the beginning of contract time. If the Contractor finishes this phase of the project before the H-piles are delivered to the project, the Engineer shall suspend time as set forth in Subsection 105.01, Authority of the Engineer, in the Standard Specifications.

Phase 2. The Contractor shall drive 80-foot, 18 x 135 H-piles to a tip elevation of 165. All H-piles on this project shall be driven with an impact hammer. The Contractor shall excavate approximately 4-foot of material from the shoulder of the frontage road and drive the pile as close to the edge of pavement as possible. These H-piles will be driven full length on 8-foot centers. The piles shall be driven from the east end of the slide to the west end of the slide. These piles should be driven between approximately between stations 198+00 to 199+50. With the Project Engineer present, the Contractor will locate the pipe as listed above with the GPS coordinates, and split the pipe a distance of four feet (4') in each direction as to center the pipe with the adjacent H-piles. The Contractor shall then stake the rest of the piles in each direction on 8-foot centers until the station limits listed above are reached. All of the H-piles must be driven before the Contractor starts the next phase.

Phase 3. The Contractor shall drive 50-foot, 18 x 135 H-piles full length on 8-foot centers to be used as deadman piles between the Frontage Road and eastbound lane of I-20. This line of piles will be 15 feet from the north edge of pavement. The Contractor shall ensure that the deadman piles do not hit the existing drainage pipe. The Contractor shall attach the cables which costs shall be included in other items bid. The cables shall be capable of carrying a load of 125 kips. Cables shall be attached to the piles within the upper two feet (2').

Phase 4. The Contractor shall excavate between the H-piles from the top down and place lagging timbers in the sections sliding them from the top down as the excavation progresses until the pipe is located and uncovered. This material will be removed from the project site and paid for under 203-G, Excess Excavation. The lagging timbers shall meet the requirements of Subsection 820.02. Lagging timbers shall be a minimum of 4" thick x 12" wide and shall be installed in accordance with this special provision or as directed by the Engineer. If the Contractor does not drive the piles accurately, sheet piling (minimum grade 50 PZ-22 section) will need to be installed by cutting and welding the sheet piling to the H-piles to function as lagging. These sheet piles will be paid for under the lagging timber pay item. Once the pipe is located, the Contractor will drive 18 x 135 H-piles from the tied back bulkhead to the new pipe to form a cofferdam scenario to make a working space so that a junction box can be poured to connect the two pipes to recreate proper drainage. Lagging shall be installed between all

exposed piles. At this point it may be applicable before junction box construction begins to lay more joints of pipe to get closer to the existing pipe. Also, during this time existing pipe may be uncovered. If existing pipe is uncovered, it will be loaded onto a truck and taken off of the project and paid for as removal of obstructions. The pipe joints that are uncovered and on the edge of the right of way will also be covered under this pay item. **The Contractor shall be required to submit to the Project Engineer for approval a design for the junction box.. The Contractor should be aware that because of the location of the junction box under this fill it will need to be designed and modified for high cover (35 feet). Cost for design of junction box shall be included in the cost of 907-699-A, Construction Staking. This may involve using box culvert details to design this junction box. Once the junction box is complete, the Contractor may start backfilling the junction box and pipe.**

Phase 5. After all structural work as listed above is complete, the Contractor will grade the backslope as gradual as possible to the flared end section of the pipe. At this time, all piles shall be a minimum of three feet (3') below finished ground line. The Contractor will then spread 13-13-13 fertilizer at a rate of 200 pounds per acre and Bermuda grass at a rate of 10 pounds per acre. The Contractor will then place ditch liner over the entire fertilized and seeded area. The Contractor shall then place wattles on top of the ditch liner every 10 feet in elevation for the entire longitudinal length of the slope. The fertilizer and Bermuda seed will not be measured for separate pay, and shall be absorbed in the ditch liner pay item.

At this point, contract time will stop and the project will be considered complete as stated in Subsection 108.06.1.4, Cessation of Contract Time, of the Standard Specification.

NOTE 1: In the event of a catastrophic failure during any portion of phase 1 or phase 2 which causes the frontage road to caves in, the Contractor will continue work and drive the H-piles based on a surveyed line. Once the H-piles are in place, the Contractor will excavate the failed area as directed by the Engineer and backfill the area around the piles to a grade not to exceed 18 inches of the existing finished grade. At this point, the MDOT maintenance forces will provide crushed stone in this area to recreate the frontage road surface. Asphalt will be placed by MDOT maintenance forces at a later date.

