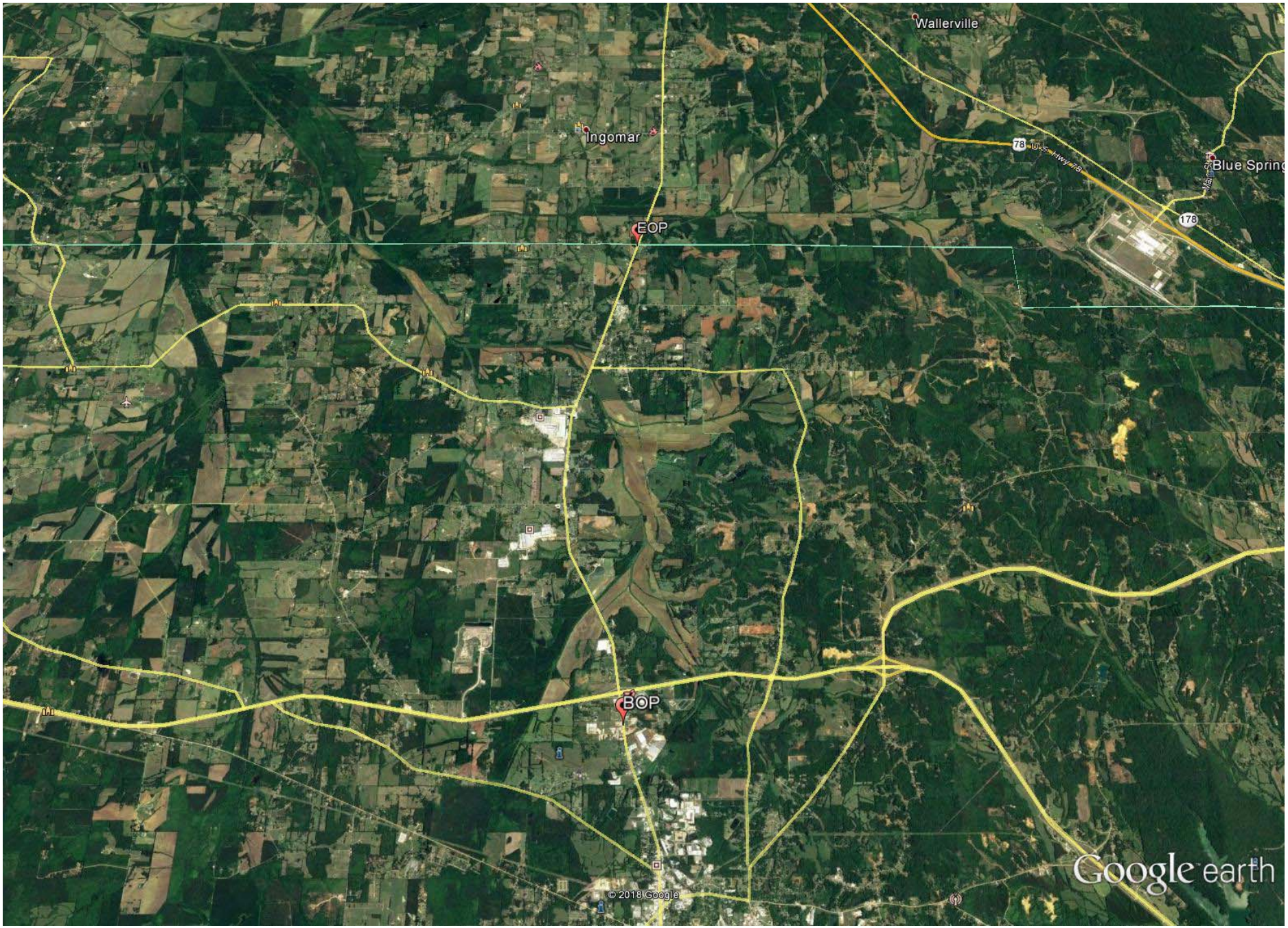
Map of Location



Google earth

miles 9

km 10

Table of Impacts (Wetland and/or Channel)

Table 1. Wetland Data Point Summary Table

Data Point	Wetland ID#	Site #	Latitude	Longitude	Sta.	Section-Township-Range	Area (Acres)	Cowardin Classification	Impact
DP-1	W-1	1	34.29558	-89.02759	146+00	18-9S-3E	0.34	PEM	0.10 acres of Permanent fill; 0.24 acres of Temporary fill; WK4
DP-2	W-2	2	34.30461	-89.03302	181+50	18-9S-3E	0.09	PF	This site was impacted by the previous grading project 301000 WKS5; Left
DP-3		3	34.31300	-89.03800	214+50	12-9S-2E		Upland	No Impacts
DP-4	W-3	8	34.38940	-89.01972	502+50	18-8S-3E	5.51	PF	No Impacts; E.O.P. is at Station 465+20.

DP- Data point- collection point for sampling data for wetland assessment
W- Wetland- areas described as wetlands
PF- Palustrine Forested
PEM- Palustrine Emergent
PSS- Palustrine Shrub-Scrub
Station Numbers are approximate

Table 2. Other Waters Assessment Table

OW #	Site #	Latitude	Longitude	Sta.	Type	Length in Project Area (feet)	Channel Width (feet)	Name	Impact
1	2	34.30068	-89.03048	166+00	I	630	5	N/A	124 ft. 10X8 RBC with 3:1 wingwalls' - Embedded box culvert; 172 ft - Rip-rap; WKS5
2	2	34.30310	-89.03231	174+00	P	400	120	Lappatubby Creek	20 ft - Additional Bridge Width with new bridge construction; 320 ft temporary bridge (16 feet wide); WKS5
3	2	34.30310	-89.03231	181+30	I	520	40	N/A	6X6 RBC Extend 25 feet; WKS5
4	3	34.31333	-89.03808	216+50	P	420	10	N/A	Extend existing 10X8 RBC 153 feet with 3:1 wingwalls
5	4	34.31670	-89.03858	229+00	I	750	6	N/A	200 feet of 66 inch RCP with FES
6	5	34.34987	-89.03422	352+50	P	520	50	Lappatubby Creek	Bridge Repair; Estimated 700 feet of temporary bridge (16 feet wide)
7	5	34.35288	-89.03308	364+25	I	320	5	N/A	152 ft – 42’ RCP with 1 FES; WKS11
8	5	34.35441	-89.03252	370+50	P	560	25	N/A	10X10 RBC to be removed; 140 feet of 16X10 RBC extension with 3:1 wingwalls; 130 feet rip-rap fill
END OF PROJECT STATION 465+20									

OW- Other Waters- Other Water assessment point location
Type:
P-Perennial
I-Intermittent
E-Ephemeral
OHWM-Ordinary High Water Mark
Station numbers (Sta.) are approximate

Plans

GENERAL INDEX

INCLUDED THIS PROJECT		BEGIN WITH SHEET
☒	ROADWAY	1
☐	PERMANENT SIGNS	1001
☐	TRAFFIC SIGNALS	2001
☐	ITS COMPONENTS	3001
☐	LIGHTING	4001
☐	(RESERVED)	5001
☒	ROADWAY STANDARD DWGS	6001
☒	BOX CULVERT STD. DRAWINGS (LRFD)	7001
☒	BOX CULVERT STD. DRAWINGS (STD. SPEC.)	7501
☒	BRIDGE	8001
☒	CROSS SECTIONS	9001

BRIDGE STRUCTURES REQ'D.

Ⓐ BRIDGE # 281.7
SR 15 ACROSS LAPPATUBBY CREEK
STA. 172+89.18 TO STA. 175+30.82
SPANS: 2 @ 40 - 80 - 2 @ 40
LENGTH = 241' 7⅝"
SKEW 15° RT. FORWARD

Ⓑ SR 15 ACROSS TANGLEFOOT TRAIL
STA. 436+78.60 TO STA. 437+61.53
SPANS: 1 @ 80
LENGTH = 82' 11¼"
SKEW 40° LT. FORWARD

BOX BRIDGES REQ'D.

CONVENTIONAL SYMBOLS

COUNTY LINE
TOWN CORPORATION LINE
SECTION LINE
EXISTING ROAD OR TRAVELED WAY
PROPOSED ROAD OR TRAVELED WAY
RAILROAD
SURVEY LINE
BRIDGES

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED STATE HIGHWAY FEDERAL AID PROJECT NO. STP-0022-04(063)

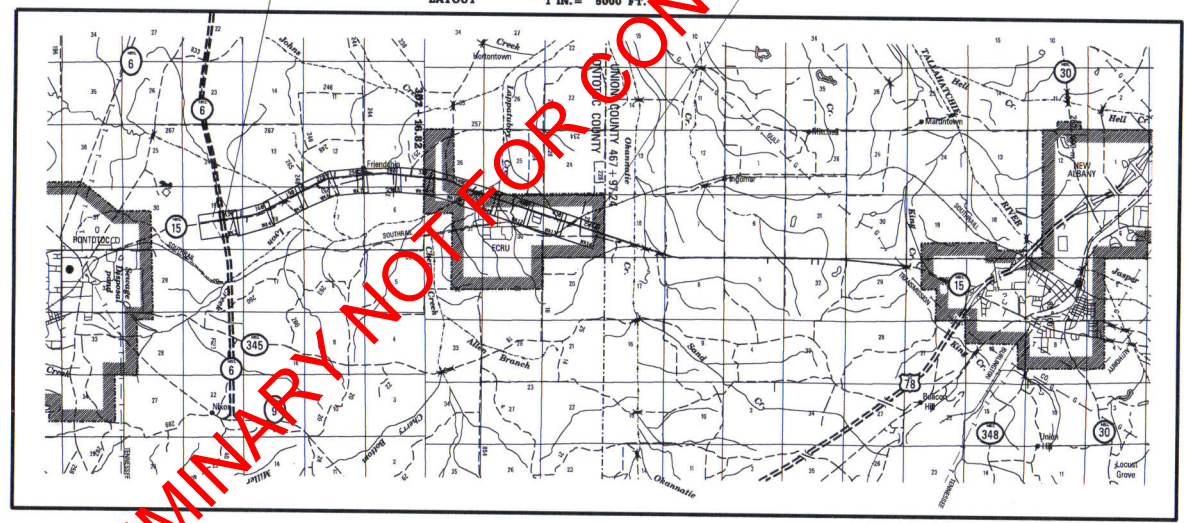
SR 15 FROM SR 76 TO THE PONTOTOC/UNION COUNTY LINE
PONTOTOC COUNTY

EMS ROW NO. 102607/201000
EMS CON. NO. 102607/303000

B.O.P. 115+00

E.O.P. 466+20.54

SCALES
PLAN 1 IN. = 100 FT.
PROFILE { HOR. 1 IN. = 100 FT. / VERT. 1 IN. = 10 FT.
LAYOUT 1 IN. = 5000 FT.



EQUATIONS

STA. 153+38.541 BK. = STA. 152+90.906 AH. = + 47.635'
STA. 221+17.068 BK. = STA. 221+64.570 AH. = - 47.502'
STA. 270+00.045 BK. = STA. 270+20.000 AH. = - 19.955'
STA. 328+59.371 BK. = STA. 328+95.210 AH. = - 35.839'
STA. 344+65.966 BK. = STA. 344+53.498 AH. = + 12.468'

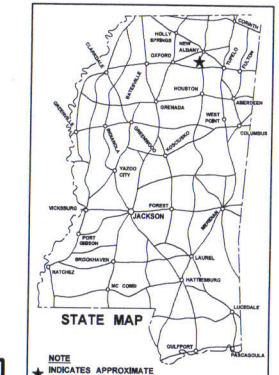
LENGTH DATA

LENGTH OF ROADWAY	33490.87 FT.	6.342 MI.
LENGTH OF BRIDGES	322.937 FT.	.061 MI.
LENGTH OF PROJECT (NET)		6.403 MI.
LENGTH OF EXCEPTIONS	FT.	Ø MI.
LENGTH OF PROJECT (GROSS)		6.403 MI.

EXCEPTIONS

PRELIMINARY NOT FOR CONSTRUCTION

STATE	PROJECT NUMBER	SHEET NO.
MISSISSIPPI	STP-022-04(063)	1



NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

LAT. 34°22'46.50" LONG. 89°04'22.55"
(APPROX. MIDDLE OF PROJECT)

DESIGN CONTROL
65 MPH = V (SPEED DESIGN)
ADT (2009) = 13000; ADT (2029) = 20000
DHV = 2000 : D = 60 % T = 13 %

PERMITS ACQUIRED BY MDOT
WETLANDS AND WATERS PERMITS

	WATERS	WETLANDS
NATIONWIDE #14	☐	☐
NATIONWIDE (OTHER)*	☐	☐
GENERAL*	☐	☐
INDIVIDUAL (404)*	☐	☐

STORMWATER PERMIT ☐

Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTURBED AREA=5 ACRES)
S	REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: _____

P S & E DATE: 12/13/2017

APPROVED:

DEPUTY EXECUTIVE DIRECTOR / CHIEF ENGINEER

EXECUTIVE DIRECTOR

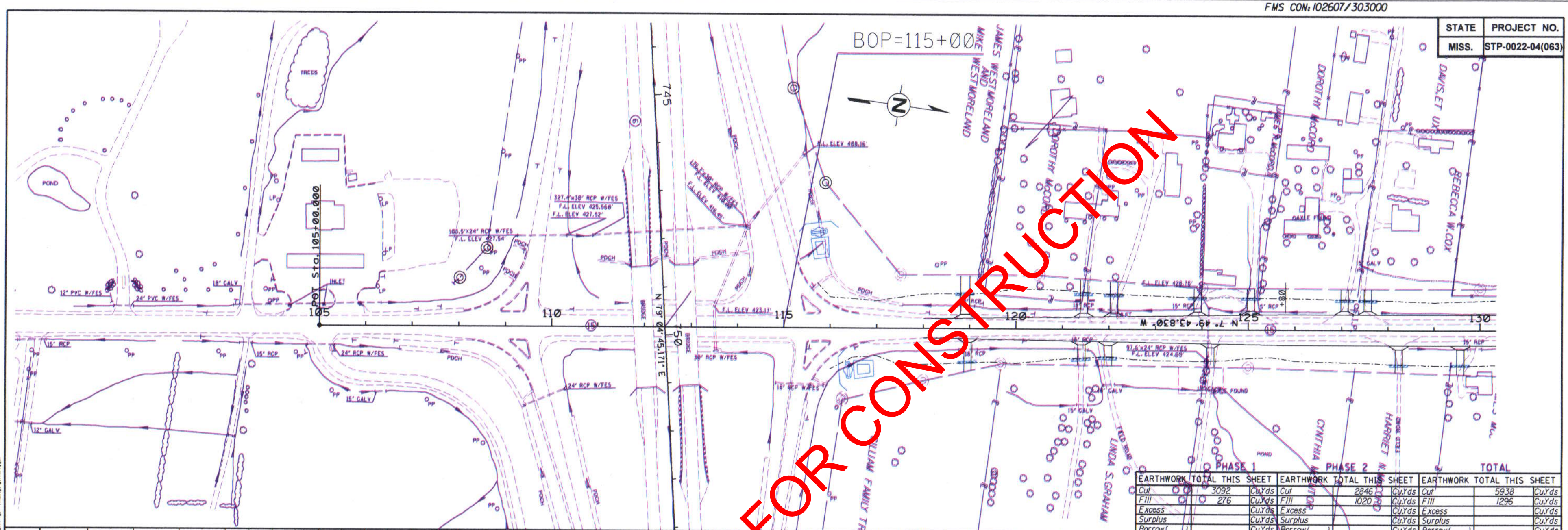
MDOT
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

REVISIONS BY DATE

12/8/2017 1:04 PM TITLE.DGN
TITLE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FMS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



EARTHWORK TOTAL THIS SHEET (PHASE 1)			EARTHWORK TOTAL THIS SHEET (PHASE 2)			EARTHWORK TOTAL THIS SHEET (TOTAL)		
Cut	3092	Cu.Yds	Cut	2846	Cu.Yds	Cut	5938	Cu.Yds
Fill	276	Cu.Yds	Fill	1020	Cu.Yds	Fill	1296	Cu.Yds
Excess		Cu.Yds	Excess		Cu.Yds	Excess		Cu.Yds
Surplus		Cu.Yds	Surplus		Cu.Yds	Surplus		Cu.Yds
Borrow( )		Cu.Yds	Borrow( )		Cu.Yds	Borrow( )		Cu.Yds

STA. 11[illegible]+10 TYPE "D" SILT BASIN REQ'D. RT. L = 35' 3

STA. 118+96 RAMP REQ'D. RT 40'-18" PIPE REQ'D.

STA. 121+45 RAMP REQ'D. RT. 40'-18" PIPE REQ'D. RT.

STA 121+98 RAMP REQ'D. RT 40'-18" PIPE REQ'D.

STA 124+20 RAMP REQ'D. RT DRY.

STA 128+25 RAMP REQ'D. RT 40'-18" PIPE REQ'D.

STA 129+60 RAMP REQ'D. RT 40'-18" PIPE REQ'D.

PRELIMINARY NOT FOR CONSTRUCTION

UTILITIES:

CITY OF PONTOTOC-GAS
SAMMY JORDAN
662-489-3891

CITY OF PONTOTOC-WATER
662-489-4841

PONTOTOC EPA
662-489-3211

AT&T TELEPHONE

MUD CREEK WATER ASSN.
LYNN ROBBINS
662-489-6851

TOWN OF ECRU- WATER AND SEWER
662-489-3881

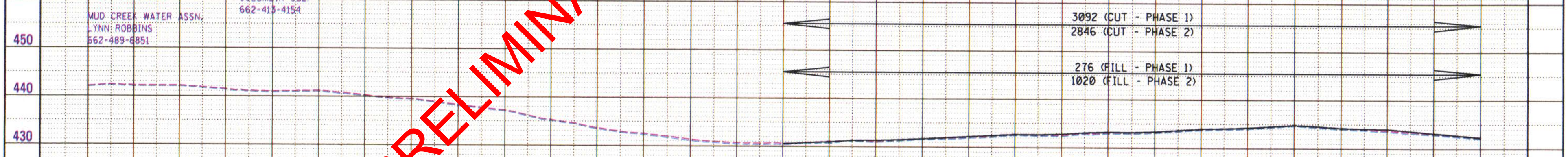
NORTH MS HEALTH SERVICES
662-377-3022

INGOMAR WATER SYSTEM
JOHN WEEDEN
662-534-3335

COLUMBIA GULF
662-413-4154

3092 (CUT - PHASE 1)
2846 (CUT - PHASE 2)

276 (FILL - PHASE 1)
1020 (FILL - PHASE 2)



Station	Proposed	Existing
100		442.00
		442.32
101		442.12
		442.10
102		442.08
		441.73
103		441.38
		441.02
104		440.89
		440.97
105		441.05
		440.62
106		440.19
		439.66
107		439.45
		438.84
108		438.22
		437.65
109		437.14
		436.10
110		435.18
		434.51
111		433.50
		432.78
112		432.44
		431.78
113		431.20
		430.81
114		430.52
		430.51
115	430.58	430.40
	430.81	430.66
116	431.04	430.79
	431.35	431.18
117	431.38	431.04
	431.48	431.31
118	431.73	431.59
	431.99	431.67
119	432.24	431.97
	432.46	432.18
120	432.67	432.55
	432.69	432.46
121	432.80	432.38
	433.13	432.85
122	433.28	432.95
	433.20	432.93
123	433.38	433.14
	433.67	433.46
124	433.99	433.79
	434.11	433.90
125	434.25	434.01
	434.51	434.34
126	434.80	434.67
	434.57	434.35
127	434.26	434.03
	434.15	433.85
128	434.10	433.63
	433.67	433.29
129	433.23	432.94
	432.80	432.54
130	432.39	432.14

