1 of 0. REV. GENERAL INDEX

FOR DETAILED INDEX OF PLANS, SEE SHEET No. 2, 3, 4, & 5

STATE OF MISSISSIPPI

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PLAN AND PROFILE OF PROPOSED U.S. 78 STATE PROJECT NO. SP-0006-01(087)

US 78 FROM THE BLUE SPRINGS INTERCHANGE TO THE SHERMAN INTERCHANGE

UNION / PONTOTOC COUNTIES

FED. ROAD REG. NO.	STATE	PROJECT NO.	SHEET NO.
4	MISS.	SP-0006-01(087)	1

FINAL PLANS OF COMPLETED WORK

104969 /304000
104969 /305000

(1) 01-08-08
RE: (1) 08-22-08

BRIDGE STRUCTURES REQUIRED

(A) Sta. 850+65.44
Collector/Distributor Over SR 9
3 Span Bridge Required
1 @71', 1 @94', 1 @63'
Total Length = 230.34'

Contractor: L&T Construction, Inc.
Address: 2170 Hwy 51, Suite #1 Hernando, Ms 38632
Proj. Engr.: William M. Jamieson
(Signature)
Work Started on 4/3/2009
Work Accepted on 8/21/12

BOX BRIDGES REQUIRED

NONE

CONVENTIONAL SYMBOLS

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

FINAL PLANS OF COMPLETED WORK

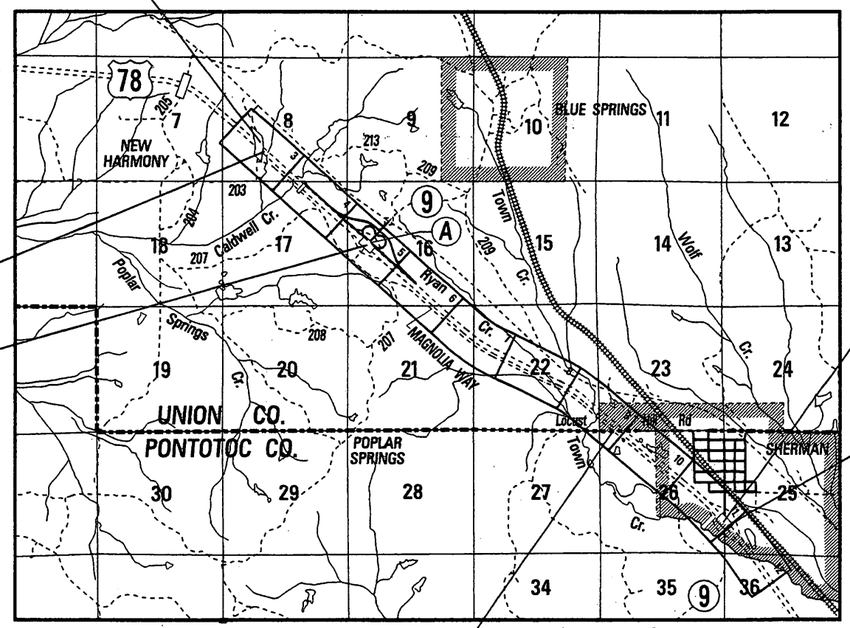
Existing Bridge #74.1
(To Remain In Place)

← TO MEMPHIS

TO ELLISTOWN →

SCALES

PLAN		1 IN. = 100 FT.
PROFILE	HOR.	1 IN. = 100 FT.
	VERT.	1 IN. = 10 FT.
LAYOUT MAP		1 IN. = 3000 FT.



BOP 792+00

Existing Bridges
#75.2 A & #75.2 B
(To Remain In Place)

County Line
Sta. 985+75.06

Existing Bridges
#78.8 A & 78.8 B
(To Remain In Place)

E.O.P. 1069+21.30

← TO PONTOTOC

TO TUPELO →

EQUATIONS

902+03.790 Bk. = 902+00.000 Ah.
922+19.840 Bk. = 922+27.580 Ah.
966+15.520 Bk. = 966+19.530 Ah.
985+85.740 Bk. = 985+81.000 Ah.
1063+50.991 Bk. = 1064+13.100 Ah.

LENGTH DATA

	UNION COUNTY	PONTOTOC COUNTY	TOTAL PROJECT
LENGTH OF ROADWAY	19,367.10 FT. 3.668 MI.	8,288.87 FT. 1.570 MI.	27,655.97 FT. 5.238 MI.
(1) LENGTH OF BRIDGES	(1) 0.00 FT. 0.000 MI.	0.00 FT. 0.000 MI.	(1) 0.00 FT. 0.000 MI.
LENGTH OF PROJECT (NET)	19,367.10 FT. 3.668 MI.	8,288.87 FT. 1.570 MI.	27,655.97 FT. 5.238 MI.
LENGTH OF EXCEPTIONS	0.00 FT. 0.000 MI.	0.00 FT. 0.000 MI.	0.00 FT. 0.000 MI.
LENGTH OF PROJECT (GROSS)	19,367.10 FT. 3.668 MI.	8,288.87 FT. 1.570 MI.	27,655.97 FT. 5.238 MI.

(1) DOES NOT INCLUDE 230.34' (0.043 MI.) FOR THE COLLECTOR / DISTRIBUTOR BRIDGE OVER SR 9 @ BLUE SPRINGS.

EXCEPTIONS

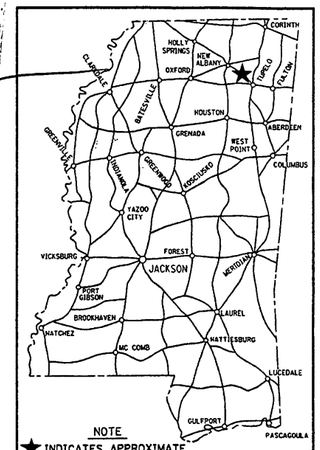
NONE

HESM&A, INC.
ROADWAY LIGHTING

DANNY H. WALKER, LICENSED PROFESSIONAL ENGINEER, 7083, STATE OF MISSISSIPPI
FLORENCE & HUTCHESON, INC.
SURVEY & ROADWAY DESIGN

STEPHEN S. PUTNEY, LICENSED PROFESSIONAL ENGINEER, 15855, STATE OF MISSISSIPPI
FLORENCE & HUTCHESON, INC.
BRIDGE DESIGN

WILLIAM LAWRENCE THACKER, REGISTERED PROFESSIONAL ENGINEER, NO. 10110, STATE OF MISSISSIPPI



NOTE
★ INDICATES APPROXIMATE LOCATION OF PROJECT.

LAT. 34°22'26" LONG. 88°52'25"
(APPROX. MIDDLE OF PROJECT)

DESIGN CONTROL

50 MPH = V (CD SPEED DESIGN)

ADT (2010) = 3400 : ADT (2030) = 6900

DHV = 1000 : D = 99 % T = 5 %

PERMITS ACQUIRED BY MDOT

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

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

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

STORMWATER PERMIT [Y]

Y	REQUIRED, CNOI SUBMITTED BY MDOT (DISTRIBUTED AREA = 5 ACRES +)(NTB 588)
S	REQUIRED, SCNOI TO BE SUBMITTED BY CONTRACTOR (1 TO 4.99 ACRES)(NTB 14)
N	NO STORMWATER PERMIT REQUIRED (<1 ACRE)

APPROVED BY: JCR DATE: 08/22/08

ACCESS CONTROL

NOTES:

1. Access to and exit from this highway will be permitted only through interchange or such other points as may be established by public authority and as shown on the plans.
2. This note applies to the following station limits: Sta. 797+97.92 to Sta. 886+80.00. This project is declared by the Transportation Commission to be a Type 1 Controlled Access Facility, as defined in and subject to all restrictions shown by order of said Commission adopted on the 11th day of March, 2008 in minute book 13, page 76 and authorized under section 65-1-10(1) MCA (1972, as amended).

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BY	REVISIONS
F&H	ADDED ROADWAY LIGHTING
	12/16/08

APPROVED:
CHIEF ENGINEER — DATE 8/22/08
EXECUTIVE DIRECTOR — DATE 8/22/08
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

APPROVED:
DIVISION ADMINISTRATOR — DATE
FEDERAL HIGHWAY ADMINISTRATION
DEPARTMENT OF TRANSPORTATION

8/14/2008 1:59 PM TITLE CONST.DGN
ROADWAY/DRAINAGE/EROSION/SEDIMENTATION CONTROL/TRAFFIC CONTROL/SIGNING/PAVEMENT MARKINGS/GUARDRAIL/MISCELLANEOUS
PLAN TITLE
DESIGN/DIVISION SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
TITLE SHEET (1)		–	1
DETAILED INDEX & GENERAL NOTES (6)			
DETAILED INDEX		DI–1	2
DETAILED INDEX		DI–2	3
DETAILED INDEX		DI–3	4
DETAILED INDEX		DI–4	5
GENERAL NOTES		GN–1	6
GENERAL NOTES		GN–2	7
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US 78		TS–2	9
US 78		TS–3	10
SR 9 @ BLUE SPRINGS		TS–4	11
INTERCHANGE RAMPS & COLLECTOR–DISTRIBUTOR RD.		TS–5	12
INTERCHANGE LOOPS		TS–6	13
OVERLAY INTERCHANGE RAMPS		TS–7	14
CHANNELIZED INTERSECTION (SR9 /SR178 @ BLUE SPRINGS)		TS–8	15
CHANNELIZED INTERSECTIONS (INTERCHANGE RAMPS @ BLUE SPRINGS)		TS–9	16
MAINLINE CONCRETE US 78 AREAS		TS–10	17
GUARDRAIL AT BRIDGE		TS–11	18
DETAIL OF PAVEMENT TRANSITIONS		TS–12	19
MAINTENANCE OF TRAFFIC		TS–13	20
CHANNELIZED INTERSECTION (SR9 /SR178 @ BLUE SPRINGS) ASPHALT PAVEMENT		TS–14	21
QUANTITY SHEETS (22) ⚠			
SUMMARY OF QUANTITIES – (ROADWAY)		SQ–1	22
SUMMARY OF QUANTITIES – (ROADWAY)		SQ–2	23
SUMMARY OF QUANTITIES – (ROADWAY)		SQ–3	24
SUMMARY OF QUANTITIES – (ROADWAY)		SQ–4	25
SUMMARY OF QUANTITIES – (ROADWAY)		SQ–5	26
SUMMARY OF QUANTITIES – (BRIDGE ITEMS)		SQ–6	27
ESTIMATED QUANTITIES – (ROADWAY)		EQ–1	28
ESTIMATED QUANTITIES – (ROADWAY)		EQ–2	29
ESTIMATED QUANTITIES – (ROADWAY)		EQ–3	30
ESTIMATED QUANTITIES – (ROADWAY)		EQ–4	31
ESTIMATED QUANTITIES – (ROADWAY)		EQ–5	32
ESTIMATED QUANTITIES – (ROADWAY)		EQ–6	33
ESTIMATED QUANTITIES – (ROADWAY)		EQ–7	34
ESTIMATED QUANTITIES – (ROADWAY)		EQ–8	35
ESTIMATED QUANTITIES – (ROADWAY)		EQ–9	36
ESTIMATED QUANTITIES – (ROADWAY)		EQ–10	37
ESTIMATED QUANTITIES – (ROADWAY)		EQ–11	38
ESTIMATED QUANTITIES – (ROADWAY)		EQ–12	39
⚠ ESTIMATED QUANTITIES – (LIGHTING)		EQ–12a ⚠	39.1 ⚠
ESTIMATED QUANTITIES – (TRAFFIC CONTROL SIGNS)		EQ–13	40
ESTIMATED QUANTITIES – (BRIDGE)		EQ–14	41
SUMMARY OF CULVERT HYDRAULIC DESIGN		HD–1	42

DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
PLAN & PROFILE SHEETS (23)			
US 78 (B.O.P. TO STA. 807+00)		3	43
US 78 (STA. 807+00 TO STA. 837+00)		4	44
US 78 PLAN (STA. 837+00 TO STA. 867+00)		5	45
US 78 PROFILE (STA. 837+00 TO STA. 867+00)		5A	46
INTERCHANGE LAYOUT SR 9 @ BLUE SPRINGS		5B	47
SR 9 @ BLUE SPRINGS		5C	48
CD ROAD (B.OP. TO STA. 806+00)		5D	49
CD ROAD (STA. 806+00 TO STA. 836+00)		5E	50
CD ROAD (STA. 836+00 TO STA. 866+00)		5F	51
CD ROAD (STA. 866+00 TO 890+75.85)		5G	52
NW RAMP @ BLUE SPRINGS		5H	53
NW LOOP @ BLUE SPRINGS		5i	54
NE RAMP @ BLUE SPRINGS		5J	55
NE LOOP @ BLUE SPRINGS		5K	56
SW RAMP @ BLUE SPRINGS		5L	57
SE RAMP @ BLUE SPRINGS		5M	58
US 78 (STA. 867+00 TO STA. 897+00)		6	59
US 78 (STA. 897+00 TO STA. 927+00)		7	60
US 78 (STA. 927+00 TO STA. 957+00)		8	61
US 78 (STA. 957+00 TO STA. 987+00)		9	62
US 78 (STA. 987+00 TO STA. 1017+00)		10	63
US 78 (STA. 1017+00 TO STA. 1047+00)		11	64
US 78 (STA. 1047+00 TO E.O.P.)		12	65
SPECIAL DESIGN SHEETS (97) ⚠			
CONSTRUCTION SIGNING DETAIL		CSD–1	66
TRAFFIC CONTROL – GENERAL NOTES SPECIAL DETAILS		TC–1	67
TRAFFIC CONTROL – PHASE 1		TC–2	68
TRAFFIC CONTROL – PHASE 1		TC–3	69
TRAFFIC CONTROL – PHASE 1		TC–4	70
TRAFFIC CONTROL – PHASE 1A & 1B		TC–5	71
TRAFFIC CONTROL – PHASE 1C & 1D		TC–6	72
TRAFFIC CONTROL – PHASE 2 & 2A		TC–7	73
TRAFFIC CONTROL – PHASE 2		TC–8	74
TRAFFIC CONTROL – PHASE 2		TC–9	75
TRAFFIC CONTROL – PHASE 3 & 4A THRU 4C		TC–10	76
TRAFFIC CONTROL – DRUM PLACEMENT AND SHOULDER CLOSURE DETAILS		TC–11	77
SPEEDING FINES DOUBLED DETAIL		SSD–1	78

FLORENCE & HUTCHESON, INC.		
PS & E PLANS – 8/22/08		
FMS CONST. No. 104969/304000 & 104969/305000		
PLAN REVISIONS		
REVISED SHEET NO.		BY
10–10–08	11, 15, 17, 21, 22, 23, 24, 25, 28, 29, 30, 32, 33, 39, 42, 47, 48, 53, 55, 66,	F&H
	67, 68, 69, 71, 72, 74, 76, 79, 86, 88, 89, 90, 91, 93, 94, 95, 96, 97, 100.02,	
	100.06, 997, 998, 999, 1041, 1042	
1–23–09	1, 2, 3, 5, 22, 23, 26, 39.1, 100.47, 100.48, 100.49, 100.50, 100.51, 100.52,	F&H
	100.53, 100.54, 100.55, 100.56, 100.57, 100.58, 100.59, 100.60, 100.61, 100.62	

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BY	REVISION	DATE
F&H	ADDED LIGHTING QTY. SHT. TO INDEX.	1/23/09

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: DI–1
SHEET NUMBER: 2

FILENAME: di.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:18 DI.DGN

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DESCRIPTION OF SHEET

DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
SPECIAL DESIGN SHEETS (CONT.)			
INTERSECTION DETAIL – NW & NE RAMP @ SR 9 & SR 178 @ SR 9		ID–1	79
FORM GRADE – US 78 & CD ROAD		FG–1	80
FORM GRADE – CD ROAD & NW RAMP		FG–2	81
FORM GRADE – CD ROAD & NW LOOP / NE LOOP SR 9 @ BLUE SPRINGS & NW LOOP / NE LOOP		FG–3	82
FORM GRADE – CD ROAD & NE RAMP		FG–4	83
FORM GRADE – US 78 & CD ROAD		FG–5	84
FORM GRADE – SR 9 @ BLUE SPRINGS & NW RAMP / NE RAMP		FG–6	85
FORM GRADE – SR 9 @ BLUE SPRINGS & EXISTING SR 178		FG–7	86
FORM GRADE – US 78 & SW RAMP		FG–8	87
PAVEMENT MARKINGS – US 78 (B.O.P. To Sta. 798+50)		PMD–1	88
PAVEMENT MARKINGS – US 78 (Sta. 798+50 To Sta. 810+00)		PMD–2	89
PAVEMENT MARKINGS – US 78 (Sta. 810+00 To Sta. 822 +50)		PMD–3	90
PAVEMENT MARKINGS – US 78 (Sta. 822 +50 To Sta. 834+50)		PMD–4	91
PAVEMENT MARKINGS – US 78 (Sta. 834+50 To Sta. 846+00)		PMD–5	92
PAVEMENT MARKINGS – US 78 (Sta. 846+00 To Sta. 858+00)		PMD–6	93
PAVEMENT MARKINGS – Blue Springs Road (Sta. 10+00 To Sta. 18+00)		PMD–6a	94
PAVEMENT MARKINGS – Blue Springs Road (Sta. 18+00 To Sta.. 26+50)		PMD–6b	95
PAVEMENT MARKINGS – Blue Springs Road (Sta. 26+50 To Sta. 37+00)		PMD–6c	96
PAVEMENT MARKINGS – NW Ramp (Sta. 840+00 To Sta. 852+00) , SW Ramp (Sta. 143+00 to Blue Springs Rd.)		PMD–6d	97
PAVEMENT MARKINGS – CD Road (Sta. 846+00 To Sta. 858+00) & N.W. LOOP & N.E. LOOP		PMD–6e	98
PAVEMENT MARKINGS – NE Ramp (Sta. 851+50 To Sta. 863+00) & SE Ramp (Blue Springs Rd. To Sta. 17+00)		PMD–6f	99
PAVEMENT MARKINGS – US 78 (Sta. 858+00 To Sta. 869+00)		PMD–7	100
PAVEMENT MARKINGS – US 78 (Sta. 869+00 To Sta. 881+00)		PMD–8	100.01
PAVEMENT MARKINGS – US 78 (Sta. 881+00 To Sta. 893+00)		PMD–9	100.02
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (B.O.P. TO STA. 808+00)		PSP–1	100.03
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (STA. 808+00 TO STA. 838+00)		PSP–2	100.04
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (STA. 838+00 TO STA. 868+00) SR 9 @ BLUE SPRINGS (STA. 10+00 TO STA. 20+00)		PSP–3	100.05
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (STA. 838+00 TO STA. 868+00) SR 9 @ BLUE SPRINGS (STA. 20+00 TO STA. 33+50)		PSP–3a	100.06
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (STA. 868+00 TO STA. 898+00)		PSP–4	100.07
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (STA. 898+00 TO STA. 928+00)		PSP–5	100.08
PERMANENT SIGNING & DELINEATOR PLANS – US 78 (STA. 928+00 TO STA. 958+00)		PSP–6	100.09
OVERHEAD SIGN ASSEMBLY – NO. 1		SA–1	100.10
OVERHEAD SIGN ASSEMBLY – NO. 2		SA–2	100.11
DIRECTIONAL SIGN DETAILS		DSD–1	100.12
DIRECTIONAL SIGN DETAILS		DSD–2	100.13
TRAFFIC SIGNAL INSTALLATION – SIGNAL LAYOUT – SR 9 AT SW/SE RAMPS		TSI–1	100.14
TRAFFIC SIGNAL INSTALLATION – WIRING DIAGRAM – SR 9 AT SW/SE RAMPS		TSI–2	100.15
TRAFFIC SIGNAL INSTALLATION – SIGNAL LAYOUT – SR 9 AT TOYOTA DR.		TSI–3	100.16
TRAFFIC SIGNAL INSTALLATION – WIRING DIAGRAM – SR 9 AT TOYOTA DR.		TSI–4	100.17
DETAIL OF TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS AND GENERAL NOTES		TSD–1	100.18
PULL BOX AND CONDUIT TRENCHING FOR TRAFFIC SIGNAL INSTALLATION		TSD–2	100.19
TYPICAL DETAILS OF CONTROLLER CABINET MOUNTINGS, TYPE 1 POLE ATTACHEMNTS AND MISCELLANEOUS DETAILS		TSD–3	100.20
MAST ARM AND PEDESTAL POLE DETAILS FOR TRAFFIC SIGNAL INSTALLATION		TSD–4	100.21
LOOP DETECTOR DETAILS FOR TRAFFIC SIGNAL INSTALLATION		TSD–5	100.22
FENCE LAYOUT – US 78 (B.O.P. TO STA. 811+00)		FNC–1	100.23
FENCE LAYOUT – US 78 (STA. 811+00 TO STA. 840+00)		FNC–2	100.24
FENCE LAYOUT – US 78 (STA. 840+00 TO STA. 871+00)		FNC–3	100.25
FENCE LAYOUT – US 78 (STA. 871+00 TO STA. 901+00)		FNC–4	100.26
FENCE LAYOUT – US 78 (STA. 901+00 TO STA. 930+00)		FNC–5	100.27
FENCE LAYOUT – US 78 (STA. 930+00 TO STA. 959+00)		FNC–6	100.28
FENCE LAYOUT – US 78 (STA. 959+00 TO STA. 988+00)		FNC–7	100.29
FENCE LAYOUT – US 78 (STA. 988+00 TO STA. 1018+00)		FNC–8	100.30
FENCE LAYOUT – US 78 (STA. 1018+00 TO STA. 1048+00)		FNC–9	100.31
FENCE LAYOUT – SR 9 @ SHERMAN		FNC–10	100.32

DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
SPECIAL DESIGN SHEETS (CONT.)			
VEGETATION SCHEDULE – GRADE, DRAIN, & PAVING		VS–1	100.33
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SOURCE OF SURVEY CONTROL		SC–2	100.35
SOURCE OF SURVEY CONTROL		SC–3	100.36
RIGHT OF WAY MARKER DETAIL		RW–1	100.37
RIGHT OF WAY MARKER COORDINATES		RWC	100.38
MISCELLANEOUS DETAILS – EDGE DRAIN DETAIL, CONCRETE APRON AND RODENT SCREEN		MD–1	100.39
MISCELLANEOUS DETAILS – EDGE DRAIN DETAIL FOR CLEANOUTS AND OUTLETS		MD–2	100.40
MISCELLANEOUS DETAILS – TYPICAL SECTION – UNDERDRAINS, SPECIAL DESIGN FOR INSTALLATION OF MEDIAN DRAINS WITH DOWNSPOUTS		MD–3	100.41
MISCELLANEOUS DETAILS – TYPICAL TEMPORARY EROISION CONTROL MEASURES (TYPE "D" SILT BASIN) RIP RAP DIKE SILT BASIN		MD–4	100.42
MISCELLANEOUS DETAILS – TYPICAL BENCH SECTION		MD–5	100.43
MISCELLANEOUS DETAILS – BOX CULVERT BENDING DETAIL HORIZONTAL AND VERTICAL		MD–6	100.44
MISCELLANEOUS DETAILS – MISCELLANEOUS CONSTRUCTION DETAILS		MD–7	100.45
MISCELLANEOUS DETAILS – DETAILS OF RUMBLE STRIPS (GROUND–IN)		MD–8	100.46
⚠ INTERCHANGE LIGHTING, ABBREVIATIONS, & GENERAL NOTES		E–1 ⚠	100.47 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING PLAN		E–2 ⚠	100.48 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING PLAN		E–3 ⚠	100.49 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING DETAILS		E–4 ⚠	100.50 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING DETAILS		E–5 ⚠	100.51 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING DETAILS		E–6 ⚠	100.52 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING DETAILS		E–7 ⚠	100.53 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING DETAILS		E–8 ⚠	100.54 ⚠
⚠ INTERCHANGE LIGHTING – LIGHTING DETAILS & SCHEDULES		E–9 ⚠	100.55 ⚠
GUARDRAIL : BRIDGE END SECTION TYPE "I" (WOOD POSTS)		SDGR–2F	100.56 ⚠
GUARDRAIL : BRIDGE END SECTION TYPE "I" (STEEL POSTS)		SDGR–2G	100.57 ⚠
GUARDRAIL : RUB RAIL HARDWARE SHEET		SDGR–RR	100.58 ⚠
32" BRIDGE END PAVEMENT RAIL		BEPR–32	100.59 ⚠
42" BRIDGE END PAVEMENT RAIL		BEPR–42	100.60 ⚠
BRIDGE END PAVEMENT WITH RAIL		BE–1A	100.61 ⚠
TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT OF 65 OR 70 MPH (4–LANE DIVIDED HIGHWAYS) (MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)		SDTCP–4	100.62 ⚠

⚠ 1/23/09 ADDED LIGHTING SHEETS, DESIGN SHTS. TO MOST REVISION F&H BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAILED INDEX

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: DI–2
SHEET NUMBER: 3

FILENAME: di.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:19 01.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
STANDARD DRAWINGS – ROADWAY SHEETS (74)			
PAVEMENT			
BRIDGE END PAVEMENT		BE–1	107
PAVEMENT MARKING			
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PAVEMENT MARKING DETAILS FOR 4–LANE & 5–LANE UNDIVIDED ROADWAYS	12–01–99	PM–2	121
PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPER)	12–01–99	PM–3	122
PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS (PARALLEL AND TAPER)	12–01–99	PM–4	123
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TYPICAL TEMPORARY EROSION CONTROL MEASURES (SLOPE DRAIN AND TYPE A SILT BASIN)		TEC–2	143
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FENCE: WOVEN WIRE CONCRETE POSTS		WW–2	161
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FENCE : TYPICAL INSTALLATION AT DITCH CROSSINGS & FENCE ENDINGS		FI–3	166
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BY | REVISION | DATE

FILENAME: di.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 08:37:50 DI.DGN

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STATE	PROJECT NO.
MISS.	SP-0006-01(087)

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DESCRIPTION OF SHEET	REVISION DATE	WKG. NO.	SH. NO.
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TOTAL SHEETS 415 ⚠

REVISED TOTAL SHEETS:	BY
1/23/09	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

FILENAME: di.dgn
DESIGN TEAM F&H, inc. CHECKED DATE

WORKING NUMBER: DI–4
SHEET NUMBER: 5

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:22 DI.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

GENERAL NOTES

(1) FOR A LIST OF PUBLIC UTILITY OWNERS, SEE WK. SH. 3. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON INFORMATION AVAILABLE TO THE ENGINEER AT THE TIME OF SURVEY. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.

(2) THE LOCATION AND SPACING OF SIGNS SHOWN ON THE PLANS ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY TO FIT FIELD CONDITIONS. ALL SIGNS SHALL BE SPACED A MINIMUM OF 250 FEET APART WHERE POSSIBLE. THE ACTUAL LOCATION OF SIGNS WILL BE AS DIRECTED BY THE ENGINEER.

(3) A SOIL PROFILE HAS BEEN PREPARED FOR THIS PROJECT USING SAMPLES TAKEN FROM HOLES AT THE LOCATIONS INDICATED IN THE TEST REPORTS. THIS SOIL PROFILE IS ON FILE IN THE DISTRICT AND CENTRAL CONSTRUCTION OFFICES AND IS AVAILABLE FOR EXAMINATION. THE DEPARTMENT DOES NOT GUARANTEE THAT THE MATERIALS AS SHOWN IN THE REPORTS ARE NECESSARILY TO BE FOUND OUTSIDE THE TEST HOLES.

(4) THE 25% SHRINKAGE FACTOR USED IN THE EARTHWORK CALCULATIONS IS FOR DESIGN ESTIMATING PURPOSES ONLY.

(5) IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROTECT EXISTING STRUCTURES SUCH AS PIPES, INLETS, APRONS, BRIDGES, ETC., FROM DAMAGE WHICH MIGHT OCCUR DURING CONSTRUCTION. EXTREME CARE SHALL BE EXERCISED IN UNDERCUT AREAS AND THE UNDERCUT DEPTH MAY BE ADJUSTED AT CROSS DRAINS, AS DIRECTED BY THE ENGINEER. THE CONTRACTOR SHALL REPLACE OR REPAIR, AS DIRECTED BY THE ENGINEER, ANY STRUCTURES DAMAGED DURING THE LIFE OF THE CONTRACT. NO PAYMENT WILL BE MADE FOR REPLACEMENT OR REPAIR OF DAMAGED ITEMS.

(6) EROSION CHECKS: QUANTITY ESTIMATED ON THE BASIS OF 4 BALES PER EVERY 25 TO 100 LIN. FT. OF DITCH AND 4 BALES AT EACH PIPE OUTLET. THIS IS REQUIRED AS A TEMPORARY EROSION CONTROL MEASURE TO MINIMIZE SILTATION UNTIL PERMANENT MEASURES ARE INSTALLED. THE ENGINEER WILL DETERMINE THE ACTUAL LOCATION AND NUMBER OF BALES DURING THE CONSTRUCTION OF THE PROJECT. (SEE WK. NO. TEC–1 FOR DETAILS.)

(7) VOIDS CREATED BY THE REMOVAL OF POSTS, CONCRETE ANCHORS, FOOTINGS, ETC., SHALL BE BACKFILLED WITH GRANULAR MATERIAL OR TOPSOIL AND TAMPED IN ACCORDANCE WITH SECTION 203 OF THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION. THE BACKFILL MATERIAL IS NOT A SEPARATE PAY ITEM.

(8) WORK ON STRUCTURES FOR THIS PROJECT REQUIRES EXCAVATION IN THE VICINITY OF TRAFFIC. THEREFORE, THE RISK OF A FAILURE OCCURRING DURING THE EXCAVATION REQUIRES THAT EXTREME CAUTION BE EXERCISED. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PLACE ANY BRACING, SHORING OR GROUND SUPPORT SYSTEM THAT IS DEEMED NECESSARY TO PREVENT A FAILURE AND PROTECT THE PERSONS WORKING NEAR THE EXCAVATION, THE PUBLIC THAT MAY BE ABOVE THE EXCAVATION OR ANY STRUCTURE ADJACENT TO THE EXCAVATION. ALL COSTS FOR ANY PROTECTIVE MEASURES, INCLUDING THE MATERIALS AND LABOR FOR DESIGNING, DRAWING AND CONSTRUCTING THE FACILITY, SHALL BE INCLUDED IN THE PRICE BID FOR OTHER CONTRACT ITEMS. THE DESIGN SHALL BE PROVIDED BY A LICENSED P.E. AND SUBMITTED TO MDOT FOR APPROVAL.

(9) FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN THE PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

(10) FULL COLLARS ARE TO BE USED AT ALL BOX CULVERT EXTENSIONS AND AT ALL BOX CULVERT CONSTRUCTION JOINTS (SEE WK. NO. ICJ–1 FOR DETAILS). A CONCRETE COLLAR (WK. NO. PC–1) IS REQ'D. ON ALL PIPE EXTENSIONS.

(11) PRIOR TO POURING PAVED ISLANDS THE TRAFFIC ENGINEERING DIVISION SHALL BE NOTIFIED SO THAT SIGNS REQUIRED IN ISLANDS CAN BE LOCATED.

(12) ALL EXISTING CULVERT PIPES OR OTHER OBSTRUCTIONS WHICH CONFLICT WITH THE REQUIRED CONSTRUCTION SHALL BE REMOVED. EXISTING PIPES THAT ARE TO BE ABANDONED IN PLACE, SHALL BE PLUGGED USING 631 A FLOWABLE FILL.

(13) ALL PROPOSED PAVEMENT MARKINGS, GUARDRAIL, AND PERMANENT SIGNING SHALL BE INSTALLED BEFORE OPENING THE NEW FACILITY TO TRAFFIC, UNLESS DIRECTED AND SPECIFICALLY APPROVED OTHERWISE BY THE ENGINEER.