NOTE 2: In the event the project uncovers other hollow out washed areas under the frontage road in the vicinity of the failure, the project will immediately cease at that time and the Contractor will be released of any work which may be remaining in the contract.

NOTE 3: Top of pile deflection shall be measured at the time of installation, during excavation, and at other times, as directed by the Engineer.

**TEMPORARY SHORING: Driven H-Piles with Timber Lagging Cabled to Deadman Piles
I-20 SOUTH FRONTAGE ROAD CULVERT REPAIR, Near Sta. 198+00
WARREN COUNTY**

GENERAL DESCRIPTION: Temporary shoring system consisting of driven H-pile sections with timber lagging. Deadman are to be driven on 8-foot center-to-center spacing north of the Frontage Road (south of I-20) and cabled to the cantilever H-Pile sections.

(1) Retained Height (feet)	(2) Minimum Soldier Pile Section	(3) Maximum Pile Spacing (feet)	(4) Minimum Pile Embedment (feet)	(5) Minimum Timber Lagging Thickness (inches)	(6) Required Deadman Cable Force (kips)	(7) Minimum Deadman Pile Section	(8) Maximum Pile Spacing (feet)	(9) Maximum Pile Allowable Deflection (inches)
Less than 34.0	HP18X135	8	30	4	125	HP18X135	8	3
Less than 30.0	HP18X135	8	30	4	105	HP18X135	8	3
Less than 25.0	HP18X135	8	30	4	80	HP18X135	8	3
Less than 22.5	HP18X135	8	30	4	70	HP18X135	8	3
Less than 15.0	HP18X135	6	30	4	N/A	N/A	N/A	3

Notes:

- (1) Retained height measured from culvert invert to top of shoring.
- (2) Minimum H-pile section (Grade 50). Piles shall be driven vertical.
- (3) Maximum horizontal spacing between soldier piles.
- (4) Minimum pile penetration below culvert invert.
- (5) Temporary timber lagging (4"x12" timbers) shall be construction grade, rough-cut lumber conforming to MDOT Standard Specifications, Section 820 with the following minimum properties: Allowable compression parallel to grain at least 1,500 psi; direct tension at least 1,000 psi; compression perpendicular to grain at least 450 psi; horizontal shear at least 140 psi; and modulus of elasticity at least 1.2×10^6 psi. Maximum gap between the H-pile web and lagging end shall not exceed one inch. Recommend that timber section lengths be field cut to account for variances in pile spacing due to pile installation. A minimum one-inch gap between lagging boards is required to prevent hydrostatic loads.
- (6) Minimum deadman resistance in the horizontal plane.
- (7) Minimum deadman pile length is 40 feet. Deadman piles shall be driven parallel to the road as close to the pavement edge as possible and opposite the corresponding cantilever pile section. Excavation of soil from the cantilever shoring wall face is not permitted until soldier piles have been secured to the deadman piles.
- (8) Maximum horizontal spacing between deadman piles.
- (9) Pile deflection to be measured at time of installation, during excavation and at other times, as directed by the Engineer.

CONSTRUCTION REQUIREMENTS:

The Contractor is to protect the existing 54-inch diameter concrete pipe.

Temporary cut slopes not steeper than 2:1 nor greater than 4 feet vertical may be used outside the shoring limits to minimize the amount of piling required. Temporary grading shall be performed to direct surface runoff away from the top and base of the temporary shoring.

Detailed shop drawings of the temporary shoring system shall be provided for MDOT review and approval prior to initiation of construction. Details of cable-pile connections, wales, and other structural components are required.