Wk. Sh. 3RT
Sh. No. 38

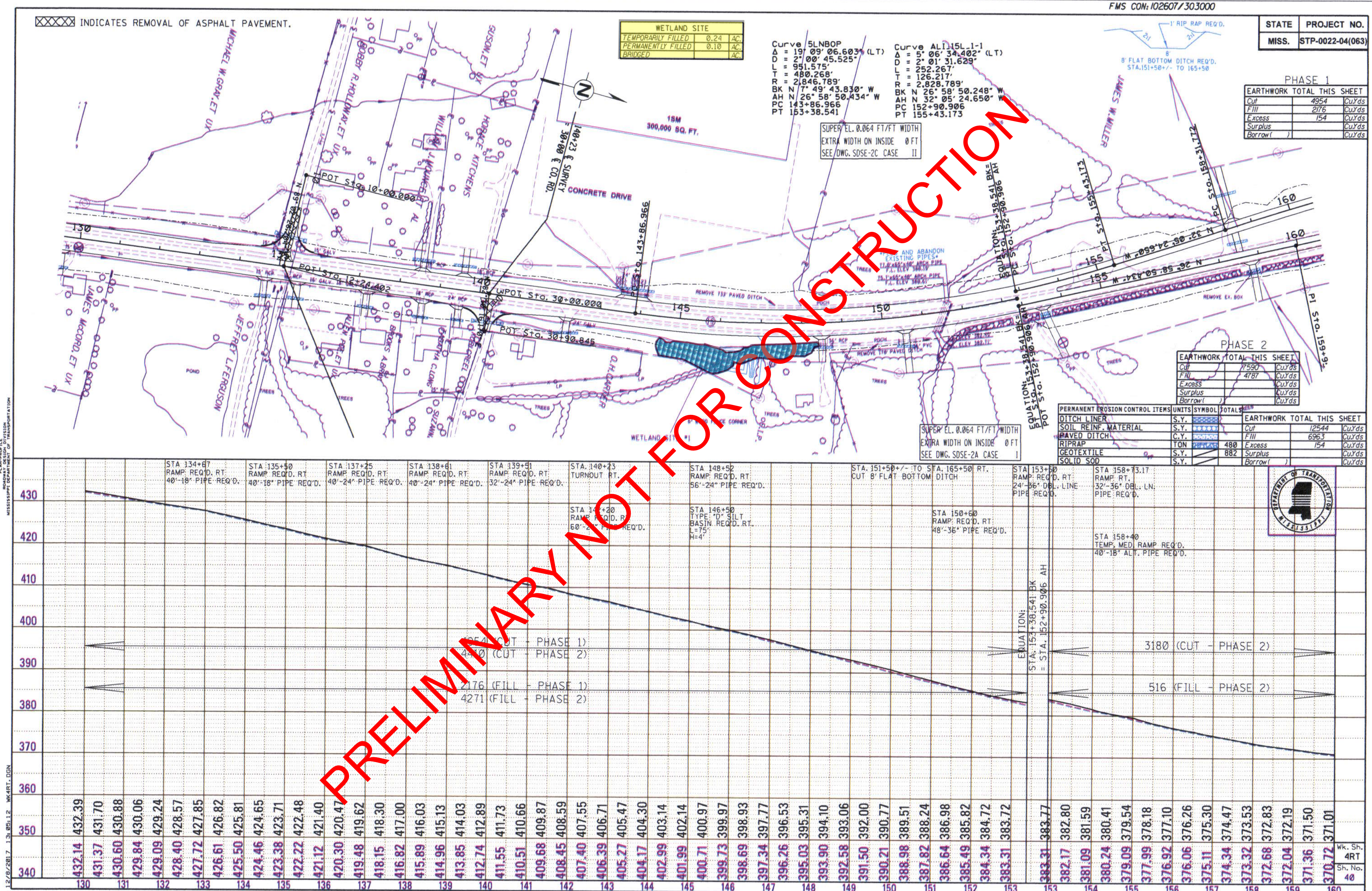
12/8/2017 13:05:02 WK3RT.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION PLAN-PROFILE

DESIGN TEAM: UPDATE FILENAME: rwd.cel COUNTY: PONTOTOC PROJECT NO.: STP-0022-04(063) SHEET ID: HWY. 15 MAINLINE

FMS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



XXXXX INDICATES REMOVAL OF ASPHALT PAVEMENT.
WETLAND SITE
TEMPORARILY FILLED 0.24 AC.
PERMANENTLY FILLED 0.10 AC.
BRIDGED AC.
Curve 5LNBOP
Δ = 19° 09' 06.603" (LT)
D = 2° 00' 45.525"
L = 951.575'
T = 480.268'
R = 2,846.789'
BK N 7° 49' 43.830" W
AH N 26° 58' 50.434" W
PC 143+86.966
PT 153+38.541
Curve ALI_15L_1-1
Δ = 5° 06' 34.402" (LT)
D = 2° 01' 31.629"
L = 252.267'
T = 126.217'
R = 2,828.789'
BK N 26° 58' 50.248" W
AH N 32° 05' 24.650" W
PC 152+90.906
PT 155+43.173
SUPER EL. 0.064 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SDSE-2C CASE II
SUPER EL. 0.064 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SDSE-2A CASE I
1' RIP RAP REQ'D.
8' FLAT BOTTOM DITCH REQ'D.
STA.151+50+/- TO 165+50
MICHAEL W. GRAY, ET UX
BOBBY R. HOLLOWAY, ET UX
SUSON, ET
HORACE KITCHENS
JAMES W. MILLER
JAMES MCCORD, ET UX
JEFFREY L. FERGUSON
1SM
300,000 SQ. FT.
CONCRETE DRIVE
140+23 € SURVEY = 30+00 € CO. RD.
POT Sta. 10+00.000
POT Sta. 12+24.402
WPOT Sta. 30+00.000
POT Sta. 30+90.845
PC Sta. 143+86.966
EQUATION: PT Sta. 153+38.541 BK = POT Sta. 152+90.906 AH
PT Sta. 155+43.173
PC Sta. 158+31.772
PI Sta. 159+9
N 26° 58' 50.434" W
N 32° 05' 24.650" W
130
135
140
145
150
155
160
REMOVE 132' PAVED DITCH
REMOVE 110' PAVED DITCH
REMOVE EX. BOX
POND
TREES
WETLAND SITE #1
STA 134+67 RAMP REQ'D. RT 40'-18" PIPE REQ'D.
STA 135+50 RAMP REQ'D. RT 40'-18" PIPE REQ'D.
STA 137+25 RAMP REQ'D. RT 40'-24" PIPE REQ'D.
STA 138+61 RAMP REQ'D. RT 40'-24" PIPE REQ'D.
STA 139+51 RAMP REQ'D. RT 32'-24" PIPE REQ'D.
STA. 140+23 TURNOUT RT.
STA 140+20 RAMP REQ'D. RT 60'-24" PIPE REQ'D.
STA 148+52 RAMP REQ'D. RT 56'-24" PIPE REQ'D.
STA 146+50 TYPE "D" SILT BASIN REQ'D. RT L=75' H=4'
STA. 151+50+/- TO STA. 165+50 RT. CUT 8' FLAT BOTTOM DITCH
STA 150+60 RAMP REQ'D. RT 48'-36" PIPE REQ'D.
STA 153+50 RAMP REQ'D. RT 24'-36" DBL. LINE PIPE REQ'D.
STA 158+73.17 RAMP RT. 32'-36" DBL. LN. PIPE REQ'D.
STA 158+40 TEMP. MED. RAMP REQ'D. 40'-18" ALT. PIPE REQ'D.
EQUATION: STA. 153+38.541 BK = STA. 152+90.906 AH
12544 (CUT - PHASE 1)
4410 (CUT - PHASE 2)
2176 (FILL - PHASE 1)
4271 (FILL - PHASE 2)
3180 (CUT - PHASE 2)
516 (FILL - PHASE 2)
430
420
410
400
390
380
370
360
350
340
432.39 431.70 430.88 430.06 429.24 428.57 427.85 426.82 425.81 424.65 423.71 422.48 421.40 420.47 419.62 418.30 417.00 416.03 415.13 414.03 412.89 411.73 410.66 409.87 408.59 407.55 406.71 405.47 404.30 403.14 402.14 400.97 399.97 398.93 397.77 396.53 395.31 394.10 393.06 392.00 390.77 389.51 388.24 386.98 385.82 384.72 383.72 383.77 382.80 381.59 380.41 379.54 378.18 377.10 376.26 375.30 374.47 373.53 372.83 372.19 371.50 371.01
432.14 431.37 430.60 429.84 429.09 428.40 427.72 426.61 425.50 424.46 423.38 422.22 421.12 420.30 419.48 418.15 416.82 415.89 414.96 413.85 412.74 411.55 410.51 409.68 408.45 407.40 406.39 405.27 404.17 402.99 401.99 400.71 399.73 398.69 397.34 396.26 395.03 393.90 392.58 391.50 390.21 388.98 387.82 386.64 385.49 384.34 383.31 383.31 382.17 381.09 380.24 379.09 377.99 376.92 376.06 375.11 374.34 373.32 372.68 372.04 371.36 370.72
130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 153 154 155 156 157 158 159 160
DEPARTMENT OF TRANSPORTATION MISSISSIPPI
PLAN-PROFILE ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
12/8/2017 13:05:12 WK4RT.DGN

PHASE 1

EARTHWORK TOTAL THIS SHEET		
Cut	4954	Cu.Yds
Fill	2176	Cu.Yds
Excess	154	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PHASE 2

EARTHWORK TOTAL THIS SHEET		
Cut	7590	Cu.Yds
Fill	4787	Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		
RIPRAP	TON		480
GEOTEXTILE	S.Y.		882
SOLID SOD	S.Y.		

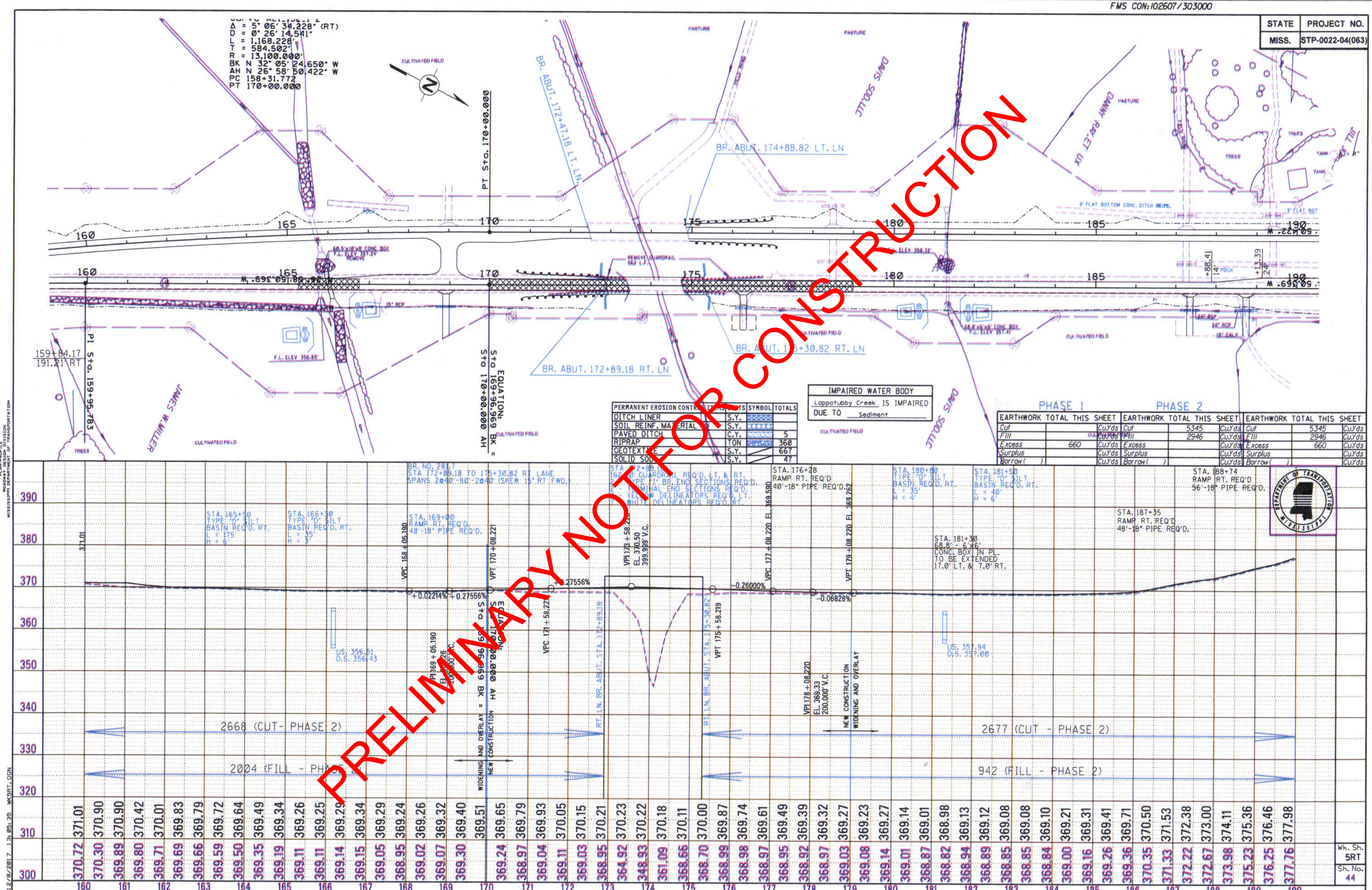
EARTHWORK TOTAL THIS SHEET		
Cut	12544	Cu.Yds
Fill	6963	Cu.Yds
Excess	154	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PRELIMINARY NOT FOR CONSTRUCTION

Wk. Sh. 4RT
Sh. No. 40

DESIGN TEAM: DOVER
FILENAME: WK4RT.DGN
COUNTY: PONTOTOC
PROJECT NO.: STP-0022-04(063)
SHEET ID: HWY. 15 MAINLINE

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		5
RIPRAP	TON		360
GEOTEXTILE	S.Y.		667
SOLID SOD	S.Y.		47

IMPAIRED WATER BODY
Loppatubby Creek IS IMPAIRED DUE TO Sediment

EARTHWORK TOTAL THIS SHEET		
Cut		Cu.Yds
Fill		Cu.Yds
Excess	660	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PHASE 1

EARTHWORK TOTAL THIS SHEET		
Cut	5345	Cu.Yds
Fill	2946	Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PHASE 2

EARTHWORK TOTAL THIS SHEET		
Cut	5345	Cu.Yds
Fill	2946	Cu.Yds
Excess	660	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

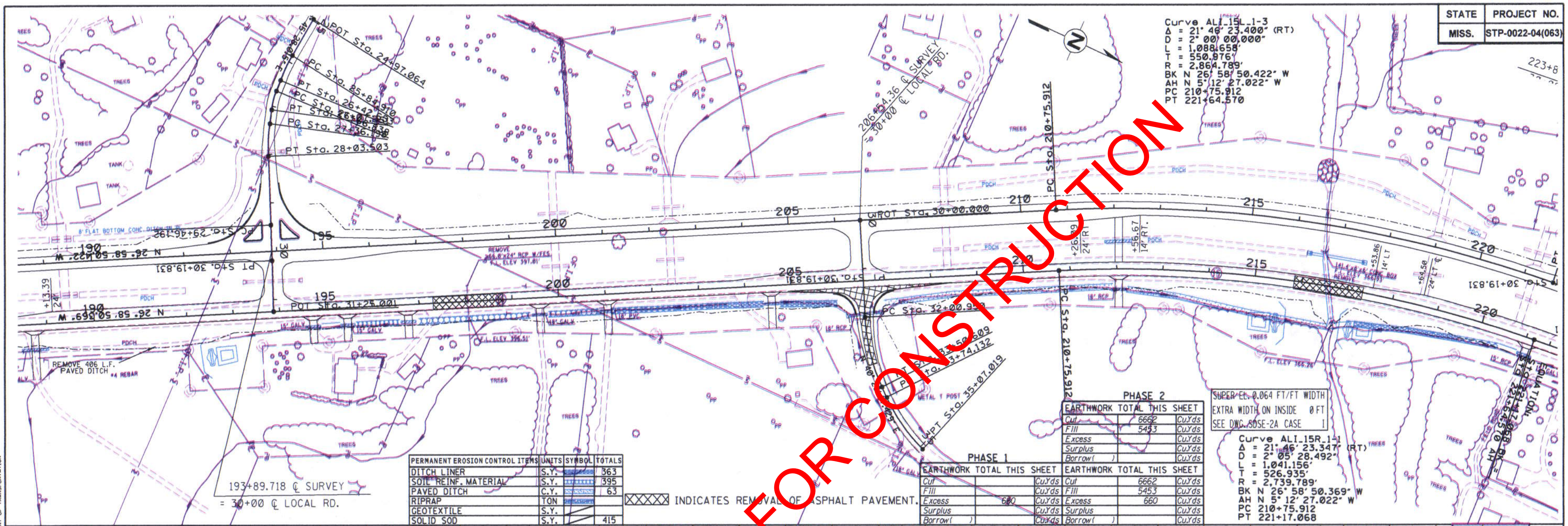
Wk. Sh. 5RT

Sh. No. 44

DESIGN TEAM: DOVER | FILENAME: WK5RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE

FMS CON:102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		363
SOIL REINF. MATERIAL	S.Y.		395
PAVED DITCH	C.Y.		63
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		415

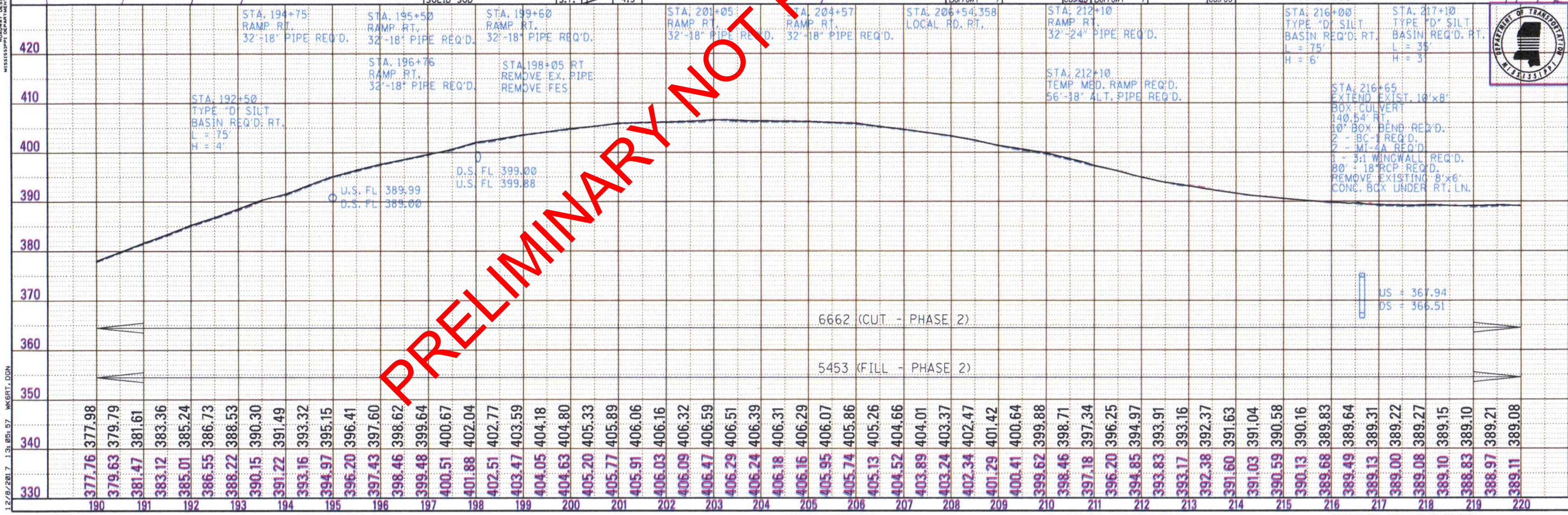
PHASE 1

EARTHWORK TOTAL THIS SHEET		
Cut		CuYds
Fill		CuYds
Excess	660	CuYds
Surplus		CuYds
Borrow( )		CuYds

PHASE 2

EARTHWORK TOTAL THIS SHEET		
Cut	6662	CuYds
Fill	5453	CuYds
Excess		CuYds
Surplus		CuYds
Borrow( )		CuYds

EARTHWORK TOTAL THIS SHEET		
Cut	6662	CuYds
Fill	5453	CuYds
Excess	660	CuYds
Surplus		CuYds
Borrow( )		CuYds