(14) EXISTING DRAIN PIPES, CULVERTS, CROSS DRAINS, AND OTHER DRAINAGE STRUCTURES THAT ARE TO REMAIN SHALL BE CLEANED OF SILT, TRASH, AND DEBRIS SATISFACTORILY TO THE ENGINEER. ALL COSTS OF SAID CLEANING WILL BE CONSIDERED SUBSIDIARY TO THE CONTRACT AND WILL NOT BE MEASURED AND PAID FOR DIRECTLY.

Barry Hobro

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: GN–1
SHEET NUMBER: 6

FILENAME: gn-1.dgn
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MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
PLAN

08/12/2008 10:08:53 GN-1 US78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

GENERAL NOTES – CONTINUED

(15) ALL EXCAVATION FOR THE SIGN POSTS OR FOOTINGS IS TO BE INCLUDED IN THE COST FOR OTHER ITEMS BID FOR CONSTRUCTION.

(16) ALL POST, PIPE, AND I–BEAM LENGTHS ARE ESTIMATED. CONTRACTOR IS RESPONSIBLE FOR PERFORMING FIELD SURVEY TO DETERMINE THE EXACT LENGTH REQUIRED.

(17) DIRECT APPLIED LEGEND, BORDERS, AND SHIELD ARE TO BE USED ON ALL GUIDE SIGNS. RIVETS WILL NOT BE ALLOWED.

(18) ERECTION DATES ARE TO BE LEGIBLY WRITTEN ON THE BACK OF ALL SIGNS WITH PERMANENT MARKER.

(19) EXISTING GROUND MOUNTED SIGNS DESIGNATED IN THE PLANS TO BE RELOCATED, SHALL BE ERECTED ON NEW SUPPORTS. ANY SIGN PANELS THAT BECOME DAMAGED PRIOR TO OR DURING RELOCATION SHALL BE REPLACED AT THE CONTRACTORS EXPENSE. ALL EXISTING SIGNS AND SUPPORTS REMOVED AND NOT USED UNDER THIS CONTRACT SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

(20) SEE WK. NO. PSP–1 FOR ADDITIONAL GENERAL NOTES REGARDING PERMANENT SIGNS AND WK. NO. TC–1 FOR GENERAL NOTES REGARDING TRAFFIC CONTROL.

(21) ALL SIGNS, SIGNALS, PAVEMENT MARKINGS AND TEMPORARY TRAFFIC CONTROL DEVICES ARE TO CONFORM TO THE MUTCD (MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES) (2003 EDITION AND ALL SUBSEQUENT REVISIONS).

(22) ALL POLES, PULL BOXES, CONTROLLERS AND PAVEMENT MARKINGS SHALL BE FIELD LOCATED BY THE ENGINEER AND THE CONTRACTOR AT THE NEAREST PRACTICAL LOCATION INDICATED ON THE PLAN SHEETS.

(23) ALL RAISED OBJECTS TO BE PLACED A MINIMUM OF 2.5 FT. BEHIND FACE OF CURB. NEW TRAFFIC SIGNAL POLES TO BE PLACED A MINIMUM OF 6 FT. BEHIND FACE OF CURB EXCEPT WHERE IN CONFLICT WITH UTILITIES OR RIGHT–OF–WAY.

(24) ALL SIGNAL MAST ARMS AND POLES SHALL BE GALVANIZED STEEL. PRIOR TO ORDERING THE POLES, THE CONTRACTOR WILL VERIFY THE MAST ARM POLE LOCATIONS TO ENSURE THERE ARE NO CONFLICTS WITH UTILITIES OR OTHER ITEMS.

(25) SIGNAL CONTROLLER TIMINGS ARE TO BE PROVIDED BY THE ENGINEER.

(26) SPECIFICATIONS FOR SIGNAL SHALL BE THE MISSISSIPPI STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION, 2004 EDITION.

(27) TRAFFIC SIGNAL CABLE IN MAST ARMS TO BE MEASURED AND PAID FOR AS ELECTRICAL CABLE, UNDERGROUND IN CONDUIT, IMSA 20–1, AWG # 14, 7 CONDUCTOR, (PAY ITEM 666–B).

(28) SEE WK. NO. TSD–1 FOR ADDITIONAL GENERAL NOTES REGARDING TRAFFIC SIGNALS.

(29) THE CONTRACTOR SHALL MAKE THE APPLICATION FOR POWER SERVICE, COORDINATING WITH UTILITY OFFICIALS, IN ADVANCE OF REQUIRING THE ELECTRICAL SERVICE AND INCIDENTALS NECESSARY FOR SUPPLY OF POWER. COST SHALL BE ABSORBED IN OTHER ITEMS OF CONSTRUCTION.

(30) REMOVAL OF CONCRETE ISLAND PAVEMENT SHALL BE INCLUDED IN PAY ITEM 202–B.

(31) SAW CUTS ARE REQUIRED FOR CONCRETE REMOVAL.

(32) WHERE MILLING OF THE ROADWAY LANE IS REQUIRED, THE CONTRACTOR SHALL PROVIDE OUTLETS IN THE EXISTING SHOULDERS AT SUFFICIENT INTERVALS TO PREVENT POOLING OR STANDING WATER.

(33) THE EROSION CONTROL DEVICES REFERENCED IN THESE PLANS ARE A MINIMUM MEASURMENT. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO INSURE THAT SILT DOES NOT LEAVE THE RIGHT OF WAY OR CONTAMINATE WATERS OF THE U.S. DURING CONSTRUCTION. THE CONTRACTOR WILL SUBMIT AN EROSION CONTROL PLAN PRIOR TO COMMENCEMENT OF WORK AND MAINTAIN THE PLAN DURING CONSTRUCTION.

(34) ALL REGRADING NEEDED PRIOR TO CONSTRUCTING THE BRIDGE SLOPE PAVING AT THE BLUE SPRINGS INTERCHANGE, SHALL BE ABSORBED IN THE COST OF ITEM 815–D CONCRETE SLOPE PAVING.

(35) FIBER BOARD SHALL BE PLACED AROUND ALL EXISTING AND PROPOSED BRIDGE PIERS PRIOR TO THE PLACEMENT OF THE CONCRETE SLOPE PAVING AT THE BLUE SPRINGS INTERCHANGE.

(36) SITE GRADING AT THE BLUE SPRINGS INTERCHANGE SHALL BE PROVIDED AS DIRECTED BY THE ENGINEER. ALL COSTS IS TO BE ABSORBED IN OTHER BID ITEMS.

(37) TRAFFIC SIGNAL HEADS SHALL BE BLACK IN COLOR.

(38) TRAFFIC SIGNAL POLES SHALL BE DESIGNED IN ACCORDANCE WITH THE 2001 AASHTO SPECIFICATION. 90 M.P.H. SHALL BE USED FOR THE DESIGN WIND SPEED. ICE LOADS WILL BE CONSIDERED. GALLOPING AND TRUCK GUSTS SHALL NOT BE CONSIDERED. FATIGUE CATEGORY IS II. DESIGN LIFE IS 50 YEARS.

(38) THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GENERAL NOTES

PROJECT NO. SP–0006–01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: GN–2
SHEET NUMBER: 7

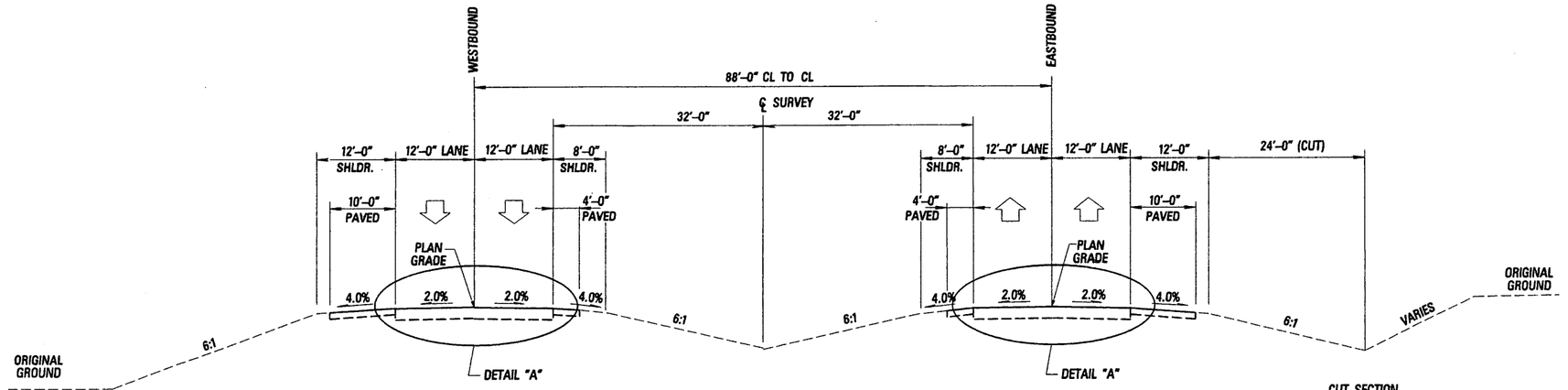
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DESIGN TEAM F&H, Inc. CHECKED DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION PLAN
08/13/2008 09:58:04 GN-2 US78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DATA FOR PAVEMENT DETERMINATION			
2010 ADT	=	3400	Current
2020 ADT	=		
2030 ADT	=	6900	Design
DHV	=	1000	
D	=	99	% of DHV
T	=	5	% of DHV
T (total)	=		% of ADT
18K (Rigid)	=		/ 1000
18K (Flex)	=		/ 1000
Design CBR	=		



WESTBOUND LANES
STA. 792+00 TO STA. 793+31.96
STA. 804+70 TO STA. 812+15

TYPICAL SECTION OF US 78 OVERLAY

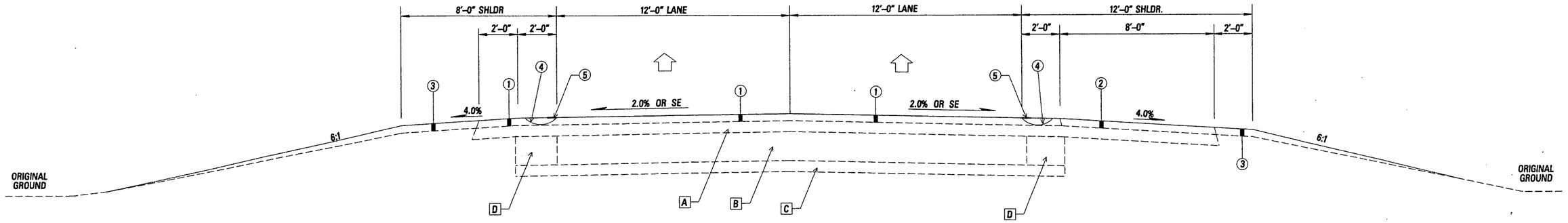
EASTBOUND LANES
STA. 792+00 TO STA. 812+15

PAVEMENT DESIGN FOR OVERLAY OF US 78

1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED)
2. 1.50" AND VAR. HOT MIX ASPHALT, HT (9.5 mm MIX) REQUIRED ON SHOULDERS.
3. 1.50" AND VAR. GRANULAR SHOULDER MATERIAL, (3C)
4. RUMBLE STRIPS, GROUND IN.
5. 6.00" THERMOPLASTIC STRIPE SHALL BE APPLIED OVER GROUND-IN RUMBLE STRIP.

- A OVERLAY FROM PREVIOUS CONTRACT
- B 8.00" CONTINUOUSLY REINFORCED CEMENT CONCRETE PAVEMENT IN PLACE.
- C SOIL CEMENT TREATED BASE IN PLACE.
- D 2" X 8" ASPHALT PAVEMENT TO REMAIN

NOTE:
1. NO GRANULAR MATERIAL SHALL BE PLACED DIRECTLY UPON THE FINISHED SURFACE COURSE.



DETAIL A
(IN DIRECTION OF TRAFFIC)

NOT TO SCALE

7
12
ANGLE OF REPOSE PERMITTED

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

US 78

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
TS-1	8

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

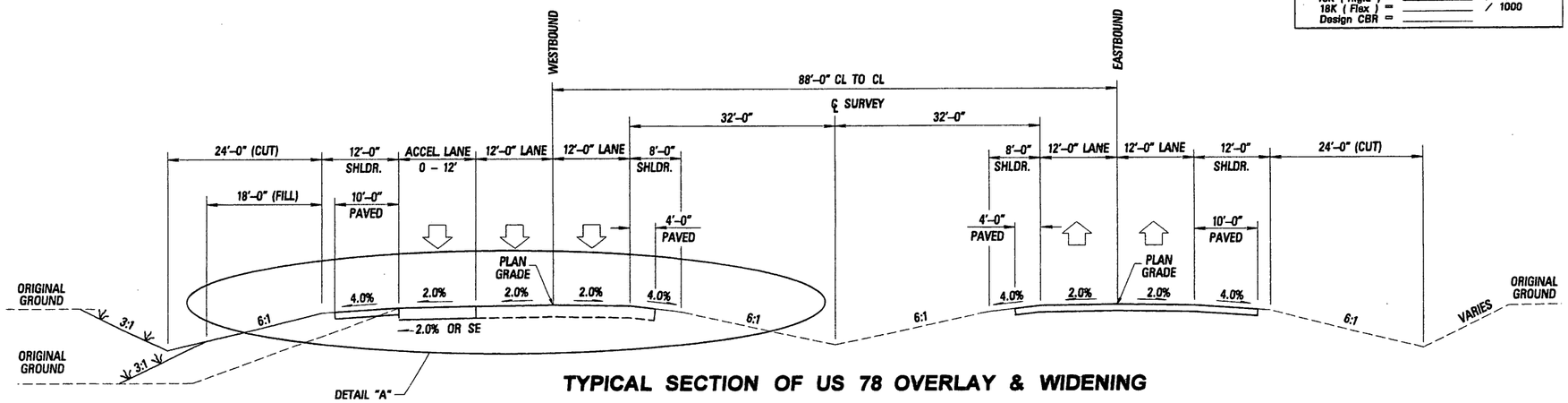
BY	REVISION	DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:42 TS CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DATA FOR PAVEMENT DETERMINATION		
2010 ADT =	3400	Current
2020 ADT =		
2030 ADT =	6900	Design
DHV =	1000	
D =	99 %	of DHV
T =	5 %	of DHV
T (total) =	%	of ADT
18K (Rigid) =		/ 1000
18K (Flex) =		/ 1000
Design CBR =		



TYPICAL SECTION OF US 78 OVERLAY & WIDENING

STA. 793+31.96 TO STA. 804+70.00 WESTBOUND (ACCELERATION LANE)

PAVEMENT DESIGN FOR US 78 WIDENING

1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED)
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED)
3. 2.50" HOT MIX ASPHALT, HT (19 mm MIX)
4. 2.50" HOT MIX ASPHALT, ST (19 mm MIX)
5. 9.00" CRUSHED STONE BASE
6. 8.00" CHEM. TREATED SUBGRADE
7. 1.50" HOT MIX ASPHALT, ST (9.5 mm MIX)
8. 2.00" HOT MIX ASPHALT, ST (12.5 mm MIX)
9. 2.50" HOT MIX ASPHALT, ST (19 mm MIX)
10. 11.50" AND VAR. GRANULAR SHOULDER MATERIAL (3℄)
11. 17.50" AND VAR. GRANULAR SHOULDER MATERIAL (3℄)
12. 1.50" AND VAR. GRANULAR SHOULDER MATERIAL, (3℄)

[A] OVERLAY FROM PREVIOUS CONTRACT

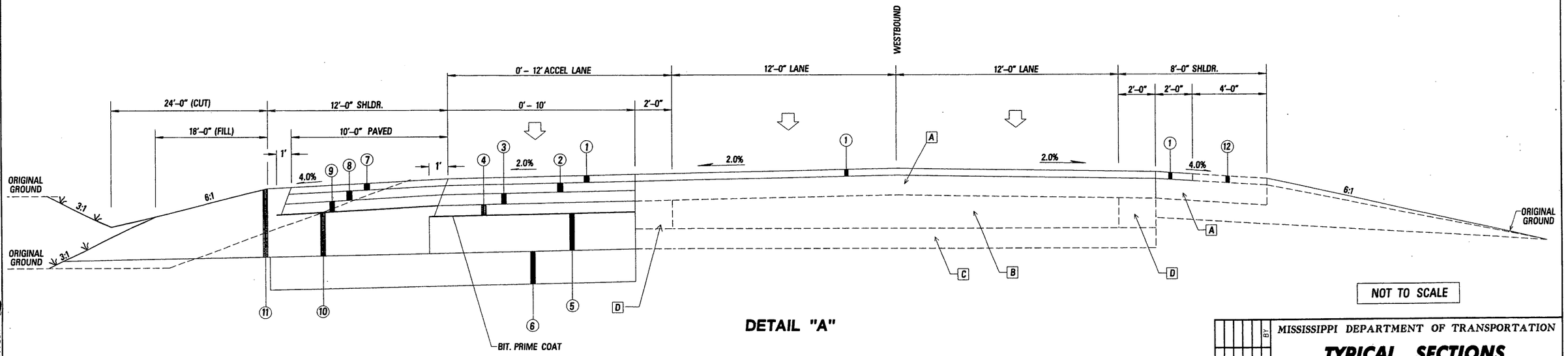
[B] 8.00" CONTINUOUSLY REINFORCED CEMENT CONCRETE PAVEMENT IN PLACE.

[C] SOIL CEMENT TREATED BASE IN PLACE.

[D] 2'X 8" ASPHALT PAVEMENT TO REMAIN.

NOTE:

1. PRIOR TO PLACING HOT MIX ASPHALT, THE EXISTING SHOULDERS ARE TO BE BLADED FOR A MINIMUM DISTANCE OF THREE FEET BEYOND THE EXISTING PAVEMENT TO REMOVE VEGETATION AND EXCESS SHOULDER MATERIAL.
2. NO GRANULAR MATERIAL SHALL BE PLACED DIRECTLY UPON THE FINISHED SURFACE COURSE.
3. EXISTING ASPHALT SHOULDERS TO BE REMOVED.



DETAIL "A"

NOT TO SCALE

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS–1.

7 : 12
ANGLE OF REPOSE PERMITTED

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

US 78

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS–2
SHEET NUMBER 9

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn

COUNTY : UNION / PONTOTOC PROJECT No. SP–0006–01(087)

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:43 TS CONST..DGN

DATA FOR PAVEMENT DETERMINATION			
2010 ADT	=	3400	Current
2020 ADT	=		
2030 ADT	=	6900	Design
DHV	=	1000	
D	=	99	% of DHV
T	=	5	% of DHV
T (total)	=		% of ADT
18K (Rigid)	=		/ 1000
18K (Flex)	=		/ 1000
Design CBR	=		

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT DESIGN FOR OVERLAY OF US 78

1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED)
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED)
3. 2.25" AND VAR. @ CL AND 1.50" AND VAR. AT 14' FROM CL (TO CORRECT CROWN TO 2.0% OR S.E.) HOT MIX ASPHALT, HT, (12.5 mm MIX), (POLYMER MODIFIED), LEVELING
4. ANY ASPHALT PAVEMENT IN PLACE OVER CONCRETE TO BE REMOVED BY COLD MILLING.
5. 1.50" AND VAR. HOT MIX ASPHALT, HT (9.5 mm MIX) REQUIRED ON SHOULDERS.
6. 2.00" AND VAR. HOT MIX ASPHALT, HT (12.5 mm MIX) REQUIRED ON SHOULDERS.
7. BITUMINOUS PRIME COAT
- * 8. 2'x 8" HOT MIX ASPHALT, HT (19 mm MIX), TRENCH WIDENING FROM THE TRENCH SHALL BE SPREAD ON THE SHOULDERS AS DIRECTED. THE COST OF THIS WORK IS TO BE INCLUDED IN THE BID PRICE FOR THE TRENCH WIDENING. EXCAVATED TRENCH TO BE FILLED PRIOR TO REMOVING LANE CLOSURE.
- * 9. 2.00" AND VAR. GRANULAR MATERIAL, 3C, REQUIRED ON THE SHOULDERS, TO BE PLACED PRIOR TO 6" IN GRADE PREPARATION.
- * 10. 6.00" INGRADE PREPARATION REQUIRED
11. 5.50" AND VARIABLE GRANULAR MATERIAL, 3C
12. RUMBLE STRIPS, GROUND IN.
13. 6.00" THERMOPLASTIC STRIPE SHALL BE APPLIED OVER GROUND-IN RUMBLE STRIP.

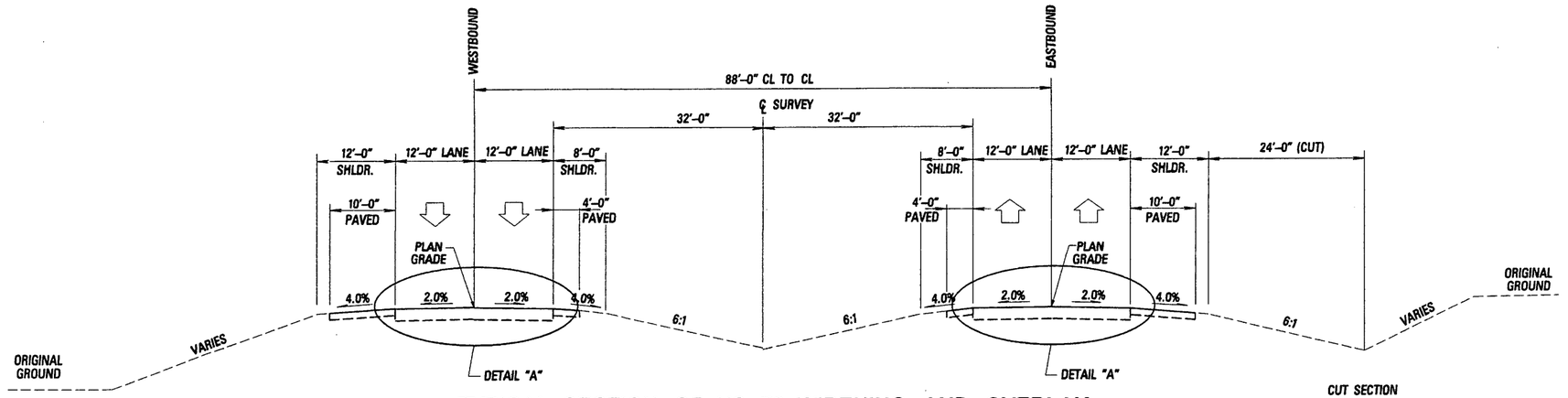
A. 8.00" CONTINUOUSLY REINFORCED CEMENT CONCRETE PAVEMENT IN PLACE.

B. SOIL CEMENT TREATED BASE IN PLACE.

C. 4" VARIABLE GRANULAR SHOULDER MATERIAL SHOULDER IN PLACE.

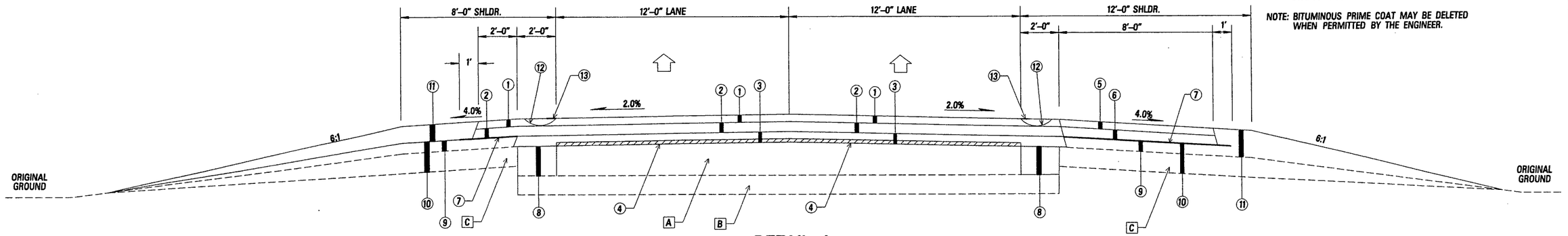
* TRENCH WIDENING AND SHOULDER INGRADE PREPARATION FROM STA. 812+15 TO STA. 815+70 AND STA. 888+00 TO STA. 894+00 WAS CONSTRUCTED IN PREVIOUS CONTRACTS.

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.



TYPICAL SECTION OF US 78 WIDENING AND OVERLAY

STA. 812+15 TO STA. 894+00



DETAIL A (IN DIRECTION OF TRAFFIC)

NOTE:

1. PRIOR TO PLACING HOT MIX ASPHALT, THE EXISTING SHOULDERS ARE TO BE BLADED FOR A MINMUM DISTANCE OF THREE FEET BEYOND THE EXISTING PAVEMENT TO REMOVE VEGETATION AND EXCESS SHOULDER MATERIAL.
2. NO GRANULAR MATERIAL SHALL BE PLACED DIRECTLY UPON THE FINISHED SURFACE COURSE.
3. TRENCH WIDENING TO BE COMPLETED PRIOR TO REMOVING LANE CLOSURE.
4. EXISTING ASPHALT SHOULDERS TO BE REMOVED.

NOT TO SCALE



ANGLE OF REPOSE PERMITTED

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

US 78

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-3
SHEET NUMBER 10

DESIGN TEAM F&H Inc. CHECKED DATE

FILENAME: ts CONST.dgn

BY | REVISION | DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

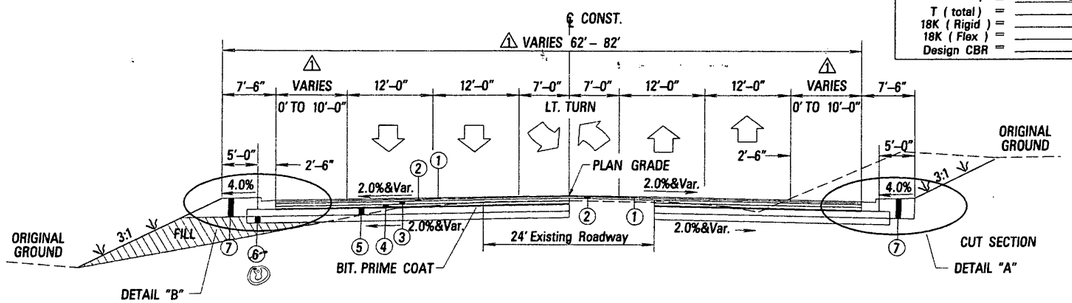
08/12/2008 10:08:43 TS CONST..DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

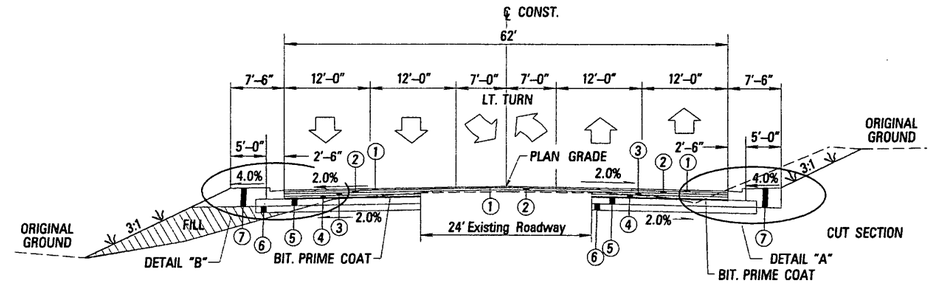
STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DATA FOR PAVEMENT DETERMINATION			
2010 ADT	=	3400	Current
2020 ADT	=		
2030 ADT	=	6900	Design
DHV	=	1000	
D	=	99	% of DHV
T	=	5	% of DHV
T (total)	=		% of ADT
18K (Rigid)	=		/ 1000
18K (Flex)	=		/ 1000
Design CBR	=		



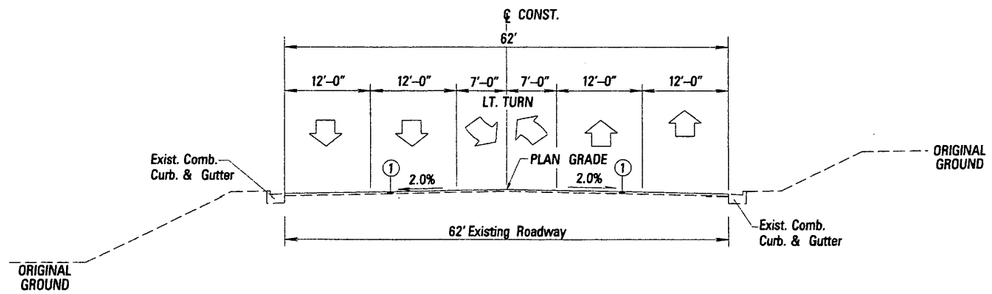
TYPICAL SECTION OF SR 9 @ BLUE SPRINGS

⚠ 29+76 TO 33+41.65



TYPICAL WIDENING & OVERLAY SECTION OF SR 9 @ BLUE SPRINGS

22+75 TO 29+76 ⚠



TYPICAL OVERLAY SECTION OF SR 9 @ BLUE SPRINGS

BEGIN CONST. TO 22+75

PAVEMENT DESIGN FOR SR 9 AT BLUE SPRINGS

ROADWAY & INSIDE SHOULDER

1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@1.5")
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@2")
3. 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFT@2.50")
4. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
5. 9.00" CRUSHED STONE BASE

17.50" STRUCTURE THICKNESS

* 6. 8.00" CHEM. TREATED SUBGRADE

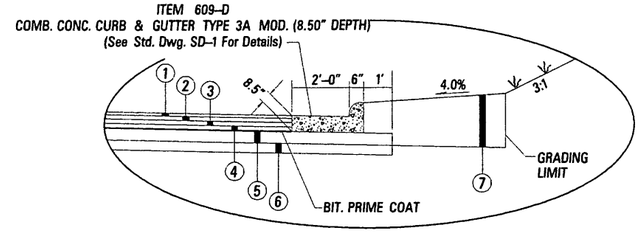
OUTSIDE SHOULDER

7. 23.50" & VAR. GRANULAR SHOULDER MATERIAL (3%)

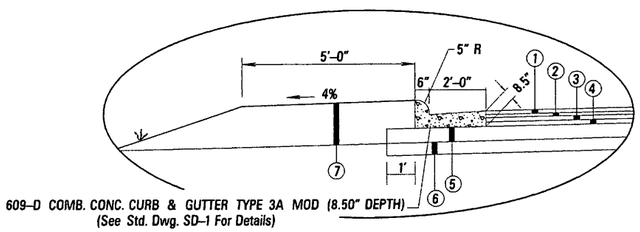
* LIME (6%) TREATING 100% OF THE PROJECT

(5) 9.00" Crushed Stone Base

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.



DETAIL "A"



DETAIL "B"

NOT TO SCALE



ANGLE OF REPOSE PERMITTED

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS–1.