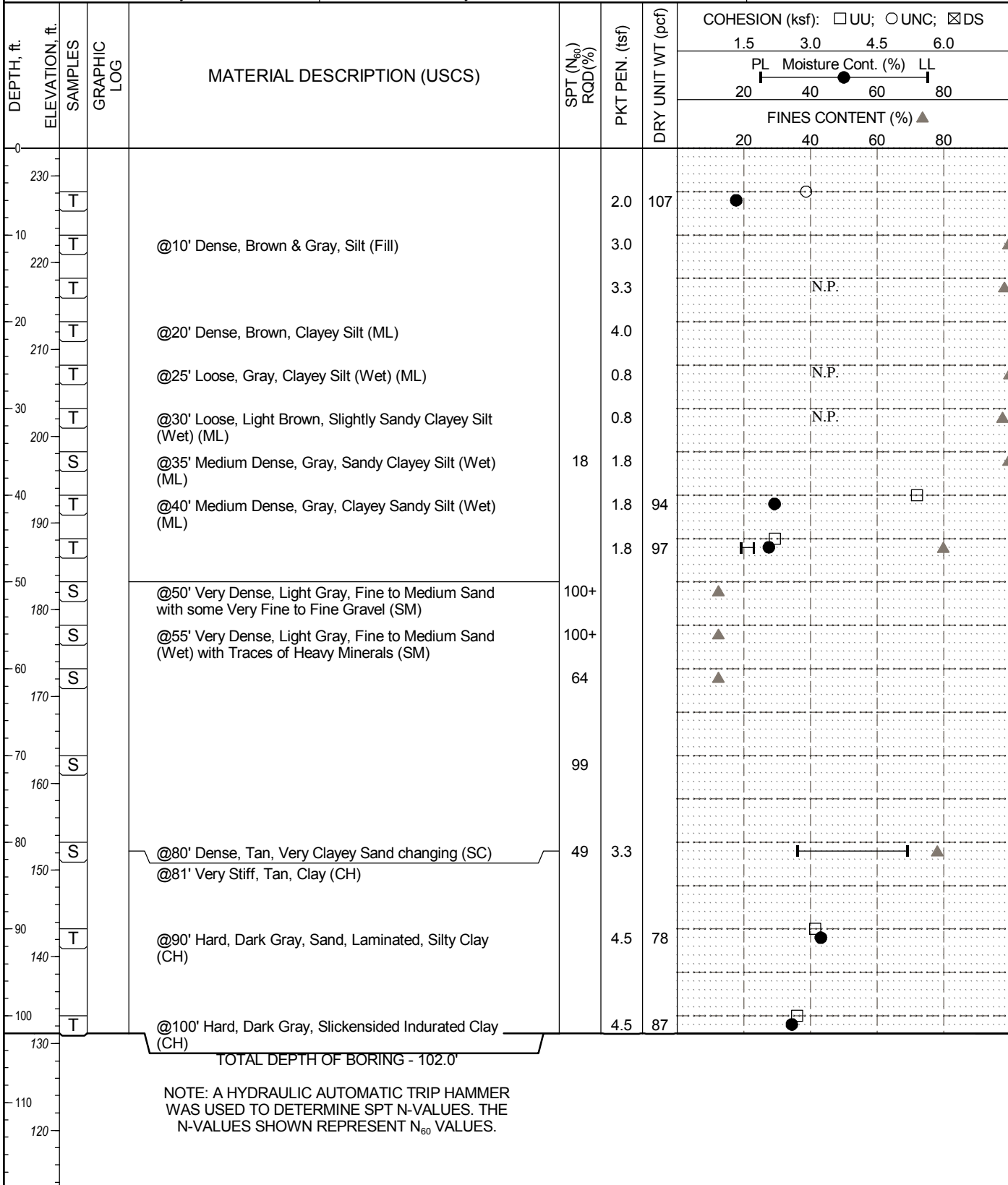
Construction equipment above the temporary shoring shall neither operate nor be located south of the Frontage Road centerline.

Excavations and shoring construction shall be performed in conformance with OSHA requirements.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Notice to the Public No. 6938 - Cont'd

SITE NO.: 16-75-2190	HOLE NO.: 1	FMS P.E. No.: 107480/101000	REPORT NO.: 16-75-23
COUNTY: Warren	LATITUDE: N32.33705°	LONGITUDE: W90.85197°	COMPLETION DATE: 11/9/2016
LOCATION: In the Median of I-20 & South I-20 Frontage Road			WATER TABLE ELEV: N/A
STATION: 199+00	OFFSET: Left 76' of Existing Centerline South I-20 Frontage Rd.		COMPLETION DEPTH: 102'
BORING TYPE: Rotary Wash		LOGGED BY: Cory Clark	SURFACE ELEVATION: 233.2'