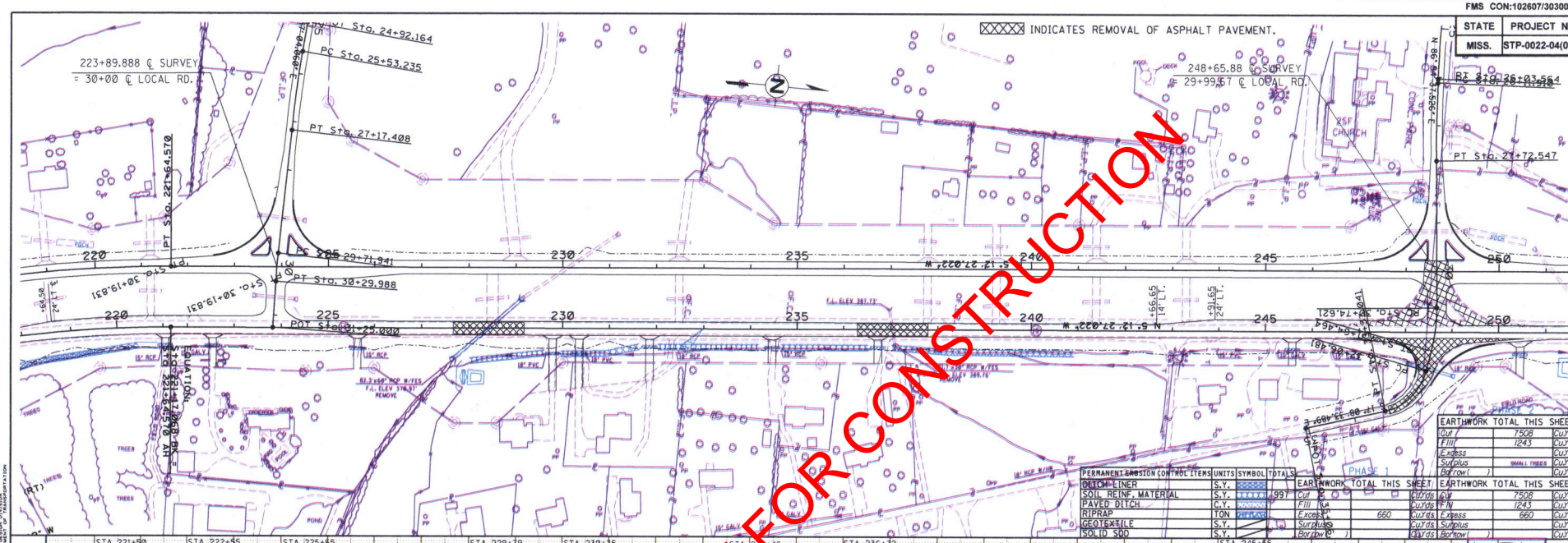


PRELIMINARY NOT FOR CONSTRUCTION

Wk. Sh. 6RT
Sh. No. 41

FMS CON:102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)

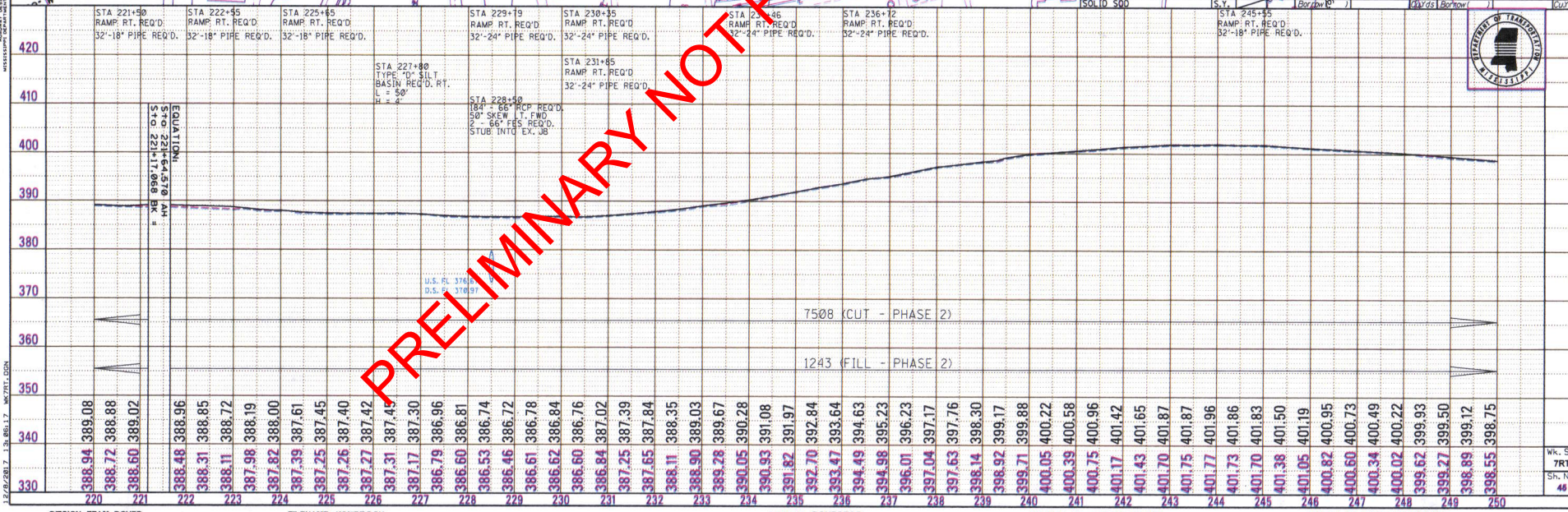


EARTHWORK TOTAL THIS SHEET		
Cut	7508	CuYds
Fill	1243	CuYds
Excess		CuYds
Surplus	SMALL TREES	CuYds
Borrow ( )		CuYds

PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		997
PAVED DITCH	C.Y.		
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		

EARTHWORK TOTAL THIS SHEET		
Cut		CuYds
Fill		CuYds
Excess	660	CuYds
Surplus		CuYds
Borrow ( )		CuYds

EARTHWORK TOTAL THIS SHEET		
Cut	7508	CuYds
Fill	1243	CuYds
Excess	660	CuYds
Surplus		CuYds
Borrow ( )		CuYds



PRELIMINARY NOT FOR CONSTRUCTION

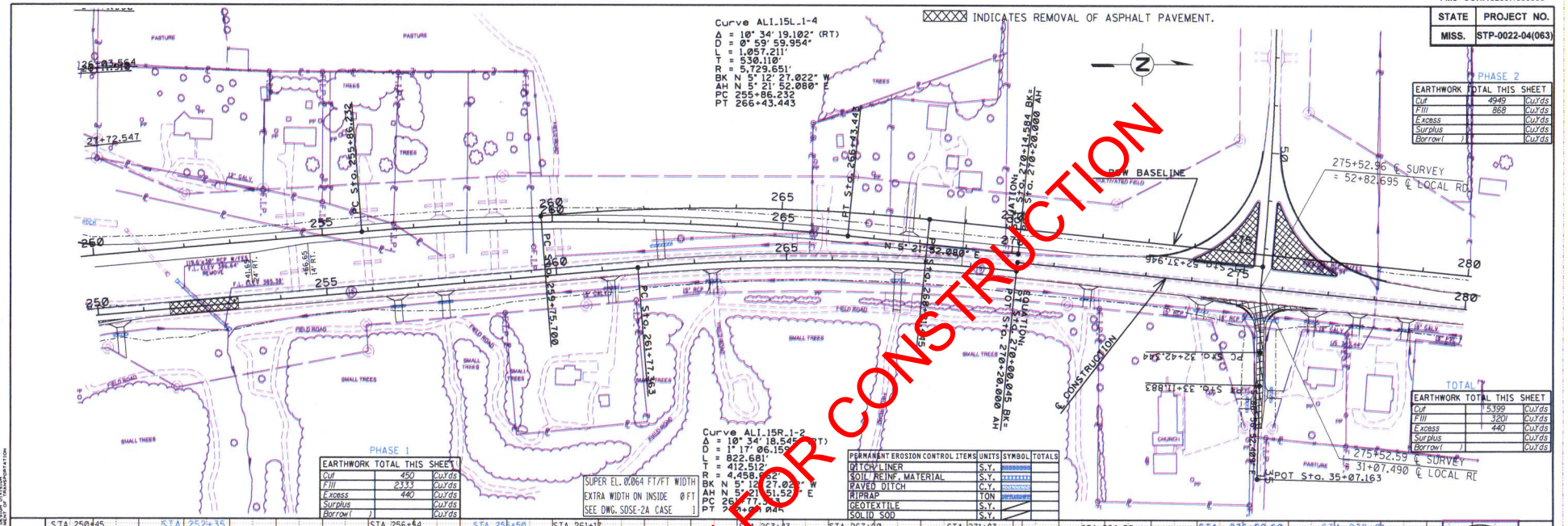
Wk. Sh.	7RT
Sh. No.	46

12/8/2017 13:46:17 WK7RT.DGN

DESIGN TEAM: DOVER | FILENAME: WK7RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE

FMS CON:102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PRELIMINARY NOT FOR CONSTRUCTION

Wk. Sh. 8RT
Sh. No. 49

DESIGN TEAM: DOVER | FILENAME: WK8RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE

FMS CON:102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)

XXXXX INDICATES REMOVAL OF ASPHALT PAVEMENT.

286+35.86 ℄ SURVEY = 31+07.42 ℄ LOCAL RD.

290+70.123 ℄ SURVEY = 31+07.009 ℄ LOCAL RD.

PT Sta. 28+02.738

POT Sta. 30+00.000

N 5° 21' 51.525" E

POT Sta. 31+25.000

N 5° 21' 52.080" E

PI Sta. 32+28.894

PI Sta. 34+37.043

POT Sta. 35+08.101

ROW BASELINE

℄ CONSTRUCTION

SURVEY LOCAL RD.

CULTIVATED FIELD

PASTURE

TREES

PHASE 1

EARTHWORK TOTAL THIS SHEET		
Cut	4711	CuYds
Fill	7493	CuYds
Excess		CuYds
Surplus		CuYds
Borrow( )		CuYds

PHASE 2

EARTHWORK TOTAL THIS SHEET		
Cut	1730	CuYds
Fill	340	CuYds
Excess		CuYds
Surplus		CuYds
Borrow( )		CuYds

PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		958
SOIL REINF. MATERIAL	S.Y.		368
PAVED DITCH	C.Y.		
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		

EARTHWORK TOTAL THIS SHEET		
Cut	6441	CuYds
Fill	7833	CuYds
Excess		CuYds
Surplus		CuYds
Borrow( )		CuYds

STA 282+30 RAMP RT. REQ'D. 32'-18" PIPE REQ'D.

STA 283+93 RAMP RT. REQ'D. 32'-18" PIPE REQ'D.

STA 284+80 RAMP RT. REQ'D. 32'-18" PIPE REQ'D.

STA 286+35.86 LOCAL RD. RT.

STA 287+63 RAMP RT. REQ'D. 32'-18" PIPE REQ'D.

STA 292+ RAMP RT. REQ'D. 32'-18" PIPE REQ'D.

STA 294+50 TYPE "D" SILT BASIN REQ'D. RT. L=35 H=3'

STA 295+34 92.3'-36" PIPE IN FL. 15° SKW. RT. FWD. EXTEND LEFT 40'-36" RCP REQ'D. 1 - PC-1 REQ'D. 1 - FES-1 REQ'D.

STA 298+42 RAMP REQ'D. RT. 32'-18" PIPE REQ'D.

STA 300+75 80.1'-24" PIPE IN FL. EXTEND LEFT 32'-24" RCP REQ'D. 1 - PC-1 REQ'D. 1 - FES-1 REQ'D.

STA 302+07 RAMP RT. REQ'D 32'-24" PIPE REQ'D

STA 302+50 TYPE "D" SILT BASIN REQ'D. RT. L=35 H=3'

STA 305+37 RAMP RT. REQ'D 32'-24" PIPE REQ'D.

STA 308+89 RAMP RT. REQ'D 32'-24" PIPE REQ'D.

U.S. FL. 383.04
D.S. FL. 379.52

U.S. FL. 386.71
D.S. FL. 382.73

4711 (CUT-PHASE 1)
1730 (CUT-PHASE 2)

7493 (FILL-PHASE 1)
340 (FILL-PHASE 2)

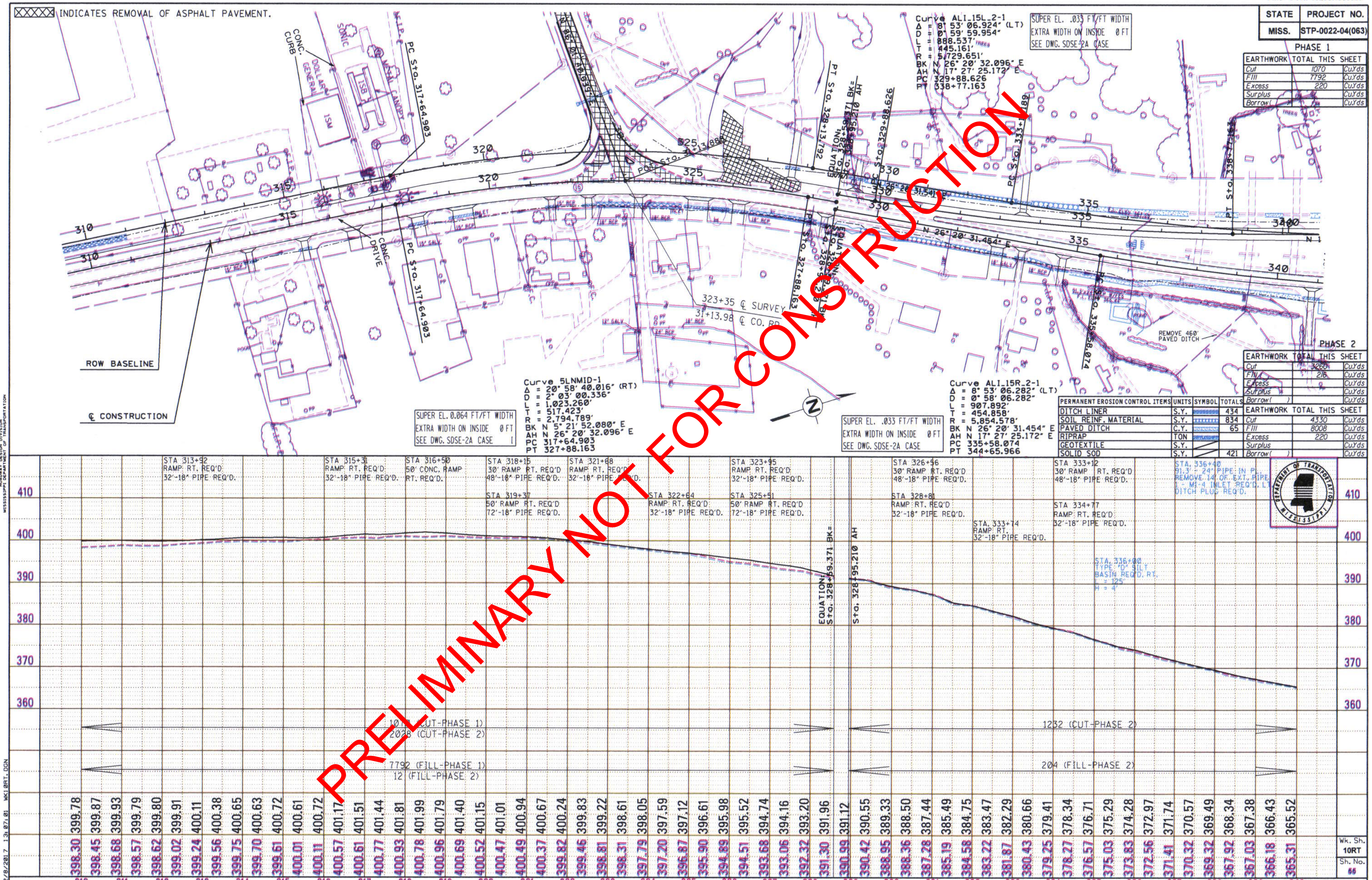
	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310
430																															
420																															
410																															
400																															
390																															
380																															
370																															
360																															
350	398.74	398.98	399.00	399.31	399.54	399.68	400.00	400.18	400.51	400.53	400.57	400.50	400.35	400.24	400.08	400.12	399.83	399.20	398.88	398.31	397.79	397.07	396.73	395.93	394.93	394.20	393.52	392.71	392.09	391.72	390.78	390.74	390.30	390.11	389.89	389.74	389.62	389.96	390.42	390.97	391.56	391.80	392.09	392.64	393.53	393.90	394.43	395.00	395.40	395.88	396.39	396.83	397.25	397.59	397.76	398.36	398.38	398.85	398.96	399.30	399.78
340	397.74	397.80	397.95	398.37	398.49	398.67	398.89	398.71	399.26	399.33	399.56	399.36	399.09	399.23	399.27	398.89	398.76	398.34	398.15	397.28	397.01	396.27	395.71	394.95	394.00	393.23	392.35	391.59	390.87	390.42	389.90	389.69	389.29	388.94	388.79	388.74	388.72	388.97	389.53	389.96	390.17	390.44	390.79	391.52	392.17	392.74	393.15	393.75	394.12	394.71	395.07	395.54	396.00	396.20	396.61	397.11	397.38	397.72	397.70	397.95	398.30

Wk. Sh. 9RT
Sh. No. 62

PRELIMINARY NOT FOR CONSTRUCTION

FMS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PHASE 1

EARTHWORK TOTAL THIS SHEET		
Cut	1070	Cu.Yds
Fill	7792	Cu.Yds
Excess	220	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PHASE 2

EARTHWORK TOTAL THIS SHEET		
Cut	3260	Cu.Yds
Fill	216	Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

EARTHWORK TOTAL THIS SHEET		
Cut	4330	Cu.Yds
Fill	8008	Cu.Yds
Excess	220	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		434
SOIL REINF. MATERIAL	S.Y.		834
PAVED DITCH	C.Y.		65
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		421

Station	Elevation	Elevation
310	399.78	398.30
	399.87	398.45
311	399.93	398.68
	399.79	398.57
312	399.80	398.62
	399.91	399.02
313	400.11	399.24
	400.38	399.56
314	400.65	399.75
	400.63	399.70
315	400.72	399.61
	400.61	400.01
316	400.72	400.11
	401.17	400.57
317	401.51	400.61
	401.44	400.77
318	401.81	400.93
	401.99	400.78
319	401.79	400.96
	401.40	400.69
320	401.15	400.52
	401.01	400.47
321	400.94	400.49
	400.67	400.37
322	400.24	399.82
	399.83	399.46
323	399.22	398.81
	398.61	398.31
324	398.05	397.79
	397.59	397.20
325	397.12	396.87
	396.61	395.90
326	395.98	394.89
	395.52	394.51
327	394.74	393.68
	394.16	393.06
328	393.20	392.32
	391.96	391.30
329	391.12	390.99
	390.55	390.42
330	389.33	388.95
	388.50	388.36
331	387.44	387.28
	385.49	385.19
332	384.75	384.58
	383.47	383.22
333	382.29	381.87
	380.66	380.43
334	379.41	379.25
	378.34	378.27
335	376.71	376.57
	375.29	375.03
336	374.28	373.83
	372.97	372.56
337	371.74	371.41
	370.57	370.32
338	369.49	369.32
	368.34	367.92
339	367.38	367.03
	366.43	366.18
340	365.52	365.31