DATE	CHANGED TYPICAL DIMENSION REVISION	BY
10/18/08		F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

SR 9 @ BLUE SPRINGS

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS–4

SHEET NUMBER 11

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

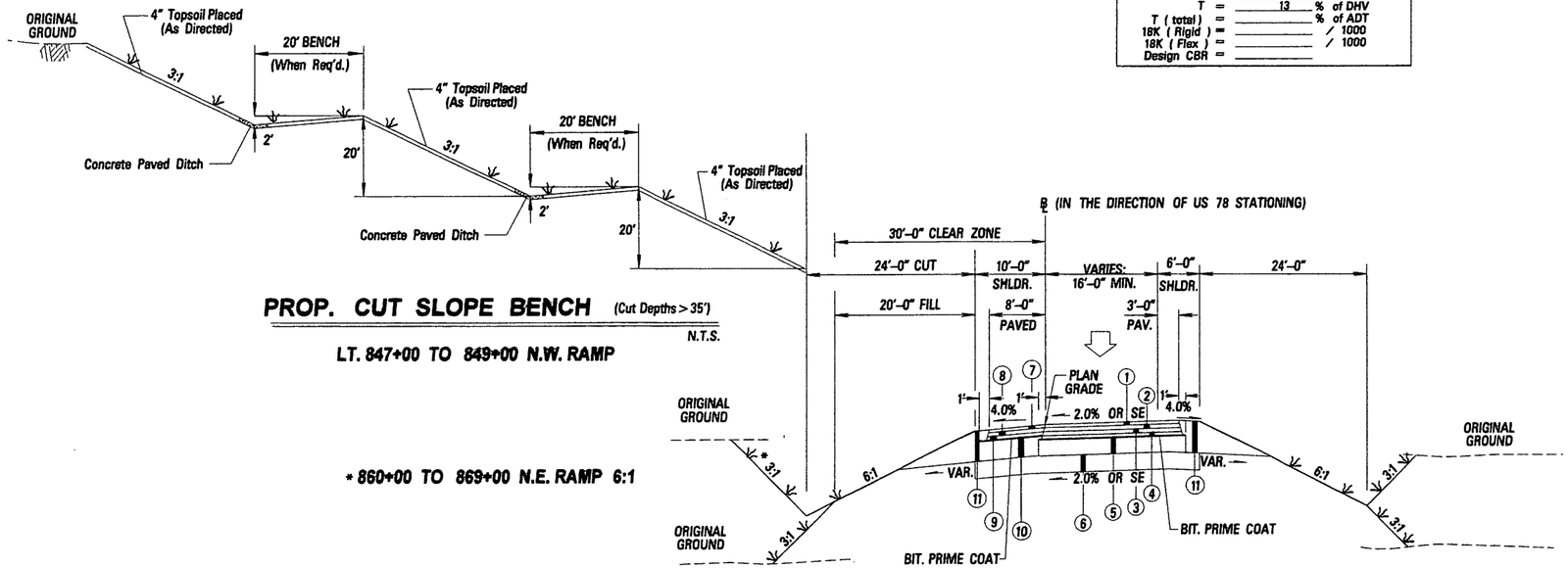
DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP–0006–01(087)

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 09:30:02 TS CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DATA FOR PAVEMENT DETERMINATION		
2010 ADT =	520	Current
2020 ADT =		
2030 ADT =	920	Design
DHV =	130	
D =	97	% of DHV
T =	13	% of DHV
T (total) =		% of ADT
18K (Rigid) =		/ 1000
18K (Flex) =		/ 1000
Design CBR =		



PROP. CUT SLOPE BENCH (Cut Depths > 35')

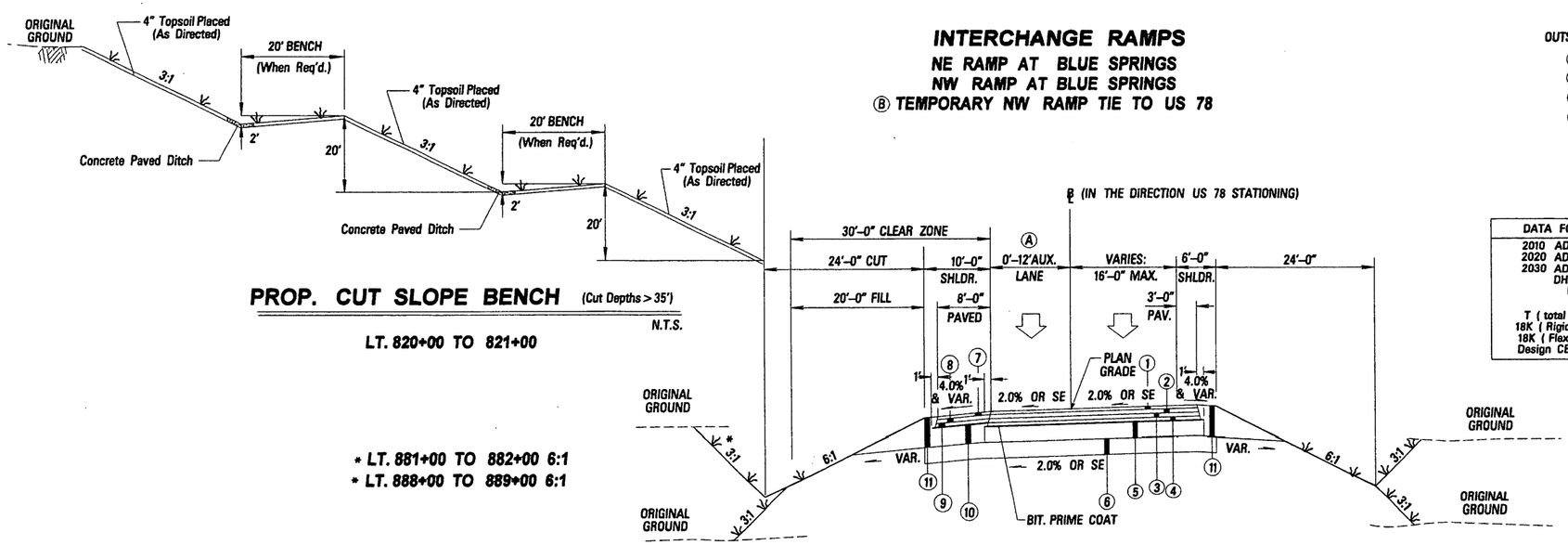
N.T.S.

LT. 847+00 TO 849+00 N.W. RAMP

*** 860+00 TO 869+00 N.E. RAMP 6:1**

INTERCHANGE RAMPS

NE RAMP AT BLUE SPRINGS
NW RAMP AT BLUE SPRINGS
Ⓑ TEMPORARY NW RAMP TIE TO US 78



PROP. CUT SLOPE BENCH (Cut Depths > 35')

N.T.S.

LT. 820+00 TO 821+00

*** LT. 881+00 TO 882+00 6:1**
*** LT. 888+00 TO 889+00 6:1**

COLLECTOR - DISTRIBUTOR ROAD

Ⓐ STA. 849+70.43 TO STA. 853+99.31
STA. 820+85.37 TO STA. 832+21.27

DATA FOR PAVEMENT DETERMINATION		
2010 ADT =	3400	Current
2020 ADT =		
2030 ADT =	6900	Design
DHV =	1000	
D =	99	% of DHV
T =	5	% of DHV
T (total) =		% of ADT
18K (Rigid) =		/ 1000
18K (Flex) =		/ 1000
Design CBR =		

7
12
ANGLE OF REPOSE PERMITTED

NOT TO SCALE

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

PAVEMENT DESIGN FOR US 78 RAMPS AT BLUE SPRINGS & COLLECTOR-DISTRIBUTOR ROAD

ROADWAY & INSIDE SHOULDER
1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@1.5")
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@2")
3. 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFT@2.50")
4. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
5. 9.00" CRUSHED STONE BASE

17.50" STRUCTURE THICKNESS

* 6. 8.00" CHEM. TREATED SUBGRADE

OUTSIDE SHOULDER
7. 1.50" HOT MIX ASPHALT, ST (9.5 mm MIX) (1 LIFT@1.50")
8. 2.00" HOT MIX ASPHALT, ST (12.5 mm MIX) (1 LIFT@2")
9. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
10. 11.50" & VAR. GRANULAR SHOULDER MATERIAL (3C)
11. 17.50" & VAR. GRANULAR SHOULDER MATERIAL (3C)

* LIME (6%) TREATING 100% OF THE PROJECT

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.

Ⓑ PAVEMENT DESIGN FOR TEMPORARY NW RAMP TIE TO US 78

ROADWAY & INSIDE SHOULDER
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@2")
3. 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFT@2.50")
4. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
5. 9.00" CRUSHED STONE BASE

16.00" STRUCTURE THICKNESS

OUTSIDE SHOULDER
8. 2.00" HOT MIX ASPHALT, ST (12.5 mm MIX) (1 LIFT@2")
9. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
10. 11.50" & VAR. GRANULAR SHOULDER MATERIAL (3C)
11. 16.00" & VAR. GRANULAR SHOULDER MATERIAL (3C)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS
INTERCHANGE RAMPS & COLLECTOR - DISTRIBUTOR RD.

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-5
SHEET NUMBER 12

BY | REVISION | DATE

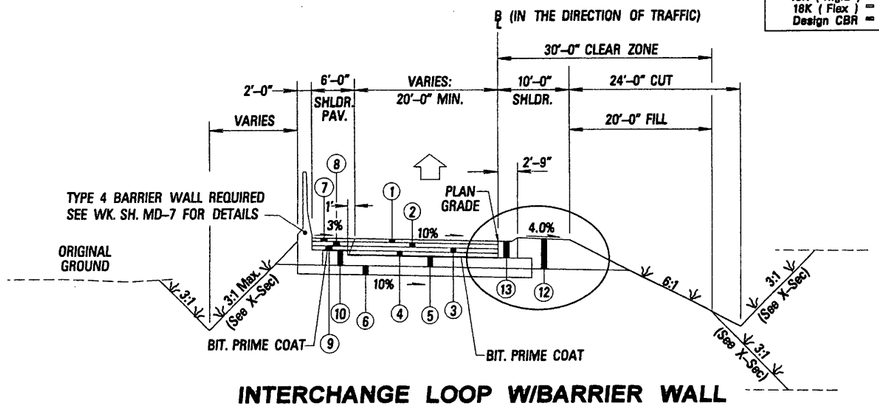
FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

PLAN PROJECT DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/12/2008 10:08:44 TS CONST..DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

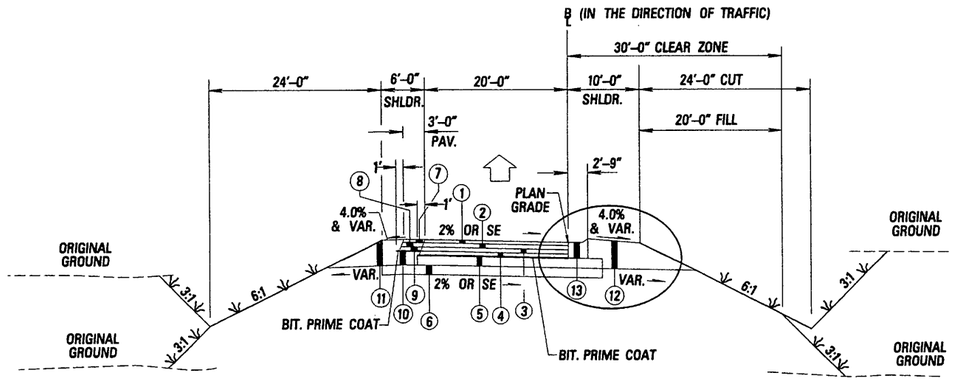
STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DATA FOR PAVEMENT DETERMINATION			
2010 ADT	=	1700	Current
2020 ADT	=		
2030 ADT	=	3400	Design
DHV	=	750	
D	=	99	% of DHV
T	=	5	% of DHV
T (total)	=		% of ADT
18K (Rigid)	=		/ 1000
18K (Flex)	=		/ 1000
Design CBR	=		



INTERCHANGE LOOP W/BARRIER WALL

NW LOOP AT BLUE SPRINGS
STA. 17+00 TO STA. 19+50



INTERCHANGE LOOPS

NE LOOP AT BLUE SPRINGS
NW LOOP AT BLUE SPRINGS

PAVEMENT DESIGN FOR LOOPS AT BLUE SPRINGS

ROADWAY

1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@1.5")
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@2")
3. 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFT@2.50")
4. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
5. 9.00" CRUSHED STONE BASE

17.50" STRUCTURE THICKNESS

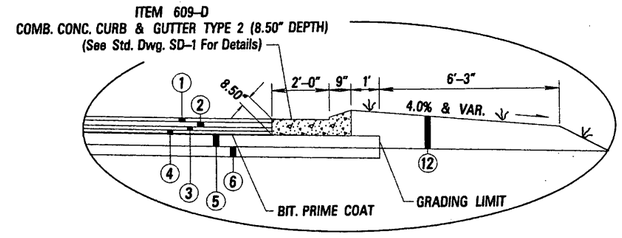
* 6. 8.00" CHEM. TREATED SUBGRADE

SHOULDER

7. 1.50" HOT MIX ASPHALT, ST (9.5 mm MIX) (1 LIFT@1.50")
8. 2.00" HOT MIX ASPHALT, ST (12.5 mm MIX) (1 LIFT@2")
9. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
10. 11.50" & VAR. GRANULAR SHOULDER MATERIAL (3C)
11. 17.50" & VAR. GRANULAR SHOULDER MATERIAL (3C)
12. VAR. GRANULAR SHOULDER MATERIAL (3C)
13. COMB. CONC. CURB & GUTTER TYPE 2 (8.50" DEPTH)

* LIME (6%) TREATING 100% OF THE PROJECT

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.



DETAIL "A"

NOT TO SCALE

7
12
ANGLE OF REPOSE PERMITTED

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

INTERCHANGE LOOPS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-6
SHEET NUMBER 13

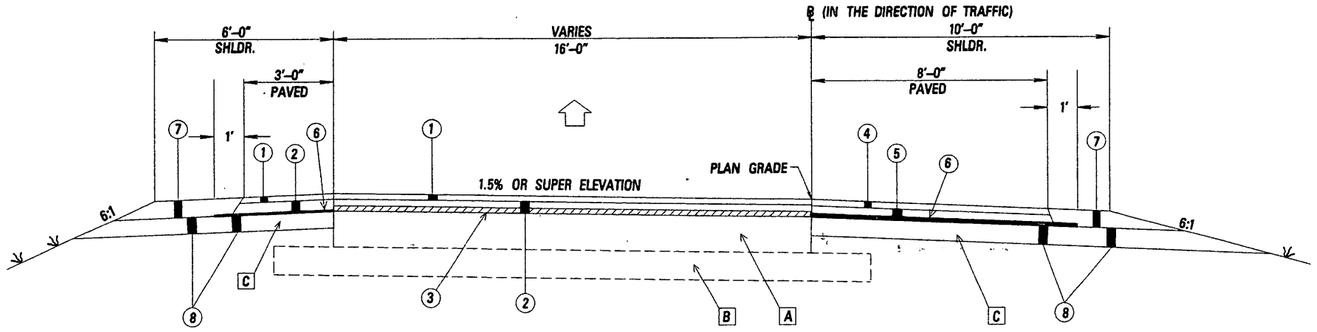
FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

REVISION BY DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:45 TS CONST..DGN

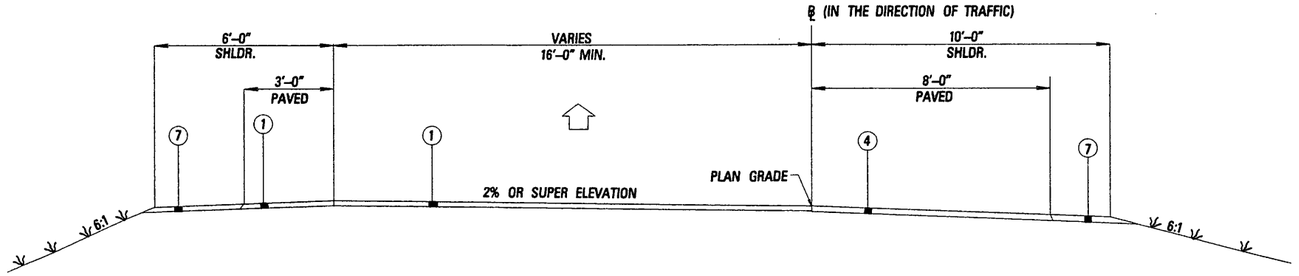
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



INTERCHANGE RAMP OVERLAY
(IN THE DIRECTION OF TRAFFIC)

SE RAMP AT BLUE SPRINGS
STA. 13+50 TO END CONST.

SEE TS-13 FOR PAVEMENT OVERLAY TRANSITIONS



INTERCHANGE RAMP OVERLAY

SW RAMP AT BLUE SPRINGS
BEGIN CONST. TO END CONST.

SE RAMP AT BLUE SPRINGS
BEGIN CONST. TO STA. 13+50

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

7
12
ANGLE OF REPOSE PERMITTED

PAVEMENT DESIGN FOR OVERLAY SECTIONS FOR INTERCHANGE RAMPS

ROADWAY

(1) 1.50" HOT MIX ASPHALT, HT, (9.5 MM MIX) (POLYMER MODIFIED) (1 LIFT.@1.50")
(2) 2.25" AND VAR. HOT MIX ASPHALT, HT, (12.5–MM MIX), (POLYMER MODIFIED) (LIFT @2.25")
(3) ANY ASPHALT PAVEMENT IN PLACE OVER CONCRETE TO BE REMOVED BY COLD MILLING.

SHOULDERS

(4) 1.50" AND VAR. HOT MIX ASPHALT, HT, (9.5–MM MIX) (1 LIFT @1.50")
(5) 2.25" AND VAR. HOT MIX ASPHALT, HT, (12.5–MM MIX) (1 LIFT @2.25")
(6) ASPHALT FOR PRIME COAT. (MAY BE DELETED AS DIRECTED BY ENGINEER).
(7) 3.50" AND VAR. GRANULAR SHOULDER MATERIAL, 3C
(8) 6" INGRADE PREPARATION REQUIRED

[A] 8" CONTINUOUSLY REINFORCED CEMENT CONCRETE PAVEMENT IN PLACE.

[B] SOIL CEMENT TREATED BASE IN PLACE.

[C] 6" AND VAR. GRANULAR SHOULDER MATERIAL 3C IN PLACE.

NOTE:

1. PRIOR TO PLACING ANY HOT MIX ASPHALT, THE EXISTING GRAVEL SHOULDERS ARE TO BE BLADED FOR A MINIMUM DISTANCE OF THREE FEET BEYOND THE EXISTING PAVEMENT TO REMOVE VEGETATION AND EXCESS SHOULDER MATERIAL. (NOT A PAY ITEM)
2. NO GRANULAR MATERIAL SHALL BE PLACED DIRECTLY UPON THE FINISHED SURFACE COURSE.
3. EXISTING ASPHALT SHOULDERS TO BE REMOVED.

NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

OVERLAY INTERCHANGE RAMPS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

BY	REVISION	DATE

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

WORKING NUMBER TS-7
SHEET NUMBER 14

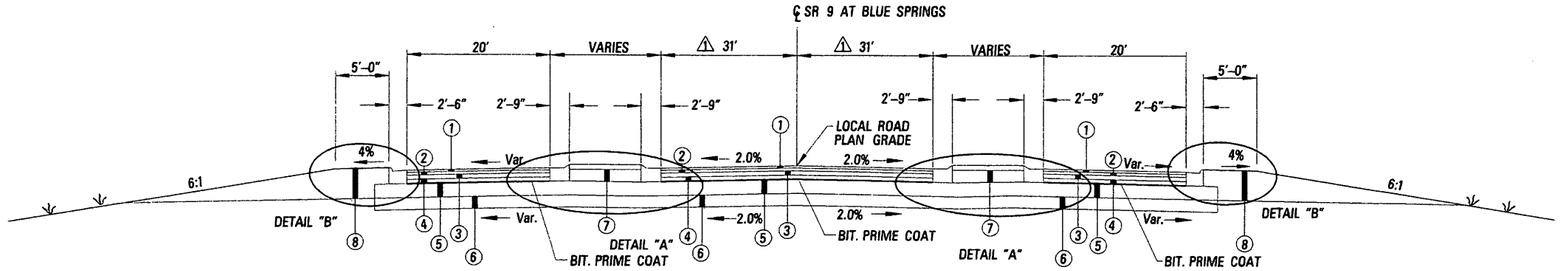
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:45 TS CONST..DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



TYPICAL FULL DEPTH SECTION OF CHANNELIZED INTERSECTION @ SR 9 WITH SR 178
(SHOWING RAISED ISLANDS WITHIN THE CURB & GUTTER LIMITS)
SOUTHWEST & SOUTHEAST QUADRANTS

PAVEMENT DESIGN FOR CHANNELIZED INTERSECTION @ SR 9 WITH SR 178

ROADWAY

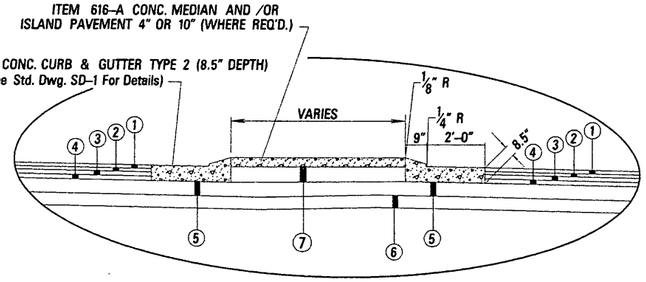
① 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@1.5")
② 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@2")
③ 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFT@2.50")
④ 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
⑤ 9.00" CRUSHED STONE BASE
17.50" STRUCTURE THICKNESS
* ⑥ 8.00" CHEM. TREATED SUBGRADE

SHOULDER

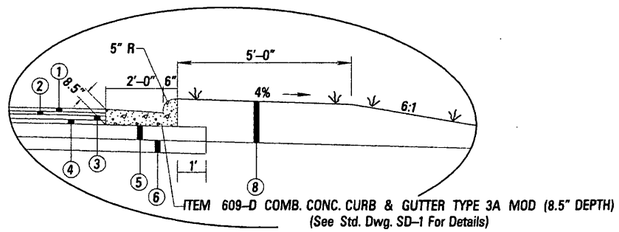
⑦ 8.50" GRANULAR SHOULDER MATERIAL (3/C)
⑧ 23.50" & VAR. GRANULAR SHOULDER MATERIAL (3/C)
⑨ 1.50" HOT MIX ASPHALT, ST (9.5 MM MIX) (1 LIFT @ 1.50")
⑩ 2.00" HOT MIX ASPHALT, ST (12.5 MM MIX) (1 LIFT @ 2.00")
⑪ 2.50" HOT MIX ASPHALT, ST (19 MM MIX) (1 LIFT @ 2.50")
⑫ 11.50" & VAR. GRANULAR SHOULDER MATERIAL (3/C)
⑬ 17.50" & VAR. GRANULAR SHOULDER MATERIAL (3/C)

* LIME (6%) TREATING 100% OF THE PROJECT

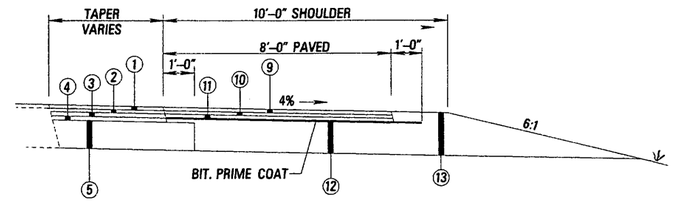
NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.



DETAIL "A"
RAISED ISLAND WITH COMBINATION CURB & GUTTER TYPE 2



DETAIL "B"
COMBINATION CURB & GUTTER TYPE 3A MOD



DETAIL OF SHOULDER @ SR 9
OUTSIDE CURB & GUTTER LIMITS
SOUTHWEST & SOUTHEAST QUADRANTS

NOT TO SCALE

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

7
12
ANGLE OF REPOSE PERMITTED

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
TYPICAL SECTIONS
CHANNELIZED INTERSECTION
SR 9 / SR 178
@ BLUE SPRINGS
(ASPHALT PAVEMENT)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-8
SHEET NUMBER 15

DATE	CHANGED TYPICAL DIMENSION REVISION	BY
08/18/08		F&H

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
10/15/2008 09:30:20 TS CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT DESIGN FOR CHANNELIZED INTERSECTION @ NW RAMP & NE RAMP WITH SR 9

ROADWAY

1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@1.5")
2. 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@2")
3. 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFT@2.50")
4. 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFT@2.50")
5. 9.00" CRUSHED STONE BASE

17.50" STRUCTURE THICKNESS

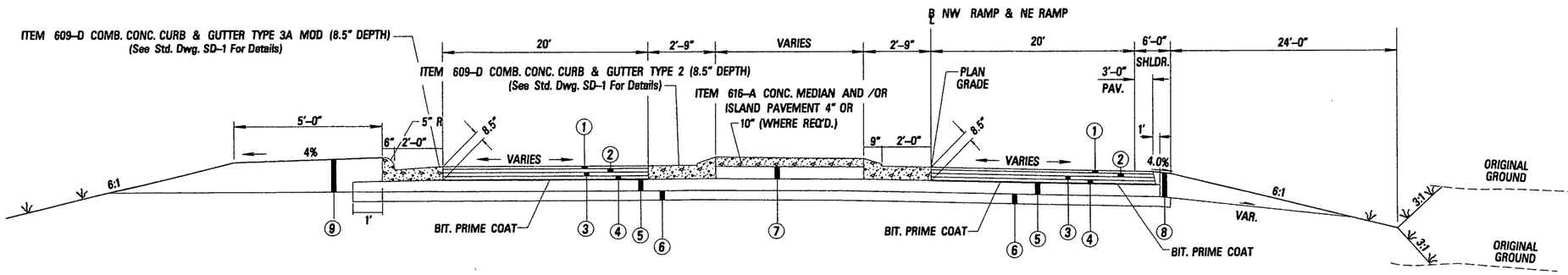
* 6. 8.00" CHEM. TREATED SUBGRADE

OUTSIDE SHOULDER

7. 8" & VAR. GRANULAR SHOULDER MATERIAL (3/C)
8. 17.50" & VAR. GRANULAR SHOULDER MATERIAL (3/C)
9. 23.5." & VAR. GRANULAR SHOULDER MATERIAL (3/C)

* LIME (6%) TREATING 100% OF THE PROJECT

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.



TYPICAL SECTION OF CHANNELIZED INTERSECTION AT NW RAMP & NE RAMP WITH SR 9 AT BLUE SPRINGS (SHOWING RAISED ISLANDS WITHIN THE CURB & GUTTER LIMITS)

NOT TO SCALE

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

7
12
ANGLE OF REPOSE PERMITTED

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

CHANNELIZED INTERSECTIONS INTERCHANGE RAMPS @ BLUE SPRINGS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-9

SHEET NUMBER 16

BY | REVISION | DATE

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

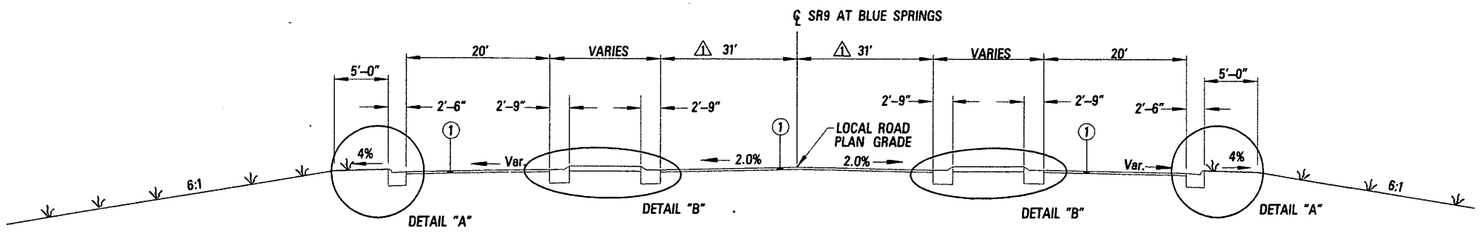
DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:47 TS CONST..DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



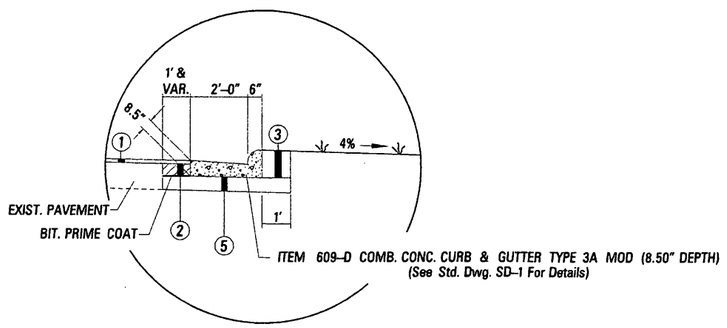
TYPICAL OVERLAY SECTION OF CHANNELIZED INTERSECTION @ SR 9 WITH SR 178 (SHOWING RAISED ISLANDS WITHIN THE CURB & GUTTER LIMITS) NORTHWEST & NORTHEAST QUADRANTS

OVERLAY PAVEMENT DESIGN FOR CHANNELIZED INTERSECTION @ SR 9 WITH SR 178

ROADWAY

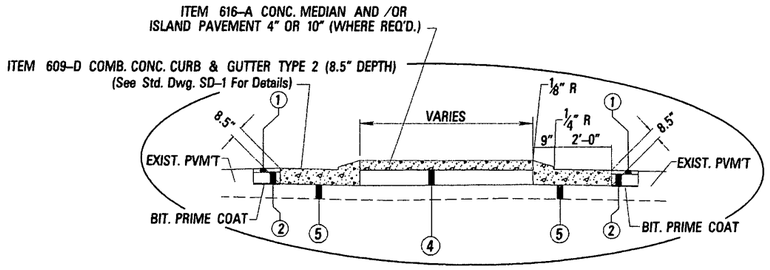
1. 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED) (1 LIFT@1.5")
2. 7.00" HOT MIX ASPHALT, HT, (19-mm MIX) AS DIRECTED BY THE ENGINEER.
3. 13.00" & VAR. GRANULAR SHOULDER MATERIAL (3℄)
4. 7.00" & VAR. GRANULAR SHOULDER MATERIAL (3℄)
5. 8.00" & VAR. CRUSHED STONE BASE W/GEOTEXTILE FABRIC TYPE V (NON-WOVEN) AS DIRECTED BY THE ENGINEER

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.



DETAIL "A"

COMBINATION CURB & GUTTER TYPE 3A MOD.



DETAIL "B"

RAISED ISLAND WITH COMBINATION CURB & GUTTER TYPE 2

NOT TO SCALE

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

7
12
ANGLE OF REPOSE PERMITTED

DATE	CHANGED TYPICAL DIMENSION REVISION	BY
10/18/08		F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

CHANNELIZED INTERSECTION SR 9 / SR 178 @ BLUE SPRINGS (ASPHALT PAVEMENT)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-10

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

SHEET NUMBER 17

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
10/15/2008 09:30:33 TS CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT DESIGN FOR MAINLINE CONCRETE PUNCHOUT AREAS

① HOT MIX ASPHALT SHOULDER PAVING TO BE REMOVED AS NECESSARY TO ALLOW FOR FORMING @ CONCRETE REPAIR LOCATIONS PAY ITEM NO. 202-B. BACKFILL WITH 5" AND VAR. GRANULAR MATERIAL, CLASS 3, GROUP C, PAY ITEM NO. 304-A.

② AREAS OF CONCRETE TO BE REMOVED, PAY ITEM NO. 202-B, AND REPLACED AS DIRECTED BY ENGINEER PAY ITEM NO. 503-A.

③ REMOVAL OF FAILED BASE (PAY AS REMOVAL OF CEMENT TREATED BASE) PAY ITEM NO. 202-B, BACKFILL WITH CLASS "C" CONCRETE (PAY AS CONCRETE FOR BASE REPAIR) PAY ITEM NO. 503-D.

[A] 8" CONTINUOUSLY REINFORCED CEMENT CONCRETE PAVEMENT IN PLACE.

[B] SOIL CEMENT TREATED BASE IN PLACE.