TOTAL DEPTH OF BORING - 102.0'

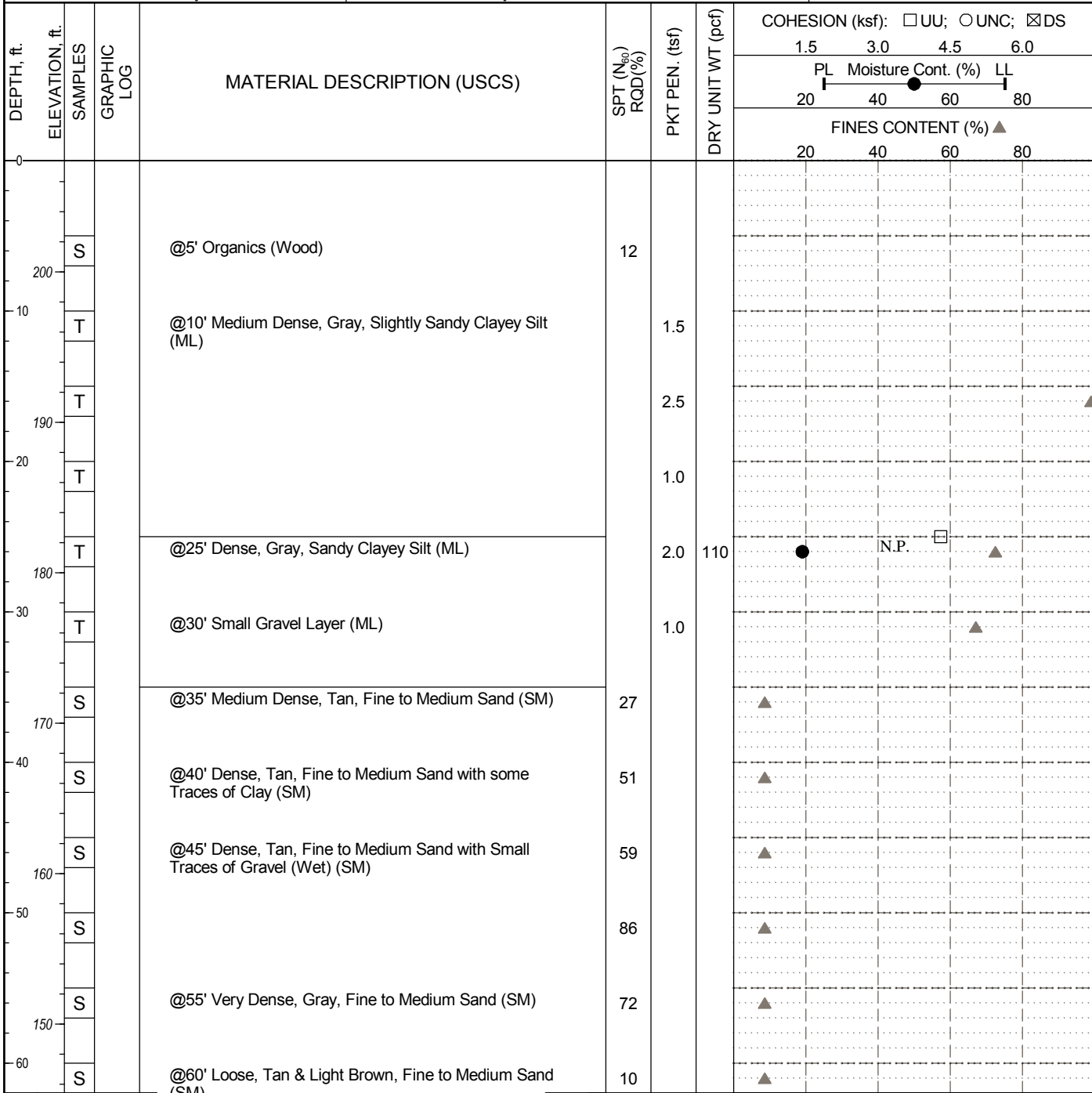
NOTE: A HYDRAULIC AUTOMATIC TRIP HAMMER WAS USED TO DETERMINE SPT N-VALUES. THE N-VALUES SHOWN REPRESENT N₆₀ VALUES.