Wk. Sh. 10RT

Sh. No. 66

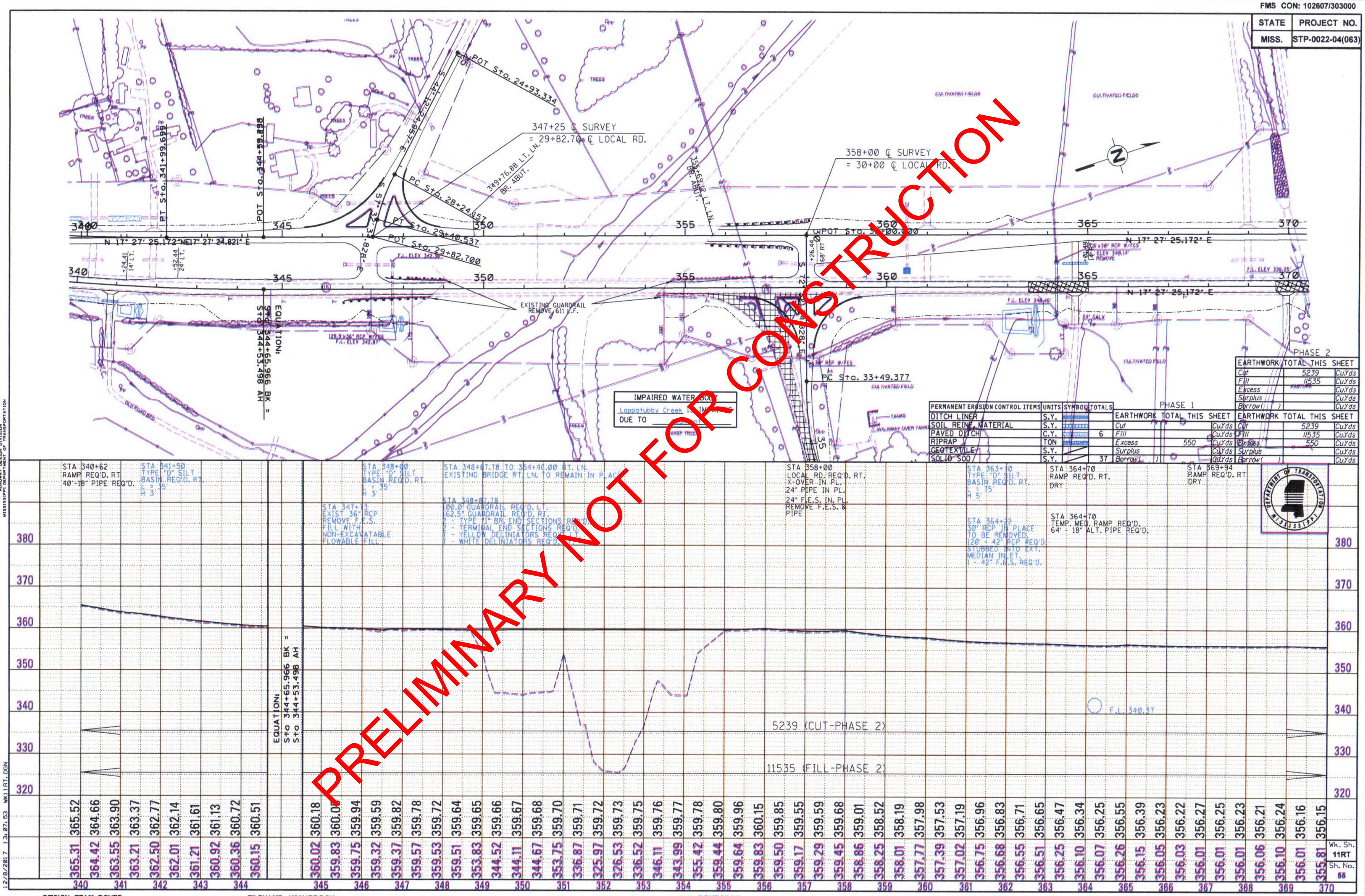
DESIGN TEAM: DOVER FILENAME: WK10RT.DGN COUNTY: PONTOTOC PROJECT NO.: STP-0022-04(063) SHEET ID: HWY. 15 MAINLINE

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

12/8/2017 1:03:07:01 WK10RT.DGN

FMS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PHASE 2

EARTHWORK TOTAL THIS SHEET		
Cut	5239	Cu.Yds
Fill	11535	Cu.Yds
Excess		Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		6
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		37

PHASE 1

EARTHWORK TOTAL THIS SHEET		
Cut		Cu.Yds
Fill		Cu.Yds
Excess	550	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

EARTHWORK TOTAL THIS SHEET		
Cut	5239	Cu.Yds
Fill	11535	Cu.Yds
Excess	550	Cu.Yds
Surplus		Cu.Yds
Borrow( )		Cu.Yds

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION PLAN-PROFILE

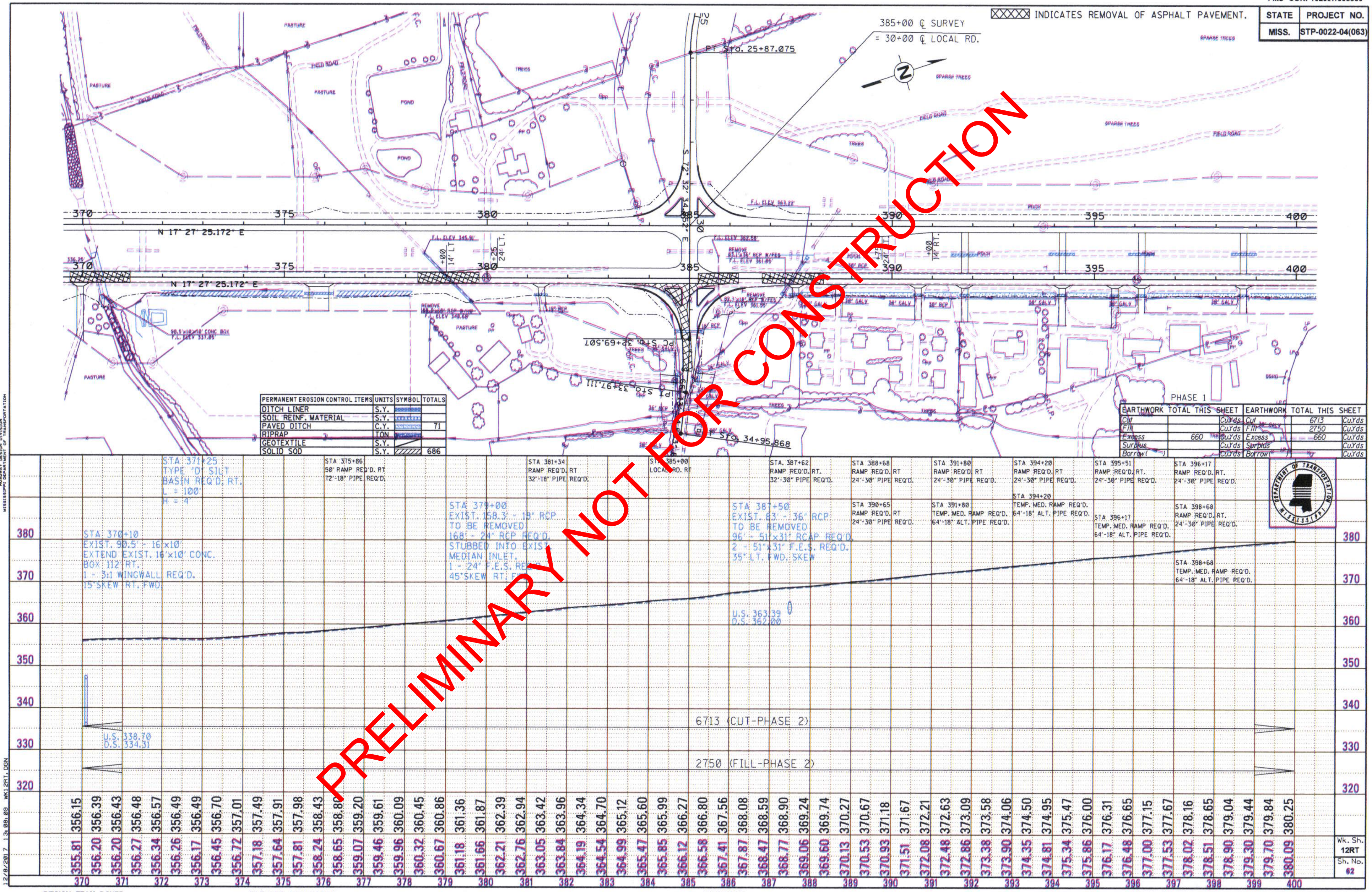
12/8/2017 13:07:53 WK11RT.DGN

Wk. Sh. 11RT
Sh. No. 58

DESIGN TEAM: DOVER FILENAME: WK11RT.DGN COUNTY: PONTOTOC PROJECT NO.: STP-0022-04-04(063) SHEET ID: HWY. 15 MAINLINE

FMS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		
PAVED DITCH	C.Y.		71
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		686

PHASE 1

EARTHWORK TOTAL THIS SHEET			EARTHWORK TOTAL THIS SHEET		
Cut		Cu.Yds	Cut	6713	Cu.Yds
Fill		Cu.Yds	Fill	2750	Cu.Yds
Excess	660	Cu.Yds	Excess	660	Cu.Yds
Surplus		Cu.Yds	Surplus		Cu.Yds
Borrow( )		Cu.Yds	Borrow( )		Cu.Yds

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

12/8/2017 13:08:09 WK12RT.DGN

Wk. Sh. 12RT
Sh. No. 62

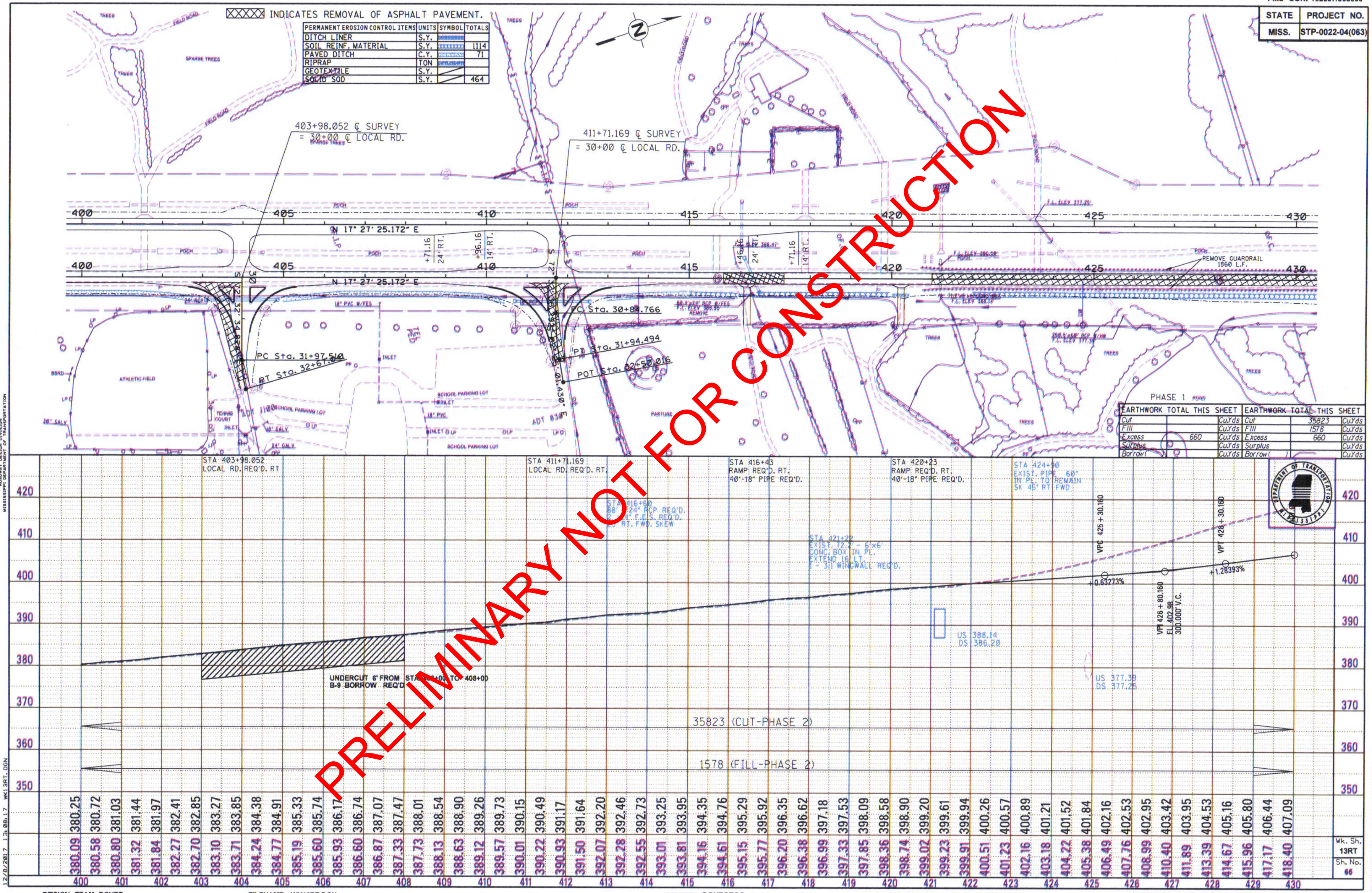
DESIGN TEAM: DOVER | FILENAME: WK12RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE

FMS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)

XXXXX INDICATES REMOVAL OF ASPHALT PAVEMENT.

PERMANENT EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		1114
PAVED DITCH	C.Y.		71
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		464



403+98.052 ℄ SURVEY = 30+00 ℄ LOCAL RD.
411+71.169 ℄ SURVEY = 30+00 ℄ LOCAL RD.
N 17° 27' 25.172" E
PC Sta. 31+97.510
PT Sta. 32+67.8
PC Sta. 30+88.766
PT Sta. 31+94.494
POT Sta. 32+50.016
REMOVE GUARDRAIL 1860 L.F.
ATHLETIC FIELD
SCHOOL PARKING LOT
PASTURE
TREES
FIELD ROAD
SPARSE TREES
STA 403+98.052 LOCAL RD. REQ'D. RT
STA 411+71.169 LOCAL RD. REQ'D. RT.
STA 416+43 RAMP REQ'D. RT. 40'-18" PIPE REQ'D.
STA 420+23 RAMP REQ'D. RT. 40'-18" PIPE REQ'D.
STA 424+90 EXIST. PIPE 60" IN PL. TO REMAIN SK 45° RT FWD
STA 421+22 EXIST. 12.2' - 6'x6' CONC. BOX IN PL. EXTEND 16' LT. 1 - 31 WINGWALL REQ'D.
UNDERCUT 6' FROM STA 403+00 TO 408+00 B-9 BORROW REQ'D
US 388.14 DS 386.20
US 377.39 DS 377.25
VPC 425+30.160
VPI 426+80.160 EL 402.98 300.000' V.C.
VPT 428+30.160
+0.63273%
+1.28393%
35823 (CUT-PHASE 2)
1578 (FILL-PHASE 2)
380.25 380.72 381.03 381.44 381.97 382.41 382.85 383.27 383.85 384.38 384.91 385.33 385.74 386.17 386.74 387.07 387.47 388.01 388.54 388.90 389.26 389.73 390.15 390.49 391.17 391.64 392.20 392.46 392.73 393.25 393.95 394.35 394.76 395.29 395.92 396.35 396.62 397.18 397.53 398.09 398.58 398.90 399.20 399.61 399.94 400.26 400.57 400.89 401.21 401.52 401.84 402.16 402.53 402.95 403.42 403.95 404.53 405.16 405.80 406.44 407.09
380.09 380.58 380.80 381.32 381.84 382.27 382.70 383.10 383.71 384.24 384.77 385.19 385.60 385.93 386.60 386.87 387.33 387.73 388.13 388.63 389.12 389.57 390.01 390.22 390.93 391.50 392.07 392.28 392.55 393.01 393.81 394.16 394.61 395.15 395.77 396.20 396.38 396.99 397.33 397.85 398.36 398.74 399.02 399.23 399.91 400.51 401.23 402.16 403.18 404.22 405.38 406.49 407.76 408.99 410.40 411.89 413.39 414.67 415.96 417.17 418.40
PRELIMINARY NOT FOR CONSTRUCTION

PHASE 1

EARTHWORK TOTAL THIS SHEET			EARTHWORK TOTAL THIS SHEET		
Cut		Cu.Yds	Cut	35823	Cu.Yds
Fill		Cu.Yds	Fill	1578	Cu.Yds
Excess	660	Cu.Yds	Excess	660	Cu.Yds
Surplus		Cu.Yds	Surplus		Cu.Yds
Borrow( )		Cu.Yds	Borrow( )		Cu.Yds

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

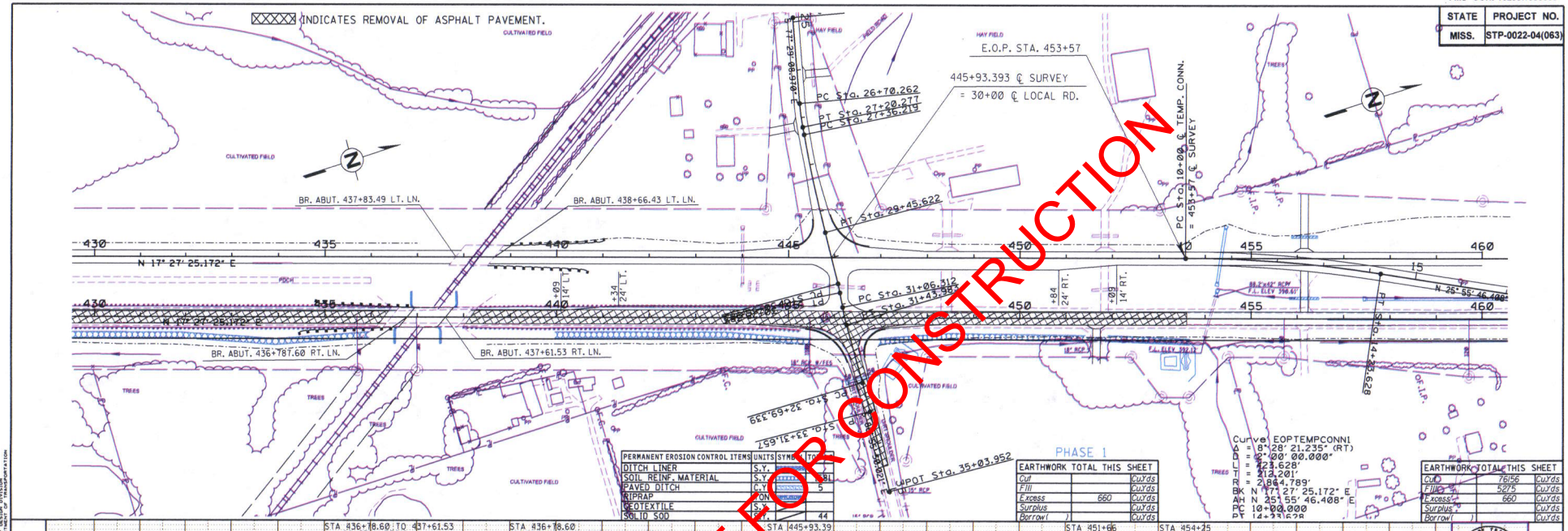
12/8/2017 WK13RT.DGN

Wk. Sh. 13RT
Sh. No. 66

DESIGN TEAM: DOVER | FILENAME: WK13RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE