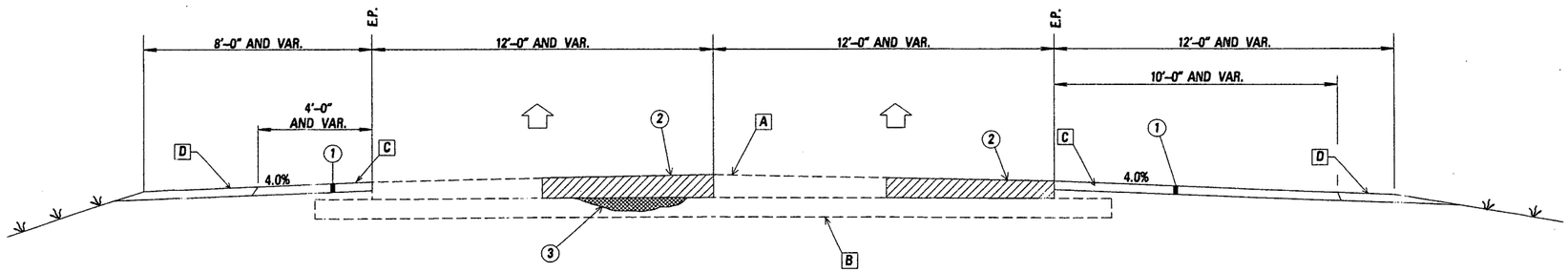
[C] 4" AND VAR. ASPHALT SHOULDER IN PLACE.

[D] 4" AND VAR. GRANULAR MATERIAL SHOULDER IN PLACE.

NOTE:

1. PUNCHOUT REPAIRS WITHIN THE LIMITS OF EXIT AND ENTRANCE RAMP TAPERS SHALL BE DONE FIRST IN ORDER THAT THE EXIT AND ENTRANCE RAMPS TO U.S. 78 MAY BE RETURNED TO NORMAL OPERATION AS SOON AS POSSIBLE.

2. LEVELING MAY BE REQUIRED AFTER PUNCHOUTS AREAS ARE COMPLETE, AS DIRECTED BY THE ENGINEER, PAY ITEM NO. 907-403-E.



TYPICAL SECTION OF CONCRETE PUNCHOUT AREAS IN MAINLINE (IN DIRECTION OF TRAFFIC)

STA. 814+15 TO STA. 891+00

NOT TO SCALE



ANGLE OF REPOSE PERMITTED

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

US 78 CONCRETE PUNCHOUT AREAS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-11

SHEET NUMBER 18

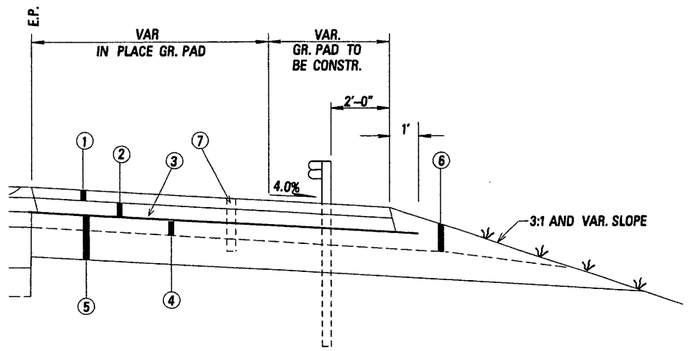
REVISION | BY | DATE

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

08/12/2009 10:08:47 TS_CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



TYPICAL GUARDRAIL SECTION AT BRIDGE
U.S. 78

SEE STD. GR-4 FOR ADDITIONAL DETAILS

* (1) 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) REQUIRED ON SHOULDERS.

* (2) 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) REQUIRED ON SHOULDERS.

(3) BITUMINOUS PRIME COAT

(4) 2.00" AND VAR. GRANULAR SHOULDER MATERIAL, 3-C, REQUIRED ON THE SHOULDERS, TO BE PLACED PRIOR TO 6" IN GRADE PREPARATION.

(5) 6.00" INGRADE PREPARATION REQUIRED

(6) 5.50" AND VAR. GRANULAR MATERIAL, CLASS 3, GROUP C.

(7) EXISTING GUARDRAIL POST HOLES ARE TO BE BACKFILLED UP TO 1' FROM FINISH SURFACE WITH GRANULAR MATERIAL, CLASS 3, GROUP C, THE REMAINDER TO BE FILLED WITH HOT MIX ASPHALT, HT, (12.5 mm MIX) PAY ITEM NO. 907-403-A.

* HOT MIX ASPHALT MATERIAL SHALL BE POLYMER MODIFIED ON INSIDE SHOULDER.

NOTE: BITUMINOUS PRIME COAT MAY BE DELETED WHEN PERMITTED BY THE ENGINEER.

NOT TO SCALE

7
12
ANGLE OF REPOSE PERMITTED

INDICATES AREA TO BE TREATED IN ACCORDANCE WITH THE VEGETATION SCHEDULE. SEE WK. SH. No. VS-1.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTION

GUARDRAIL @ BRIDGE

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-12

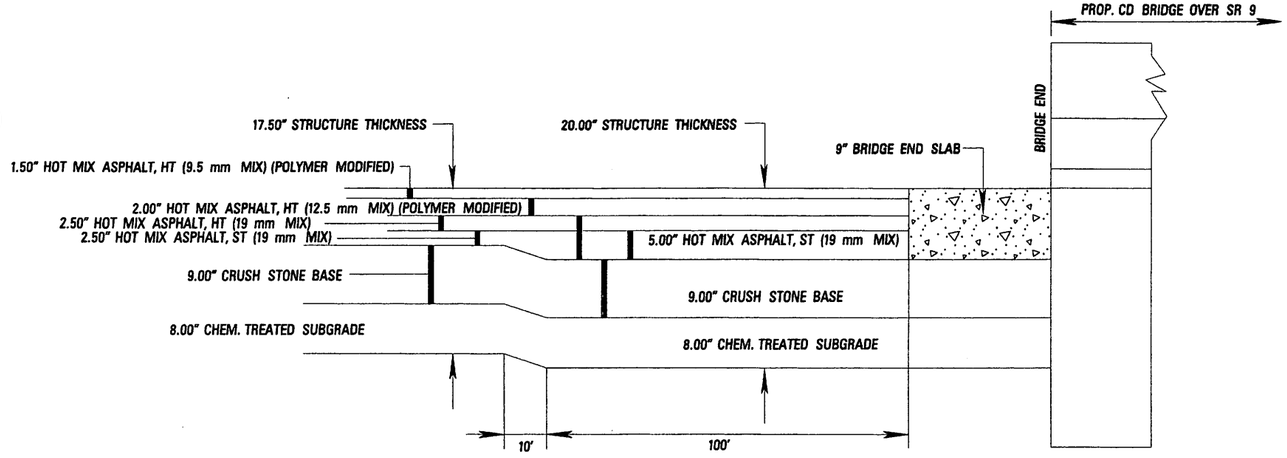
SHEET NUMBER 19

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

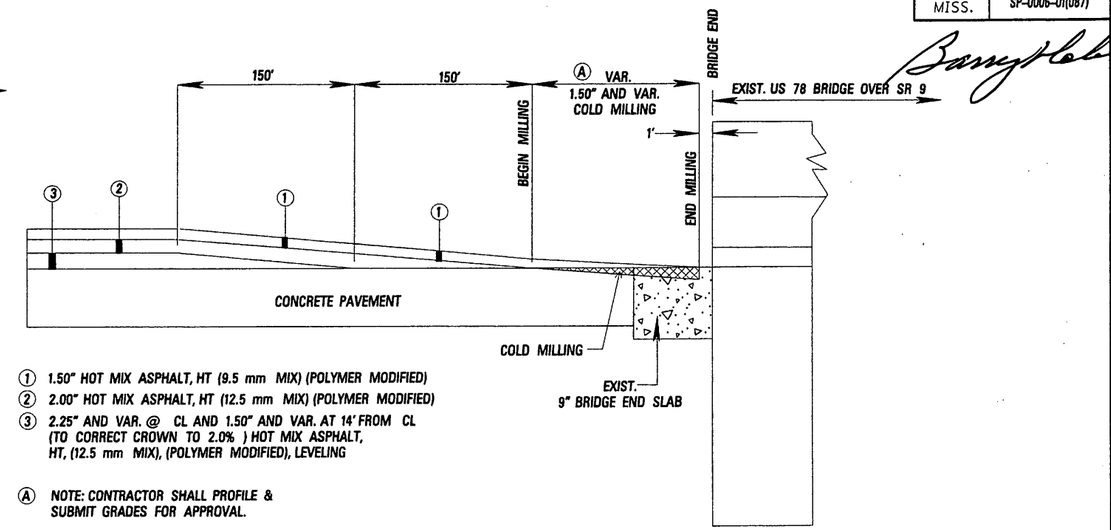
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:48 TS CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



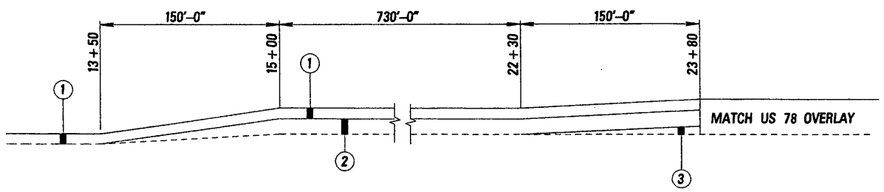
DETAIL FOR CD ROAD PAVEMENT @ BRIDGE ENDS OVER SR 9



① 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) (POLYMER MODIFIED)
② 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) (POLYMER MODIFIED)
③ 2.25" AND VAR. @ CL AND 1.50" AND VAR. AT 14' FROM CL (TO CORRECT CROWN TO 2.0%) HOT MIX ASPHALT, HT, (12.5 mm MIX), (POLYMER MODIFIED), LEVELING

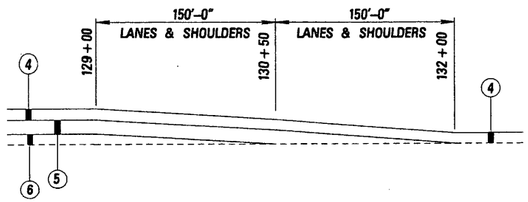
Ⓐ NOTE: CONTRACTOR SHALL PROFILE & SUBMIT GRADES FOR APPROVAL.

DETAIL OF MILLING & PAVEMENT TRANSITION @ EXISTING US 78 BRIDGE ENDS OVER SR 9



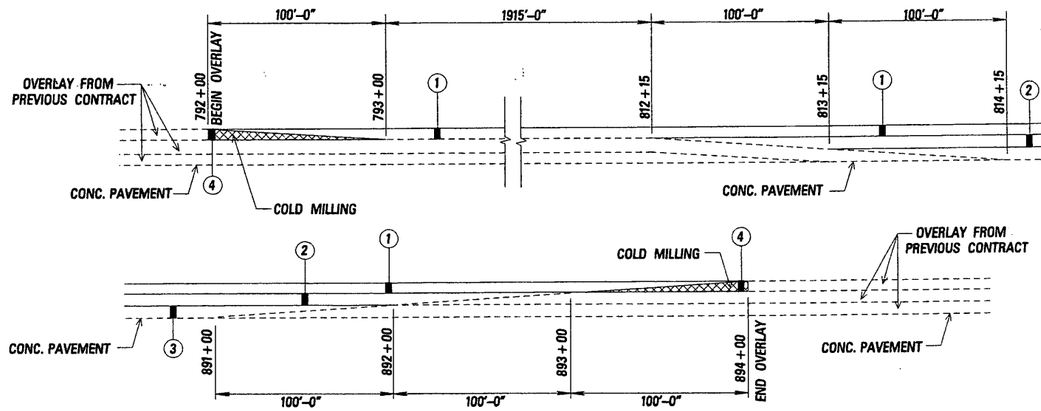
DETAIL FOR PAVEMENT TRANSITIONS @ SE RAMP

① 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) POLYMER MODIFIED.
② 2.25" HOT MIX ASPHALT, HT (12.5 mm MIX) POLYMER MODIFIED.
③ 1.25" AND VAR. HOT MIX ASPHALT LEVELING, HT (12.5 mm MIX) POLYMER MODIFIED.



DETAIL FOR PAVEMENT TRANSITION @ SW RAMP

④ 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) POLYMER MODIFIED.
⑤ 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) POLYMER MODIFIED.
⑥ 1.50" AND VAR. HOT MIX ASPHALT, LEVELING, HT (12.5 mm MIX) POLYMER MODIFIED.



DETAIL FOR PAVEMENT TRANSITION ON US 78

① 1.50" HOT MIX ASPHALT, HT (9.5 mm MIX) POLYMER MODIFIED.
② 2.00" HOT MIX ASPHALT, HT (12.5 mm MIX) POLYMER MODIFIED.
③ 2.25" AND VAR. @ CL AND 1.50" AND VAR. AT 14' FROM CL (TO CORRECT CROWN TO 2.0%) HOT MIX ASPHALT, HT, (12.5 mm MIX), (POLYMER MODIFIED) LEVELING.
④ 1.50" @ VAR. COLD MILLING

NOT TO SCALE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

DETAIL OF PAVEMENT TRANSITIONS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TS-13

SHEET NUMBER 20

REVISION | BY | DATE

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 10:08:48 TS CONST. DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: ts CONST.dgn

COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

Barry Hutcheson

PAVEMENT DESIGN FOR TEMPORARY WIDENING @ NW RAMP INTERSECTION
(SAME COURSES AS NW RAMP PAVEMENT)

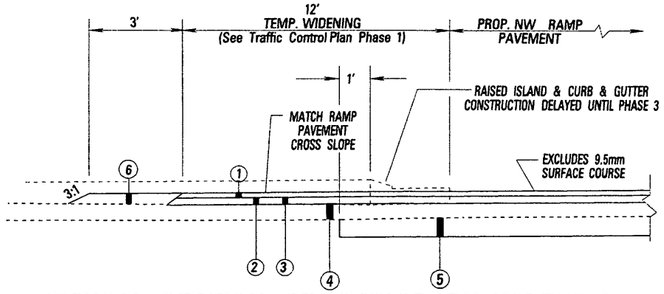
ROADWAY

① 2.00" HOT MIX ASPHALT, HT, (POLYMER MODIFIED) (12.5 mm MIX) (1 LIFT@2")
② 2.50" HOT MIX ASPHALT, HT (19 mm MIX) (1 LIFTS@2.50")
③ 2.50" HOT MIX ASPHALT, ST (19 mm MIX) (1 LIFTS@2.50")
④ 9.00" CRUSHED STONE BASE
16" STRUCTURE THICKNESS

⑤ 8.00" CHEM. TREATED SUBGRADE

SHOULDER

⑥ 7.00" & VAR. CRUSHED STONE BASE



TYPICAL SECTION OF TEMPORARY WIDENING
NW RAMP @ SR 9 INTERSECTION

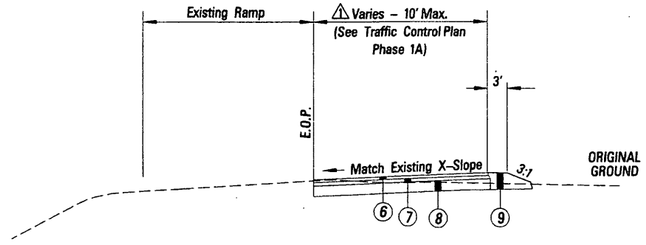
⚠ PAVEMENT DESIGN FOR TEMPORARY WIDENING OF EXISTING RAMP @ SR 178 INTERSECTION

ROADWAY

⑥ 1.50" HOT MIX ASPHALT, ST (9.5 mm MIX) (1 LIFT@1.5")
⑦ 2.00" HOT MIX ASPHALT, ST (12.5 mm MIX) (1 LIFT@2")
⑧ 8.00" CRUSHED STONE
11.50" STRUCTURE THICKNESS

SHOULDER

⑨ 11.50" & VAR. SHOULDER GRANULAR MATERIAL (3C)



TYPICAL SECTION OF TEMPORARY WIDENING
EB SR 178 TO SB SR 9 EXISTING RAMP
⚠ (SIMILAR FOR NB SR 9 TO EB SR 178)

NOT TO SCALE



ANGLE OF REPOSE
PERMITTED

DATE	CHANGED TYPICAL DIMENSION REVISION	BY
10/18/06		F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL SECTIONS

MAINTENANCE OF TRAFFIC

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER
TS-14

FILENAME: ts CONST.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

SHEET NUMBER
21

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2006 11:34:32 TS CONST..DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

1ST. REV.

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	UNION		PONTOTOC		TOTALS		
	**** EARTHWORK ITEMS ****		PRELIMINARY	FINAL	PRELIMINARY	FINAL	PRELIMINARY	FINAL	
201–A	CLEARING AND GRUBBING	LUMP SUM	100%	100 %	0%	0 %	100%	100 %	(1)
202–B	REMOVAL OF ASPHALT PAVEMENT, ALL DEPTHS	SQUARE YARD	8375	10,933.04	0	— 0 —	8375	10,933.04	(14)
202–B	REMOVAL OF BOX CULVERT WINGS AND HEADWALL, ALL SIZES	EACH	1	1	0	— 0 —	1	1	
202–B	REMOVAL OF CEMENT TREATED BASE, ALL DEPTHS	SQUARE YARD	112	— 0 —	0	— 0 —	112	— 0 —	(3)(15)
202–B	REMOVAL OF CONCRETE HEADWALL	EACH	11	14	0	— 0 —	11	14	
202–B	REMOVAL OF CONCRETE MEDIAN & ISLAND PAVEMENT, ALL DEPTHS	SQUARE YARD	495 ⚠	206.24	0	— 0 —	495 ⚠	206.24	
202–B	REMOVAL OF CONCRETE PAVED DITCH	SQUARE YARD	336	2,159.62	0	— 0 —	336	2,159.62	
202–B	REMOVAL OF CONCRETE PAVEMENT W/ VARIABLE DEPTH OVERLAY	SQUARE YARD	1157	4,553.826	0	— 0 —	1157	4,553.826	
202–B	REMOVAL OF CONCRETE SLOPE PAVING	SQUARE YARD	2123	2,131.11	0	— 0 —	2123	2,131.11	
202–B	REMOVAL OF CURB & GUTTER, ALL TYPES	LINEAR FOOT	1924 ⚠	1571	0	— 0 —	1924 ⚠	1,571	
202–B	REMOVAL OF FENCE, ALL TYPES	LINEAR FOOT	9512	8,409	0	— 0 —	9512	8,409	(2)
202–B	REMOVAL OF GUARD RAIL	LINEAR FOOT	752	818	0	— 0 —	752	818	
202–B	REMOVAL OF INLETS, ALL SIZES	EACH	1	— 0 —	0	— 0 —	1	— 0 —	
202–B	REMOVAL OF JUNCTION BOX	EACH	2	3	0	— 0 —	2	3	
202–B	REMOVAL OF PIPE, 8" AND ABOVE	LINEAR FOOT	264	248	0	— 0 —	264	248	
202–B	REMOVAL OF SIGN	EACH	3	3	0	— 0 —	3	3	(13)
202–B	REMOVAL OF SIGN INCLUDING POST AND FOOTING	EACH	12	12	0	— 0 —	12	12	
202–B	REMOVAL OF SIGN, GROUND MOUNTED WITH POSTS	EACH	7	10	0	— 0 —	7	10	
202–B	REMOVAL OF TRAFFIC STRIPE	MILE	2	0.223	0	— 0 —	2	0.223	
202–B	REMOVAL OF RAISED REFLECTIVE PAVEMENT MARKER	EACH	346	329	0	— 0 —	346	329	
203–A	UNCLASSIFIED EXCAVATION, FM, AH	CUBIC YARD	794,698 ⚠	723,747.82	0	— 0 —	794,698 ⚠	723,747.82	(15A)⚠
203–G	EXCESS EXCAVATION, FM	CUBIC YARD	194,501 ⚠	351,785.70	0	— 0 —	194,501 ⚠	351,785.70	(3)
206–A	STRUCTURE EXCAVATION	CUBIC YARD	1316	1,449.815	0	— 0 —	1316	1,449.815	(5)
206–B	SELECT MATERIAL FOR UNDERCUTS, CONTRACTOR FURNISHED, FM	CUBIC YARD	36	32.372	0	— 0 —	36	32.372	(6)
	**** ROADSIDE DEVELOPMENT ITEMS ****								
211–B	TOPSOIL FOR SLOPE TREATMENT, CONTRACTOR FURNISHED	CUBIC YARD	19852	28,400	0	— 0 —	19852	28,400	(7)
212–A	LIGHT GROUND PREPARATION	SQUARE YARD	166,406	169,249.67	0	— 0 —	166,406	169,249.67	(8)
212–B	STANDARD GROUND PREPARATION	SQUARE YARD	332,812	392,893.39	0	— 0 —	332,812	392,893.39	
907–213–A	AGRICULTURAL LIMESTONE	TON	206	250.52	0	— 0 —	206	250.52	
213–B	COMBINATION FERTILIZER, 13–13–13	TON	43	49.650	0	— 0 —	43	49.650	(9)
213–C	SUPERPHOSPHATE	TON	34	— 0 —	0	— 0 —	34	— 0 —	
214–A	SEEDING, BAHIAGRASS	POUND	1719	1,886	0	— 0 —	1719	1,886	
214–A	SEEDING, BERMUDAGRASS	POUND	1375	1,627	0	— 0 —	1375	1,627	
214–A	SEEDING, BROWNTOP MILLET	POUND	688	102	0	— 0 —	688	102	(8)
214–A	SEEDING, CRIMSON CLOVER	POUND	690	1,509	0	— 0 —	690	1,509	
214–A	SEEDING, OATS	POUND	3094	1,802	0	— 0 —	3094	1,802	(8)
214–A	SEEDING, RYE GRASS	POUND	860	746	0	— 0 —	860	746	(8)
214–A	SEEDING, SERICEA LESPEDEZA	POUND	860	409	0	— 0 —	860	409	
214–A	SEEDING, TALL FESCUE	POUND	1719	2,032	0	— 0 —	1719	2,032	
215–A	VEGETATIVE MATERIALS FOR MULCH	TON	172	209.26	0	— 0 —	172	209.26	(10)
216–A	SOLID SODDING	SQUARE YARD	5852	3,004.67	0	— 0 —	5852	3,004.67	(4)
217–A	DITCH LINER	SQUARE YARD	2490	34,585.89	0	— 0 —	2490	34,585.89	
219–A	WATERING	K/GALLON	117	— 0 —	0	— 0 —	117	— 0 —	
220–A	INSECT PEST CONTROL	ACRE	35	— 0 —	0	— 0 —	35	— 0 —	
221–A	PORTLAND CEMENT CONCRETE PAVED DITCH	CUBIC YARD	1010 ⚠	1,328.744	0	— 0 —	1010 ⚠	1,328.744	(11)
223–A	MOWING	ACRE	1	38.78	0	— 0 —	1	38.78	
224–A	SOIL REINFORCING MAT	SQUARE YARD	2288	950.62	0	— 0 —	2288	950.62	
234–A	TEMPORARY SILT FENCE	LINEAR FOOT	3482	14,571	0	— 0 —	3482	14,571	
907–234–D	INLET SILTATION GUARD	EACH	30	— 0 —	0	— 0 —	30	— 0 —	
907–234–E	RESET INLET SILTATION GUARD	EACH	30	— 0 —	0	— 0 —	30	— 0 —	
235–A	TEMPORARY EROSION CHECKS	BALE	2736	176	0	— 0 —	2736	176	
236–A	SILT BASIN, TYPE D	EACH	10	9	0	— 0 —	10	9	(12)
239–A	TEMPORARY SLOPE DRAINS	LINEAR FOOT	446	— 0 —	0	— 0 —	446	— 0 —	
907-308-A	Portland Cement S/A	T	— 0 —	1,058.7	— 0 —	— 0 —	— 0 —	1,058.7	
907-308-B	Soil-Cement-Water, Optional Mixers, Base S/A	S.Y.	— 0 —	67,728.77	— 0 —	— 0 —	— 0 —	67,728.77	
213-C061	Refertilization 13-13-13 S/A	T	— 0 —	4.849	— 0 —	— 0 —	— 0 —	4.849	

(1) INCLUDES CLEARING & GRUBBING ALL PROPOSED R.O.W. AREA LEFT OF US 78 FROM STA. 793+00 TO STA. 892+00 AND TO STA 34+00 ALONG SR 9 AT BLUE SPRINGS.

(2) EXIST. ACCESS CONTROL FENCE ALONG US 78.

(3) AS DIRECTED BY THE ENGINEER.

(4) INCLUDES 5769 SQ. YDS. FOR PAVED DITCHES AND 83 SQ. YDS. FOR PAVED APRONS.

(5) INCLUDES 473 CU. YDS. FOR BOX CULVERTS AND 843 CU. YDS. FOR PIPES.

(6) SHALL MEET THE REQUIREMENTS COARSE STABILIZER AGGREGATE SIZE I OR II SUBSECTIONS 703.20.02 AND 703.20.03.

(7) INCLUDES 1362 CU. YDS. FOR CUT & EMB. SLOPE BENCHES

(8) FOR TEMPORARY EROSION CONTROL.

(9) INCLUDES 9 TONS FOR TEMPORARY EROSION CONTROL.

(10) INCLUDES 34 TONS FOR TEMPORARY EROSION CONTROL.

(11) INCLUDES 14 CU. YDS. FOR PAVED FLUMES, ⚠ 973 CU. YDS. FOR CONC. PAVED DITCHES, 17 CU. YDS. FOR MAST POLE SURFACE PADS AND 6 CU. YDS. FOR PAVED APRONS.

(12) WHEN SILT BASINS ARE REMOVED, AREAS ARE TO BE REDRESSED STABILIZED, & SEEDED. RIP RAP AND SEDIMENT STONE SHALL BE REMOVED AND REPLACED AT PERMANENT LOCATIONS AS DIRECTED BY THE ENGINEER. ALL COST FOR REDRESSING AREAS, REMOVAL AND REPLACEMENT OF THE STONE IS TO BE ABSORBED IN THE PAY ITEM FOR THE SILT BASIN.

(13) INCLUDES SIGN PANEL ONLY.

(14) INCLUDES 8061 S.Y. FOR PUNCHOUT AREAS.

(15) FOR PUNCHOUT AREAS.

⚠(15A) LAYERS OF HARD SHELL MATERIALS (AS NOTED IN THE GEOTECHNICAL REPORT) MAY BE ENCOUNTERED IN SOME AREAS TO BE EXCAVATED. THIS MATERIAL WILL BE USED AS UNCLASSIFIED EXCAVATION.

DATE	REVISION	BY
1/23/09	REVISED FOOTNOTE	F&H
9/18/08	REVISED QUANTITIES	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER SQ-1

SHEET NUMBER 22

FILENAME: sqs.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

01/23/2009 13:15:32 SQS.DGN

DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION / PONTOTOC

PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

1st Q. REV.

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	UNION		PONTOTOC		TOTALS		
			PRELIMINARY	FINAL	PRELIMINARY	FINAL	PRELIMINARY	FINAL	
	**** SUBBASE, BASE & PAVING ITEMS ****								
304-A	GRANULAR MATERIAL, LVM, CLASS 3, GROUP C	CUBIC YARD	1262 ⚠1 ⚠2	- 0 -	0	- 0 -	1262 ⚠1 ⚠2	- 0 -	(23)
304-C	GRANULAR MATERIAL, AEA, CLASS 3, GROUP C	CUBIC YARD	27743	26,474.12	0	- 0 -	27743	26,474.12	(22)
907-304-F	3/4" AND DOWN CRUSHED STONE BASE	TON	27178 ⚠	33,973.03	0	- 0 -	27178 ⚠	33,973.03	(24)
907-304-H	3/4" AND DOWN CRUSHED STONE BASE, LVM	CUBIC YARD	86 ⚠	- 0 -	0	- 0 -	86 ⚠	- 0 -	(16)
907-307-C	8" SOIL-LIME-WATER MIXING, CLASS C	SQUARE YARD	69471 ⚠	- 0 -	0	- 0 -	69471 ⚠	- 0 -	
907-307-D	LIME	TON	1250 ⚠	- 0 -	0	- 0 -	1250 ⚠	- 0 -	
321-A	6" INGRADE PREPARATION	MILE	4	5.540	0	- 0 -	4	5.540	
907-403-A	HOT MIX ASPHALT, ST, 9.5-MM MIXTURE	TON	1092	999.30	0	- 0 -	1092	999.30	(25)
907-403-A	HOT MIX ASPHALT, HT, 9.5-MM MIXTURE	TON	1477	1,689.32	0	- 0 -	1477	1,689.32	
907-403-A	HOT MIX ASPHALT, ST, 12.5-MM MIXTURE	TON	1464	1,297.68	0	- 0 -	1464	1,297.68	(26)
907-403-A	HOT MIX ASPHALT, HT, 12.5-MM MIXTURE	TON	1731	1,857.91	0	- 0 -	1731	1,857.91	(21)
907-403-A	HOT MIX ASPHALT, HT, 19-MM MIXTURE	TON	6879 ⚠	7,219.85	0	- 0 -	6879 ⚠	7,219.85	(27)
907-403-A	HOT MIX ASPHALT, ST, 19-MM MIXTURE	TON	8666 ⚠	8,305.01	0	- 0 -	8666 ⚠	8,305.01	(28)
907-403-C	HOT MIX ASPHALT, HT, 19-MM MIXTURE, TRENCH WIDENING	TON	2499	2,621.01	0	- 0 -	2499	2,621.01	
907-403-D	HOT MIX ASPHALT, HT, 9.5-MM MIXTURE, POLYMER MODIFIED	TON	11709 ⚠	11,268.42	0	- 0 -	11709 ⚠	11,268.42	
907-403-D	HOT MIX ASPHALT, HT, 12.5-MM MIXTURE, POLYMER MODIFIED	TON	11870 ⚠	11,589.18	0	- 0 -	11870 ⚠	11,589.18	(29) ⚠4 ⚠3 (23)
907-403-E	HOT MIX ASPHALT, HT, 12.5-MM MIXTURE, POLYMER MODIFIED, LEVELING	TON	4939	4,656.35	0	- 0 -	4939	4,656.35	
406-A	COLD MILLING OF BITUMINOUS PAVEMENT, ALL DEPTHS	SQUARE YARD	5681	2,338.87	0	- 0 -	5681	2,338.87	
406-B	COLD MILLING OF CONCRETE PAVEMENT, ALL DEPTHS	SQUARE YARD	1600	1,600.00	0	- 0 -	1600	1,600.00	
408-A	ASPHALT FOR PRIME COAT, CUT BACK MC -70 OR EMULSIFIED EA-1	GALLON	33369 ⚠	- 0 -	0	- 0 -	33369 ⚠	- 0 -	(30)
423-A	RUMBLE STRIPS, GROUND IN	MILE	5	5.894	0	- 0 -	5	5.894	
	**** CONCRETE PAVING ITEMS ****								
501-E	EXPANSION JOINTS, WITHOUT DOWELS	LINEAR FOOT	90	90	0	- 0 -	90	90	
502-A	REINFORCED CEMENT CONCRETE BRIDGE END PAVEMENT	SQUARE YARD	200	200	0	- 0 -	200	200	
503-A	8" AND VARIABLE REINFORCED CONCRETE PAVEMENT	SQUARE YARD	112	306.666	0	- 0 -	112	306.666	
503-B	SAWCUT LONGITUDINAL JOINTS	LINEAR FOOT	72	- 0 -	0	- 0 -	72	- 0 -	
503-C	SAWCUT , 3-INCH	LINEAR FOOT	204	498	0	- 0 -	204	498	
503-C	SAWCUT , FULL DEPTH	LINEAR FOOT	228	783.5	0	- 0 -	228	783.5	
503-D	CONCRETE FOR BASE REPAIR	CUBIC YARD	25	- 0 -	0	- 0 -	25	- 0 -	
503-E	TIE BARS, NO 5 DEFORMED DRILLED AND EPOXIED OR GROUTED	EACH	58	128	0		58	128	
	**** DRAINAGE ITEMS ****								
907-601-A	CLASS "B" STRUCTURAL CONCRETE	CUBIC YARD	172	170.438	0	- 0 -	172	170.438	(20)
907-601-B	CLASS "B" STRUCTURAL CONCRETE, MINOR STRUCTURES	CUBIC YARD	75	74.142	0	5.678	75	79.820	(17)
602-A	REINFORCING STEEL	POUND	36,288	35,141.09	0	- 0 -	36,288	35,141.09	(18)
603-A	24" STEEL PIPE, WALL THICKNESS 0.375"	LINEAR FOOT	200	- 0 -	0	- 0 -	200	- 0 -	(19)
					0				
603-CA	18" REINFORCED CONCRETE PIPE, CLASS III	LINEAR FOOT	204	168	0	- 0 -	204	168	
603-CA	24" REINFORCED CONCRETE PIPE, CLASS III	LINEAR FOOT	1196 ⚠	1,256	0	- 0 -	1196 ⚠	1,256	
603-CA	30" REINFORCED CONCRETE PIPE, CLASS III	LINEAR FOOT	136	136	0	- 0 -	136	136	
603-CA	36" REINFORCED CONCRETE PIPE, CLASS III	LINEAR FOOT	24	24	0	- 0 -	24	24	
603-CA	30" REINFORCED CONCRETE PIPE, CLASS IV, CLASS C BEDDING	LINEAR FOOT	164	168	0	- 0 -	164	168	
603-CA	36" REINFORCED CONCRETE PIPE, CLASS IV, CLASS C BEDDING	LINEAR FOOT	180	184	0	- 0 -	180	184	
603-CA	48" REINFORCED CONCRETE PIPE, CLASS V, CLASS B BEDDING	LINEAR FOOT	108	112	0	- 0 -	108	112	
603-CA	36" REINFORCED CONCRETE PIPE, CLASS V, JACKED OR BORED	LINEAR FOOT	68	72	0	- 0 -	68	72	
603-CB	18" REINFORCED CONCRETE END SECTION	EACH	4	4	0	- 0 -	4	4	
603-CB	24" REINFORCED CONCRETE END SECTION	EACH	15	16	0	- 0 -	15	16	
603-CB	30" REINFORCED CONCRETE END SECTION	EACH	4	4	0	- 0 -	4	4	
603-CB	36" REINFORCED CONCRETE END SECTION	EACH	4	4	0	- 0 -	4	4	
603-CB	48" REINFORCED CONCRETE END SECTION	EACH	1	1	0	- 0 -	1	1	
603-CE	22" X 13" CONCRETE ARCH PIPE, CLASS A III	LINEAR FOOT	344	320	0	- 0 -	344	320	(31)
603-CE	36" X 23" CONCRETE ARCH PIPE, CLASS A III	LINEAR FOOT	76	80	0	- 0 -	76	80	
603-CE	51" X 31" CONCRETE ARCH PIPE, CLASS A III	LINEAR FOOT	96	88	0	- 0 -	96	88	
603-CF	22" X 13" CONCRETE ARCH PIPE END SECTION	EACH	5	5	0	- 0 -	5	5	
603-CF	36" X 23" CONCRETE ARCH PIPE END SECTION	EACH	2	2	0	- 0 -	2	2	
603-CF	51" X 31" CONCRETE ARCH PIPE END SECTION	EACH	2	2	0	- 0 -	2	2	
604-A	CASTINGS	POUND	3158	3,158	0	- 0 -	3158	3,158	
604-B	GRATINGS	POUND	4700	4,700	0	- 0 -	4700	4,700	

(16) FOR MAINTENANCE OF TRAFFIC.