S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher □: UU Cohesion, ○: UNC Cohesion, ☒: DS Cohesion, ●: Moisture Content (%)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Notice to the Public No. 6938 - Cont'd

SITE NO.: 16-75-2190	HOLE NO.: 2	FMS P.E. No.: 107480/101000	REPORT NO.: 16-75-23
COUNTY: Warren	LATITUDE: N32.3367°	LONGITUDE: W90.85159°	COMPLETION DATE: 11/14/2016
LOCATION: Landslide on South I-20 Frontage Road between Clay St. & Indiana Ave.			WATER TABLE ELEV: N/A
STATION: 199+07	OFFSET: Right 95' of Existing Centerline South I-20 Frontage Road		COMPLETION DEPTH: 62'
BORING TYPE: Rotary Wash		LOGGED BY: Cory Clark	SURFACE ELEVATION: 207.4'



TOTAL DEPTH OF BORING - 62.0'

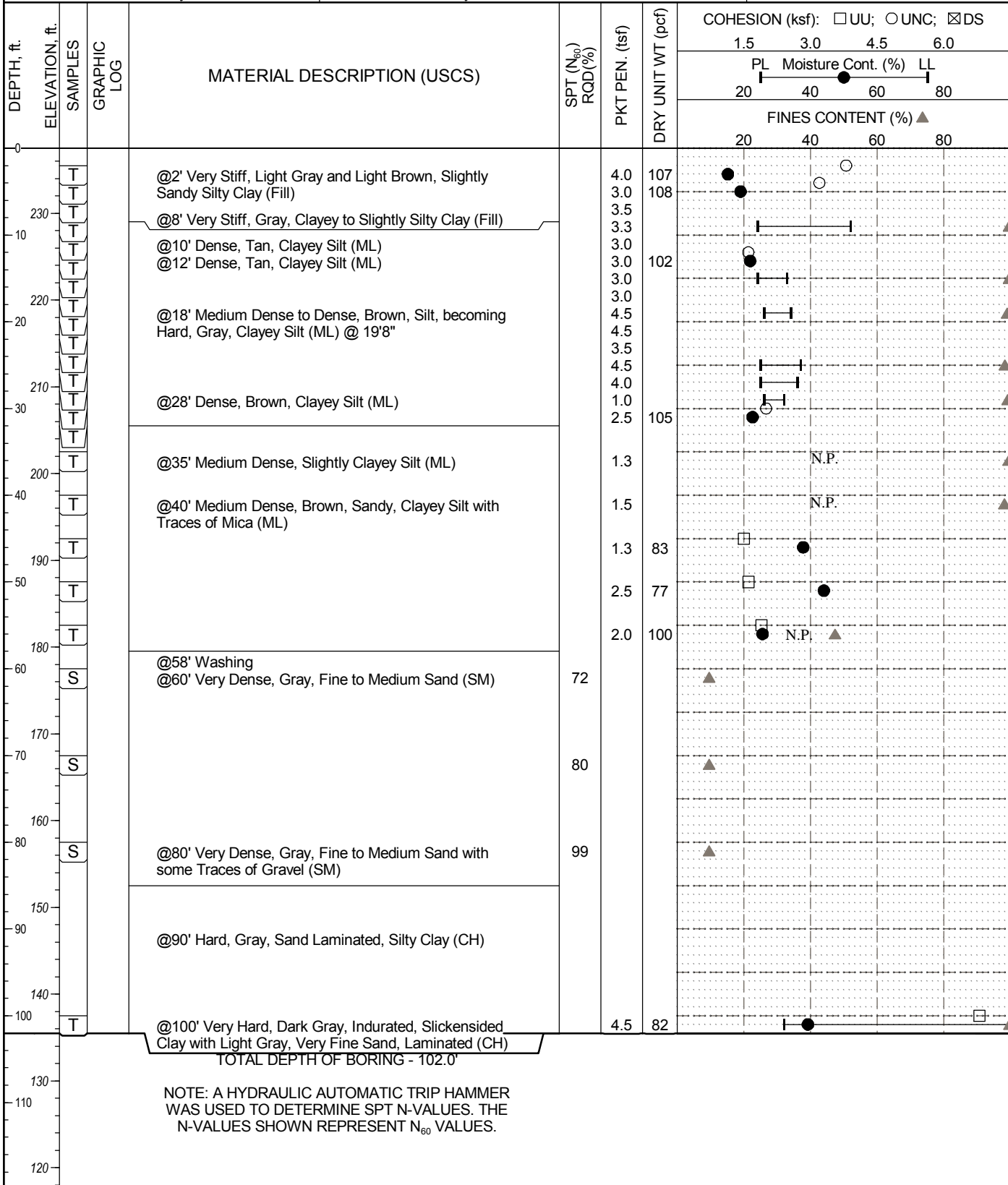
NOTE: A HYDRAULIC AUTOMATIC TRIP HAMMER WAS USED TO DETERMINE SPT N-VALUES. THE N-VALUES SHOWN REPRESENT N₆₀ VALUES.