FMS CON: 102607/303000

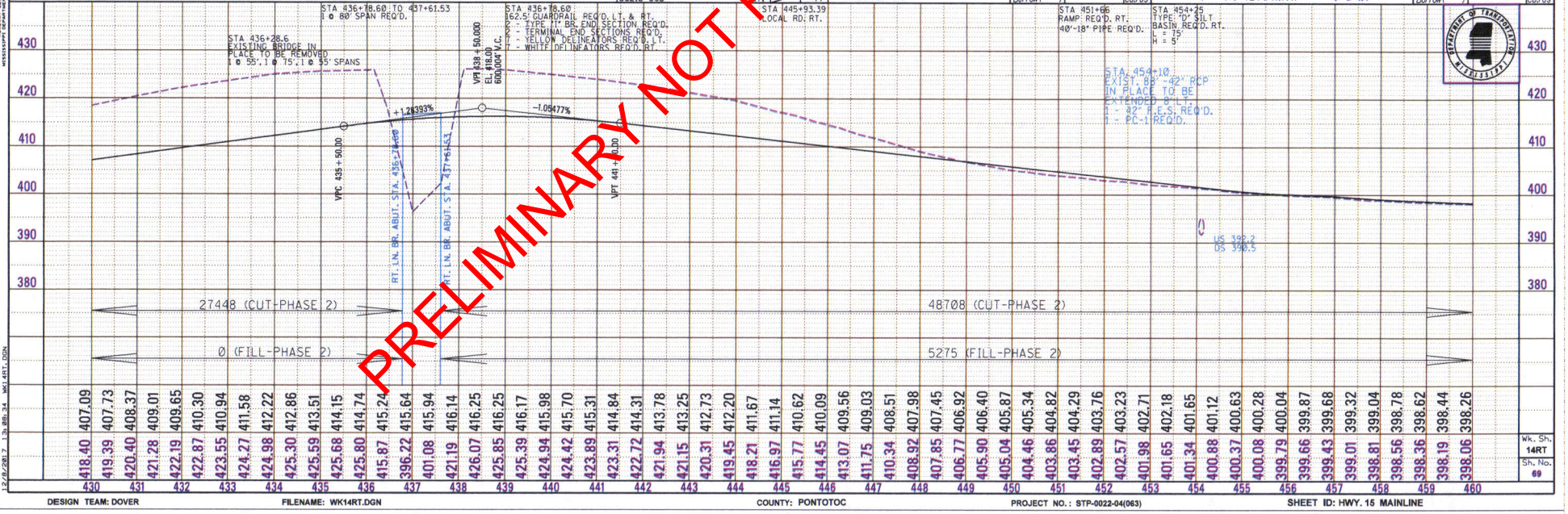
STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PERMANENT EROSION CONTROL ITEMS	UNITS	SYMB.	TOTAL
DITCH LINER	S.Y.		
SOIL REINF. MATERIAL	S.Y.		681
PAVED DITCH	C.Y.		5
RIPRAP	TON		
GEOTEXTILE	S.Y.		
SOLID SOD	S.Y.		44

EARTHWORK TOTAL THIS SHEET		
Cut		CuYds
Fill		CuYds
Excess	660	CuYds
Surplus		CuYds
Borrow( )		CuYds

EARTHWORK TOTAL THIS SHEET		
Cut	76156	CuYds
Fill	5275	CuYds
Excess	660	CuYds
Surplus		CuYds
Borrow( )		CuYds



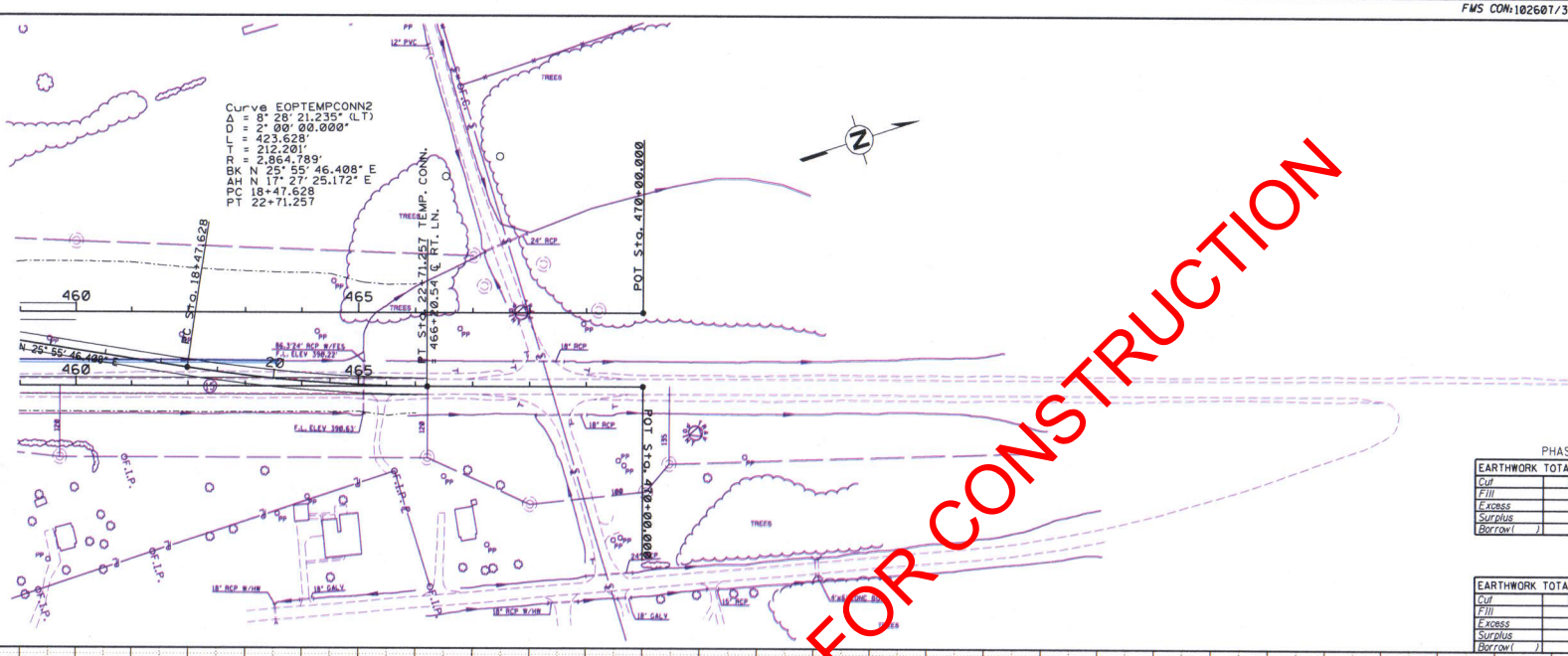
PRELIMINARY NOT FOR CONSTRUCTION

Wk. Sh. 14RT
Sh. No. 69

DESIGN TEAM: DOVER | FILENAME: WK14RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE

FWS CON: 102607/303000

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



PHASE 1

EARTHWORK TOTAL THIS PROJECT		
Cut	194370	CuYds
Fill	67666	CuYds
Excess		CuYds
Surplus		CuYds
Borrow( )		CuYds

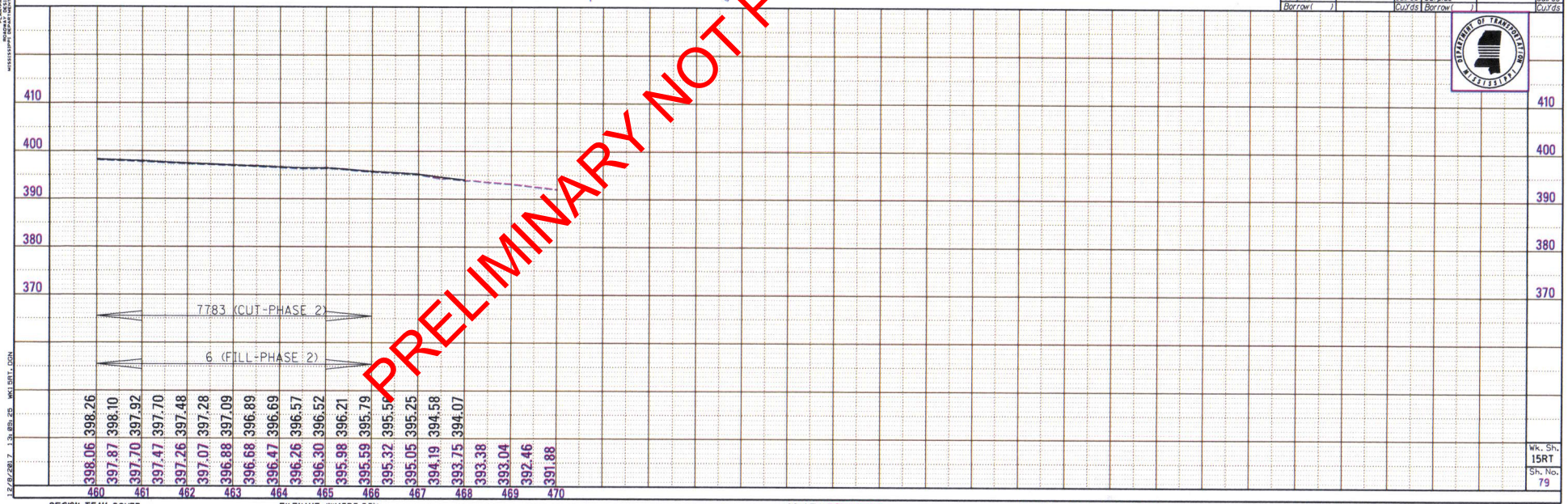
PHASE 2

EARTHWORK TOTAL THIS SHEET			EARTHWORK TOTAL THIS PROJECT		
Cut	7783	CuYds	Cut	194370	CuYds
Fill	6	CuYds	Fill	67666	CuYds
Excess		CuYds	Excess		CuYds
Surplus		CuYds	Surplus		CuYds
Borrow( )		CuYds	Borrow( )		CuYds

PHASE 2

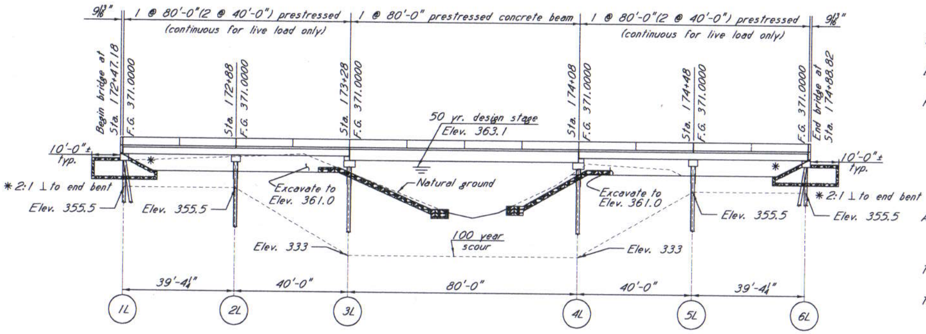
EARTHWORK TOTAL THIS SHEET			EARTHWORK TOTAL THIS PROJECT		
Cut	7783	CuYds	Cut	194370	CuYds
Fill	6	CuYds	Fill	67666	CuYds
Excess		CuYds	Excess		CuYds
Surplus		CuYds	Surplus		CuYds
Borrow( )		CuYds	Borrow( )		CuYds

PRELIMINARY NOT FOR CONSTRUCTION



Wk. Sh. 15RT
Sh. No. 79

DESIGN TEAM: DOVER | FILENAME: WK15RT.DGN | COUNTY: PONTOTOC | PROJECT NO.: STP-0022-04(063) | SHEET ID: HWY. 15 MAINLINE



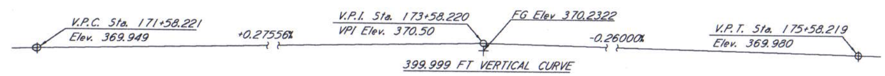
ELEVATION WITH PROFILE ALONG ℄ APPROACH ROADWAY LEFT LANE
Scale: 1" = 20'-0"

PDA TEST PILE SCHEDULE

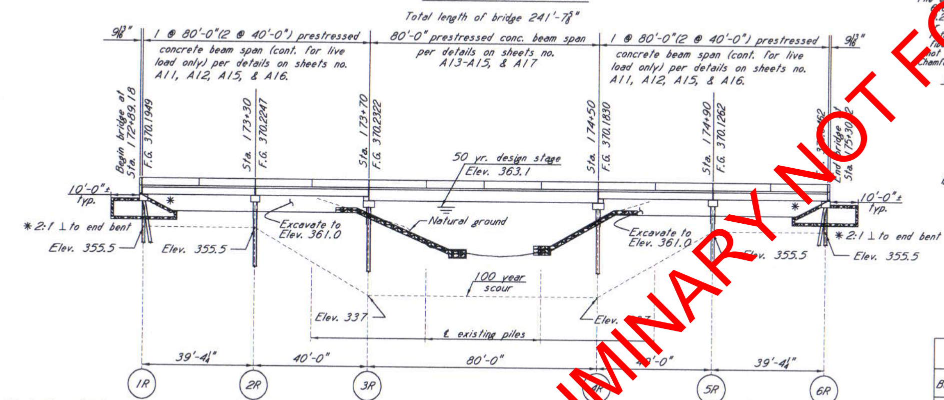
Bent No.	Min. Lgth.~Ft.	Tip Elevation
1R	45	320.3
3R	60	303.8
5R	45	319.9

NOTE: Build Right Lane Only This Project.

NOTE:
Geotextile fabric is required under all riprap. All riprap and geotextile fabric shown on the bridge plans are included in the bridge quantities.



Total length of bridge 241'-7⅜"



Steel pile endbent no. 1R per details on sheets no. A4 & A6. 10 ~ HP12x84 steel piles.

Steel pile intermediate bents no. 2R & 5R per details on sheet no. A7. 6 ~ HP14x117 steel piles per bent.

Steel pile intermediate bents no. 3R & 4R per details on sheets no. A8, A9, & A10. 6 ~ HP14x117 steel piles per bent.

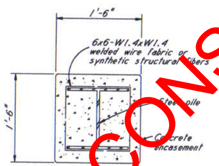
Steel pile endbent no. 6R per details on sheets no. A5 & A6. 10 ~ HP12x84 steel piles.

ELEVATION WITH PROFILE ALONG ℄ APPROACH ROADWAY RIGHT LANE
Scale: 1" = 20'-0"

ESTIMATED QUANTITIES ~ RT. LN.

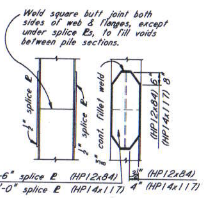
Item / Location	Transverse Grooving (Sq. Yd.)	Conventional Static Pile Load Test (Each)	HP 12x84 Steel Piling (L.F.)	HP 14x117 Steel Piling (L.F.)	PDA Test Piles (Each)	Pile Restrike (Each)	Class "AA" Bridge Concrete (C.Y.)	Class "BD" Bridge Concrete (C.Y.)	40 Foot Prest. Conc. Type I + 2 Beams (L.F.)	80 Foot Prest. Conc. Type III Beams (L.F.)	Reinforcement (Lb.)	Concrete Railing (L.F.)	Loose Riprap Size 300 (Ton)	Geotextile Under Riprap (S.Y.)
Spans	960.0							285.18	947.0	478.5	56448	480.00		
End Bents			810.0		1	1	47.28				7908	3.11	262.0	386.0
Int. Bents		1		965.0	2	1	86.69				9331			
Totals	960.0	1	810.0	965.0	3	2	133.97	285.18	947.0	478.5	73687	483.11	262.0	386.0

NOTE:
The girder deflection diagrams shown in these plans were prepared and intended for design and estimation purposes only. Actual bridge girder deflections may differ from the deflection diagrams shown in these plans.
It is the Contractor's responsibility to construct the bridge to meet the requirements of the plans and specifications including, but not limited to, the requirements for bridge deck smoothness.
Prior to formwork construction, the Contractor shall submit three (3) copies of a proposed BRIDGE SUPERSTRUCTURE CONSTRUCTION PLAN to the Director of Structures, State Bridge Engineer for review, through the Project Engineer. This submittal shall include all calculations, assumptions and parameters used by the Contractor to determine bridge girder deflections and form grade elevations. This submittal shall also include an erection and construction procedure that addresses the construction means and methodologies used by the Contractor and shall consider effects including, but not limited to, construction phasing, pouring schedules, applied permanent and construction loading, and shall include calculations and details of temporary girder bracing systems used to ensure girder stability and to counter the effects of girder tilt.
After girder erection and prior to deck construction, the Contractor shall submit deck thickness verification calculations for each girder. These calculations shall include a comparison of the erected girder top flange profiles versus the plan deck grade elevations over each girder plus the anticipated girder deflection due to applied permanent dead load and creep.
Three (3) copies of the deck thickness verification calculations and any proposed remediation measures to correct for thin deck areas shall be submitted to the Director of Structures, State Bridge Engineer for review, through the Project Engineer.
The BRIDGE SUPERSTRUCTURE CONSTRUCTION PLAN and the deck thickness verification calculations shall be prepared and stamped by a Mississippi Registered Professional Engineer.



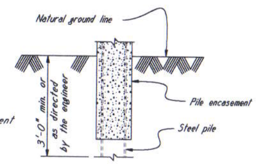
NOTE:
Concrete for pile encasement shall be class "AA" and will be paid for as bridge concrete.
Class "AA" concrete with #67 aggregate may be used for pile encasement.
Pile encasement shall be reinforced with 6x6-W1.4xW1.4 welded wire fabric weighing 0.21 lbs. per sq. ft. (not a separate pay item) or synthetic structural fiber applied at a dosage rate of [illegible] lbs. per cubic yd. Synthetic structural fiber shall meet requirements of Section 7-11 (not a separate pay item).
Chamfer corners of encasement ¾".

PILE ENCASEMENT DETAIL
HP14x117 steel piles

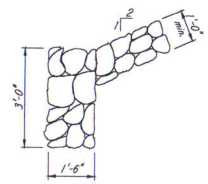


PILE SPLICE DETAIL
HP12x84 steel piles
HP14x117 steel piles

NOTE: In lieu of splice plates, prefabricated splicers may be used. Prefabricated splicers shall be submitted for approval by the Director of Structures, State Bridge Engineer.



PILE ENCASEMENT DETAIL



RIPRAP TOE DETAILS

REQUIRED ULTIMATE PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE

Bent no.	Steel piling	Req'd. bearing (tons)	Tip elevation	Estimated length	Controlling limit state	LRFD resistive factor
1R	HP 12X84	115	330.3	35	Strength I	0.65
2R	HP 14X117	152	330.0	35	Strength I	0.65
3R	HP 14X117	179	313.8	50	Strength I	0.65
4R	HP 14X117	179	314.7	50	Strength I	0.65
5R	HP 14X117	152	329.9	35	Strength I	0.65
6R	HP 12X84	115	330.2	35	Strength I	0.65

500 YEAR SCOUR

Bent No.	Elevation
1R	354.5
2R	354.5
3R	333.0
4R	333.0
5R	354.5
6R	354.5

STATE	PROJECT NO.
MISS.	STP-0022-04(063)

GENERAL NOTES:
Mississippi Standard Specifications for Road and Bridge Construction, 2017.
No change of plans will be permitted except by written approval of the Director of Structures, State Bridge Engineer. Minor changes in detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not be cause for contract price adjustment.
The final surface texture of the bridge deck shall be mechanically transverse grooved in accordance with Sections 501 and 804 of the specifications. See Misc. Span Details for limits of transverse grooving on bridge deck.
Bridge concrete shall be class "AA" and "BD" as indicated in plans.
Railing expansion joint material shall be bituminous fiber type unless otherwise noted.
No payment will be allowed for excavation incidental to the construction of end bents.
Bar bending details shall be in accordance with "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (ACI 315R-94).
Reinforcement order lists and required placing plans shall be furnished in accordance with Section 805 of the Mississippi Standard Specifications. Partial submittals are not acceptable.
Shop drawings of prestressed beams, including an erection plan, shall be submitted in duplicate to the Director of Structures, State Bridge Engineer for approval prior to the manufacture of beams.
The Fabricator shall provide camber data at release and immediately prior to shipping.
The Contractor shall provide camber data after erection. The Contractor should be aware that the deflection diagram may be modified based on the provided camber data. Therefore, deck grades should be set only after notification from the Director of Structures, State Bridge Engineer.
Concrete surfaces shall receive a Class 2 rubbed or spray finish in accordance with the specifications.
Reinforcing steel shall be ASTM A615, Grade 60, unless otherwise noted.
Work for which no pay item is provided in the proposal will not be paid for directly and compensation therefor will be included in the prices and payments for bid items.

PILE NOTES:
Test piles shall be driven as permanent piles at the location shown in the PDA TEST PILE SCHEDULE and will be paid for as test piles only.
The Director of Structures, State Bridge Engineer may authorize test piles driven outside the structural limits.
Test piles shall be driven as a continuous operation, to the bearing capacity and the tip elevations shown in the PDA TEST PILE SCHEDULE, unless otherwise directed by the Director of Structures, State Bridge Engineer.
Permanent piles shall be driven to an elevation no higher than the elevation shown in the REQUIRED ULTIMATE PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE.
The tip elevation of piling, for hydraulic structures, may be determined by the scour line.
When feasible, bearing piles shall be driven full length and be spliced, only, as approved by the Director of Structures, State Bridge Engineer.
Welding shall be done by the ELECTRIC ARC process. Welders shall be certified and electrodes shall be approved.
When loading tests are required, the maximum test load shall be one and one half (1½) times the minimum pile bearing capacity.
PDA test piles shall require a 1 day and 7 day restrike unless otherwise directed by the Engineer.
Pile lengths and driving criteria shall be provided based on the results of the PDA test piles.
The required ultimate pile bearing shown in the REQUIRED ULTIMATE PILE BEARING AND TIP ELEVATION SCHEDULE includes the LRFD resistance factor for PDA of 0.65.
Pile hammer leads used for all PDA test piles and PDA restrikes shall be large enough to provide a minimum of 3" of clearance on each side of the pile in order to properly place and protect PDA gages.