(17) INCLUDES 44 CU. YDS. FOR INLETS, 3 CU. YDS. PIPE COLLARS, 4 CU. YDS. TOEWALLS, 12 CU. YDS. JUNCTION BOXES, 8 CU. YDS. FOR DIRECTIONAL SIGN FOOTINGS & 4 CU. YDS. FOR STANDARD SIGN FOOTINGS.

(18) INCLUDES 28,861 LBS. FOR BOX CULVERTS, 3762 LBS. FOR INLETS, 839 LBS. JUNCTION BOXES, 1841 LBS. FOR BARRIER WALL FOOTER & 985 LBS. FOR DIRECTIONAL SIGN SUPPORTS.

(19) "OPEN CUT" ENCASEMENT PIPE. MINIMUM YIELD STRENGTH 35,000 psi.. MATERIAL TO BE IN ACCORDANCE WITH ASTM A139 STEEL ENCASEMENT. COAT EXTERIOR W/COAL TAR EPOXY.

(20) INCLUDES 132 CU. YDS. FOR BOX CULVERTS AND 40 CU. YDS. FOR BARRIER WALL FOOTER

(21) INCLUDES 3 TONS FOR FILLING EXISTING GUARDRAIL POST HOLES AND 113 TONS FOR TEMPORARY NW RAMP.

(22) INCLUDES 3 C.Y. FOR FILLING EXISTING GUARDRAIL POST HOLES AND 433 C.Y. FOR TEMPORARY NW RAMP.

(23) INCLUDES 1117 C.Y. FOR CONCRETE PUNCHOUT AREAS, 45 C.Y. FOR MAINTENANCE OF TRAFFIC, AND 100 C.Y. FOR RE-ESTABLISHING SLOPE PAVING AREAS.

(24) INCLUDES 55 TONS FOR MAINTENANCE OF TRAFFIC AND 880 TONS FOR TEMPORARY NW RAMP.

(25) INCLUDES 21 TONS FOR MAINTENANCE OF TRAFFIC.

(26) INCLUDES 28 TONS FOR MAINTENANCE OF TRAFFIC.

(27) INCLUDES 12 TONS FOR MAINTENANCE OF TRAFFIC AND 477 TONS FOR TEMPORARY NW RAMP.

(28) INCLUDES 12 TONS FOR MAINTENANCE OF TRAFFIC AND 477 TONS FOR TEMPORARY NW RAMP.

(29) INCLUDES 10 TONS FOR MAINTENANCE OF TRAFFIC AND 269 TONS FOR TEMPORARY NW RAMP.

(30) INCLUDES 4,482 GALLONS FOR TEMPORARY NW RAMP.

(31) INCLUDES 40 L.F. OF TEMPORARY PIPE (UNION COUNTY).

DATE	REVISION	BY
1/23/09	REVISED QTY. & FOOTNOTE	F&H
10/19/06	REVISED QUANTITIES	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER SQ-2

SHEET NUMBER 23

FILENAME: sqs.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:30 SQS.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

ADDENDUM

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	UNION		PONTOTOC		TOTALS		
			PRELIMINARY	FINAL	PRELIMINARY	FINAL	PRELIMINARY	FINAL	
	**** DRAINAGE ITEMS ****								
605–AA	GEOTEXTILE FOR SUBSURFACE DRAINAGE, TYPE V	SQUARE YARD	1063	– 0 –	0	– 0 –	1063	– 0 –	
907–605–O	6" PERFORATED SEWER PIPE FOR UNDERDRAINS, SDR 23.5	LINEAR FOOT	1400	– 0 –	0	– 0 –	1400	– 0 –	
907–605–P	6" NON–PERFORATED SEWER PIPE FOR UNDERDRAINS, SDR 23.5	LINEAR FOOT	200	– 0 –	0	– 0 –	200	– 0 –	
605–W	FILTER MATERIAL FOR COMBINATION STORM DRAIN AND /OR UNDERDRAINS, TYPE A, FM	CUBIC YARD	90	– 0 –	0	– 0 –	90	– 0 –	
605–W	FILTER MATERIAL FOR COMBINATION STORM DRAIN AND /OR UNDERDRAINS, TYPE B, FM	CUBIC YARD	98	– 0 –	0	– 0 –	98	– 0 –	
	**** GUARDRAIL ITEMS ****								
606–B	GUARD RAIL, CLASS A, TYPE 1	LINEAR FOOT	1075	1,062.5	0	– 0 –	1075	1,062.5	(32)
606–C	GUARD RAIL, CABLE ANCHOR, TYPE I	EACH	2	2	0	– 0 –	2	2	
606–D	GUARD RAIL, BRIDGE END SECTION, TYPE I	EACH	8	8	0	– 0 –	8	8	
606–E	GUARD RAIL, TERMINAL END SECTION, FLARED	EACH	6	6	0	– 0 –	6	6	(33)
	**** FENCING ITEMS ****								
607–A	60" TYPE "A" WOVEN WIRE FENCE, W/BARBED WIRE AS SHOWN	LINEAR FOOT	28,829	29328	4651	4,175	33,480	33503	
607–E	BARBED WIRE FENCE, SINGLE STRAND	LINEAR FOOT	750	355	1550	– 0 –	2300	355	
607–G	GATE 12'x 52" ALUMINUM	EACH	2	2	0	– 0 –	2	2	
607–P1	LINE POST, 7'X 4" X 4" CONCRETE	EACH	1105	1,497	55	62	1160	1,559	
607–P1	LINE POST, 9'X 4" X 4" CONCRETE	EACH	220	– 0 –	11	– 0 –	231	– 0 –	
607–P1	LINE POST, 10'X 4" X 4" CONCRETE	EACH	148	– 0 –	7	– 0 –	155	– 0 –	
607–P2	BRACE POST, 8'X 6" X 6" CONCRETE	EACH	132	205	20	29	152	234	
607–P2	BRACE POST, 10'X 6" X 6" CONCRETE	EACH	26	– 0 –	4	– 0 –	30	– 0 –	
607–P2	BRACE POST, 12'X 6" X 6" CONCRETE	EACH	17	– 0 –	3	– 0 –	20	– 0 –	
607–P1	LINE POST, 7'X 4" TIMBER	EACH	521	725	196	248	717	973	
607–P1	LINE POST, 9'X 4" TIMBER	EACH	105	– 0 –	39	– 0 –	144	– 0 –	
607–P1	LINE POST, 10'X 4" TIMBER	EACH	68	– 0 –	26	– 0 –	94	– 0 –	
607–P2	BRACE POST, 8'X 6" TIMBER	EACH	44	52	20	15	64	67	
607–P2	BRACE POST, 10'X 6" TIMBER	EACH	9	– 0 –	4	– 0 –	13	– 0 –	
607–P2	BRACE POST, 12'X 6" TIMBER	EACH	6	– 0 –	3	– 0 –	9	– 0 –	
607–P1	LINE POST, 14'X 2" GALVANIZED STEEL	EACH	10	11	2	– 0 –	12	11	
	**** INCIDENTAL CONSTRUCTION ITEMS ****								
609–D	COMBINATION CONCRETE CURB AND GUTTER TYPE 2	LINEAR FOOT	3628 ⚠	3,566	0	– 0 –	3628 ⚠	3,566	
609–D	COMBINATION CONCRETE CURB AND GUTTER TYPE 3A MODIFIED	LINEAR FOOT	2072 ⚠	2,137	0	– 0 –	2072 ⚠	2,137	
615–A	CONCRETE TYPE IV CAST–IN–PLACE MEDIAN BARRIER	LINEAR FOOT	278	278	0	– 0 –	278	278	
616–A	CONCRETE MEDIAN AND /OR ISLAND PAVMENT, 10–INCH	SQUARE YARD	56 ⚠	59.613	0	– 0 –	56 ⚠	59.613	
616–A	CONCRETE MEDIAN AND /OR ISLAND PAVMENT, 4–INCH	SQUARE YARD	1102 ⚠	1,077.547	0	– 0 –	1102 ⚠	1,077.547	
907–617–A ⚠	RIGHT – OF – WAY MARKERS ⚠	EACH ⚠	33 ⚠	33	0 ⚠	– 0 –	33 ⚠	33	
	**** TRAFFIC CONTROL ITEMS ****								
618–A	MAINTENANCE OF TRAFFIC	LUMP SUM	80%	80%	20%	20%	100%	100%	
619–A1	TEMPORARY TRAFFIC STRIPE, CONTINUOUS WHITE	LINEAR FOOT	60079 ⚠	67,951	0	– 0 –	60079 ⚠	67,951	
619–A2	TEMPORARY TRAFFIC STRIPE, CONTINUOUS YELLOW	LINEAR FOOT	61208 ⚠	67,688	0	– 0 –	61208 ⚠	67,688	
619–A5	TEMPORARY TRAFFIC STRIPE, DETAIL, PAINT	LINEAR FOOT	1960 ⚠	25,160	0	– 0 –	1960 ⚠	25,160	
619–A6	TEMPORARY TRAFFIC STRIPE, LEGEND, PAINT	LINEAR FOOT	72 ⚠	244	0	– 0 –	72 ⚠	244	
619–C6	RED–CLEAR REFLECTIVE HIGH PERFORMANCE RAISED PAVEMENT MARKERS	EACH	100	175	0	– 0 –	100	175	
619–D1	STANDARD ROADSIDE CONSTRUCTION SIGNS, LESS THAN 10 SQUARE FEET	SQUARE FOOT	202	98	32	40	234	138	
619–D2	STANDARD ROADSIDE CONSTRUCTION SIGNS, 10 SQUARE FEET OR MORE	SQUARE FOOT	685	556	356	308	1041	864	
907–619–E3	CHANGEABLE MESSAGE SIGN	EACH	2	2	0	– 0 –	2	2	
619–F1	CONCRETE MEDIAN BARRIER, PRECAST	LINEAR FOOT	520	520	0	– 0 –	520	520	
619–G4	BARRICADES, TYPE III, DOUBLE FACED	LINEAR FOOT	60	48	30	30	90	78	
619–G4	BARRICADES, TYPE III, SINGLE FACED	LINEAR FOOT	136	108	12	12	148	120	
619–G5	FREE STANDING PLASTIC DRUMS	EACH	182 ⚠	165	0	– 0 –	182 ⚠	165	
620–A	MOBILIZATION	LUMP SUM	1	1	0	– 0 –	1	1	
621–A	FIELD LABORATORY	EACH	1	1	0	– 0 –	1	1	
619-A3	Temporary Traffic Stripes, Skip White S/A	LF	– 0 –	48,760	– 0 –	– 0 –	– 0 –	48,760	

(32) LENGTH OF GUARDRAIL REQUIRED IS BASED ON A TERMINAL SECTION OF 37.5 FEET BEING USED. FOR ANY OTHER LENGTH TERMINAL SECTION, THE LENGTH OF NORMAL GUARDRAIL WILL BE ADJUSTED.

(33) FLEAT–350, REGENT, SRT–350, ROSS–350, OR APPROVED FLARED EQUAL TO BE INSTALLED FOLLOWING MANUFACTURER'S RECOMMENDATION. CONTRACTOR TO PROVIDE TWO COPIES OF MANUFACTURER'S INSTALLATION DETAILS TO THE PROJECT ENGINEER. THE ENGINEER SHALL KEEP ONE COPY IN PROJECT FILE AND PROVIDE ONE COPY TO DISTRICT MAINTENANCE ENGINEER. REFLECTIVE ADHESIVE SHEETING WITH ALTERNATING BLACK AND YELLOW STRIPES (SLOPING DOWNWARD AT AN ANGLE OF 45 DEGREES IN THE DIRECTION TRAFFIC IS TO PASS) IS REQUIRED ON THE END OF THE TERMINAL SECTION.

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/16/2008 11:19AM SQS.DGN

DATE	BY	REVISED QUANTITIES REVISION
10/10/08	F&H	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (ROADWAY)

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER SQ–3
SHEET NUMBER 24

FILENAME: sqs.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION / PONTOTOC

PROJECT No. SP–0006–01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

ADDENDUM

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	UNION		PONTOTOC		TOTALS	
	**** PAVEMENT MARKINGS ITEMS ****		PRELIMINARY	FINAL	PRELIMINARY	FINAL	PRELIMINARY	FINAL
907–626–A	6" THERMOPLASTIC TRAFFIC STRIPE, SKIP WHITE	LINEAR FOOT	26778 ⚠	24,000	0	– 0 –	26778 ⚠	24,000
907–626–B	6" THERMOPLASTIC TRAFFIC STRIPE, CONTINUOUS WHITE	LINEAR FOOT	2056	2,127	0	– 0 –	2056	2,127
907–626–C	6" THERMOPLASTIC EDGE STRIPE, CONTINUOUS WHITE	LINEAR FOOT	34930 ⚠	32,107	0	– 0 –	34930 ⚠	32,107
907–626–E	6" THERMOPLASTIC TRAFFIC STRIPE, CONTINUOUS YELLOW	LINEAR FOOT	3650 ⚠	3,569	0	– 0 –	3650 ⚠	3,569
907–626–F	6" THERMOPLASTIC EDGE STRIPE, CONTINUOUS YELLOW	LINEAR FOOT	36462 ⚠	33,166	0	– 0 –	36462 ⚠	33,166
907–626–G	THERMOPLASTIC DETAIL STRIPE, WHITE	LINEAR FOOT	21911 ⚠	26,652	0	– 0 –	21911 ⚠	26,652
907–626–G	THERMOPLASTIC DETAIL STRIPE, YELLOW	LINEAR FOOT	7534 ⚠	7,344	0	– 0 –	7534 ⚠	7,344
907–626–H	THERMOPLASTIC LEGEND, WHITE	SQUARE FOOT	1379 ⚠	954.8	0	– 0 –	1379 ⚠	954.8
907–626–H	THERMOPLASTIC LEGEND, WHITE	LINEAR FOOT	1048 ⚠	868	0	– 0 –	1048 ⚠	868
627–K	RED–CLEAR REFLECTIVE HIGH PERFORMANCE RAISED MARKERS	EACH	1157 ⚠	2,161	0	– 0 –	1157 ⚠	2,161
627–L	TWO–WAY YELLOW REFLECTIVE HIGH PERFORMANCE RAISED MARKERS	EACH	338 ⚠	409	0	– 0 –	338 ⚠	409
628–I	6" HIGH PERFORMANCE COLD PLASTIC TRAFFIC STRIPE, SKIP WHITE	LINEAR FOOT	456	542	0	– 0 –	456	542
628–J	6" HIGH PERFORMANCE COLD PLASTIC TRAFFIC STRIPE, CONTINUOUS WHITE	LINEAR FOOT	684	826	0	– 0 –	684	826
628–M	6" HIGH PERFORMANCE COLD PLASTIC TRAFFIC STRIPE, CONTINUOUS YELLOW	LINEAR FOOT	684	860	0	– 0 –	684	860
628–O	HIGH PERFORMANCE COLD PLASTIC DETAIL STRIPE, WHITE	LINEAR FOOT	32	40	0	– 0 –	32	40
629–A	VEHICULAR IMPACT ATTENUATOR, 50 MPH	EACH	1	1	0	– 0 –	1	1
	**** SIGNING ITEMS ****							
630–A	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.080" THICKNESS	SQUARE FOOT	144	215.88	0	– 0 –	144	215.88
630–A	STANDARD ROADSIDE SIGNS, SHEET ALUMINUM, 0.125" THICKNESS	SQUARE FOOT	396	403.30	0	– 0 –	396	403.30
630–B	INTERSTATE DIRECTIONAL SIGNS, BOLTED EXTRUDED ALUMINUM PANELS, GROUND MOUNTED	SQUARE FOOT	746	816.50	0	– 0 –	746	816.50
630–B	INTERSTATE DIRECTIONAL SIGNS, BOLTED EXTRUDED ALUMINUM PANELS, OVERHEAD MOUNTED	SQUARE FOOT	359	459.75	0	– 0 –	359	459.75
630–C	STEEL U–SECTION POSTS, 2.0 LB/FT	LINEAR FOOT	26	76.42	0	– 0 –	26	76.42
630–C	STEEL U–SECTION POSTS, 3.0 LB/FT	LINEAR FOOT	462	351.00	0	– 0 –	462	351.00
630–D	STRUCTURAL STEEL BEAMS, S4 X 7.7	LINEAR FOOT	97	148.86	0	– 0 –	97	148.86
630–D	STRUCTURAL STEEL BEAMS, W6 X 9	LINEAR FOOT	96	90.98	0	– 0 –	96	90.98
630–D	STRUCTURAL STEEL BEAMS, W10 X 26	LINEAR FOOT	47	52.17	0	– 0 –	47	52.17
630–D	STRUCTURAL STEEL BEAMS, W12 X 26	LINEAR FOOT	49	52.91	0	– 0 –	49	52.91
630–E	STRUCTURAL STEEL ANGLES & BARS, 3 1/2" X 3 1/2" X 1/4" ANGLES	POUND	174	174.00	0	– 0 –	174	174.00
630–E	STRUCTURAL STEEL ANGLES & BARS, 3" X 3" X 1/4" ANGLES	POUND	49	88.20	0	– 0 –	49	88.20
630–E	STRUCTURAL STEEL ANGLES & BARS, 4" X 4" X 5/16" ANGLES	POUND	253	252.15	0	– 0 –	253	252.15
630–E	STRUCTURAL STEEL ANGLES & BARS, 7/16" X 2 1/2" FLAT BAR	POUND	551	390.98	0	– 0 –	551	390.98
630–F	DELINEATORS, GUARD RAIL, WHITE	EACH	22	24	0	– 0 –	22	24
630–F	DELINEATORS, GUARD RAIL, YELLOW	EACH	22	24	0	– 0 –	22	24
630–F	DELINEATORS, POST MOUNTED, DOUBLE WHITE	EACH	122	130	0	– 0 –	122	130
630–F	DELINEATORS, POST MOUNTED, DOUBLE YELLOW	EACH	11	11	0	– 0 –	11	11
630–F	DELINEATORS, POST MOUNTED, SINGLE WHITE	EACH	82	104	0	– 0 –	82	104
630–F	DELINEATORS, POST MOUNTED, SINGLE YELLOW	EACH	47	47	0	– 0 –	47	47
630–G	TYPE 3 OBJECT MARKERS, OM–3R OR OM–3L, POST MOUNTED	EACH	6	6	0	– 0 –	6	6
907–630–I	METAL OVERHEAD SIGN SUPPORTS, ASSEMBLY NO. 1, CONTRACTOR DESIGNED	LUMP SUM	1	1	0	– 0 –	1	1
907–630–I	METAL OVERHEAD SIGN SUPPORTS, ASSEMBLY NO. 2, CONTRACTOR DESIGNED	LUMP SUM	1	1	0	– 0 –	1	1
630–K	WELDED & SEAMLESS STEEL PIPE POSTS, 3"	LINEAR FOOT	40	64.66	0	– 0 –	40	64.66
630–K	WELDED & SEAMLESS STEEL PIPE POSTS, 3 1/2"	LINEAR FOOT	72	47.00	0	– 0 –	72	47.00
630–K	WELDED & SEAMLESS STEEL PIPE POSTS, 4"	LINEAR FOOT	293	236.91	0	– 0 –	293	236.91
907–630–O	REMOVE AND RESET SIGNS, ALL SIZES	EACH	41	29	0	– 0 –	41	29
631–A	FLOWABLE FILL	CUBIC YARD	277	128.744	0	– 0 –	277	128.744 (34)
	**** TRAFFIC SIGNAL ITEMS ****							
635–A	VEHICLE LOOP ASSEMBLIES	LINEAR FOOT	277	298	0	– 0 –	277	298
636–A	SHIELDED CABLE, AWG #18, 4 CONDUCTOR	LINEAR FOOT	1978	1,889	0	– 0 –	1978	1,889
638–A	LOOP DETECTOR AMPLIFIER, CARD RACK MOUNTED, 4 CHANNEL	EACH	2	2	0	– 0 –	2	2
639–A	TRAFFIC SIGNAL EQUIPMENT POLE, TYPE II, 17' SHAFT, 25' ARM	EACH	1	1	0	– 0 –	1	1
639–A	TRAFFIC SIGNAL EQUIPMENT POLE, TYPE II, 17' SHAFT, 35' ARM	EACH	3	3	0	– 0 –	3	3
639–A	TRAFFIC SIGNAL EQUIPMENT POLE, TYPE II, 17' SHAFT, 45' ARM	EACH	3	3	0	– 0 –	3	3
640–A	TRAFFIC SIGNAL HEADS, TYPE 1 LED	EACH	10	10	0	– 0 –	10	10
640–A	TRAFFIC SIGNAL HEADS, TYPE 1 LED (OPTICAL PROGRAM)	EACH	2	2	0	– 0 –	2	2
640–A	TRAFFIC SIGNAL HEADS, TYPE 5 LED	EACH	4	3	0	– 0 –	4	3

(34) INCLUDES 8 CU. YDS. FOR EXIST. 24" RCP @ 26+97 SR 9 @ BLUE SPRINGS.
7 CU. YDS. FOR EXIST. 15" RCP @ LT. 814+82 CD RD TO RT. EXIST. JB (UNDER US 78).
29 CU. YDS. FOR EXIST. 24" RCP @ LT. 871+48 CD RD TO RT. EXIST. JB (UNDER US 78).
116 CU. YDS. FOR EXIST 42" RCP @ LT. 811+73 TO 814+05 US 78
11 CU. YDS. FOR EXIST. JUNCTION BOX @ 814+00 US 78
78 CU. YDS. FOR EXIST. 36" RCP @ 814+00 TO 817+00 US 78
28 CU. YDS. FOR EXIST 30" RCP @ 817+00 TO 817+20 US 78

BY	DATE	
F&H	10/18/08	REVISED QUANTITIES

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (ROADWAY)

PROJECT NO. SP–0006–01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER SQ–4

SHEET NUMBER 25

FILENAME: sqs.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN FORMAT VERSION 05.01.00
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 09:40:59 SQS.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

1 st C. REV.

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	UNION		PONTOTOC		TOTALS		
			PRELIMINARY	FINAL	PRELIMINARY	FINAL	PRELIMINARY	FINAL	
	**** TRAFFIC SIGNAL ITEMS ****								
640–A	TRAFFIC SIGNAL HEADS, TYPE 7 LED	EACH	1	1	0	– 0 –	1	1	
642–A	SOLID STATE TRAFFIC ACTUATED CONTROLLERS, TYPE 8A	EACH	2	2	0	– 0 –	2	2	
647–A	PULLBOX, TYPE 1	EACH	14	6	0	– 0 –	14	6	
647–A	PULLBOX, TYPE 2	EACH	9	9	0	– 0 –	9	9	
649–A	VIDEO VEHICLE DETECTION, NEW INSTALLATION, 1 CAMERA	EACH	5	6	0	– 0 –	5	6	
666–B	ELECTRIC CABLE, UNDERGROUND IN CONDUIT, IMSA 20–1, AWG 8, 2 CONDUCTOR	LINEAR FOOT	1904	– 0 –	0	– 0 –	1904	– 0 –	
666–B	ELECTRIC CABLE, UNDERGROUND IN CONDUIT, IMSA 20–1, AWG 14, 7 CONDUCTOR	LINEAR FOOT	1548	1,487	0	– 0 –	1548	1,487	
668–A	TRAFFIC SIGNAL CONDUIT, UNDERGROUND, TYPE 4, 1"	LINEAR FOOT	3430	1,192	0	– 0 –	3430	1,192	
668–A	TRAFFIC SIGNAL CONDUIT, UNDERGROUND, TYPE 4, 2"	LINEAR FOOT	189	254	0	– 0 –	189	254	
668–B	TRAFFIC SIGNAL CONDUIT, UNDERGROUND DRILLED OR JACKED, ROLLED PIPE, 2"	LINEAR FOOT	258	181	0	– 0 –	258	181	
668–B	TRAFFIC SIGNAL CONDUIT, UNDERGROUND DRILLED OR JACKED, ROLLED PIPE, 3"	LINEAR FOOT	353	394	0	– 0 –	353	394	
	⚠ **** LIGHTING ITEMS ****								
682–A	UNDERGROUND BRANCH CIRCUIT, AWG 8, 3 CONDUCTOR	LINEAR FOOT	4355 ⚠	4.050	0 ⚠	– 0 –	4355 ⚠	4.050	
682–A	UNDERGROUND BRANCH CIRCUIT, AWG 6, 3 CONDUCTOR	LINEAR FOOT	1469 ⚠	1,701	6157 ⚠	5696	7626 ⚠	7,397	
682–A	UNDERGROUND BRANCH CIRCUIT, AWG 4, 3 CONDUCTOR	LINEAR FOOT	2216 ⚠	2,148	805 ⚠	633	3021 ⚠	2,781	
682–A	UNDERGROUND BRANCH CIRCUIT, AWG 3, 3 CONDUCTOR	LINEAR FOOT	4998 ⚠	4311	3530 ⚠	3,474	8528 ⚠	7785	
682–A	UNDERGROUND BRANCH CIRCUIT, AWG 2, 3 CONDUCTOR	LINEAR FOOT	7733 ⚠	7,217	0 ⚠	– 0 –	7733 ⚠	7,217	
682–A	UNDERGROUND BRANCH CIRCUIT, AWG 1, 3 CONDUCTOR	LINEAR FOOT	0 ⚠	– 0 –	73 ⚠	457	73 ⚠	457	
682–B	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, 8AWG8, 3 CONDUCTOR	LINEAR FOOT	415 ⚠	416	0 ⚠	– 0 –	415 ⚠	416	
682–B	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, AWG 6, 3 CONDUCTOR	LINEAR FOOT	116 ⚠	80	853 ⚠	1155	969 ⚠	1,235	
682–B	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, AWG 4, 3 CONDUCTOR	LINEAR FOOT	294 ⚠	366	190 ⚠	270	484 ⚠	636	
682–B	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, AWG 3, 3 CONDUCTOR	LINEAR FOOT	482 ⚠	692	255 ⚠	320	737 ⚠	1012	
682–B	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, AWG 2, 3 CONDUCTOR	LINEAR FOOT	691 ⚠	815	0 ⚠	– 0 –	691 ⚠	815	
682–B	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, AWG 1, 3 CONDUCTOR	LINEAR FOOT	0 ⚠	– 0 –	49 ⚠	90	49 ⚠	90	
682–D	UNDERGROUND PULL BOX	EACH	14 ⚠	13	14 ⚠	14	28 ⚠	27	
682–F	SECONDARY POWER CONTROLLERS	EACH	3 ⚠	3	1 ⚠	1	4 ⚠	4	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 100–8–S	EACH	1 ⚠	1	0 ⚠	– 0 –	1 ⚠	1	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 100–6–S	EACH	1 ⚠	1	2 ⚠	2	3 ⚠	3	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 100–4–S	EACH	1 ⚠	1	1 ⚠	1	2 ⚠	2	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 100–4–A	EACH	8 ⚠	8	2 ⚠	2	10 ⚠	10	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 120–4–A	EACH	0 ⚠	– 0 –	1 ⚠	1	1 ⚠	1	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 130–8–S	EACH	2 ⚠	2	0 ⚠	– 0 –	2 ⚠	2	
683–A	LIGHTING ASSEMBLY, HIGH MAST, TYPE 130–6–S	EACH	3 ⚠	3	1 ⚠	1	4 ⚠	4	
683–B	LIGHTING ASSEMBLY, LOW MAST, TYPE 40–1–0–400	EACH	5 ⚠	5	6 ⚠	6	11 ⚠	11	
683–B	LIGHTING ASSEMBLY, LOW MAST, TYPE 40–1–8–400	EACH	8 ⚠	8	8 ⚠	8	16 ⚠	16	
683–D	PORTABLE ELECTRIC POWER UNITS	EACH	1 ⚠	1	0 ⚠	– 0 –	1 ⚠	1	
684–A	POLE FOUNDATIONS, 24" DIAMETER	CUBIC YARD	25 ⚠	15.132	23 ⚠	16.296	48 ⚠	31.428	
684–A	POLE FOUNDATIONS, 36" DIAMETER	CUBIC YARD	54 ⚠	53.670	27 ⚠	26.835	81 ⚠	80.505	
684–A	POLE FOUNDATIONS, 48" DIAMETER	CUBIC YARD	74 ⚠	73.073	24 ⚠	23.737	98 ⚠	96.810	
684–B	SLIP CASINGS, 24" DIAMETER	LINEAR FOOT	10 ⚠	32	0 ⚠	– 0 –	10 ⚠	32	(39) ⚠
684–B	SLIP CASINGS, 36" DIAMETER	LINEAR FOOT	20 ⚠	35	0 ⚠	– 0 –	20 ⚠	35	(39) ⚠
684–B	SLIP CASINGS, 48" DIAMETER	LINEAR FOOT	24 ⚠	32	0 ⚠	– 0 –	24 ⚠	32	(39) ⚠
682-A	Underground Branch Circuit, AWG 1/0, 3 Conductor S/A	LF	– 0 –	629	– 0 –	– 0 –	– 0 –	629	
682-A	Underground Branch Circuit, AWG 4/0, 3 Conductor S/A	LF	– 0 –	991	– 0 –	– 0 –	– 0 –	991	
682-B	Underground Branch Circuit, Jack or Bored, AWG 1/0, 3 Conductor S/A	LF	– 0 –	84	– 0 –	– 0 –	– 0 –	84	
682-B	Underground Branch Circuit, Jack or Bored, AWG 4/0, 3 Conductor S/A	LF	– 0 –	149	– 0 –	– 0 –	– 0 –	149	
682-D	Underground Pull Box S/A	EA	– 0 –	2	– 0 –	– 0 –	– 0 –	2	
620-B	Requisite Work (Abandonment of Conduit, All Sizes) S/A	LS	– 0 –	1	– 0 –	– 0 –	– 0 –	1	
640-A018	Traffic Signal Head Type 3 Led S/A	EA	– 0 –	1	– 0 –	– 0 –	– 0 –	1	
699–A	ROADWAY CONSTRUCTION STAKES	LUMP SUM	100%	100 %	0%	0%	100%	100 %	
	**** BRIDGE ITEMS ****								
815–A	LOOSE RIPRAP, SIZE 300	TON	2580	2654.42	0	– 0 –	2580	2654.42	(35)(36)(38)
815–E	GEOTEXTILE UNDER RIPRAP, TYPE V	SQUARE YARD	704	5730.61	0	– 0 –	704	5730.61	
815–F	SEDIMENT CONTROL STONE	TON	410	376.50	0	– 0 –	410	376.50	(36)(37)

(35) INCLUDES 1964 TONS FOR SILT BASINS AND 616 TONS FOR DITCHES.