S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher UU Cohesion, UNC Cohesion, DS Cohesion, ● Moisture Content (%)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

Notice to the Public: No. 6938 - Cont'd

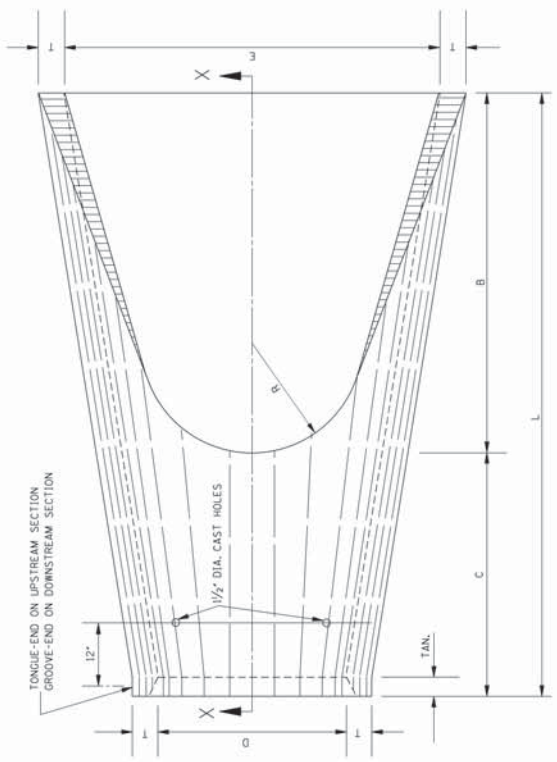
SITE NO.: 16-75-2190	HOLE NO.: 3	FMS P.E. No.: 107480/101000	REPORT NO.: 16-75-23
COUNTY: Warren	LATITUDE: N32.3367°	LONGITUDE: W90.85177°	COMPLETION DATE: 11/15/2016
LOCATION: Landslide on South I-20 Frontage Road between Clay St. & Indiana Ave.			WATER TABLE ELEV: N/A
STATION: 198+68	OFFSET: Right 9' of Existing Centerline South I-20 Frontage Road		COMPLETION DEPTH: 102'
BORING TYPE: Rotary Wash		LOGGED BY: Cory Clark	SURFACE ELEVATION: 237.5'



S: Split Spoon, T: Shelby Tube, C: Rock Core, P: Pitcher □: UU Cohesion, ○: UNC Cohesion, ☒: DS Cohesion, ●: Moisture Content (%)

BELL AND SPIGOT END OPTION

NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.