DRAINAGE DATA:
Drainage Area . . . . 12.3 sq. mi.
Q50 (U.S.G.S.) . . . . 4070 cfs
Effective Area Provided . . 704.1 sq. ft.

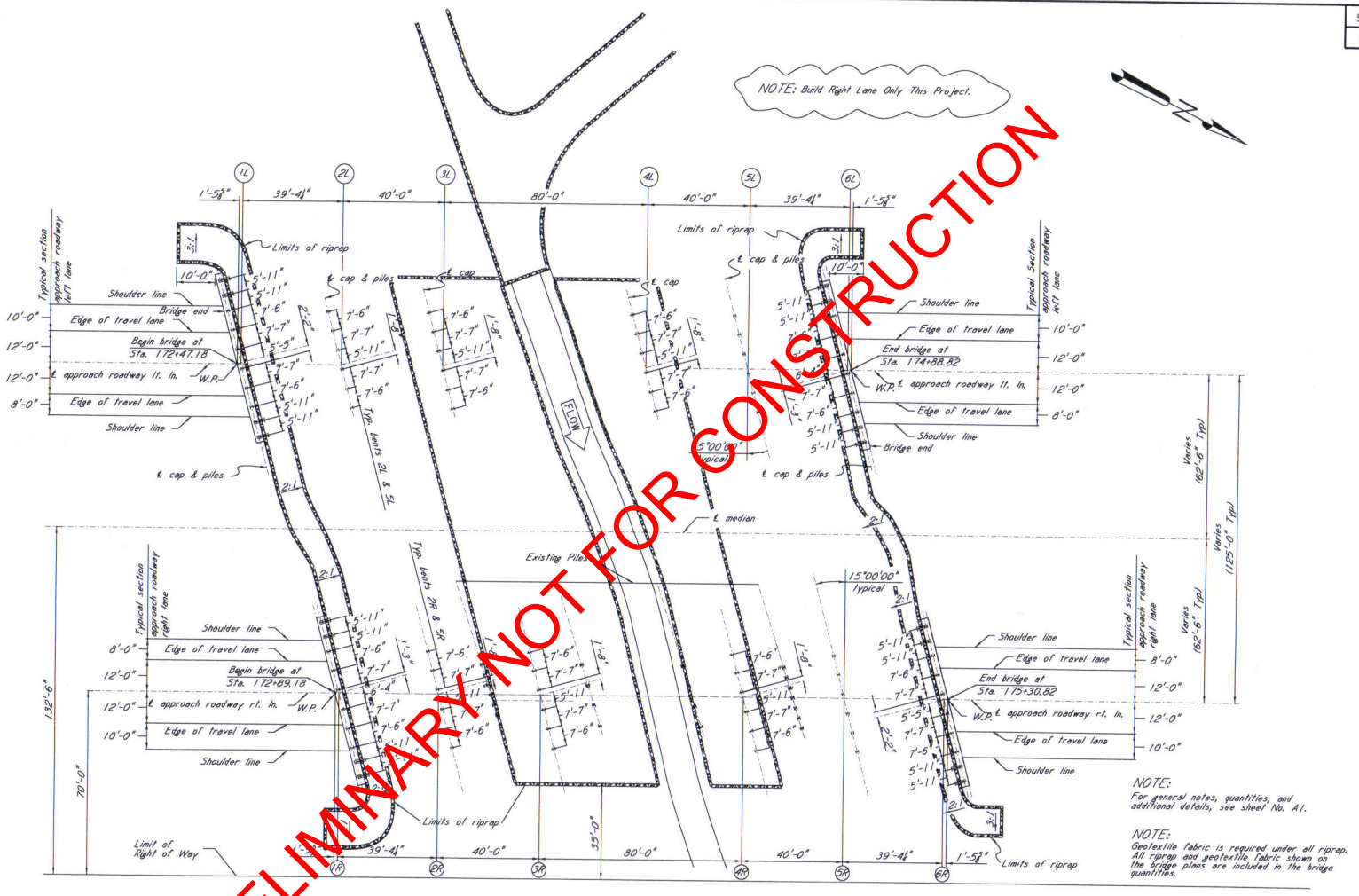
DESIGN DATA:
Specifications . . . . A.A.S.H.T.O. LRFD, 2014 with 2016 Interims
Loading HL-93
Roadway width . . . . . . 40'-0" Gutter to gutter
Stay-in-place metal forms. . . . . . 18 lbs/sf
Concrete . . . . .Class "AA" (4,000 psi)
Class "BD" (4,000 psi)
Siesmic performance zone. I
Siesmic soil site class C
Siesmic operational class . . . . . OTHER

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY NOT FOR CONSTRUCTION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BRIDGE AT STA. 172+89.18 RT. LN.
SR 15 OVER LAPPATUBBY CREEK BRIDGE NO. 281.7
FMS: 102607 / 303000
COUNTY: Pontotoc
PROJECT NUMBER: STP-0022-04(063)
DESIGNER Adam Jackson CHECKER Spencer Yates
DETAILER Andy Hilton ISSUE DATE 9/13/2017
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.
BY / REVISION / DATE
WORKING NUMBER A1 OF A17
SHEET NUMBER 8003

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



FOUNDATION PLAN ~ LEFT LANE & RIGHT LANE
Scale: 1"= 20'-0"

NOTE:
For general notes, quantities, and additional details, see sheet No. A1.

NOTE:
Geotextile fabric is required under all riprap. All riprap and geotextile fabric shown on the bridge plans are included in the bridge quantities.

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BRIDGE AT STA. 172+89.18
RT. LN.
SR 15 OVER LAPPATUBBY CREEK
BRIDGE NO. 281.7
FMS: 102607 / 303000
COUNTY: Pontotoc
PROJECT NUMBER: STP-0022-04(063)

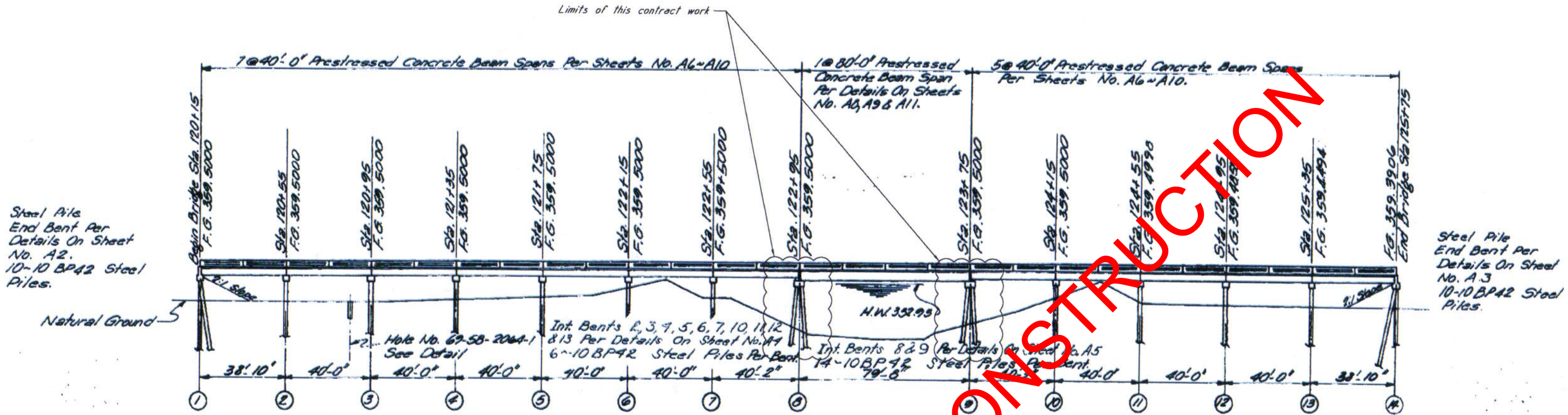
REVISION	BY	DATE

DESIGNER Adam Jackson CHECKER Spencer Yates
DETAILER Andy Hilton ISSUE DATE 9/13/2017
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

WORKING NUMBER A2 OF A17
SHEET NUMBER 8004

PLAN BRIDGE DESIGN MISSISSIPPI DEPARTMENT OF TRANSPORTATION
8/29, 08:04PM DGNFILENAME

STATE	PROJECT NO.
MISS.	STP-0022-04(063)



ELEVATION – WITH PROFILE ALONG ℄ SURVEY

INFORMATION PLANS:

Original plans (Proj. No. S-0179(7)A) sheets Elevation ME-400H, MC-420, SP-420, ME-420H & MP-420-H. For information plans see sheet nos. A4-A5.

ESTIMATED QUANTITIES			
PAY ITEM CODE	DESCRIPTION	QUANTITIES	UNIT
907-824-PP008	Bridge Repair, Pile Encasement Repairs, Per Plans	739	L.F.
907-824-PP006	Bridge Repair, Cleaning of Caps	14	Each
907-824-PP005	Bridge Repair, Epoxy Mortar Repair	3	C.F.

SCOPE OF WORK:

1. Excavate 3'-0" below the natural ground around each pile at bent 8 & 9.
2. Remove all unsound concrete from existing pile encasements including any below natural ground at bent 8 & 9.
3. Form and pour new pile encasements at bent 8 & 9 per details on sheet no. 8021.
4. Fill all excavated locations with existing cut materials as directed by the Project Engineer.
5. Pressure wash and clean all debris from existing caps and bearings.
6. Repair all concrete spall areas as directed by the project engineer with epoxy mortar.

MAINTENANCE OF TRAFFIC:

Maintain traffic in accordance with Section 618 of the 2017 edition of The Standard Specifications For Road And Bridge Construction, Part IV of the "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" and the Traffic Control Plans included in these plans.

CAP CLEANING NOTE:

Cap Cleaning should be performed by removing all large debris by hand. All other debris (dirt & rust) shall be removed by pressure washing the bent caps to the satisfaction of the project engineer. The pressure washer shall be able to maintain 3,500 psi of pressure.

GENERAL NOTES:

1. Specifications: Mississippi Standard Specifications for Road and Bridge Construction, 2017.
2. No change of plans will be permitted except by written approval of the Director of Structures, State Bridge Engineer. Minor changes of detail of design or construction procedure may be authorized by the Director of Structures, State Bridge Engineer provided such changes will not cause for contract price adjustment.
3. All pile encasement concrete shall be class "AA".
4. Exposed surface of new concrete shall receive a Class I finish in accordance with the specifications. Match existing finish as nearly as possible.
5. Chamfer all edges 3/4" unless otherwise noted.
6. Bar bending details shall be in accordance with "Manual of Standard Practice for Detailing Reinforced Concrete Structures" (AI 315-80).
7. Reinforcing steel shall be ATM A615, Grade 60, unless otherwise noted.
8. All area of concrete that will be in contact with new concrete shall be coated with epoxy binder designed to bond new concrete to old. Epoxy shall be applied according to manufacturer's directions.
9. Prior to construction, dimensions and elevations of the existing structure shall be field verified by the Contractor. The Contractor shall be responsible for adjusting the elements of the new construction to ensure proper fit with existing structure.
10. All dimensions and details for the new structure shall be in accordance with the original plans that are attached as information plans except as otherwise noted in these plans.
11. Any damage that occurs to the existing structure during the duration of the project shall be repaired to the satisfaction of the Project Engineer by the Contractor at no additional cost to the state.
12. For the duration of the project, care shall be exercised to ensure that no debris falls into the hydraulic crossing below the structure. The debris that is removed from the bridge shall become the property of the Contractor and shall be removed from the construction site.
13. Work for which no pay item is provided in the proposal will not be paid for directly and compensation therefore will be included in the prices and payments for bid items.

EPOXY MORTAR NOTES:

1. Repair spalled concrete or unsound areas on the bridge as directed by the Project Engineer using epoxy mortar.
2. Repair areas shall include, but are not limited to, the concrete drop slabs on the underside of the bridge deck.
3. Spalled areas where pack rust has developed around or on reinforcement shall be removed by small hand tools or pressure washing (using 3,500 psi pressure).
4. All areas of the bridge repaired with epoxy mortar shall be restord to the original dimensions and details on the information plans.

Materials:

a. Epoxy resign: resin shall be selected from the MDOT approved materials list.
b. Silica sand: the material shall be bagged general purpose blast cleaning sand.
c. Epoxy mortar mix: the epoxy mortar mix shall consist of part liquid epoxy and part clean, dry sand mixed in the ratio recommended by the manufacturer.

Application:

a. Representative of the epoxy manufacturer must be present for sufficient time to ensure that the contractor is properly schooled in the use of the epoxy materials.
b. Prior to placement of the mortar mix the prepared surface shall be lightly primed with neat epoxy.
c. Acetone alcohol may be used to clean and lubricate trowels.
d. Curing time shall be in accordance with manufacturer's recommendations.

PRELIMINARY NOT FOR CONSTRUCTION

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NOT FOR
CONSTRUCTION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE AT STA. 120+15.00
SR 15 over Lappatubby Creek
Bridge Repair
Layout

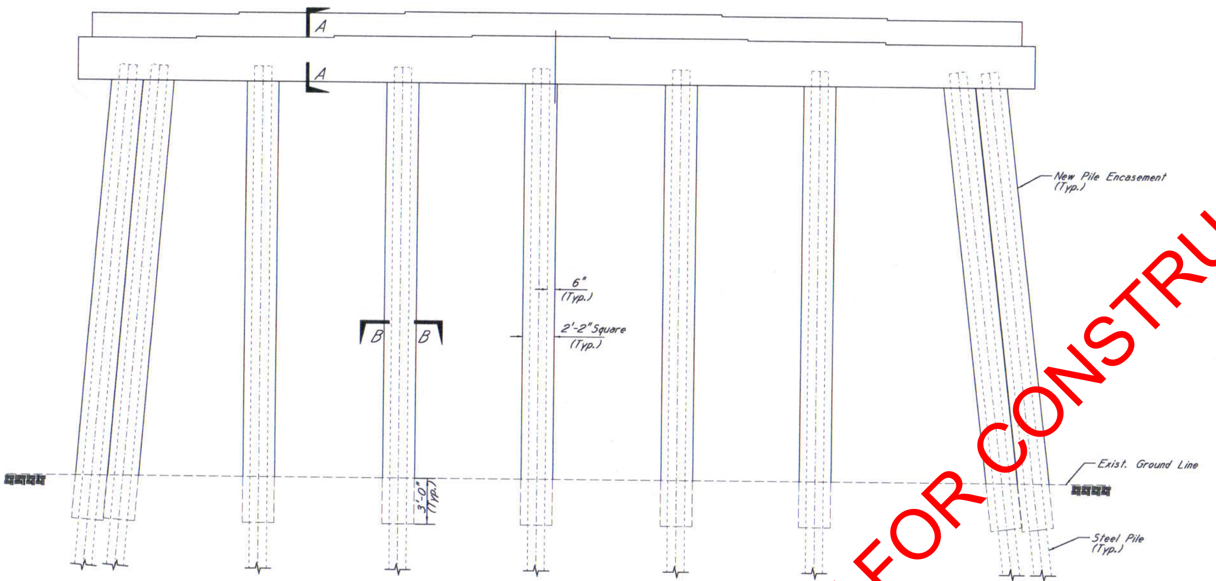
FMS: **102607 / 303000**
COUNTY: **Pontotoc**
PROJECT NUMBER: **STP-0022-04(063)**

DESIGNER Andy Hilton CHECKER Paul Dees
DETAILER Andy Hilton ISSUE DATE 2017-09-08
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

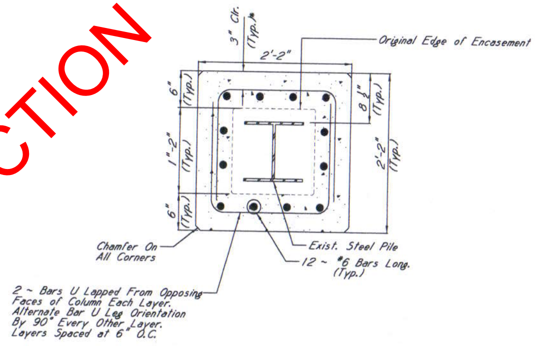
WORKING NUMBER B1 OF B2
SHEET NUMBER 8020

REVISION | BY | DATE

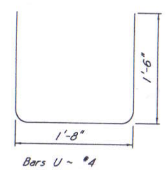
STATE	PROJECT NO.
MISS.	STP-0022-04(063)



ELEVATION - INTERMEDIATE BENTS 8 & 9

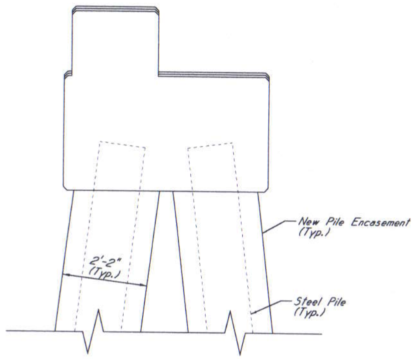


SECTION B-B
PILE ENCASEMENT REPAIR DETAIL
Dimensions are out to out



BAR BENDING DETAILS
Dimensions are out to out

NOTE:
Excavation around piles will not be paid for directly and shall be adsorbed into pay item no. 907-824-PP008 pile encasement repairs.



SECTION A-A

CONCRETE NOTE:
Concrete for pile encasement shall be class "AA". Class "AA" Concrete With #67 Aggregate May Be Used For Pile Encasement.

CHAMFER NOTE:
Chamfered corners of encasement 3/4 except when using stay-in-place forms.

ENCASEMENT FORM NOTES:
Nonrigid encasement forms will not be permitted.
Encasement forms shall be removed unless fiberglass reinforced stay-in-place encasement forms are utilized.
A. If the Contractor elects to use the fiberglass reinforced stay encasement forms, the Contractor shall submit to the Director of Structures, State Bridge Engineer technical data for the fiberglass forms to be used on the porject for review and approval.
B. The fiberglass reinforced pile jacket shall be installed according to the manufacturer's recommendations. The concrete specified on this sheet shall be used for construction of the encasement.
C. A representative of the manufacturer shall be present for sufficient time to ensure that the Contractor is properly schooled in the proper installation of the pile jacket.

ENCASEMENT NOTE:
Length of the New Pile Encasement is based on information gathered from Bridge Inspection Report dated 4/25/2017 (for estimating purposes only). The Contractor is responsible for verifying all dimensions of the existing structure and adjusting the elements of the new construction to ensure a proper fit with the existing structure.

PRELIMINARY NOT FOR CONSTRUCTION

PRELIMINARY
NOT FOR
CONSTRUCTION

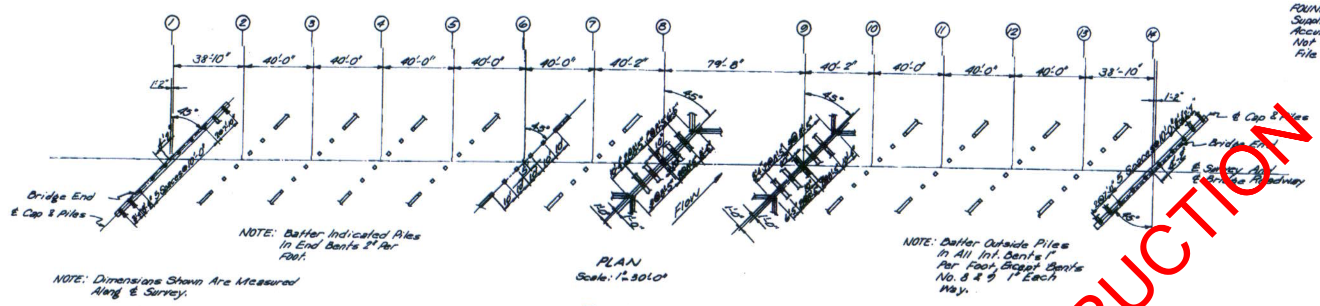
BY
REVISION
DATE

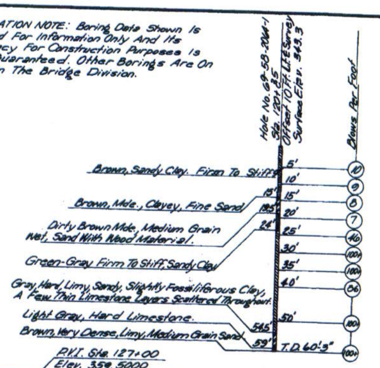
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BRIDGE AT STA. 120+15.00
Pile Encasement Repair Details
Bent 8 & 9
FMS: 102607 / 303000
COUNTY: Pontotoc
PROJECT NUMBER: STP-0022-04(063)
DESIGNER Andy Hilton
DETAILER Andy Hilton
CHECKER Paul Dees
ISSUE DATE 2017-09-08
DIRECTOR OF STRUCTURES, STATE BRIDGE ENGINEER - JUSTIN WALKER, P.E.
DEP. DIR. OF STRUCTURES, ASST. STATE BRIDGE ENGINEER - SCOTT WESTERFIELD, P.E.