(36) WHEN SILT BASINS ARE REMOVED, AREAS ARE TO BE REDRESSED STABILIZED, & SEEDED. RIP RAP AND SEDIMENT STONE SHALL BE REMOVED AND REPLACED AT PERMANENT LOCATIONS AS DIRECTED BY THE ENGINEER. ALL COST FOR REDRESSING AREAS, REMOVAL AND REPLACEMENT OF THE STONE IS TO BE ABSORBED IN THE PAY ITEM FOR THE SILT BASIN.

(37) SIZE NO. 57 STONE FOR TYPE D SILT BASINS.

(38) SHALL MEET THE REQUIREMENTS COARSE STABILIZER AGGREGATE SIZE I OR II SUBSECTIONS 703.20.02 AND 703.20.03.

⚠ (39) QUANTITY SHOWN FOR ESTIMATING PURPOSES ONLY. ACTUAL QUANTITY AND PLACEMENT TO BE DIRECTED BY THE ENGINEER.

1/23/09	ADDED LIGHTING QUANTITIES	F&H	⚠
DATE	REVISION	BY	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER SQ-5

FILENAME: sqs.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER 26

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:25 SQS.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

SUMMARY OF QUANTITIES

PAY ITEM NO.	PAY ITEM	UNIT	UNION		PONTOTOC		TOTALS	
	**** BRIDGE ITEMS ****		PRELIMINARY	FINAL	PRELIMINARY	FINAL	PRELIMINARY	FINAL
501-K	TRANSVERSE GROOVING	SQUARE YARD	1014	1,201.48	0	-0-	1014	1,201.48
803-B	CONVENTIONAL STATIC LOADING TEST	EACH	2	-0-	0	-0-	2	-0-
803-D	HP 12X53 STEEL PILING	LINEAR FOOT	1530	1,105	0	-0-	1530	1,105
803-F	18" PREFORMED PILE HOLES	LINEAR FOOT	1360	-0-	0	-0-	1360	-0-
803-I	PDA TEST PILE	EACH	2	2	0	-0-	2	2
803-J	PILE RESTRIKE	EACH	1	-0-	0	-0-	1	-0-
907-803-K	DRILLED SHAFT 48" DIA. ϕ	LINEAR FOOT	190	190	0	-0-	190	190
907-803-M	TRIAL SHAFT 48" DIA. ϕ	LINEAR FOOT	46	46	0	-0-	46	46
803-N	EXPLORATION	LINEAR FOOT	10	-0-	0	-0-	10	-0-
803-O	TEMPORARY CASING 48" ϕ	LINEAR FOOT	95	-0-	0	-0-	95	-0-
907-804-A	BRIDGE CONCRETE, CLASS AA	CUBIC YARD	475	466.530	0	-0-	475	466.530
907-804-C	71 FT. PRESTRESSED CONCRETE BEAM, TYPE IV	LINEAR FOOT	494	493.208	0	-0-	494	493.208
907-804-C	94 FT. PRESTRESSED CONCRETE BEAM, TYPE IV	LINEAR FOOT	653	652.167	0	-0-	653	652.167
907-804-C	63 FT. PRESTRESSED CONCRETE BEAM, TYPE IV	LINEAR FOOT	438	437.208	0	-0-	438	437.208
805-A	REINFORCEMENT	POUND	95,749	97,054.605	0	-0-	95,749	97,054.605
813-A	CONCRETE RAILING	LINEAR FOOT	456	456	0	-0-	456	456
815-D	CONCRETE SLOPE PAVING	CUBIC YARD	525	557.81	0	-0-	525	557.81

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF QUANTITIES (BRIDGE ITEMS)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER SQ-6

SHEET NUMBER 27

BY | REVISION | DATE

FILENAME: sqs.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/18/2008 11:50:51 SQS.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PIPE CULVERT DRAINAGE STRUCTURES REQUIRED

WK. SH. NO.	STATION	I.D. NO.	PIPE CULVERTS (RCP)										FLARED END SECTIONS							INLETS								PAVED APRON	SILT BASIN TYPE D	CL. "B" CONC. MINOR STRUCT.		STRUCTURE EXCAVATION		SOLID SODDING	FILTER MATERIAL		FLOWABLE FILL	COVER HEIGHT	REMARKS
			CLASS III (ROUND)				CLASS III (ARCH)			CLASS IV (ROUND)		CLASS V (ROUND)								SIZE			OPENINGS REQUIRED	STANDARD DRAWINGS	CL. "B" CONC. MINOR STRUCT.	REINF. STEEL	GRATING	CASTING			PIPE COLLAR	TOEWALL	EXCAV	EST. DEPTH		TYPE "A"	TYPE "B"		
			18"	24"	30"	36"	22"x13"	36"x23"	51"x31"	30"	36"	36"	48"	18"	24"	30"	36"	48"	22"x13"	38"x23"	51"x31"	L	W	H																
	UNION COUNTY																																						
3	794+80 163' LT US 78																													1									
4	811+73 US 78																																					127	PLUG & ABANDON EXIST. 42" RCP (116 CU. YD.), EXIST. J. BOX (11 CU. YD.)
4	814+00 US 278																																					78	PLUG & ABANDON EXIST. 36" RCP
4	814+82 US 78																																					7	PLUG & ABANDON EXIST. 15" RCP LT. TO RT. EXIST. J. BOX (UNDER US 78)
4	817+00 US 78																																					28	PLUG & ABANDON EXIST. 30" RCP, REMOVE INLET & BACKFILL
5C	22+76 33' LT. SR 9 BLUE SPRINGS		52																						PI-1, PC-1					0.320		16.852	2.5					4	90° SKEW, CONNECT TO SS-2 @ 23+30 SR 9 @ BLUE SPRINGS
5C	22+76 33' RT. SR 9 BLUE SPRINGS		52																						PI-1, PC-1					0.320		15.504	2.3					4	90° SKEW, CONNECT TO SS-2 @ 23+30 SR 9 @ BLUE SPRINGS
5C	23+30 33' LT. SR 9 BLUE SPRINGS		12											1								10	2.5	5.50	2 @ 18"	PI-1, SS-2, FE-1	3.408	334		79			0.063	3.009	1.1				4	0° SKEW
5C	23+30 33' RT.SR 9 BLUE SPRINGS		12											1								10	2.5	5.50	2 @ 18"	PI-1, SS-2, FE-1	3.408	334		79			0.063	3.556	1.3				4	0° SKEW
5C	26+97 SR 9 BLUE SPRINGS																																					8	PLUG & ABANDON EXIST. 24" RCP (UNDER SR 9 BLUE SPRINGS)
5C	27+19 33' LT.SR 9 BLUE SPRINGS					12											1					10	2.5	7.69	2 @ 36"	PI-1, SS-2, FE-1	3.813	377		79			0.123	23.267	5.1				5	0° SKEW
5C	27+19 SR 9 BLUE SPRINGS											68													PI-1							74.296	5.9					4	JACKED OR BORED, X-DRAIN REQ'D., 0° SKEW
5C	27+19 33' RT. SR 9 BLUE SPRINGS					12											1					10	2.5	8.04	2 @ 36"	PI-1, SS-2, FE-1	3.923	380		79			0.123	10.493	2.3				5	0° SKEW
⚠1 5C	31+25 43' LT. SR 9 BLUE SPRINGS		28 ⚠1											1								10	2.5	5.50	1 @ 18"	PI-1, SS-2, FE-1	3.461	334		79			0.063	8.394	1.2				4	0° SKEW, 1-JB-1 REQ'D.
⚠1 5C	31+80 43' RT. BLUE SPRINGS		12 ⚠1											1								10	2.5	5.50	1 @ 18"	PI-1, SS-2, FE-1	3.461	334		79			0.063	2.217	1.0				4	0° SKEW
5C	30+00 59' LT. SR 9 BLUE SPRINGS																													1									
5C	32+60 95' RT. SR 9 BLUE SPRINGS																													1									
5C	33+76 SR 9 BLUE SPRINGS			28 ⚠1											1										PI-1, FE-1							0.083						12	55° SKEW RT. FWD., EXT. OF EXIST. PIPE, 1-JB-1 REQ'D.
5E	808+00 CD RD			96											1										4.21	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.888	61	250	0.532			0.083	23.448	1.5	8.3			8	0° SKEW, 2-JB-1 REQ'D.
5E	812+10 127' LT. CD RD																													1									
5E	813+00 123' LT. CD RD																													1									
5E	813+95 CD RD			80											1										3.54	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.747	54	250	0.532			0.083	11.936	0.9	8.3			7	0° SKEW, 1-DITCH PLUG REQ'D.
5E	821+16 CD RD		16	96											1										4.50	1 @ 18, 1 @ 24"	PI-1, PC-1, MI-1A, IG-1, FE-1	1.138	161	250	0.532		0.410	0.083	99.489	3.5 / 5.9	8.3			7	30° SKEW RT. FWD., EXT. OF EXIST. PIPE, 1-DITCH PLUG REQ'D.
5E	827+21 CD RD		20	104											1										4.50	1 @ 18, 1 @ 24"	PI-1, PC-1, MI-1A, IG-1, FE-1	1.138	161	250	0.532		0.410	0.083	103.510	3.6 / 5.6	8.3			6	30° SKEW RT. FWD., EXT. OF EXIST. PIPE, 1-DITCH PLUG REQ'D.
5E	829+40 172' LT. CD RD																													1									
5F	837+00 CD RD			84											1										3.54	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.747	54	250	0.532			0.083	62.345	4.5	8.3			6	0° SKEW, 1-DITCH PLUG REQ'D.
5F	850+50 CD RD			104											1										3.78	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.797	57	250	0.532			0.083	3.363	0.2	8.3			7	0° SKEW
5F	861+50 CD RD			84											1										3.54	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.747	54	250	0.532			0.083	15.240	1.1	8.3			6	0° SKEW, 1-DITCH PLUG REQ'D.
5G	869+98 CD RD			172											1										3.84	1 @ 18, 1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.810	57	250	0.532			0.083	26.891	1.0	8.3			13	0° SKEW, 2-JB-1 REQ'D., 1-DITCH PLUG REQ'D.
5G	871+48 CD RD																																					29	PLUG & ABANDON EXIST. 24" RCP LT. TO RT. EXIST. J. BOX (UNDER US 78)
5G	877+88 CD RD											108				1									PI-1, PC-1, FE-1					0.850	0.145							34	2° SKEW RT. FWD., EXT. OF EXIST. PIPE, CLASS B BEDDING
5G	877+75 251' LT. CD RD																													1									
5G	880+00 CD RD			104											1										4.50	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.949	64	250	0.532			0.083	21.863	1.3	8.3			15	0° SKEW, 2-JB-1 REQ'D., 1-DITCH PLUG REQ'D.
5G	883+50 CD RD			56											1										4.26	1 @ 24"	PI-1, MI-1, IG-1, FE-1	0.898	62	250	0.532			0.083	17.471	1.8	8.3			4	0° SKEW
5G	885+65 CD RD			16											1										PI-1, PC-1, FE-1					0.410	0.083	0.756	0.2					6	11° SKEW LT. FWD., EXT. OF EXIST. PIPE
5H	842+28 NW RP @ BLUE SPRINGS									164						2									PI-1, FE-1							0.204	21.415	0.7				18	X-DRAIN REQ'D., 0° SKEW, CLASS C BEDDING, 1-JB-1 REQ'D.
5H	842+36 206' LT. NR RP @ BLUE SPRINGS																													1									
5I	14+75 2' RT. NW LP @ BLUE SPRINGS					20												1				—	—	4.58	1 @ 22"x13"	PI-1, GI-1, IG-2, FE-1A	1.052	68	200	244			0.063	10.907	2.7				4	0° SKEW
5I	17+75 2' RT. NW LP @ BLUE SPRINGS					20												1				—	—	4.58	1 @ 22"x13"	PI-1, GI-1, IG-2, FE-1A	1.052	68	200	244			0.063	11.311	2.8				4	0° SKEW
5I	20+33 2' RT. NW LP @ BLUE SPRINGS					48																—	—	4.58	1 @ 22"x13"	PI-1, GI-1A, IG-2	1.284	86	200	244				19.081	2.8				3	90° SKEW, CONNECT TO GI-1A @ 2' RT. 20+83 NW LP @ BLUE SPRINGS
5I	20+83 2' RT. NW LP @ BLUE SPRINGS						76												2			—	—	5.56	2 @ 22"x13",2 @ 36"x23"	PI-1, GI-1A, IG-2, FE-1A	1.535	110	200	244			0.204	78.273	4.5				6	X-DRAIN REQ'D., 0° SKEW
5I	21+33 2' RT. NW LP @ BLUE SPRINGS					48																—	—	4.58	1 @ 22"x13"	PI-1, GI-1A, IG-2	1.284	86	200	244				19.081	2.8				3	90° SKEW, CONNECT TO GI-1A @ 2' RT. 20+83 NW LP @ BLUE SPRINGS
5J	852+00 NE RP @ BLUE SPRINGS							96												2					PI-1, FE-1A							0.268	41.103	1.5				6	X-DRAIN REQ'D., 0° SKEW
5J	854+45 140' LT. NE RP @ BLUE SPRINGS																													1									
5J	858+50 NE RP @ BLUE SPRINGS								180							2									PI-1, FE-1							0.246	2.651	0.5				20	X-DRAIN REQ'D., 0° SKEW, CLASS C BEDDING
5J	858+53 215' LT. NE RP @ BLUE SPRINGS																													1									
5J	867+00 NE RP @ BLUE SPRINGS			76											2										PI-1, FE-1							0.166	40.830	2.9				5	X-DRAIN REQ'D., 0° SKEW
5K	11+75 2' RT. NE LP @ BLUE SPRINGS					20												1				—	—	4.56	1 @ 22"x13"	PI-1, GI-1, IG-2, FE-1A	1.047	68	200	244			0.063	9.695	2.4				4	0° SKEW
5K	13+06 2' RT. NE LP @ BLUE SPRINGS					48																—	—	4.58	1 @ 22"x13"	PI-1, GI-1A, IG-2	1.284	86	200	244				17.719	2.6				3	90° SKEW, CONNECT TO GI-1A @ 2' RT. 13+56 NE LP @ BLUE SPRINGS
5K	13+56 2' RT. NE LP @ BLUE SPRINGS					20												1				—	—	4.58	3 @ 22"x13"	PI-1, GI-1A, IG-2, FE-1A	1.178	86	200	244			0.063	10.907	2.7				3	0° SKEW
5K	14+06 2' RT. NE LP @ BLUE SPRINGS					48																—	—	4.58	1 @ 22"x13"	PI-1, GI-1A, IG-2	1.284	86	200	244				17.719	2.6				3	90° SKEW, CONNECT TO GI-1A @ 2' RT. 13+56 NE LP @ BLUE SPRINGS
5K	16+50 NE LP @ BLUE SPRINGS				136											2									PI-1, FE-1							0.204	—	—				15	X-DRAIN REQ'D., 0° SKEW
5K	16+75 2' RT. NE LP @ BLUE SPRINGS			96											1							—	—	5.17	1 @ 24"	PI-1, GI-1, IG-2, FE-1	1.099	73	200	244			0.083	—	—				8	0° SKEW
5K	19+75 2' RT. NE LP @ BLUE SPRINGS					32												1				—	—	4.64	1 @ 22"x13"	PI-1, GI-1, IG-2, FE-1A	1.052	68	200	244			0.063	—	—				4	0° SKEW
UNIT			L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	EA.	EA.	EA.	EA.	EA.	EA.	EA.	EA.								C.Y.	LB.	LB.	LB.	C.Y.	EA.	C.Y.	C.Y.	C.Y.		S.Y.		C.Y.	
TOTAL PROJECT			204	1196 ⚠1	136	24	304	76	96	164	180	68	108	4	15	4	4	1	5	2	2								43.484	3762	4700	3158	5.320	10	2.720	3.329	842.592		83		277	

⚠1

		F&H	BY
		QUANTITIES & OFFSETS.	REVISION
		10/18/2006	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: EQ-1

FILENAME: eq-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 28

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2006 09:45:09 EQ-1.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

BOX CULVERTS REQUIRED

	WK. SH. NO.	STATION	SKEW	BARREL SIZE	LENGTH	No. OF COLLARS	QUANTITIES CLASS "B" CONC.	QUANTITIES REINF. STEEL	COVER HEIGHT FEET	STRUCTURE EXC. EST. DEPTH FEET	STRUCTURE EXC. CUBIC YARD	SELECT MATERIAL FOR UNDERCUTS	STANDARD DRAWINGS REQUIRED
							UNION COUNTY						
(2) (1)	5E	811+73 LT. CD. RD.	45° LT FWD	10'x6'	~~102'~~	1	~~131.05~~	~~28860.51~~	20	~~5.4~~	~~473~~	~~36~~	IBJL-1, ICJ-1, IBS-8-2W, IWS-3, ISK-45-3W, IBSM-3W
					77.16		130.97	28,974.843		7.55	340.573	32.372	
	UNIT						C.Y.	LB.			C.Y.	C.Y.	
	TOTAL PROJECT						~~131.05~~	~~28860.51~~			~~473~~	~~36~~	
							130.97	28,974.843			340.573	32.372	

(1) MODIFY FOR HIGH COVER.
(2) SEE DETAILS ON WK SHEET MD-6.

JUNCTION BOXES REQUIRED

	WK. SH. NO.	STATION	SIDE 1 SIZE	SIDE 1 SKEW	SIDE 2 SIZE	SIDE 2 SKEW	SIDE 3 SIZE	SIDE 3 SKEW	SIDE 4 SIZE	SIDE 4 SKEW	SIDE W1-3 (FT.)	SIDE W2-4 (FT.)	INLET HT.	CL. "B" CONC.	REINF. STEEL	BAR LIST A1	A2	A3	A4	B	C	D	E	F	
																UNION COUNTY									
⚠	5C	31+25.63' LT. SR 9 @ BLUE SPRINGS	18"	0°			18"	0°			3.67	2.50	3.40	0.802	60.02	2 @ 28		2 @ 28		2 @ 38	2 @ 24	4 @ 35	12 @ 26	8 @ 40	JB-1
	5C	32+28.105' LT. SR 9 @ BLUE SPRINGS	EXIST. 24"	0°			24"	0°			4.25	2.50	3.85	0.952	68.69	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 40	14 @ 26	8 @ 47	JB-1
	5E	808+00 48' LT. CD. RD.	24"	0°			24"	0°			4.25	2.50	3.99	0.982	69.07	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 42	14 @ 26	8 @ 47	JB-1
	5E	808+00 9' LT. CD. RD.	24"	0°			24"	0°			4.25	2.50	3.97	0.977	69.01	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 42	14 @ 26	8 @ 47	JB-1
	5G	869+98 114' LT. CD. RD.	24"	0°			24"	0°			4.25	2.50	3.85	0.952	68.69	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 40	14 @ 26	8 @ 47	JB-1
	5G	869+98 7' LT. CD. RD.	24"	0°			24"	0°			4.25	2.50	3.78	0.937	68.51	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 39	14 @ 26	8 @ 47	JB-1
	5G	880+00 3' LT. CD. RD.	24"	0°			24"	0°			4.25	2.50	3.97	0.977	69.01	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 42	14 @ 26	8 @ 47	JB-1
	5G	880+00 29' RT. CD. RD.	24"	0°			24"	0°			4.25	2.50	3.90	0.963	68.83	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 41	14 @ 26	8 @ 47	JB-1
	5H	842+28.87' LT. NW RAMP @ BLUE SPRINGS	30"	0°			30"	0°			4.83	2.50	4.47	1.144	74.95	2 @ 34		2 @ 34		2 @ 52	2 @ 24	4 @ 48	14 @ 26	8 @ 54	JB-1
	5J	858+50.108' LT. NE RAMP @ BLUE SPRINGS	36"	0°			36"	0°			5.42	2.50	5.13	1.356	84.22	2 @ 37		2 @ 37		2 @ 59	2 @ 24	4 @ 56	16 @ 26	8 @ 61	JB-1
	5K	16+75.83' LT. NE LOOP @ BLUE SPRINGS	24'	0°			24'	0°			4.25	2.50	3.98	0.980	69.04	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 42	14 @ 26	8 @ 47	JB-1
	5K	16+75.29' LT. NE LOOP @ BLUE SPRINGS	24"	0°			24"	0°			4.25	2.50	3.90	0.963	68.83	2 @ 31		2 @ 31		2 @ 45	2 @ 24	4 @ 41	14 @ 26	8 @ 47	JB-1
	UNIT													C.Y.	LB.										
	~~TOTAL PROJECT~~													11.985	838.87										

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER EQ-2
SHEET NUMBER 29

BY	DATE	REVISION
F&H	8/18/08	REVISED OFFSET.

FILENAME: eq-2.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN REVIEW DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
10/15/2009 09:48:55 EQ-2.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

(A) REMOVAL OF PIPES

WK. SH. NO.	LOCATION	STATION	PIPE SIZE 12"	15"	18"	24"	30"	36"	42"	48"	54"	60"	REMARKS
UNION COUNTY													
5c	33' Lt.	22+80 SR 9			8								
5c	33' Rt.	22+80 SR 9			8								
5c	90' Lt.	24+00 SR 9			90								
5c	90' Rt.	24+00 SR 9				90							
5c	15' Rt.	26+98 SR 9				28							
5e	63' Rt.	821+52 CD RD.			8								
5e	63' Rt.	827+58 CD RD.			10								
5g	46' Lt.	869+98 CD RD.			2								
5g	40' Lt.	871+03 CD RD.				20							
UNIT			L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	L.F.	
TOTAL PROJECT			0	0	126	138	0	0	0	0	0	0	

(A) ALL SALVAGEABLE MATERIAL TO BECOME THE PROPERTY OF THE CONTRACTOR.

US 78 ESTIMATED EARTHWORK QUANTITIES

WK. SHT. NO.	CUT	FILL	BORROW EXC. AH, FME CL B9	TOPSOIL	UNCL. EXC. FM, AH	EXCAVATION EXC.	EXCESS	CHANNEL	STRUCT.	ENTRANCES FILL	CUT	REMARKS
UNION COUNTY												
3	6748	412										
4	0	0										
5	0	0										
5c	34996 ⚠1	23324 ⚠1										
5d	973	559										
5e	115060	56092										
5f	40515	137145										
5g	27930	93351										
5h	234300	62993										
5i	240960	29085										
5j	166230	154282										
5k	120170	78515										
6	0	0										
7	0	0										
8	0	0										
9	0	0										
10	0	0										
11	0	0										
12	0	0										
UNIT	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	C.Y.	
TOTAL	987882 ⚠1	635758 ⚠1	0	0	0	0	0	0	1316 ⚠1	0	0	

⚠1 EARTHWORK BALANCE UNION COUNTY

((CUT + STRUCTURE EXC.) – (FILL)(1.25)) = EXCESS C.Y.
⚠1 ((987,882 + 1316) – (635,758)(1.25)) = 194,501 C.Y.

(FILL) (1.25) = UNCLASSIFIED C.Y.
⚠1 (635,758)(1.25) = 794,698 C.Y.

BY	DATE	REVISION
F&H	10/10/08	REVISED QUANTITIES

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER EQ-3

SHEET NUMBER 30

FILENAME: eq-3.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2003 09:50:45 EQ-3.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

REMOVAL ITEMS

WORK SHEET No.	LOCATION	STATION	CURB & GUTTER (ALL TYPES)	CONC. PVMT. W/ VARIABLE DEPTH OVERLAY	CONC. MEDIAN & ISLAND PVMT. (ALL DEPTHS)	ASPHALT PVMT. (ALL DEPTHS)	PAVED DITCH	BOX CULVERT W'WALLS	CONCRETE SLOPE PAVING	JUNCTION BOX	INLETS (ALL SIZES)	PIPE HEADWALLS	GUARDRAIL	FENCE WOVEN WIRE	REMARKS
						UNION COUNTY									
3	Lt.	US 78												912	
3	32' Lt.	793+31.96 - 804+70 US 78				253									
4	0'	817+00 US 78									1				
4	Rt.	821+42 US 78		11		2									CONCRETE PUNCHOUT AREA
4	Lt.	825+09 US 78		13		2									CONCRETE PUNCHOUT AREA
4	Lt.	827+82 US 78		5		1									CONCRETE PUNCHOUT AREA
4	Rt.	US 78				1132									CONCRETE PUNCHOUT AREA
4	Lt.	814+15 - 837+00 US 78				981								3025	CONCRETE PUNCHOUT AREA
5	Rt.	US 78				1772									CONCRETE PUNCHOUT AREA
5	Lt.	841+90 US 78		11		2									CONCRETE PUNCHOUT AREA
5	Lt.	845+32 US 78		5		2									CONCRETE PUNCHOUT AREA
5	Lt.	846+69 US 78		13		2									CONCRETE PUNCHOUT AREA
5	Lt.	850+65 US 78		38		6									CONCRETE PUNCHOUT AREA
5	Lt.	862+80 US 78		5		2									CONCRETE PUNCHOUT AREA
5	Lt.	837+00 - 867+00 US 78				1899								3544	CONCRETE PUNCHOUT AREA
5	26' Rt.	848+80 US 78											188		
5	66' Rt.	848+80 US 78											188		
5	70' Lt. - 70' Rt.	850+68 - 852+93 US 78							2123						
5	26' Rt.	852+95 US 78											188		
5	66' Rt.	852+95 US 78											188		
5C	33' Lt.	22+80 SR 9								1					
5C	33' Rt.	22+80 SR 9								1					
5C	Lt.	24+25 SR 9	233	533											Exist. NW Ramp
5C	Rt.	24+25 SR 9	218	512	42										Exist. NE Ramp
5C	35' Lt.	26+71 SR 9										1			
5C	36' Rt.	27+26 SR 9										1			
5C	40' Rt.	24+50 - 32+00 SR 9					336								
5C	105' Lt.	32+28 SR 9										1			
5C	Lt.	33+00 SR 9	512		396										
5C	Rt.	33+00 SR 9	474		195										
5C	Lt.	33+54 - 35+27 SR 9	485		210										
5C	Rt.	33+78 - 35+02 SR 9	407		237										
5E	27' Lt.	811+75 CD RD.						1							
5E	5' Rt.	814+75 CD RD.										1			
5E	7' Lt.	817+19 CD RD.										1			
5E	53' Rt.	821+47 CD RD.										1			
5E	51' Rt.	827+51 CD RD.										1			
5G	46' Rt.	869+98 CD RD.										1			
5G	40' Lt.	871+05 CD RD.										1			
5G	60' Lt.	877+82 CD RD.										1			
5G	85' Lt.	885+82 CD RD.										1			
6	Lt.	867+00 - 891+00 US 78				1200								2031	CONCRETE PUNCHOUT AREA
6	32' Lt.	888+00 - 890+75.85 US 78				61									
6	Rt.	867+00 - 891+00 US 78				1056									CONCRETE PUNCHOUT AREA
6	Rt.	890+77 US 78		11		2									CONCRETE PUNCHOUT AREA
UNIT			L.F.	SQ. YD.	SQ. YD.	SQ. YD.	SQ. YD.	EACH	SQ. YD.	EACH	EACH	EACH	L.F.	L.F.	
TOTAL PROJECT			2329	1157	1080	8375	336	1	2123	2	1	11	752	9512	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER EQ-4
SHEET NUMBER 31

REVISION | BY | DATE

FILENAME: eq-4.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
PLAN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 14:30:48 EQ-4.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: eq-4.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

COMB. CURB & GUTTER AND CONC. MEDIAN AND / OR ISLAND PAVEMENT REQUIRED

WK. SH. NO.	STATION TO STATION		COMB. CURB & GUTTER		CONC. MEDIAN AND / OR ISLAND PAVEMENT		REMARKS
			TYPE 2	TYPE 3A (MOD)	4-INCH	10-INCH	
			US 78 (UNION COUNTY)				
5	10+83	23+56	1273				NW LOOP
5	10+00	22+73	1273				NE LOOP
5C	22+75	35+27	1082 ⚠1	2072 ⚠1	1102 ⚠1	56 ⚠1	BLUE SPRINGS RD.& RAMPS
UNIT			L.F.	L.F.	S.Y.	S.Y.	
TOTAL PROJECT			3628 ⚠1	2072 ⚠1	1102 ⚠1	56 ⚠1	

BRIDGE END PAVEMENT REQUIRED

WK. SH. NO.	BRIDGE ABUTMENT STATION	W1	W2	WB	W	A	B	ANGLE "Z"	PVMT.	JOINT	REMARKS
		UNION COUNTY									
5	850+65.44 CD ROAD	22	22	44	45	20.00	20.00	0°00'00"	100.0	45.0	9" Thick
5	852+95.78 CD ROAD	22	22	44	45	20.00	20.00	0°00'00"	100.0	45.0	9" Thick
UNIT									S.Y.	L.F.	
TOTAL PROJECT									200.0	90.0	