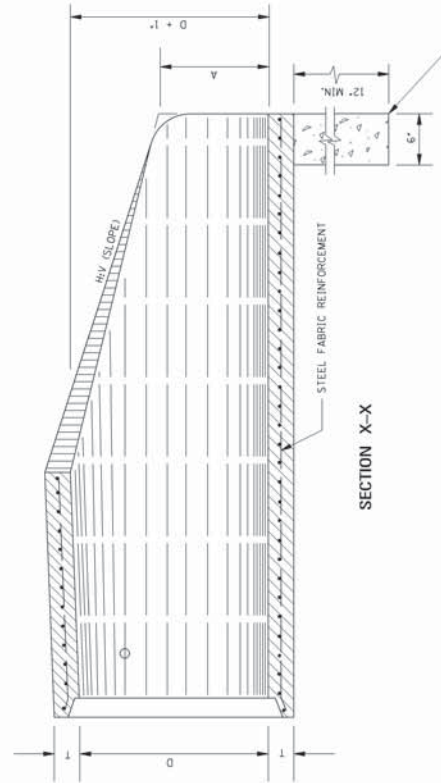
PLAN OF DOWNSTREAM END

D	T	H/V	A	B	C	E	L	TOE WALL CONC. QUANTITY (cu yd.)
15"	2 1/2"	3:1	5'-0"	2'-3"	4'-11"	2'-8"	6'-11"	0.056
18"	2 7/8"	3:1	9'-0"	2'-3"	3'-10"	3'-0"	6'-11"	0.063
24"	3"	3:1	10'-0"	3'-0"	4'-6"	4'-0"	6'-2"	0.083
30"	3 1/2"	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"	0.102
36"	4"	3:1	1'-5"	5'-3"	2'-11"	6'-0"	8'-2"	0.123
42"	4 1/2"	3:1	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"	0.134
48"	5"	3:1	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"	0.145
54"	5 1/2"	3:1	2'-4"	6'-6"	1'-10"	7'-6"	8'-4"	0.156
60"	6"	3:1	2'-10"	6'-6"	1'-10"	8'-0"	8'-4"	0.167
66"	6 1/2"	3:1	3'-4"	6'-6"	1'-10"	8'-6"	8'-4"	0.177
72"	7"	3:1	3'-10"	6'-6"	1'-10"	9'-0"	8'-4"	0.188

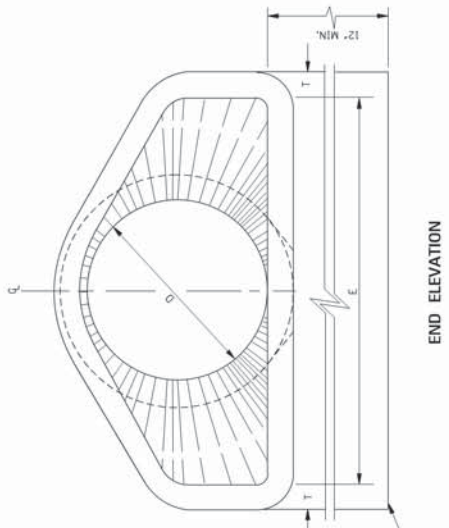
TABLE OF DIMENSIONS

D	T	H/V	A	B	C	E	L
15"	2 1/2"	3:1	5'-0"	2'-3"	4'-11"	2'-8"	6'-11"
18"	2 7/8"	3:1	9'-0"	2'-3"	3'-10"	3'-0"	6'-11"
24"	3"	3:1	10'-0"	3'-0"	4'-6"	4'-0"	6'-2"
30"	3 1/2"	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"
36"	4"	3:1	1'-5"	5'-3"	2'-11"	6'-0"	8'-2"
42"	4 1/2"	3:1	1'-9"	5'-3"	2'-11"	6'-6"	8'-2"
48"	5"	3:1	2'-0"	6'-0"	2'-2"	7'-0"	8'-2"
54"	5 1/2"	3:1	2'-4"	6'-6"	1'-10"	7'-6"	8'-4"
60"	6"	3:1	2'-10"	6'-6"	1'-10"	8'-0"	8'-4"
66"	6 1/2"	3:1	3'-4"	6'-6"	1'-10"	8'-6"	8'-4"
72"	7"	3:1	3'-10"	6'-6"	1'-10"	9'-0"	8'-4"

* NOTE: SEE GENERAL NOTE 2.



SECTION X-X



END ELEVATION

- GENERAL NOTES:
- REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LINE DIAMETER PER AASHTO M 118, TABLE 2, WALL B.
 - 1/2" DIA. CAST HOLES REQUIRED AS SHOWN TO ACCOMMODATE 2 - 1" DIA. TIE BOLTS, USED IN TIEING SECTION TO ADJACENT CULVERT.
 - LENGTH (L) OF A BELL-END OPTION MAY VARY BY A NOMINAL EXTENSION ON THE BELL END.
 - FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
 - ALL SIZES OF FLARED END SECTIONS FOR CIRCULAR CONCRETE PIPE MAY BE FINISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

**FLARED END SECTION
FOR CONCRETE PIPE**

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

ISSUE DATE: OCTOBER 1, 1998

WORKING NUMBER
FE-1
SHEET NUMBER
632B

DATE	REVISION