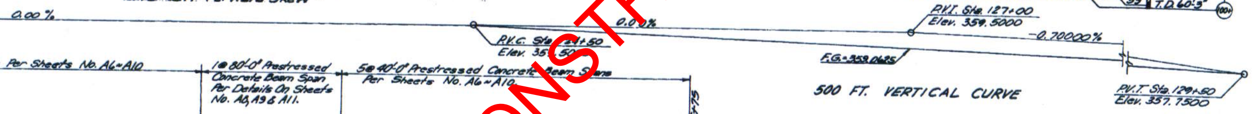
WORKING NUMBER
B2 OF B2
SHEET NUMBER
8021

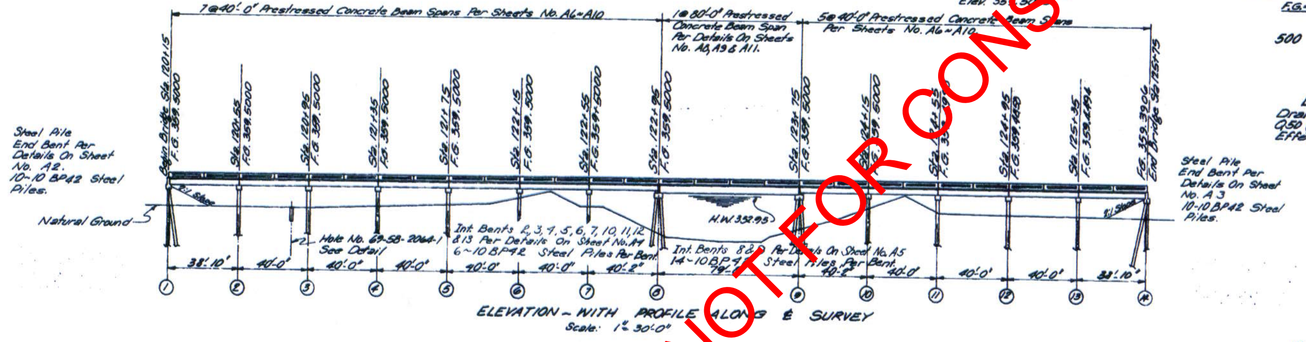
PRELIMINARY NOT FOR CONSTRUCTION

FOUNDATION NOTE: Boring Data Shown Is Supplied For Information Only And Its Accuracy For Construction Purposes Is Not Guaranteed. Other Borings Are On File In The Bridge Division.









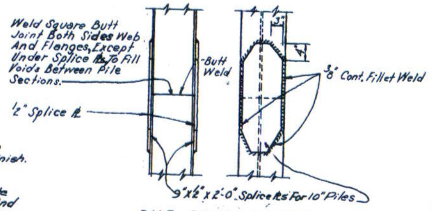
End Bents - 10BP42 Steel: 45'
Single Pile Bents - 10BP42 Steel: 45'
Double Pile Bents - 10BP42 Steel: 45'

DRAINAGE DATA
Drainage Area: 48.6 Sq. Mi.
Q50 (U.S.G.S.): 10,400 c.f.s.
Effective Area: 3,070 Sq. Ft.

SPECIAL PROVISIONS REQUIRED:
Sprayed Finish Alternate: No. 907-804-4
Vegetable Oil Coating: No. 907-806-1

DESIGN DATA:
Specifications ------ A.A.S.H.O. 1969
Loading ---------- HS 20-44
Roadway Width ------ 38'-6" Gutter To Gutter

MINIMUM PILE BEARING CAPACITY
End Bents ---------- 33 Tons
Int. Bents No. 8 & 9 ---------- 38 Tons
Int. Bents No. 2, 3, 4, 5, 6, 7, 10, 11, 12 & 13 ---------- 48 Tons



PILE SPLICE DETAILS

GENERAL NOTES:
Specifications: Mississippi State Highway Department, 1967.
No Change Of Plans Will Be Permitted, Except By Written Authority Of The Bridge Engineer. Minor Changes In Details Of Design Or Construction May Be Authorized In Writing By The Bridge Engineer, Provided Such Changes Are Not Justifiable Reason For Contract Price Adjustments.
Expansion Joint Material Shall Be Bituminous Fiber Type, Unless Otherwise Noted.
Finish Concrete Surfaces, Including Railings, In Accordance With Sub-Section 804.24. See Special Provision No. 907-804-4 For Alternate Sprayed Finish.
Steel Piles, Where Practicable, Shall Be Driven Full Length And Shall Not Be Spliced Except By Authority Of The Bridge Engineer.
Steel Piles Will Be Paid For At The Contract Price Per Linear Foot Complete In Place And No Additional Payment Will Be Allowed For Splicing And Welding. No Paint Is Required For Piles.
All Welding Shall Be Done By The Electric Arc Process.
Test Piles Shall Be Driven As Permanent Piles In Bents Nos. 2, 5, 7, 10 & 13 To A Minimum Bearing Capacity Of 48 Tons & To A Min. Penetration To El. 310± And Will Be Paid For As Test Piles Only.
Test Pile Data And Recommended Pile Lengths Shall Be Submitted To The Bridge Engineer For Approval.
Shop Drawings Of Prestressed Beams, Including An Erection Plan, Shall Be Submitted In Duplicate To The Bridge Engineer For Approval Prior To The Manufacture Of Beams.
No Payment Will Be Allowed For Excavation Incidental To Construction Of The End Bents.
Bar Bending Details Shall Be In Accordance With "Manual Of Standard Practice For Detailing Reinforced Concrete Structures" (ACI 315-57).
All Work For Which No Pay Items Are Provided In The Proposal Will Not Be Paid For Directly And Compensation Therefor Will Be Considered Included In The Prices And Payments For Bid Items.

ESTIMATED QUANTITIES

Item / Location	Class "B" Bridge Concrete Cu. Yds.	Reinforcement Lbs.	Concrete Railing Lin. Ft.	40 Ft. Prestressed Conc. Beams Lin. Ft.	80 Ft. Prestressed Conc. Beams Lin. Ft.	10 BP42 Steel Piling Lin. Ft.	10BP42 Steel Test Piles Units	Loading Test Units	Veg. Oil Coating Gal.
Spans	583.21	149,308	1,120	2,862.00	[illegible]8.25				
End Bents	46.17	4,952				900			
Int. Bents	298.17	22,753				3,785	5		
Totals	927.55	177,013	1,120	2,86[illegible].00	[illegible].25	4,685	5	1	184

MISSISSIPPI STATE HIGHWAY DEPARTMENT
BRIDGE AT STA. 120+15
MISS. 15 OVER LAPPATUBBY CREEK
PROJECT F-FG-022-4(11)
13-0022-04-011-10
PONTOTOC COUNTY
SUBMITTED BY ________ BRIDGE ENGINEER
DESIGNED R.H.L. DETAILED R.H.L. TRACED W.R.F.
CHECKED J.R.R. ISSUED ____ DATE 12-5-69
SHEET NUMBER A1 OF 11
14014

Dietzgen N. O. 195 Imperial Ink Cloth

FOR INFORMATION ONLY: PROJECT NO. STP-0022-04(063)   REVISED SHEET NO: 8022

Permit Conditions

Certification of Compliance
With Department of the Army Permit

Nationwide Permit Number:	RGP 46
Identification Number:	MVK-2016-00035
Name of Permittee:	MDOT
Issued Date:	January 26, 2016
Evaluator name:	Mr. Anthony Lobred
Expiration Date:	October 2, 2019

Upon completion of the activity authorized by this permit, sign this certification and return it to the following address:

USACE, Vicksburg District
ATTN: Regulatory Branch
4155 Clay Street
Vicksburg, Mississippi 39183-3435

Please note that your permitted activity is subject to a compliance inspection by an Army Corps of Engineers representative. If you fail to comply with this permit, you are subject to permit modification, suspension, or revocation.

I hereby certify that the work authorized by the above-referenced permit has been completed in accordance with the terms and conditions of the said permit including any required mitigation.

Date work was completed: _____

_____ _____
Signature of Permittee Date Signed

US Army Corps of Engineers
Vicksburg District
4155 Clay Street
Vicksburg, MS 39183-3435
www.mvk.usace.army.mil

GENERAL PERMIT

FILE NO.: GENERAL PERMIT – 46
DATE: October 2, 2014
EXPIRES: October 2, 2019

FOR: CONSTRUCTION AND STABILIZATION OF ROADWAY EMBANKMENTS AND BRIDGE ABUTMENTS IN WATERS OF THE UNITED STATES AND FOR THE ASSOCIATED DISCHARGE OF DREDGED AND FILL MATERIAL

WHERE: THE STATE OF MISSISSIPPI

BY WHOM: DISTRICT ENGINEER ON BEHALF OF THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION

The U.S. Army Corps of Engineers, Vicksburg District, is hereby reissuing a Department of the Army General Permit for the construction of roadway embankments and bridge abutments in waters of the United States performed by or having oversight from the Mississippi Department of Transportation within the State of Mississippi. This General Permit shall authorize activities such as the repair and stabilization of existing roadway embankments and bridge abutments; the installation of additional traffic lanes to existing roadways; the upgrading of bridges and other stream-crossing structures; and, construction along new alignments.

This action is being taken pursuant to Federal regulations printed in the Federal Register on November 13, 1986, concerning permits for activities in waters of the United States. These regulations state the U.S. Army Corps of Engineers' responsibility for regulating structures or work in or affecting waters of the United States under Section 10 of the Rivers and Harbors Act of 1899 (30 Stat. 1151; 33 U.S.C. 403) and Section 404 of the Clean Water Act (33 U.S.C. 1344).

An agreement was finalized between MDOT, FHWA, and the U.S. Army Corps of Engineers with concurrence from the appropriate Districts on December 12, 2008, which specifies that all MDOT projects within the State will be evaluated by the

Vicksburg District. The address is USACE, Vicksburg District, ATTN: Regulatory Branch, 4155 Clay Street, Vicksburg, Mississippi 39183-3435.

Upon expiration of the agreement, since portions of the State are within jurisdictional boundaries of five United States Army Corps of Engineers Districts (enclosure 1), subsequent authorizations to proceed with work proposed under this General Permit will be granted by letter from the appropriate District within whose boundaries the work will be located. The MDOT will be notified of any changes to the agreement and furnished the mailing address of each district.

This General Permit contains certain limitations intended to protect the environment and natural and cultural resources. Conformance with conditions contained in the General Permit does not necessarily guarantee authorization under this General Permit. In cases where the District Engineer considers it necessary, an application will be required for an individual permit. Construction, dredging, or fill operations not specifically covered by this General Permit would be prohibited unless authorized by a separate permit.

General Permits may be issued for a category or categories of activities when: (1) those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or (2) the General Permit would result in avoiding unnecessary duplication of the regulatory control exercised by another Federal, State, or local agency, provided it has been determined that the environmental consequences of the actions are individually and cumulatively minimal. The determination that the proposed activities comply with the requirements for the issuance of General Permits was made using information which is available for inspection at the office of the Vicksburg District's Regulatory Branch at 4155 Clay Street, Vicksburg, Mississippi.

In compliance with requirements of Section 401 of the Clean Water Act, the Vicksburg District has obtained water quality certification from the Mississippi Department of Environmental Quality (enclosure 2).

The Council on Environmental Quality (CEQ) has defined mitigation to include: avoiding impacts, minimizing impacts, rectifying impacts, reducing impacts over time, and compensating for impacts. Early in the design phase of projects to be authorized under this General Permit, avoidance and minimization of impacts to wetlands and other waters of the U.S. must be considered and the least environmentally damaging practicable alternative must be selected. The remaining impacts shall be compensated for to the maximum extent practicable. In order to compensate for any unavoidable losses of functions of jurisdictional waters of the United States associated with the work authorized by this General Permit; the Mississippi Department of Transportation shall develop a compensatory mitigation plan. The compensatory mitigation plan will be fully described in accordance with 33 CFR Parts 325 and 332, Compensatory Mitigation for Losses of Aquatic Resources; Final Rule, April 2008.

REQUEST FOR AUTHORIZATION UNDER THE GENERAL PERMIT: IN ORDER TO BE AUTHORIZED BY THIS GENERAL PERMIT, THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION WOULD BE REQUIRED TO SUBMIT TO THE DISTRICT ENGINEER, IN WRITING, THE FOLLOWING INFORMATION A MINIMUM OF 60 DAYS PRIOR TO THE PROPOSED BID ADVERTISEMENT DATE:

a. Statement of the number of the General Permit under which the work is to be conducted. (General Permit-46)

b. Statement that the work will be conducted in compliance with the terms and conditions of the General Permit, will not adversely impact adjoining properties, and will be mitigated for in accordance with the terms of this General Permit.

c. Location map showing the proposed worksite (including Section, Township, Range, and County).

d. A brief description of the proposed worksite in its present condition.

e. A brief description and 8 1/2- by 11-inch drawings of the proposed work including the method of construction or stabilization, the project dimensions, and amounts and types of excavated and fill material in cubic yards.

f. Estimated starting and completion dates of construction.

g. Name, mailing address, and telephone number of the person acting as the point of contact for the requested authorization.

h. If wetlands or other waters of the U.S. are to be impacted, the following information is required:

1. A map delineating the wetlands and other water of the U.S. and copies of the associated data form(s) for routine wetland determinations from the 1987 Corps of Engineers Wetland Delineation Manual and its subsequent Regional Supplement Manual(s) covering the proposed project area(s).

2. The type and date of approval of the environmental documentation by the Federal Highway Administration and a copy of their findings as required by Executive Order 11990.

i. If the combined acreage of wetlands at a single and complete project site exceeds 0.1 acre, the application shall include a compensatory mitigation plan based on an approved wetland functional assessment methodology which takes into account the habitat quality and quantity of the impacted area and the proposed mitigation area. Such recommendations shall include copies of all factual information (e.g. worksheets) used in performing the calculations of the

functional assessment. (Note: The District Engineer will consider this recommendation in making the final decision on compensatory mitigation measures).

j. If impacts to a natural waterway at a single and complete project site exceed 100 linear feet, MDOT shall include a compensatory mitigation plan based on an approved stream functional assessment methodology which takes into account the habitat quality and quantity of the impacted area and the proposed mitigation area.

k. Comments from the Mississippi Department of Wildlife, Fisheries and Parks, Mississippi Department of Archives and History, United States Fish and Wildlife Service, and the Mississippi Department of Environmental Quality on the project.

l. Concurrence in writing from the Mississippi Department of Marine Resources and the National Marine Fisheries Service, if the project is located in Hancock, Harrison, or Jackson County, Mississippi. (See Special Condition h below).

Upon receipt of this information, the District Engineer will evaluate the proposal and advise either that the work is authorized under the General Permit; will request additional information, or will advise that the proposed activity will require an individual permit. Included with the letter authorizing work under the General Permit will be the number of wetland acres, if any, which must be deducted from the mitigation bank.

Special Conditions:

a. No more than 7 acres of wetlands and other waters of the United States shall be directly impacted by the placement of fill at each single and complete crossing of a water of the United States where the proposed work involves either upgrading an existing highway within an established corridor or where the work is to be constructed along a new alignment. Any wetlands or other waters of the United States cut off from their natural hydrologic regime as a result of project work shall be considered as directly impacted.

b. For stream or river crossings, discharges of permanent fill material and temporary fill material shall be the minimum necessary to complete the crossing. The term fill refers to earthen material, riprap, concrete, and any other materials associated with the work.

c. The stabilization or construction work shall not interfere with navigation (including recreational boating) or adversely impact the flow-carrying capacity of the affected stream.

d. Material to be used for fill must be nonpolluting and may be obtained either

offsite or from site preparation. Offsite material shall not be obtained from wetlands outside the 7-acre limit or from other areas which may adversely affect adjacent wetlands. Any excess material shall be placed in an upland area and properly contained or stabilized to prevent entry into adjacent water bodies or wetlands.

e. Disturbed areas on the site shall be stabilized to minimize erosion. Stabilization of erodible areas shall be accomplished by seeding or sodding as soon as practicable to restore vegetative cover. Stabilization of soil and removal of sediment that may enter storm water shall be accomplished by the use of appropriate vegetative and structural sediment and erosion control practices. The controls must be in accordance with MS Department of Transportation's Storm Water Pollution Prevention Plan (SWPPP), as approved by MS Department of Environmental Quality. If construction scheduling at a disturbed area results in a cessation of additional construction activities for thirty or more days, appropriate temporary or permanent sediment and erosion control measures shall be implemented within seven calendar days of the cessation of construction activities. Implementation of sediment and erosion control measures shall include sufficient monitoring to evaluate success of the measures. If initial revegetation is unsuccessful, the area shall be reseeded or resodded until revegetation is successful. In areas subject to currents, riprap may be required for slope protection.

f. No activity that may adversely impact a site listed in or eligible for listing in the National Register of Historic Places, or a site that has previously been unevaluated, shall be allowed by this General Permit. Additional fill material shall not be taken from a known historical or archaeological site within or outside of regulated areas. If the permittee, during prosecution of work authorized herein, inadvertently discovers or accidently destroys a cultural resource such as a cemetery, shipwreck, mound, historic structure, or archaeological site, within the area subject to Department of the Army jurisdiction, they shall cease work in the immediate area and notify the District Engineer within 24 hours. The District Engineer, in consultation with the appropriate State Historic Preservation Officer and the Federally recognized Tribe, shall comply with the procedures set forth in 33 CFR 325, Appendix C, paragraph 11 (Historic Properties Discovered During Construction).

g. The work shall not occur in a National Wildlife Refuge, State Game Management Area, or other such Federal or State lands, or lands leased to those entities without the appropriate Federal or State authorization in writing.

h. For work within the Mississippi Coastal Zone Management Area, including all areas below Interstate I-10, a set of complete plans shall be sent to the two agencies listed below for review and/or approval as appropriate. Comments and concurrence resulting from this coordination shall be submitted with the request for authorization under this General Permit.