CONCRETE PUNCHOUT REPAIR ITEMS

UNION COUNTY

WESTBOUND LANES

WORK SHEET No.	STATION	LANE	LENGTH	WIDTH	SQ. FT.	CONC. REPLACEMENT SQ. YD.	3" SAW CUT	FULL DEPTH SAW CUT	LONGITUDINAL SAW CUT	#5 TIE BARS
4	825+09	Rt.	10	12	120	13.33	24	24	10	6
4	827+82	Rt.	8	6	48	5.33	12	20	0	5
5	841+90	Rt.	8	12	96	10.67	24	24	8	5
5	845+32	Rt.	8	6	48	5.33	12	20	0	5
5	846+69	Rt.	10	12	120	13.33	24	24	10	6
5	850+65	Rt.	14	12	168	18.67	24	24	14	8
5	850+65	Lt.	14	12	168	18.67	24	24	14	8
5	862+80	Rt.	8	6	48	5.33	12	20	0	5
EASTBOUND LANES										
4	821+42	Rt.	8	12	96	10.67	24	24	8	5
6	890+77	Rt.	8	12	96	10.67	24	24	8	5
UNIT			L.F.	L.F.	SQ. FT.	SQ. YD.	L.F.	L.F.	L.F.	EACH
TOTAL PROJECT					1008	112	204	228	72	58

BY	REVISION	DATE
F&H	REVISED QUANTITIES	10/18/08

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: EQ-5

FILENAME: eq-5.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 32

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 03:53:32 EQ-5.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

ESTIMATED EROSION CONTROL ITEMS REQUIRED

WORKING SHEET NO.	DITCH LINER	SOIL REINF. MAT	PORTLAND CEMENT CONC PAVED DITCH	PORTLAND CEMENT FLUME	SOLID SOD (1) PAVED DITCH	SOLID SOD (1) SOD DITCH	LOOSE RIP RAP (SIZE 300#)	GEOTEXTILE FABRIC UNDER RIP RAP	SILT FENCE	SEDIMENT CONTROL STONE	STRAW EROSION CHECKS	SILT BASIN TYPE "D"	TEMP. SLOPE DRAIN	INLET SILTATION GUARD	RESET INLET SILTATION GUARD	REMARKS
UNION COUNTY																
3							97		118	22	20	1				
5C	243	68	53 ⚠	6	320		259		793	55	192	2		8	8	
5D		133	7		44				233		32		42			
5E	667	867	201		1207		586	203	615	88	620	3	72	4	4	
5F	567	438	61	8	369						364			3	3	
5G			229		1373		464	131	797	56	332	1	142	3	3	
5H	286	157	170		1016		264	123	458	33	632	1	132			
5I		173	79		475						156			5	5	
5J	639	67	115		692		916	1,247	350	112	308	2	58	1	1	
5K	88	385	58		349						80			6	6	
UNIT	S.Y.	S.Y.	C.Y.	C.Y.	S.Y.	S.Y.	TON	S.Y.	L.F.	TON	BALE	EA.	L.F.	EA.	EA.	
TOTAL PROJECT	2490	2288	973 ⚠	14	5847		2580	704	3364	366	2736	10	446	30	30	

(1) SEE EQ 1 FOR ADDITIONAL SOLID SOD QUANTITY AT PAVED APRONS

GUARDRAIL REQUIRED

WORK SHEET NO.	LOCATION	CL A TYPE 1	STATE STD. (INSTAL.)	TERMINAL END SECTION (FLARED)	CABLE ANCHOR TYPE 1	BR. END SECTION TYPE "I"	BR. END SECTION TYPE "H"	DELINEATORS (1) WHITE	DELINEATORS (1) YELLOW	REMARKS
UNION COUNTY										
5	S.W. BRIDGE CORNER @ US 78 EASTBOUND	175		1		1				
5	N.W. BRIDGE CORNER @ US 78 EASTBOUND	175		1		1				
5	S.W. BRIDGE CORNER @ US 78 WESTBOUND	175		1		1				
5	N.W. BRIDGE CORNER @ US 78 WESTBOUND	175		1		1				
5F	S.W. BRIDGE CORNER @ CD RD.	50			1	1				
5f	N.W. BRIDGE CORNER @ CD RD.	50			1	1				
5F	S.E. BRIDGE CORNER @ CD RD.	137.5		1		1				
5F	N.E. BRIDGE CORNER @ CD RD.	~~137.5~~		1		1				
		125.0								
UNIT		LF.		EACH	EACH	EACH	EACH	EACH	EACH	
TOTAL PROJECT		~~4075~~ 1,062.5		6	2	8	0	0	0	

(1) SEE DELINEATORS SUMMARY, EQ-11, SHEET NUMBER 38, FOR DELINEATOR QUANTITY.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
EQ-6	33

DATE	REVISION	BY
8/18/08	REVISED QUANTITIES	F&H

FILENAME: eq-6.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: eq-6.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 09:54:04 EQ-6.DGN

UNION COUNTY

STANDARD ROADSIDE SIGN ASSEMBLIES REQUIRED

	WORKING NUMBER	CODE LETTER THIS SHEET	STANDARD ROADSIDE SIGNS (TO BE MOUNTED)	WELDED & SEAMLESS STEEL PIPE POSTS				STEEL U-SECTION POST		STRUCTURAL STEEL ANGLES (FLAT BARS)	CLASS "B" STRUCT. CONCRETE (FOOTING)
				3"	3 1/2"	4"	5"	2 LB / FT	3 LB / FT	7/16"X2 1/2"	
	PSP-1	A	R2-1 (48" X 60")(RELOCATE EXIST.)								
			R2-4 (48" X 30")(RELOCATE EXIST.)			~~18.8~~		18		~~5 @ 2.67~~	0.13
		B	M3-4 (30" X 15")(RELOCATE EXIST.)								
			M1-4 (36" X 36")(RELOCATE EXIST.)		~~15.04~~					~~3 @ 1.0~~	0.12
		C	R6-2R (24" X 30")						14		
	PSP-2	A	W4-1R (48" X 48") (RELOCATE EXIST.)			~~15.47~~				~~2 @ 2.58~~	~~0.13~~
		B	W4-1R (48" X 48")			16.5				2 @ 2.58	0.13
		C	R3-7L (30" X 30")	~~12.5~~					13		
(1)	PSP-3	A	SN7475 (48" X 48") (RELOCATE EXIST.)			~~15.47~~				~~2 @ 2.58~~	~~0.13~~
(1)		B	OM-3L (12" X 36")		SEE NOTE 1						
(1)		C	OM-3R (12" X 36")		SEE NOTE 1						
(1)		D	OM-3L (12" X 36")		SEE NOTE 1						
		E	OM-3R (12" X 36")		SEE NOTE 1						
		F	SN7475 (48" X 48") (RELOCATE EXIST.)			18				2 @ 2.58	0.13
		G	W4-1R (48" X 48")(RELOCATE EXIST.)			~~15.47~~				~~2 @ 2.58~~	~~0.13~~
		H	R6-2R (24" X 30")						14		
		I	W3-3 (48" X 48")			16				2 @ 2.58	0.13
		J	W3-3 (48" X 48")(MOUNT ON EXIST POSTS)								
		K	W3-3 (48" X 48")(MOUNT ON EXIST POSTS)			17.75					0.13
		L	W3-3 (48" X 48")			~~15.47~~				~~2 @ 2.58~~	~~0.13~~
		M	W3-3 (48" X 48")(MOUNT ON EXIST POSTS)								
		N	SPECIAL (48" X 36")								
			R3-9B (24" X 36")(EXIST. TO REMAIN)		~~13.63~~					2 @ 2.67	~~0.12~~
		O	SPECIAL (48" X 36")		15.5					2 @ 2.67	0.12
		P	R3-7L (30" X 30")	~~12.5~~					13		
	PSP-3a	A	W1-8R (30" X 36")						14		
		B	W1-8R (30" X 36")						14		
		C	W1-8R (30" X 36")						14		
		D	W1-8R (30" X 36")						14		
		E	W1-8R (30" X 36")						14		
		F	W1-8R (30" X 36")						14		
		G	W1-15 (48" X 48")								
			W13-1 (24" X 24")			17.5				2 @ 2.58	0.13
		H	R1-2 (36" TRIANGLE)								
			R5-1(36" X 36")						14		
		I	R5-1 (48" X 48")	15.5						2 @ 2.33	0.12
		J	W1-8R (30" X 36")						14		
		K	W1-8R (30" X 36")						14		
		L	W1-8R (30" X 36")						14		
		M	W1-8R (30" X 36")						14		
		N	W1-8R (30" X 36")						14		
		O	W1-8R (30" X 36")						14		
		P	W1-15 (48" X 48")								
			W13-1 (24" X 24")			18				2 @ 2.58	0.13
(1)		Q	OM-3R (12" X 36")		SEE NOTE 1						
(1)		R	OM-3L (12" X 36")		SEE NOTE 1						
		S	SN7475 (48" X 48")			17.66				2 @ 2.58	0.13
		T	M1-5 (24" X 24")(RELOCATE EXIST.)								
			M6-4 (21" X 15")(RELOCATE EXIST.)	5.5				20.5	13.33	2 @ 2.67	0.12
		U	R1-1 (48" OCTAGON)								
			R1-4 (36" X 12") R1-3P			16.0				2 @ 2.50	0.13
		V	R1-2 (36" TRIANGLE)								
			R5-1 (36" X 36")						14		
		W	M3-3 (24" X 12")(RELOCATE EXIST.)								
			M1-5 (24" X 24")(RELOCATE EXIST.)								
			M6-3 (21" X 15")(RELOCATE EXIST.)								
			M3-2 (24" X 12")(RELOCATE EXIST.)								
			M1-4 (24" X 24")(RELOCATE EXIST.)								
			M6-3 (21" X 15")(RELOCATE EXIST.)					20.3			
			M3-4 (24" X 12")(RELOCATE EXIST.)					20.49		2 @ 2.67	
			M1-4 (24" X 24")(RELOCATE EXIST.)		15.5			8.08			0.12
			M6-2 (21" X 15")(RELOCATE EXIST.)		~~15.29~~			~~1 @ 8.08~~		~~2 @ 2.67~~	~~0.12~~
	SHEET TOTALS			LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN.FT.	CU. YD.
				31.0	31.0	131.41	0	49.9	250.0	56.64	1.77
										POUNDS	
										209.51	

(1) SIGN, POST & HARDWARE ARE INCLUDED IN PAY ITEM 630 - G (EACH)

M3-1 M3-3 24"X12"
M1-5 M1-5 24"X24"
M5-1L M6-2R 21"X15"

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: eq-7.dgn

COUNTY : UNION / PONTOTOC

PROJECT No. SP-0006-01(087)

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

FILENAME: eq-7.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

WORKING NUMBER EQ-7
SHEET NUMBER 34

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

UNION COUNTY

STANDARD ROADSIDE SIGN ASSEMBLIES REQUIRED

WORKING NUMBER	CODE LETTER THIS SHEET	STANDARD ROADSIDE SIGNS (TO BE MOUNTED)	WELDED & SEAMLESS STEEL PIPE POSTS				STEEL U-SECTION POST		STRUCTURAL STEEL ANGLES (FLAT BARS)	CLASS "B" STRUCT. CONCRETE (FOOTING)
			3"	3 1/2"	4"	5"	2 LB / FT	3 LB / FT	7/16"X2 1/2"	
PSP-3a	X	R2-1 (36" TRIANGLE)(RELOCATE EXIST.)						12.53		
	Y	R1-1 (48" OCTAGONAL)								
		R5-1 (48" X 48")								
		R6-1L (36" X 12")								
		R6-1R (36" X 12")			16				4 @ 2.50	0.13
	Z	R1-2 (36" TRIANGLE)								
		R5-1 (36" X 36")						13.5		
	AA	R3-7R (30" X 30")						13		
	AB	M1-5B (30" X 24")(RELOCATE EXIST.)			15.5		20.42		20.67	0.13
		M6-4 (21" X 15")(RELOCATE EXIST.)						13.33		
	AC	R1-1 (48" OCTAGONAL)								
		R1-4 (36" X 12") R1-3P			16				2 @ 2.50	0.13
	AD	R1-2 (36" TRIANGLE)								
		R5-1 (36" X 36")						14		
	AE	W3-1a (36" X 36")(RELOCATE EXIST.)			17			13.96		0.13
	AF	W12-2 (36" X 36")(RELOCATE EXIST.)						16		
W16-3 30"X24" (3 miles)		LOW CLEAR. (48" X 36")(2 POSTS)(RELOC.EX.)						16		
	AG	M2-1 (21" X 15") (RELOCATE EXIST.)								
		M1-4 (24" X 24")(RELOCATE EXIST.)						13.33		
	AH	M3-2 (24" X 12")(RELOCATE EXIST.)								
		M1-5B (30" X 24")(RELOCATE EXIST.)						13.08		
	AI	M3-4 (24" X 12")								
		M1-4 (24" X 24")								
		M6-2R (21" X 15")						14		
	AJ	M3-1 (24" X 12")								
		M1-5 (24" X 24")								
		M6-2R (21" X 15")						14.46		
	AK	M3-4 (24" X 12")(RELOCATE EXIST.)								
		M1-5B (30" X 24")(RELOCATE EXIST.)						13.08		
M3-2 M3-4 30"X15" M1-5 M1-5 30"X24" M5-1L M6-2R 21"X15"	AL	R1-2 (36" TRIANGLE)								
		R5-1 (36" X 36")						14		
	AM	R1-1 (48" OCTAGONAL)								
		R1-4 (36" X 12") R1-3P			16				2 @ 2.50	0.13
	AN	M1-5B (30" X 24")(RELOCATE EXIST.)								
		M6-4 (21" X 15")(RELOCATE EXIST.)	16.66				20.4.42	13.33	20.2.67	0.12
	AO	R1-1 (48" OCTAGONAL)								
M3-3 M3-1 24"X12" M1-5 M1-5 24"X24" M5-1L M6-2R 21"X15"		R1-4 (36" X 12") R1-3P		16	15.92				2 @ 2.50	0.12
	AP	R1-2 (36" TRIANGLE)								
		R5-1 (36" X 36")						14		
	AQ	M1-5 (24" X 24")(RELOCATE EXIST.)	17				20.4.42		20.2.67	0.12
		M6-4 (21" X 15")(RELOCATE EXIST.)						13.33		
PSP-4	A	W13-2 (48" X 60") W13-3			19				3 @ 2.67	0.13
	B	M3-2 (30" x 15")(RELOCATE EXIST.)								
		M1-4 (36" X 36")(RELOCATE EXIST.)								
		M3-3 (30" X 15")(RELOCATE EXIST.)								
		M1-5 (36" X 36")(RELOCATE EXIST.)		14.33			2 @ 4.25		2 @ 3.67	0.13
	C	R2-1 (48" X 60")(RELOCATE EXIST.)								
		R2-4 (48" X 30")(RELOCATE EXIST.)			18.8				5 @ 2.67	0.13
PSP-5	A	D10-5 (12" X 36")(EXIST. TO REMAIN)								
	B	D10-5 (12" X 36")(EXIST. TO REMAIN)								
PSP-6	A	(EXIST. TO REMAIN)								
SHEET TOTALS			LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN.FT.	CU. YD.
			33.66	16.0	99.5	-0-	26.52	101.0	49.03	1.14
									POUNDS	
									181.41	
UNION COUNTY TOTALS			LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN.FT.	CU. YD.
			64.66	47.0	236.91	0	76.42	351	105.67	2.91
									POUNDS	
									390.98	

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: eq-8.dgn

COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

DESIGN TEAM F&H, Inc. FILENAME: eq-8.dgn CHECKED DATE

WORKING NUMBER EQ-8

SHEET NUMBER 35

STATE MISS. PROJECT NO. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

STANDARD ROADSIDE SIGNS

SHEET ALUMINUM 0.080" THICKNESS

SIGN NUMBER	SIZE	UNIT AREA (SQ. FT)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	REMARKS
M1-4	24" X 24"	4	1	4	US ROUTE MARKER
M1-5	24" X 24"	4	1	4	STATE ROUTE MARKER
M3-1	24" X 12"	2	1	2	NORTH
M3-4	24" X 12"	2	1	2	WEST
M6-2R	21" X 15"	2.19	2	4.38	SLANTED ARROW
R3-7L	30" X 30"	6.25	2	12.5	LEFT LANE MUST TURN LEFT
R3-7R	30" X 30"	6.25	1	6.25	RIGHT LANE MUST TURN RIGHT
R6-2R	24" X 30"	5	2	10	ONE WAY
W1-8R	30" X 36"	7.5	12	90	CHEVRON
W13-1	24" X 24"	4	2	8	30 M.P.H.
TOTAL (0.080" THICKNESS)				143.13	

UNION COUNTY

STANDARD ROADSIDE SIGNS

SHEET ALUMINUM 0.125" THICKNESS

SIGN NUMBER	SIZE	UNIT AREA (SQ. FT)	QUANTITY REQUIRED	TOTAL SIGN AREA (SQ. FT.)	REMARKS
R1-1	48" OCTAGONAL	16	5	80	STOP
R1-2	36" TRIANGLE	3.9	6	23.4	YIELD
R1-4B	36" X 12"	3	4	12	4-WAY
R5-1	36" X 36"	9	6	54	DO NOT ENTER
R5-1	48" X 48"	16	2	32	DO NOT ENTER
R6-1L	36" X 12"	3	1	3	ONE WAY
R6-1R	36" X 12"	3	1	3	ONE WAY
SN7475	48" X 48"	16	1	16	BRIDGE MAY ICE IN COLD WEATHER
W1-15	48" X 48"	16	2	32	HORIZONTAL ALIGNMENT
W3-3	48" X 48"	16	5	80	SIGNAL AHEAD
W4-1R	48" X 48"	16	1	16	MERGE
W13-2	48" X 60"	20	1	20	EXIT 45 M.P.H.
SPECIAL	48" X 36"	12	2	24	LEFT LANE MUST TURN LEFT
TOTAL (0.125" THICKNESS)				395.4	

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 14:39:10 EQ-9.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: EQ-9
SHEET NUMBER: 36

REVISION | BY | DATE

FILENAME: eq-9.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DIRECTIONAL SIGN ASSEMBLIES REQUIRED (GROUND MOUNTED ONLY)

WORKING NUMBER	SIGN NO.	NOTES	SIGN SIZE			POST SIZE (STRUCTURAL STEEL BEAMS)										STRUCTURAL STEEL ANGLES AND BARS				REINF. STEEL (POUNDS)	CLASS "B" STRUCT. CONCRETE (FOOTING)	STEEL U-SECTION POSTS
																ANGLES			FLAT BARS			
			PRIMARY	SUPPLE-MENTARY	TOTAL	S4 x 7.7	W6 x 9	W6 x 12	W6 x 15	W8 x 18	W8 x 21	W10 x 22	W10 x 26	W12 x 26	3"x3"x1/4"	3 1/2"x3 1/2"x1/4"	4"x4"x5/16"	1/16"x2 1/2"			3 LB/FT
PSP-1	1		11.5 x 3		34.5		16.62										7.50		64.60	1.04	
							16.29														
PSP-3a	2		12 x 3		36		14.45									7.50			64.60	1.04	
							15.29														
PSP-3a	3		11.5 x 3.5		40.25		13.46									7.50			64.60	1.04	
							14.87														
PSP-3a	4		10 x 2		20	13.87										7.50			56.50	0.52	
						15.12															
PSP-3a	5		9.5 x 3.5		33.25	13.54										7.50			56.50	0.52	
						14.0															
PSP-3a	6		17 x 6.5		110.5				OVERHEAD SIGN												
									overhead												
PSP-4	7A	Approx	31 x 8		248				OVERHEAD SIGN												
PSP-4	7B	Approx							overhead												
PSP-4	8	Approx	8 X 7		56	16.29									7.0				56.50	0.52	
						17.46															
PSP-4	9		20.5x11	10 x 2.5	250.5									24.79			12.75		282.50	1.33	
														27.12							
PSP-6	10		20.5x12	10 x 2.5	271								25.46				10.50		282.50	1.33	
													26.71								
PSP-3a	11A		7.5 x 5		37.5	14.79									5.5				56.50	0.52	
						15.04															
PSP-3a	11B		7.5 x 5		37.5	14.21									5.5				56.5	0.52	
						14.46															
UNION COUNTY TOTALS					SQ. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	LIN. FT	POUNDS	CU. YDS.	LIN. FT.
					96.5	148.96	99.99	0	0	0	0	0	52.17	52.91	18	30.00	30.75	0	1041.3	8.38	0
															POUNDS	POUNDS	POUNDS	POUNDS			
															38.20	174	252.15				

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 14:48:15 EQ-10.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: EQ-10
SHEET NUMBER: 37

REVISION | BY | DATE

FILENAME: eq-10.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS

WORKING NUMBER	LOCATION	WHITE DELINEATOR		YELLOW DELINEATOR	
		SINGLE	DOUBLE	SINGLE	DOUBLE
PSP-1	US 78 B.O.P. TO STA. 808+00 (UNION CO.)	0	15	0	0
PSP-2	US 78 STA. 808+00 TO STA. 838+00 (UNION CO.)	3	28	3	0
PSP-3	US 78 STA. 838+00 TO STA. 868+00 (UNION CO.)	0 (14)	0	0 (14)	0
PSP-3a	US 78 @ BLUE SPRINGS RD. (UNION CO.)	79 (8)	49	44 (8)	11
PSP-4	US 78 STA. 868+00 TO STA. 898+00 (UNION CO.)	0	30	0	0
PSP-5	US 78 STA. 898+00 TO STA. 928+00 (UNION CO.)	0	0	0	0
PSP-6	US 78 STA. 928+00 TO STA. 958+00 (UNION CO.)	0	0	0	0
PSP-7	SR 9 @ SHERMAN INTERCHANGE (PONTOTOC CO.)	0	0	0	0
TOTAL		82 (22)	122	47 (22)	11

( ) DENOTES GUARDRAIL DELINEATOR QUANTITY

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 14:41:01 EQ-11.DGN

REVISION | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER EQ-11
SHEET NUMBER 38

FILENAME: eq-11.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

TRAFFIC CONTROL DEVICES & TEMPORARY STRIPING

DESCRIPTION	CSD	PH. 1	PH. 2	PH. 3	TOTAL UNION COUNTY	TOTAL PONTOTOC COUNTY	TOTAL PROJ.	UNITS
TEMPORARY TRAFFIC STRIPE, CONTINUOUS WHITE	0	3897 ⚠	52157	4025	60079 ⚠	0	60079 ⚠	L.F.
TEMPORARY TRAFFIC STRIPE, CONTINUOUS YELLOW	0	3978 ⚠	54490	2740	61208 ⚠	0	61208 ⚠	L.F.
TEMPORARY TRAFFIC STRIPE, DETAIL, PAINT	0	1392 ⚠	568	0	1960 ⚠	0	1960 ⚠	L.F.
TEMPORARY TRAFFIC STRIPE, LEGEND, PAINT	0	72 ⚠	0	0	72 ⚠	0	72 ⚠	L.F.
RED-CLEAR REFLECTIVE RAISED PAVEMENT MARKERS	0	0	100	0	100	0	100	EA.
CHANGEABLE MESSAGE SIGN	2	0	0	0	2	0	2	EA.
CONCRETE MEDIAN BARRIER, PRECAST	0	520	0	0	520	0	520	L.F.
TYPE III BARRICADE (SINGLE FACED)	24	88	112	16	136	12	148	L.F.
TYPE III BARRICADE (DOUBLE FACED)	78	6	12	0	60	30	90	L.F.
FREE STANDING PLASTIC DRUMS	0	161 ⚠	182 ⚠	68	182 ⚠	0	182 ⚠	EA.
REMOVAL OF TRAFFIC STRIPE	0	1.2	0.8	0	2	0	2	MI.

PLAN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

10/15/2008 09:45:27 EQ-12.DGN

DATE	REVISION	BY
10/15/08	REVISED QUANTITIES	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (ROADWAY)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: EQ-12

FILENAME: eq-12.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 39

1st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

⚠ RECAPITULATION OF QUANTITIES

LIGHTING ASSEMBLY	STATION	HIGH MAST TYPE							LOW MAST TYPE			UNDERPASS TYPE					POLE LENGTH	BREAKAWAY DEVICE REQUIRED	S.P.C. NUMBER	CIRCUIT NUMBER	NUMBER OF FIXTURES	LAMP WATTAGE	COUNTY	I.E.S. TYPE	UNDG. BR. CKT. AWG#., L.F. (3 CONDUCTOR)						UNDG. BR. CKT. (JACKED OR BORED) AWG#. L.F. (3 COND.)						STRUC. MTD. BR. CKT. AWG#. L.F. (3 COND.)						LOCATION
		A	B	C	D	E	F	G	H	J																8	6	4	3	2	1	8	6	4	3	2	1	8	6	4	3	2	1	
HA-1	805+86.2				X												100'		1	SPC1-2	4	1000	UNION	III				788'															CENTER OF US 78
HA-2	813+74.1				X												100'		1	SPC1-2	4	1000	UNION	III				651'				96'											CENTER OF US 78
HA-3	821+66.7				X												100'		1	SPC1-3	4	1000	UNION	III			426'							96'									CENTER OF US 78
HA-4	829+29.1				X												100'		1	SPC1-3	4	1000	UNION	III			763'																CENTER OF US 78
HA-5	836+63.1	X															100'		1	SPC1-4	8	1000	UNION	V					1,904'						96'							CENTER OF US 78
HA-6	842+67.4				X												100'		1	SPC2-1	4	1000	UNION	III					551'						48'							320' LT. OF CD RD.
HA-7	842+99.7							X									130'		1	SPC2-1	6	1000	UNION	V					811'						150'							95' RT. OF US 78
HA-8	848+88.5						X										130'		1	SPC2-2	8	1000	UNION	V				285'						120'								301' LT. OF CD RD.
HA-9	848+45.5							X									130'		1	SPC2-3	6	1000	UNION	V			1,027'						198'									177' RT. OF US 78
HA-10	855+29.3						X										130'		1	SPC3-2	8	1000	UNION	V				312'						124'								293' LT. OF CD RD.
HA-11	853+87.5							X									130'		1	SPC3-1	6	1000	UNION	V					667'						54'							117' RT. OF US 78
HA-12	861+45.5				X												100'		1	SPC3-3	4	1000	UNION	III				206'						46'								332' LT. OF CD RD.
HA-13	859+87.5			X													100'		1	SPC3-1	4	1000	UNION	V					642'						142'							CENTER OF US 78
HA-14	866+2.9		X														100'		1	SPC3-3	6	1000	UNION	V				907'						96'								CENTER OF US 78
HA-15	872+77.6				X												100'		1	SPC3-4	4	1000	UNION	III		1,469'						116'									CENTER OF US 78
HA-16	880+68.2				X												100'		1	SPC3-5	4	1000	UNION	III					2,162'						116'							CENTER OF US 78
HA-17	1033+3.4		X														100'		1	SPC4-2	6	1000	PONTOTOC	III				744'						54'								CENTER OF US 78
HA-18	1039+50.4				X												100'		1	SPC4-3	4	1000	PONTOTOC	III		736'						110'									231' LT. OF US 78
HA-19	1040+10.8					X											120'		1	SPC4-2	4	1000	PONTOTOC	III				452'														167' RT. OF US 78
HA-20	713+37.2			X													100'		1	SPC4-4	4	1000	PONTOTOC	V			225'															89' LT. OF SR 9 @ SHERMAN
HA-21	1046+0.6							X									130'		1	SPC4-4	6	1000	PONTOTOC	V			560'						190'									217' LT. OF US 78
HA-22	1051+58.9		X														100'		1	SPC4-6	6	1000	PONTOTOC	V		865'						135'									CENTER OF US 78
HA-23	1058+59.7				X												100'		1	SPC4-7	4	1000	PONTOTOC	III				1,421'						135'								CENTER OF US 78
LA-1	793+92.4								X								40'	X	1	SPC1-1	1	400	UNION	IV	324'																	88' LT. OF US 78
LA-2	797+13.7								X								40'	X	1	SPC1-1	1	400	UNION	IV	325'																	98' LT. OF US 78
LA-3	800+37.2								X								40'	X	1	SPC1-1	1	400	UNION	IV	1,866'																	98' LT. OF US 78
LA-4	31+64.3									X							40'	X	1	SPC2-2	1	400	UNION	III				220'															46' LT. OF SR 9 @ BLUE SPRINGS
LA-5	29+44.8									X							40'	X	1	SPC2-2	1	400	UNION	III				165'															42' LT. OF SR 9 @ BLUE SPRINGS
LA-6	28+1.8									X							40'	X	1	SPC2-2	1	400	UNION	III				450'															121' LT. OF SR 9 @ BLUE SPRINGS
LA-7	28+1.7									X							40'	X	1	SPC3-2	1	400	UNION	III				844'															122' RT. OF SR 9 @ BLUE SPRINGS
LA-8	26+60.9									X							40'	X	1	SPC2-4	1	400	UNION	III	1,375'						313'											42' LT. OF SR 9 @ BLUE SPRINGS
LA-9	22+33.2									X							40'	X	1	SPC2-4	1	400	UNION	III	228'																	42' RT. OF SR 9 @ BLUE SPRINGS
LA-10	15+4.9									X							40'	X	1	SPC2-4	1	400	UNION	III	230'																	69' LT. OF SR 9 @ BLUE SPRINGS
LA-11	15+0.9									X							40'	X	1	SPC2-4	1	400	UNION	III	7'						102'											62' RT. OF SR 9 @ BLUE SPRINGS
LA-12	886+9.3								X								40'	X	1	SPC3-5	1	400	UNION	III					577'						85'							30' LT. OF CD RD.
LA-13	889+37.4								X								40'	X	1	SPC3-5	1	400	UNION	III					330'													30' LT. OF CD RD.
LA-14	1019+4.5								X								40'	X	1	SPC4-1	1	400	PONTOTOC	IV		323'																	86' LT. OF US 78
LA-15	1022+25.2								X								40'	X	1	SPC4-1	1	400	PONTOTOC	IV		318'																	86' LT. OF US 78
LA-16	1025+40.5								X								40'	X	1	SPC4-1	1	400	PONTOTOC	IV		310'																	92' LT. OF US 78
LA-17	1028+48.2								X								40'	X	1	SPC4-1	1	400	PONTOTOC	IV		1,680'						124'									103' LT. OF US 78
LA-18	725+23.1									X							40'	X	1	SPC4-3	1	400	PONTOTOC	III		288'						121'									26' RT. OF SR 9 @ SHERMAN
LA-19	709+96.5									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		568'						189'									90' RT. OF SR 9 @ SHERMAN
LA-20	708+48.1									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		157'															41' RT. OF SR 9 @ SHERMAN
LA-21	706+26.6									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		222'															41' RT. OF SR 9 @ SHERMAN
LA-22	704+5									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		222'															41' RT. OF SR 9 @ SHERMAN
LA-23	701+66.3									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		239'															41' RT. OF SR 9 @ SHERMAN
LA-24	409+53.8									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		224'						78'									44' LT. OF FRONTAGE RD.
LA-25	409+48.3									X							40'	X	1	SPC4-5	1	400	PONTOTOC	III		5'						96'									55' RT. OF FRONTAGE RD.
LA-26	1064+77.4								X								40'	X	1	SPC4-7	1	400	PONTOTOC	IV				587'					66'									97' RT. OF US 78
LA-27	1068+3.1								X								40'	X	1	SPC4-7	1	400	PONTOTOC	IV				326'															90' RT. OF US 78
SPC1	818+91.6																						UNION					86'													99' LT. OF CD RD.
SPC2	28+58.4																						UNION					84'													566' LT. OF SR 9 @ BLUE SPRINGS
SPC3	859+72.9																						UNION						89'											134' LT. OF NE RAMP @ BLUE SPRINGS
SPC4	44+68.8																						PONTOTOC							73'						49'					83' LT. OF SW RAMP @ SHERMAN
TOTALS		1	3	2	10	1	2	4	11	16											145				4,355'	7,626'	3,021'	8,528'	7,733'	73'	415'	969'	484'	737'	691'	49'							