1. The Mississippi Department of Marine Resources
   1141 Bayview Avenue
   Suite 101
   Biloxi, Mississippi 39530

2. National Marine Fisheries Service
   Habitat Conservation Division
   Attention: Mr. Mark Thompson
   3500 Delwood Beach Road
   Panama City, Florida 32408-7403

i. All temporary fills must consist of nonerodible material or be protected to prevent erosion.

j. Any materials used for temporary structures such as cofferdams, equipment pads, or temporary crossings, shall be removed as soon as practicable, and the waterway shall be restored to preconstruction contours.

k. Disturbance to riparian vegetation shall be kept to a minimum during construction. Erosion and sediment controls should limit the exposure of disturbed areas to the shortest amount of time as possible and minimize the amount of surface area disturbed. Vegetative practices shall be designed to preserve existing vegetation where possible and revegetate disturbed areas as soon as practicable after grading or construction.

l. No activity that is likely to adversely affect Federally listed threatened or endangered species, or that is likely to destroy or adversely modify the critical habitat of such species, shall be authorized under this General Permit.

m. Discharges shall not restrict or impede the movement of aquatic species indigenous to the waters.

n. All work shall be performed in a manner that will minimize increased turbidity of the water in the project area and otherwise avoid adverse effects on water quality and aquatic life especially during fish spawning season. This may require avoiding construction activities during the peak spawning months of April, May, and June.

o. The discharge shall not adversely affect a public water supply intake or a National or State Fish Hatchery intake.

p. The discharge shall not contain unacceptable levels of pathogenic organisms (as prescribed in standards set by the Mississippi Department of Environmental Quality) in areas used for water-contact sports.

q. The construction activity shall not result in the permanent diversion or relocation of a stream or a river channel except where needed to align a waterway crossing to avoid potential damage to the roadway. In no case, shall any realignment extend beyond 150 feet upstream and 150 feet downstream from the centerline of a crossing structure. The construction activity shall result in neither stream flow impediment nor drain adjacent wetlands.

r. Authorizations under this General Permit shall be valid for 5 years from the date of the authorizing letter.

s. Current standards and practices shall be used to determine what type drainage structure is required at a particular stream crossing (box culvert, bridge, etc.).

t. To minimize potential adverse impacts to wetlands or other waters of the United States within the right-of-way or associated with the project, the Mississippi Department of Transportation shall incorporate into each project's design all practicable measures to:

1. Minimize impact on hydrology in wetland areas or other waters of the United States.

2. Minimize potential for toxic spills and leaching into wetland areas or other waters of the United States.

3. Minimize discharge of materials, such as silt, into wetlands or other waters of the United States.

4. Maintain adequate flow through wetlands or other waters of the United States by providing culverts, ditches, and other hydrologic structures.

5. Provide berms, traps, or ditches to direct potential toxic spills away from wetlands or other waters of the United States.

6. Provide for animal migration to and from wetland areas or along riparian corridors.

7. Provide erosion and sediment control features throughout the construction phase of a project which would minimize both short- and long-term impacts to water quality.

8. Provide treatment facilities which may be required to treat highway runoff which would otherwise adversely affect wetlands or other waters of the United States.

9. Provide contractual provisions for stopwork orders, project staging, and other specifications pertaining to minimizing impacts on wetlands or other waters of the United States and to onsite monitoring.

General Conditions:

a. Mississippi Department of Transportation must allow representatives from the appropriate Corps' office to inspect the authorized activity at any time deemed necessary to ensure that it is being or has been accomplished in accordance with the terms and conditions of the permit.

b. This permit does not obviate the need to obtain other Federal, State, or local authorizations required by law.

c. This permit does not grant any property rights or exclusive privileges.

d. This permit does not authorize any injury to the property or rights of others.

e. This permit does not authorize interference with any existing or proposed Federal project.

f. In issuing this permit, the Federal Government does not assume any liability for the following:

1. Damages to the permitted project, or uses thereof, as a result of other permitted or unpermitted activities or from natural causes.

2. Damages to the permitted project or uses thereof as a result of current or future activities undertaken by or on behalf of the United States in the public interest.

3. Damages to persons, property, or to other permitted or unpermitted activities or structures caused by the activity authorized by this permit.

4. Design or construction deficiencies associated with the permitted work.

5. Damage claims associated with any future modification, suspension, or revocation of this permit.

g. In issuing individual authorizations under this General Permit, the Government will rely on the information and data which the permittee provides in connection with the permit application. If, subsequent to the authorization, such information and data prove to be false, incomplete, or inaccurate, this authorization may be modified, suspended, or revoked, in whole or in part, and/or the Government may, in addition, institute appropriate legal proceedings.

h. The United States Army Corps of Engineers may re-evaluate its decision on this permit at any time the circumstances warrant. Circumstances that could require a reevaluation include, but are not limited to, the following:

1. Failure to comply with the terms and conditions of this permit.

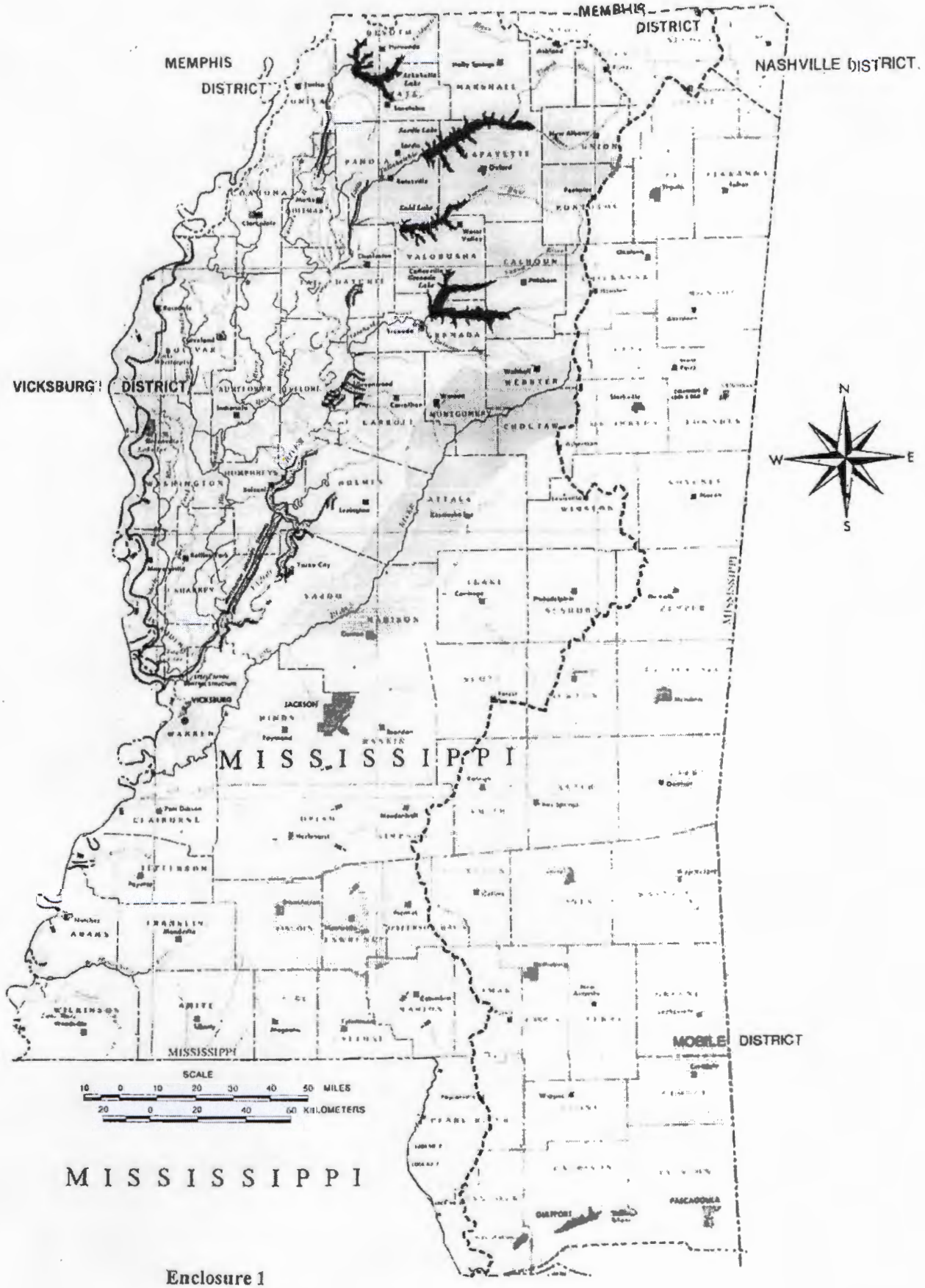
2. The information provided in support of a request for authorization proves to have been false, incomplete, or inaccurate (See g. above).

3. Significant new information surfaces which was not considered in reaching the original public interest decision.

i. This General Permit is valid for a 5-year period at which time the cumulative environmental effects of completed work will be reviewed and reissuance of the permit may be considered. However, if unforeseen adverse environmental effects result from the issuance of this General Permit, it may be modified or terminated.

Additional copies of this Notice are available upon request from this office. Requests may be addressed to: USACE, Vicksburg District, ATTN: Regulatory Branch, 4155 Clay Street, Vicksburg, Mississippi 39183-3435.

Michael F. McNair, R.F.
Chief, Regulatory Branch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Enclosure 1

STATE OF MISSISSIPPI
PHIL BRYANT
GOVERNOR
MISSISSIPPI DEPARTMENT OF ENVIRONMENTAL QUALITY
TRUDY D. FISHER, EXECUTIVE DIRECTOR

June 20, 2014

Certified Mail No.7009 1680 0000 8670 1652

Colonel John W. Cross
U.S. Army Corps of Engineers
Vicksburg District
4155 Clay Street
Vicksburg, MS 39183-3435

Dear Colonel Cross:

Re: US Army COE, Vicksburg District, General Permit 46
Warren County
COE No. MVK20130909
WQC No. WQC2013046

Pursuant to Section 401 of the Federal Water Pollution Control Act (33 U. S. C. 1251, 1341), the Office of Pollution Control (OPC) issues this Certification, after public notice and opportunity for public hearing, to U. S. Army Corps of Engineers, Vicksburg District, an applicant for a Federal License or permit to conduct the following activity:

US Army COE, Vicksburg District, General Permit 46: Proposed reissuance of a statewide General Permit for the construction of roadway embankments and bridge abutments in waters of the United States. This General Permit would authorize activities such as the repair and stabilization of existing roadway embankments and bridge abutments; the installation of additional traffic lanes to existing roadways; the upgrading of bridges and other stream-crossing structures; and, construction along new alignments.

This proposed General Permit contains certain limitations intended to protect the environment and natural and cultural resources. Conformance with conditions contained in the General Permit does not necessarily guarantee authorization under this General Permit. In cases where the District Engineer considers it necessary, an application will be required for an individual permit. Construction, dredging, or fill operations not specifically covered by

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Enclosure 2

this General Permit would be prohibited unless authorized by a separate permit.

General Permits may be issued for a category or categories of activities when: (1) those activities are substantially similar in nature and cause only minimal individual and cumulative environmental impacts; or (2) the General Permit would result in avoiding unnecessary duplication of the regulatory control exercised by another Federal, State, or local agency, provided it has been determined that the environmental consequences of the actions are individually and cumulatively minimal.

The following must be provided by the applicant in writing in request for authorization under the General Permit:

a. Statement of the number of the General Permit under which the work is to be conducted. (General Permit-46)

b. Statement that the work would be conducted in compliance with the terms and conditions of the General Permit, would not adversely impact adjoining properties, and would be mitigated for in accordance with the terms of this General Permit.

c. Location map showing the proposed worksite (including Section, Township, Range, and County).

d. A brief description of the proposed worksite in its present condition.

e. A brief description and 8 1/2- by 11 -inch drawings of the proposed work including the method of construction or stabilization, the project dimensions, and amounts and types of excavated and fill material in cubic yards.

f. Estimated starting and completion dates of construction .

g. Name, mailing address, and telephone number of the person acting as the point of contact for the requested authorization.

h. If wetlands or other waters of the U.S. are to be impacted, the following information is required:

1. A map delineating the wetlands and other water of the U.S. and copies of the associated data form(s) for routine wetland determinations from the 1987 Corps of Engineers Wetland Delineation Manual and its subsequent Regional Supplement Manual(s) covering the proposed project area(s).

2. The type and date of approval of the environmental documentation by the Federal Highway Administration and a copy of their findings as required by Executive Order 11990.

i. If the combined acreage of wetlands at a single and complete project site
exceeds 0.1 acre, the application would include a compensatory mitigation plan based on an approved wetland functional assessment methodology which takes into account the habitat quality and quantity of the impacted area and the proposed mitigation area. Such recommendations would include copies of all factual information (e.g. worksheets) used in performing the calculations of the functional assessment. (Note: The District Engineer would consider this recommendation in making the final decision on compensatory mitigation measures).

j. If impacts to a natural waterway at a single and complete project site exceed 100 linear feet, MDOT would include a compensatory mitigation plan based on an approved stream functional assessment methodology which takes into account the habitat quality and quantity of the impacted area and the proposed mitigation area.

k. Comments from the Mississippi Department of Wildlife, Fisheries and Parks, Mississippi Department of Archives and History, United States Fish and Wildlife Service, and the Mississippi Department of Environmental Quality on the project.

l. Concurrence in writing from the Mississippi Department of Marine Resources and the National Marine Fisheries Service, if the project is located in Hancock, Harrison, or Jackson County, Mississippi. (See

Special Condition 8 below).

Upon receipt of this information, the District Engineer will evaluate the proposal and notify the inquiring party, in writing, that either the work will be authorized under the General Permit; will require additional information or will advise the inquiring party that the proposed activity will require an individual permit. Included with the letter authorizing work under the General Permit would be the number of wetland acres, if any, which would be deducted from the mitigation bank.

Special Conditions of the General Permit:

1. No more than 7 acres of wetlands and other waters would be directly impacted by the placement of fill at each single and complete crossing of a water of the United States where the proposed work involves either upgrading an existing highway within an established corridor or where the work is to be constructed along a new alignment. Any wetlands cut off from their natural hydrologic regime as a result of project work would be considered as directly impacted.

2. For stream or river crossings, discharges of permanent fill material and temporary fill material would be the minimum necessary to complete the crossing. The term fill refers to earthen material, riprap, concrete, and any other materials associated with the work.

3. The stabilization or construction work would not interfere with navigation (including recreational boating) or adversely impact the flow-carrying capacity of the affected stream.

4. Material to be used for fill must be nonpolluting and may be obtained either offsite or from the site preparation. Offsite material would not be obtained from wetlands outside the 7-acre limit or from other areas which may adversely affect adjacent wetlands. Any excess material would be placed in an upland area and properly contained or stabilized to prevent entry into adjacent water bodies or wetlands.

5. Disturbed areas on the site would be stabilized to minimize erosion. Stabilization of erodible areas would be accomplished by seeding or sodding as soon as practicable to restore vegetative cover. If initial revegetation is unsuccessful, the area would be reseeded or resodded until revegetation is successful. In areas subject to currents, riprap may be required for slop protection.

6. No activity that may adversely affect a site listed in or eligible for listing in the National Register of Historic Places would be authorized by this General Permit until the requirements of Section 106 of the National Historic Preservation Act have been satisfied. Additional material would not be taken from a known historical or archaeological site. If the permittee, during prosecution of work authorized herein, encounters a previously unidentified cultural resource such as a cemetery, shipwreck, mound, historic structure, or archaeological site, within the area subject to Department of the Army jurisdiction, they would immediately notify the District Engineer. The District Engineer, in consultation with the appropriate State Historic Preservation Office and the Federally recognized Tribe, would comply with 33 CFR 325, Appendix C, paragraph 11 (Historic Properties Discovered During Construction).

7. The work would not occur in a National Wildlife Refuge, State Game Management Area, or other such Federal or State lands, or lands leased to those entities without the appropriate Federal or State authorization in writing.

8. For work within the Mississippi Coastal Zone Management Area, including all areas below Interstate I-10, a set of complete plans would be sent to the two agencies listed below for review and/or approval as appropriate. Comments and concurrence resulting from this coordination would be submitted with the request for authorization under this General Permit.

   a. The Mississippi Department of Marine Resources
   1141 Bayview Avenue
   Suite 101
   Biloxi, Mississippi 39530

   b. National Marine Fisheries Service
   Habitat Conservation Division
   Attention: Mr. Mark Thompson
   3500 Delwood Beach Road
   Panama City, Florida 32408-7403

9. All temporary fills must consist of nonerodible material or be protected to prevent erosion.

10. Any materials used for temporary structures such as cofferdams, equipment pads, or temporary crossings, would be removed as soon as practicable, and the waterway would be restored to preconstruction contours.

11. Disturbance to riparian vegetation would be kept to a minimum during construction.

12. No activity that is likely to adversely affect Federally listed threatened or endangered species, or that is likely to destroy or adversely modify the critical habitat of such species, would be authorized under this General Permit.

13. Discharges would not restrict or impede the movement of aquatic species indigenous to the waters.

14. All work would be performed in a manner that would minimize increased turbidity of the water in the project area and otherwise avoid adverse effects on water quality and aquatic life especially during fish spawning

season. This may require avoiding construction activities during the peak spawning months of April, May, and June.

15. The discharge would not adversely affect a public water supply intake or a National or State Fish Hatchery intake.

16. The discharge would not contain unacceptable levels of pathogenic organisms (as prescribed in standards set by the Mississippi Department of Environmental Quality) in areas used for water-contact sports.

17. The construction activity would not result in the permanent diversion or relocation of a stream or a river channel except where needed to align a waterway crossing to avoid potential damage to the roadway. In no case, would any realignment extend beyond 150 feet upstream and 150 feet downstream from the centerline of a crossing structure. The construction activity would result in neither stream flow impediment nor drain adjacent wetlands.

18. Authorizations under this General Permit would be valid for 3 years from the date of the authorizing letter.

19. Current standards and practices would be used to determine what type drainage structure is required at a particular stream crossing (box culvert, bridge, etc.).

20. To minimize potential adverse impacts to wetlands within the right-of-way or associated with the project, the Mississippi Department of Transportation would incorporate into each project's design all practicable measures to:

    a. Minimize impact on hydrology in wetland areas.

    b. Minimize potential for toxic spills and leaching into wetland areas.

    c. Minimize discharge of materials, such as silt, into wetlands.

    d. Maintain adequate flow through wetlands by providing culverts, ditches, and other hydrologic structures.

    e. Provide berms, traps, or ditches to direct potential toxic spills away from wetlands.

    f. Provide for animal migration to and from wetland areas or habitat corridors.

g. Provide erosion and sediment control features throughout the construction phase of a project which would minimize both short- and long-term impacts to water quality.

h. Provide treatment facilities which may be required to treat highway runoff which would otherwise adversely affect wetlands.

i. Provide contractual provisions for stopwork orders, project staging, and other specifications pertaining to minimizing impacts on wetlands and to onsite monitoring.

The Office of Pollution Control certifies that the above-described activity will be in compliance with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Federal Water Pollution Control Act and Section 49-17-29 of the Mississippi Code of 1972, if the applicant complies with the following conditions:

1. The Mississippi Department of Environmental Quality (MDEQ) shall be given a minimum 30-day commenting period for new alignment work that impacts more than three (3) acres of wetlands or 300 linear feet of stream.

2. Prior to the start of construction activities, coverage under a Stormwater Construction General NPDES Permit shall be obtained. No construction activities shall begin until such approvals are obtained.

3. Extreme care shall be taken to prevent the permanent restriction or impedance of water flow. Pre-construction hydrology shall be maintained.

4. All stream impacts (including streams identified as ephemeral by the U.S. Army Corps of Engineers and described as non-relatively permanent waters) shall be mitigated in kind with stream mitigation elements. In the event that stream mitigation is not available and alternate mitigation proposals are provided, a pre-construction notification shall be provided to MDEQ and 10 working days shall be allowed to provide comments.

5. A pre-construction notification shall be provided to MDEQ for projects that include channel work within waterways found on the latest version of the State of Mississippi's Section 303(d) List of Impaired Water Bodies for sediment or biological impairment or waterways with a completed Total Maximum Daily Load (TMDL) for sediment or biological impairment. This notification shall include the following:

a. Justification of why the impacts cannot be avoided;

b. Proposed best management practices that would minimize the impacts to receiving sensitive waters; and

c. Compensatory mitigation primarily along the same reach of stream or on another impaired stream within the same drainage basin.

6. The turbidity outside the limits of a 750-foot mixing zone shall not exceed the ambient turbidity by more than 50 Nephelometric Turbidity Units.

7. No sewage, oil, refuse, or other pollutants shall be discharged into the watercourse.

The Office of Pollution Control also certifies that there are no limitations under Section 302 nor standards under Sections 306 and 307 of the Federal Water Pollution Control Act which are applicable to the applicant's above-described activity.

This certification is valid for the project as proposed. Any deviations without proper modifications and/or approvals may result in a violation of the 401 Water Quality Certification. If we can be of further assistance, please contact us.

Sincerely,

Harry M. Wilson III, P.E., DEE
Chief, Environmental Permits Division

HMW: fb

cc: Anthony Lobred , U.S. Army Corps of Engineers, Vicksburg District
Amy Carson, U.S. Fish and Wildlife Service
Calista Mills, Environmental Protection Agency
Kim Thurman, Mississippi Department of Transportation