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:35 EQ-12A.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (LIGHTING)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION/PONTOTOC

WORKING NUMBER	SHEET NUMBER
EQ-12a	39.1

1/22/09 ADDED SHEET & QUANTITIES REVISION — F&H BY

FILENAME: eq-12a.dgn
DESIGN TEAM HESM&A CHECKED WLT DATE

DESIGN TEAM: HESM & A | FILENAME: eq-12a.dgn | COUNTY : UNION / PONTOTOC | PROJECT No. SP-0006-01(087)

SIGNS REQUIRED

	SIGN NO.	SIZE	UNIT AREA SQ.FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ.FT.	REMARKS
	G20 - 1	60" X 24"	10.00 ♦	2	20	ROAD WORK NEXT X X MILES
	G20 - 2a	48" X 24"	8.00	8	64	END ROAD WORK
	G20 - 4	36' X 18"	4.50			PILOT CAR FOLLOW ME
	SPECIAL	90" X 30"	18.75 ♦	1	18.75	TO MAGNOLIA WAY W/ ARROW LEFT
1	M1 - 1	24" X 24"	4.00			1 OR 2 DIGIT
1	M1 - 1	30" X 24"	5.00			3 DIGIT
2	M1 - 4	24" X 24"	4.00	2	8	US 78
2	M1 - 4	30" X 24"	5.00			3 DIGIT
3	M1 - 6	24" X 24"	4.00			SR 9
3	M1 - 6	30" X 24"	5.00			3 DIGIT
4	M3 - 1	24" X 12"	2.00			NORTH- 1 OR 2 DIGIT RTE. MARKER
4	M3 - 1	30" X 15"	3.13			NORTH- 3 DIGIT RTE. MARKER
4	M3 - 2	24" X 12"	2.00			EAST- 1 OR 2 DIGIT RTE. MARKER
4	M3 - 2	30" X 15"	3.13			EAST- 3 DIGIT RTE. MARKER
4	M3 - 3	24" X 12"	2.00			SOUTH- 1 OR 2 DIGIT RTE. MARKER
4	M3 - 3	30" X 15"	3.13			SOUTH- 3 DIGIT RTE. MARKER
4	M3 - 4	24" X 12"	2.00	2	4	WEST- 1 OR 2 DIGIT RTE. MARKER
4	M3 - 4	30" X 15"	3.13			WEST- 3 DIGIT RTE. MARKER
	M4 - 8	24" X 12"	2.00	1	2	DETOUR- 1 OR 2 DIGIT RTE. MARKER
	M4 - 8	30" X 15"	3.13			DETOUR- 3 DIGIT RTE. MARKER
	M4 - 8a	24" X 18"	3.13			END DETOUR
	M4 - 9	48" X 36"	12.00 ♦			DETOUR ↑
	M4 - 9L	48" X 36"	12.00 ♦			DETOUR ←
	M4 - 9BL	48" X 36"	12.00 ♦			DETOUR ↰
	M4 - 9SL	48" X 36"	12.00 ♦			DETOUR ↖
	M4 - 9BSL	48" X 36"	12.00 ♦			DETOUR ↰
	M4 - 9R	48" X 36"	12.00 ♦			DETOUR →
	M4 - 9BR	48" X 36"	12.00 ♦			DETOUR ↱
	M4 - 9SR	48" X 36"	12.00 ♦			DETOUR ↗
	M4 - 9BSR	48" X 36"	12.00 ♦			DETOUR ↱
	M4 - 10L	48" X 18"	6.00			DETOUR ←
	M4 - 10R	48" X 18"	6.00			DETOUR →
4	M4 - 5	24" X 12"	2.00			TO
4	M5 - 1L	21" X 15"	2.19	1	2.19	↰
4	M5 - 1R	21" X 15"	2.19			↱
4	M5 - 2L	21" X 15"	2.19			↖
4	M5 - 2R	21" X 15"	2.19			↗
4	M6 - 1L	21" X 15"	2.19	1	2.19	←
4	M6 - 1R	21" X 15"	2.19			→
4	M6 - 2L	21" X 15"	2.19			↖
4	M6 - 2R	21" X 15"	2.19			↗
4	M6 - 3	21" X 15"	2.19			↑
	R1 - 1	36" X 36"	9.00	2	18	STOP (1)
	R1 - 1	48" X 48"	16.00 ♦			STOP (2)
	R1 - 2	48" X 48" X 48"	6.93			YIELD (1)
	R1 - 2	60" X 60" X 60"	10.83 ♦			YIELD (2)

SIGNS REQUIRED (CONT'D)

	SIGN NO.	SIZE	UNIT AREA SQ.FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ.FT.	REMARKS
	R1 - 3	12" X 6"	0.50			3-WAY,4 WAY ETC.
	R2 - 1	36" X 48"	12.00 ♦			SPEED LIMIT
	R2 - 1	48" X 60"	20.00 ♦			SPEED LIMIT
	R3 - 1	36" X 36"	9.00			(1)
	R3 - 1	48" X 48"	16.00 ♦			(2)
	R3 - 2	36" X 36"	9.00			(1)
	R3 - 2	48" X 48"	16.00 ♦			(2)
	R3 - 4	36" X 36"	9.00			(1)
	R3 - 4	48" X 48"	16.00 ♦			(2)
	R3 - 5L	30" X 36"	7.50			ONLY ↰
	R3 - 5R	30" X 36"	7.50			ONLY ↱
	R3 - 6L	30" X 36"	7.50			↰
	R3 - 6R	30" X 36"	7.50			↱
	R3 - 7L	30" X 30"	6.25			LEFT LANE MUST TURN LEFT
	R3 - 7R	30" X 30"	6.25			RIGHT LANE MUST TURN RIGHT
	R4 - 1	24" X 30"	5.00			DO NOT PASS (1)
		48" X 60"	20.00 ♦			DO NOT PASS (2)
	R4 - 2	24" X 30"	5.00			PASS WITH CARE (1)
		48" X 60"	20.00 ♦			PASS WITH CARE (2)
	R4 - 7	48" X 60"	20.00 ♦			↰
	R4 - 8	48" X 60"	20.00 ♦			↱
	R5 - 1	48" X 48"	16.00 ♦	2	32	DO NOT ENTER
	R5 - 1a	42" X 30"	8.75			WRONG WAY
	R6 - 1L	36" X 12"	3.00			ONE WAY ←
	R6 - 1R	36" X 12"	3.00			ONE WAY →
	R6 - 2L	18" X 24"	3.00			ONE WAY (1)
	R6 - 2L	24" X 30"	5.00			ONE WAY (2)
	R6 - 2R	18" X 24"	3.00			ONE WAY (1)
	R6 - 2R	24" X 30"	5.00			ONE WAY (2)
	R11 - 2	48" X 30"	10.00 ♦	7	70	ROAD CLOSED
	R11 - 3	60" X 30"	12.50 ♦			ROAD CLOSED LOCAL TRAFFIC ONLY
	R11 - 3a	60" X 30"	12.50 ♦			ROAD CLOSED XX MILES AHEAD
	R11 - 3b	60" X 30"	12.50 ♦			BRIDGE OUT XX MILES AHEAD
	R11 - 4	60" X 30"	12.50 ♦			ROAD CLOSED TO THRU TRAFFIC
	R12 - 1	36" X 48"	12.00 ♦			WEIGHT LIMIT XX TONS
7	R16- 3	36" X 48"	12.00 ♦	8	96	WHEN WORKERS ARE PRESENT SPEEDING FINES DOUBLED
6 7		48" X 60"	20.00 ♦			
	W1 - 1L	48" X 48"	16.00 ♦			↰
	W1 - 1R	48" X 48"	16.00 ♦			↱
	W1 - 2L	48" X 48"	16.00 ♦			↰
	W1 - 2R	48" X 48"	16.00 ♦			↱
	W1 - 3L	48" X 48"	16.00 ♦			↰
	W1 - 3R	48" X 48"	16.00 ♦			↱
	W1 - 4aL	48" X 48"	16.00 ♦	1	16	↰
	W1 - 4aR	48" X 48"	16.00 ♦	1	16	↱
	W1 - 4bL	48" X 48"	16.00 ♦			↰
	W1 - 4bR	48" X 48"	16.00 ♦			↱
	W1 - 5L	48" X 48"	16.00 ♦			↰
	W1 - 5R	48" X 48"	16.00 ♦			↱
	W1 - 6L	36" X 18"	4.50			← (1)
	W1 - 6L	48" X 24"	8.00	1	8	← (2)
	W1 - 6R	48" X 24"	8.00	1	8	→ (1)
	W1 - 6R	60" X 30"	12.50 ♦			→ (2)
	W1 - 7	48" X 24"	8.00			↔ (1)

SIGNS REQUIRED (CONT'D)

SIGN NO.	SIZE	UNIT AREA SQ.FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ.FT.	REMARKS
W1 - 7	60" X 30"	12.50 ♦			↔ (2)
W1 - 8L	18" X 24"	3.00			↙ (1)
W1 - 8L	36" X 48"	12.00 ♦			↙ (2)
W1 - 8R	18" X 24"	3.00			↘ (1)
W1 - 8R	36" X 48"	12.00 ♦			↘ (2)
W1 - 9L	48" X 48"	16.00 ♦			↰
W1 - 9R	48" X 48"	16.00 ♦			↱
W3 - 1a	48" X 48"	16.00 ♦			○
W3 - 2a	48" X 48"	16.00 ♦			▽
W3 - 3	48" X 48"	16.00 ♦			RXR
W3 - 5	48" X 48"	16.00 ♦			RR
W4 - 1L	48" X 48"	16.00 ♦			↑
W4 - 1R	48" X 48"	16.00 ♦			↑
W4 - 2L	48" X 48"	16.00 ♦			⫽
W4 - 2R	48" X 48"	16.00 ♦			⫽
W5 - 1a	48" X 48"	16.00 ♦			PAVEMENT NARROWS
W6 - 1	48" X 48"	16.00 ♦			↓↑
W6 - 2	48" X 48"	16.00 ♦			↓↑
W6 - 3	48" X 48"	16.00 ♦			↓↑
W8 - 1	48" X 48"	16.00 ♦			BUMP
W8 - 4	48" X 48"	16.00 ♦			SOFT SHOULDER
W8 - 6	48" X 48"	16.00 ♦			TRUCK CROSSING
W8 - 9	48" X 48"	16.00 ♦			LOW SHOULDER
W8 - 11	36" X 36"	9.00			UNEVEN PAVEMENT
W10 - 1	36" DIA.	9.00			RR (1)
W10 - 1	48" DIA.	16.00 ♦			RR (2)
W13 - 1	24" X 24"	4.00	2	8	25 MPH
W13 - 4	36" X 36"	9.00			ON RAMP (plaque)
W14 - 3	36"X48"X48"	5.56			NO PASSING ZONE (1)
	48"X64"X64"	9.89			NO PASSING ZONE (2)
W19 - 2	48" X 48"	16.00 ♦			BRIDGE MAY ICE IN COLD WEATHER
W20 - 1	48" X 48"	16.00 ♦	26	416	ADVANCE ROAD WORK (1)
W20 - 1	36" X 36"	9.00			ADVANCE ROAD WORK (2)
W20 - 2	48" X 48"	16.00 ♦			ADVANCE DETOUR
W20 - 3	48" X 48"	16.00 ♦			ADVANCE ROAD CLOSED
W20 - 4	48" X 48"	16.00 ♦			ADVANCE ONE-LN. RD.
W20 - 4B	48" X 48"	16.00 ♦			ADVANCE ONE-LN. BR.
W20 - 5L	48" X 48"	16.00 ♦			ADVANCE LT. LN. CLOSED
W20 - 5R	48" X 48"	16.00 ♦			ADVANCE RT. LN. CLOSED
SPECIAL	48" X 48"	16.00 ♦			LANES SHIFT LT. 1/2 MILE
SPECIAL	48" X 48"	16.00 ♦			LANES NARROW 1500 FT.
W20 - 7	48" X 48"	16.00 ♦			ADVANCE FLAGGER
W20 - 7a	48" X 48"	16.00 ♦			
W21 - 1	36" X 36"	9.00			WORKERS
W21 - 1a	36" X 36"	9.00			

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

SIGNS REQUIRED (CONT'D)

SIGN NO.	SIZE	UNIT AREA SQ.FT.	QUAN. REQ'D.	TOTAL SIGN AREA SQ.FT.	REMARKS
W21 - 2	36" X 36"	9.00			FRESH OIL (TAR)
W21 - 3	48" X 48"	16.00 ♦			ADVANCE ROAD MACHINERY
W21 - 5	48" X 48"	16.00 ♦			SHOULDER WORK
W21 - 6	36" X 36"	9.00			SURVEY CREW
DP - 1	24" X 18"	3.00			XXX FEET
VP - 1L	12" X 36"	3.00			▮
VP - 1R	12" X 36"	3.00			▮
5 OM - 3L	12" X 36"	3.00	6	18	▮
5 OM - 3R	12" X 36"	3.00	8	24	▮

TOTAL SIGN AREA (Union Co.) (LESS THAN 10 SQ. FT.) 202 SQ. FT.
TOTAL SIGN AREA (Pontotoc Co.) (LESS THAN 10 SQ. FT.) 32 SQ. FT.

TOTAL SIGN AREA (Union Co.) (10 SQ. FT. OR MORE ♦) 685 SQ. FT.
TOTAL SIGN AREA (Pontotoc Co.) (10 SQ. FT. OR MORE ♦) 356 SQ. FT.

(1) STANDARD
(2) SPECIAL (USE WHERE WARRANTED)

NOTES

1. INTERSTATE ROUTE MARKER
2. UNITED STATES ROUTE MARKER
3. STATE ROUTE MARKER
4. COLORS OF CARDINAL DIRECTION MARKERS AND DIRECTIONAL ARROWS SHALL BE APPROPRIATE TO MATCH ACCOMPANYING ROUTE MARKERS.
5. BLACK STRIPES ON YELLOW BACKGROUND
6. INTERSTATE USE ONLY
7. TOP OF SIGN – BLACK LETTERING ON ORANGE BACKGROUND, BOTTOM OF SIGN – BLACK LETTERING ON WHITE BACKGROUND

THE BACKGROUND OF ALL WARNING SIGNS ("W" SERIES) EXCEPT W10-1 SHALL BE ORANGE. THE W10 – BACKGROUND SHALL BE YELLOW IN ALL CASES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (TRAFFIC CONTROL SIGNS)

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER EQ-13
SHEET NUMBER 40

REVISION | BY | DATE

FILENAME: eq-13.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 14:42:46 EQ-13.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

ESTIMATED BRIDGE QUANTITIES

BRIDGE	BEGINNING STATION	SPANS – SIZE	OVERALL LENGTH	ITEM	Transverse Grooving	Conventional Static Loading Tests	HP12X53 Steel Piling	18" Preformed Pile Holes	PDA Test Piles	Pile Restrike	Drilled Shaft 48" Ø	Trial Shaft 48" Ø	Exploration	Temp. Casting 48" Ø	Bridge Concrete Class AA	71 Ft. Prest. Conc. Beam TY IV	94 Ft. Prest. Conc. Beam TY IV	63 Ft. Prest. Conc. Beam TY IV	Reinforcement	Concrete Railing	Concrete Slope Paving
"A"	850+65.44	71'– 94'– 63'	230'–4"	SPANS	~~1410~~										306.742	493.21	652.17	437.21	63,040	456	
				END BENTS	1201.48	-0-	~~1530~~	~~1360~~	2	~~1~~					76.435				11,717		~~524.44~~
		* CONTINUOUS FOR LIVE LOAD ONLY		INT. BENTS		-0-	1105	-0-		-0-	190	46	~~10~~ -0-	~~95~~ -0-	83.349				20,992		557.81
				UNIT	SQ. YD.	EACH	L.F.	L.F.	EACH	EACH	L.F.	L.F.	L.F.	L.F.	CU. YD.	L.F.	L.F.	L.F.	LB.	L.F.	CU. YD.
				TOTAL	~~1410~~ 1201.48	~~2~~ -0-	~~1530~~ 1105	~~1360~~ -0-	2	~~1~~ -0-	190	46	~~10~~ -0-	~~95~~ -0-	~~474.61~~ 466.53	493.21	652.17	437.21	~~95,749~~ 97,054.605	456	~~524.44~~ 557.81

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

ESTIMATED QUANTITIES (BRIDGE)

PROJECT NO. SP–0006–01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER EQ–14

SHEET NUMBER 41

FILENAME: eq-14.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 10:24:33 EQ-14.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

CULVERT HYDRAULIC DESIGN SUMMARY

WK. SH. NO.	STATION	D.A. ACRES	CULVERT SIZE	UPSTREAM FLOW LINE ELEV.	DESIGN STORM (Q 50)				BASE STORM (Q 100) (100 YEAR STORM)				ROADWAY OVERTOPPING STORM			STORM OF RECORD			REMARKS
					DISCHARGE C.F.S.	* HEADWATER CONTROL IN/OUT			DISCHARGE C.F.S.	* HEADWATER CONTROL IN/OUT			( )-YEAR STORM	DISCHARGE C.F.S.	* H.W. ELEV	DATE OCCURRED	DISCHARGE C.F.S	HW ELEV	
						HW/D	HW (DEPTH)	HW (ELEV)		HW/D	HW (DEPTH)	HW (ELEV)							
3	795+38	232.5	10'x6'	433.59	440	1.13	6.76	440.35	486	1.19	7.13	440.72	> 500	1408	459.09	N.A.	N.A.	N.A.	Existing Box Culvert to Remain.
5C	27+19	14.2	36"	472.53	30.0	0.85	2.56	475.09	32.8	0.90	2.70	475.23	> 500	87.3	479.23	N.A.	N.A.	N.A.	
5C	33+76	7.2	24"	457.63 ⚠	16.0	1.00 ⚠	1.99 ⚠	459.62 ⚠	17.4	1.07 ⚠	2.14 ⚠	459.77 ⚠	> 500	74.7 ⚠	475.44	N.A.	N.A.	N.A.	Pipe Culvert Extension
5E	811+73	743.0	10'x6'	426.95	1011	1.45	11.58	438.53	1121	1.62	12.93	439.88	> 500	2084	458.66	N.A.	N.A.	N.A.	Box Culvert Extension
5E	817+18	9.3	30"	466.82	24.7	0.94	2.35	469.17	27.0	1.00	2.50	469.32	> 500	66.7	473.92	N.A.	N.A.	N.A.	Pipe Culvert Extension
5G	877+88	20.5	48"	425.08	60.7	0.83	3.30	428.38	66.0	0.87	3.48	428.56	> 500	479.3	470.46	N.A.	N.A.	N.A.	Pipe Culvert Extension
5G	885+65	3.4	24"	439.23	13.1	0.88	1.76	440.99	14.2	0.93	1.86	441.09	> 500	49.4	447.81	N.A.	N.A.	N.A.	Pipe Culvert Extension
5H	842+28	5.1	30"	496.45	17.1	0.74	1.84	498.29	18.6	0.78	1.94	498.39	> 500	91.0	508.18	N.A.	N.A.	N.A.	
5I	20+83	8.7	36"x23"	475.08	23.8	1.13	2.16	477.24	26.0	1.24	2.38	477.46	> 500	43.2	479.70	N.A.	N.A.	N.A.	
5J	852+00	15.3	51"x31"	469.89	30.8	0.73	1.88	471.77	33.7	0.77	2.00	471.89	> 500	115.2	476.89	N.A.	N.A.	N.A.	
5J	858+50	14.0	36"	463.88	29.8	0.77	2.31	466.19	32.6	0.82	2.45	466.33	> 500	113.8	473.43	N.A.	N.A.	N.A.	
5J	867+00	3.5	24"	474.34	12.9	0.94	1.87	476.21	14.0	0.99	1.97	476.31	> 500	40.9	480.73	N.A.	N.A.	N.A.	
5K	16+50	6.8	30"	472.36	18.5	0.83	2.07	474.43	20.2	0.87	2.18	474.54	> 500	94.7	485.41	N.A.	N.A.	N.A.	

* HEADWATER ELEVATION VALUES SHOWN ON THESE PLANS ARE THEORETICAL AND MAY VARY FROM ACTUAL CONDITIONS.

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 09:57:51 HD-1.DGN

REVISED	CULVERT SUMMARY REVISION	F&H BY
8/18/08	DATE	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SUMMARY OF CULVERT HYDRAULIC DESIGN

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER HD-1

SHEET NUMBER 42

FILENAME: hd-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: hd-1.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		0
SOIL REINF. MATERIAL	S.Y.		0
PAVED DITCH	C.Y.		0
RIP RAP	TON		97
SILT FENCE	L.F.	—SF—	118
GEOTEXTILE	S.Y.		0
SOLID SOD	S.Y.		0
EROSION CHECKS	BALE		20
SILT BASIN TYPE "D"	EACH		1

EARTHWORK	TOTAL THIS SHEET	
Cut	6748	Cu. Yds
Fill	412	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

UTILITIES

WATER —— TOWN OF SHERMAN, BLUE SPRINGS WATER DISTRICT, & WALLERVILLE WATER ASSOCIATION (662)534-4147
SEWER —— TOWN OF SHERMAN (662)840-9185
GAS —— CITY OF PONTOTOC NATURAL GAS (662)489-4841
TELEPHONE —— AT & T (662)841-8384
CABLE TV —— COMCAST CABLE (662)842-5625
ELECTRICITY —— PONTOTOC ELECTRIC & POWER ASSOCIATION (662)489-6711

For Profile of CD Road See Wk. Sheet 5D.

CD ROAD
PI 803+82.004
Δ = 4° 00' 00" (LT)
D = 2° 00' 00"
L = 200
T = 100.041
R = 2,864.789
PC 802+81.964
PT 804+81.964
V = 50 mph

SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

B.M.ELEV. 440.39
796+29.53 144.28' RT.
CHIS. "D" SE CNR HDWL.

PC 802+81.964 CD ROAD= 68' LT. 802+84.25 US 78

PT 804+81.964

ED BRIDGES, et ux
JOYCE BRIDGES

219.88' 797+97.92 | 255' 799+10 | 255' 800+75 | 183.93' 803+50 | 184.06' 806+45

No Access R.O.W. Req'd.
Existing Fence (Remove)
Begin Fence Removal
Exist. No Access R.O.W.
Exist. No Access R.O.W.

CD. RD.
℄ Pvd Dt.
Pvd Dt.
18" RCP (To Remain)
+31.96
SF
+31.96
300' Taper
12'
650' ACCEL. LANE
12'
16'
S.T.
CD RD.
790 Asphalt 24' 795 800 805 2' 6' 24'
88'
US 78
M. Inlet (To Remain)
15" Stacked Pipe (To Remain)
S 48° 00' 19" E
M. Inlet (To Remain)
Asphalt 24'
24'

← To Memphis

To Tupelo →

Exist. Bridge #74.1 (To Remain in place)
6'
10' X 6' BC (To Remain)
24" RCP (To Remain)
Exist. No Access R.O.W.
203
Pvd Dt.
Proposed Woven Wire Fence
Fr. Rd.
42" RCP (To Remain)
Asphalt
12'x6' RCBC
R.O.W.
Woods
Woods
Mobile Home

B.O.P. 792 + 00.00
SP-0006-01(087)

US 78
0 100 200 300
SCALE: 1"=100' HOR.

STA. 794+80.163' LT.
1 - TYPE D SILT BASIN REQ'D.
L=50', H=3'

Co. Rd. 203

US 78 OVERLAY

Exist. Grade
US 78 W.B. Lane

Exist. 18" & Median Inlet Fl. 462.50 (In Place)

Exist. 15" Stacked Pipe (To Remain)

Exist. 10'x6' RCBC Fl. 434.05 (To Remain)

Exist. 24" Fl. 446.97 (To Remain)

SCALE: 1"=10' VERT.

490 480 470 460 450 440 430 0 10 20 30

784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807
479.90	479.10	476.90	474.76	472.62	470.47	468.32	466.19	464.16	462.32	460.73	459.25	457.96	457.30	456.63	456.04	455.76	455.53	455.15	454.78	454.43	453.90	453.75	453.83

Wk. Sh. 3
Sh. No. 43

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk3.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

RAILROAD/ROAD PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 10:52:34 WK3.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 433.42
811+79.33 155.03' RT.
CHIS. "□" NE CNR HDWL.

THOMAS WILLIAM HUNN, et ux
PATTI MARIE HUNN PROPERTY

B.M.ELEV. 484.16
822+01.81
CHIS. "□" NE CNR INLET

For Profile of CD Road
See Wk. Sheet 5E.

TEMP NW RAMP TIE TO US 78
PI 11+00.163
Δ = 8° 00' 00.000" (LT)
D = 4° 00' 00.000"
L = 200.000
T = 100.163
R = 1,432.394
PC 10+00.000
PT 12+00.000
V = 50 mph
SUPER EL. 0.072 FT/FT WIDTH
EXTRA WIDTH ON INSIDE Ø FT
SEE DWG. SE-2A CASE I

PI 16+02.808
Δ = 8° 00' 00.000" (RT)
D = 2° 00' 00.000"
L = 400.000
T = 200.326
R = 2,864.789
PC 14+02.482
PT 18+02.482
V = 50 mph
SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE Ø FT
SEE DWG. SE-2A CASE I

B.M.ELEV. 517.15
833+81.91
CHIS. "□" SE CNR. INLET

NW RAMP
PI 831+91.135
Δ = 6° 13' 27.624" (LT)
D = 2° 00' 00.000"
L = 311.217
T = 155.762
R = 2,864.789
PC 830+35.374
PCC 833+46.590
V = 50 mph
SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE Ø FT
SEE DWG. SE-2A CASE I

CD ROAD
PI 813+85.414
Δ = 4° 00' 00.000" (RT)
D = 2° 00' 00.000"
L = 200.000
T = 100.041
R = 2,864.789
PC 812+85.374
PT 814+85.374
V = 50 mph
SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE Ø FT
SEE DWG. SE-2A CASE I

ED BRIDGES, et ux
JOYCE BRIDGES

MARTHA KIRK PROPERTIES, LLC

MARTHA KIRK PROPERTIES, LLC

NO CORNER FOUND

Exist. 15" RCP (To be plugged & abandoned)
Plug w/approx. 7 cu. yds. of Flowable Fill
(To Exist. J. Box)

Exist. 30" RCP (To be plugged & abandoned)
Plug w/approx. 28 cu. yds. of Flowable Fill
(To Exist. M. Inlet)

812+85.374 TO 818+00
OMITTED SECTION
FOR RR BRIDGE CONST.

Exist. J. Box (To be plugged & abandoned)
Plug w/approx. 11 cu. yds. of Flowable Fill.

Exist. 42" RCP (To be plugged & abandoned)
Plug w/approx. 116 cu. yds. of Flowable Fill (To Exist. J. Box)

Exist. 36" RCP (To be plugged & abandoned)
Plug w/approx. 78 cu. yds. of Flowable Fill.

For Profile of NW Ramp
See Wk. Sheet 5H.

TEMP. NW RP.
TIE TO US 78

CD RD.

FR. RD.

US 78

NW Ramp

SW Ramp

PROP. RAILROAD (BY OTHERS)

No Access R.O.W. Req'd.

Exist. No Access R.O.W.

Existing Fence (Remove)

Exist. Fence (Remove)

Bench Dt.

Remove Headwall

Remove Headwall & 8' of Exist. 18" RCP.

Remove Headwall & 10' of Exist. 18" RCP.

Remove Wingwall

Collar

Box Bend

10'x6' RCBC Ext.

10'x8' RCBC (To Remain)

73"x45" Arch (To Remain)

29"x18" Arch (To Remain)

TEMP. 22"X13" ARCH PIPE

Proposed Woven Wire Fence

Asphalt

Pvd. Dt.

Woods

Taper

S 52° 00' 19" E

S 48° 00' 19" E

S 56° 00' 19" E

PC 812+85.374

PT 814+85.374

PC 830+35.374 = 12' LT. 830+35.37 CD ROAD

PCC 833+46.590

PC 129+01.340

PT 134+43.865

PI 131+72.805

PCT 123+50.000

SEC 8 / SEC 17

813+79.35

835+38.50

SCALE: 1"=100' HOR.

0 100 200 300

174' RT. STA. 811+73 (AT EXIST. 10'x8' BOX CULVERT)
TO STA. 814+05 (TO EXIST. J BOX IN MEDIAN).
PLUG & ABANDON EXIST. 42" RCP.
PLUG W/ 116 CU. YDS. OF FLOWABLE FILL.

STA. 814+00 PLUG & ABANDON EXIST. J. BOX
PLUG W/ 11 CU. YDS. OF FLOWABLE FILL.

STA. 814+00 TO STA. 817+00:
PLUG & ABANDON EXIST. 36" RCP.
PLUG W/ 78 CU. YDS. OF FLOWABLE FILL.

STA. 814+05 (AT EXIST. J. BOX)
TO 133' LT. STA. 814+75.
PLUG & ABANDON EXIST. 15" RCP.
PLUG W/ 7 CU. YDS. OF FLOWABLE FILL.

STA. 817+00 REMOVE & BACKFILL
EXIST. MEDIAN INLET & DITCH PLUG.

STA. 817+00 (AT EXIST. MEDIAN INLET)
TO 145' LT. STA. 817+20.
PLUG & ABANDON EXIST. 30" RCP.
PLUG W/ 29 CU. YDS. OF FLOWABLE FILL.

US 78 OVERLAY

Exist. Grade
US 78 W.B. Lane

Exist. 18" & Median Inlet
Fl. 482.13
(In Place)

Exist. 15" & J. Box
PLUG & ABANDON

Exist. 30" & Median Inlet
Fl. 446.80
PLUG & ABANDON

Exist. 36" PLUG & ABANDON

Exist. 15" Stacked Pipe
(To Remain)

Exist. 10'x8' RCBC
El. 426.22
(To Remain)

Exist. 42"
Fl. 445.41
PLUG & ABANDON

Exist. 18" & Median Inlet
Fl. 508.48
(In Place)

Exist. 18" & Median Inlet
Fl. 512.08
(In Place)

Exist. Ground Line

Temp Tie Grade

40' of Temp. 22"x13" Arch Req'd.

VPI 10+75.000
EL. 489.902

VPI 11+75.000
EL. 492.791

VPI 11+25.000
EL. 491.143
100.000' V.C.
K = 123

VPI 16+50.000
EL. 508.452

VPI 17+50.000
EL. 511.447

VPI 17+00.000
EL. 510.100
100.000' V.C.
K = 166
SSD = 115'

+2.497215%
+3.298972%
+2.693216%

488.040
512.860

TEMP NW RAMP TIE TO US 78

SCALE: 1"=10' VERT.

Wk. Sh.	Sh. No.
4	44

08/15/2008 10:46:12 wk4.DGN

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk4.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

853+18.77 NW RAMP =
850+54.53 NE RAMP =
27+65.70 SR 9

B.M.ELEV. 521.53
844+56.52
CHIS. "□" NW CNR. INLET

B.M.ELEV. 488.32
865+05.10
CHIS. "□" NW CNR. INLET

For Profile of NW Ramp See Wk. Sheet 5H.

For Profile of NW Loop See Wk. Sheet 5I.

For Profile of NE Ramp See Wk. Sheet 5J.

For Profile of NE Loop See Wk. Sheet 5K.

For Profile of CD Road See Wk. Sheet 5F.

For Profile of SR 9 @ Blue Springs See Wk. Sheet 5C.

For Profile of US 78 See Wk. Sheet 5A.

KIRK FAMILY LIMITED PARTNERSHIP

MARTHA KIRK PROPERTIES, LLC

VERNEL HOWARD HANCOCK, TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

NW Ramp

NW Loop

NE Ramp

NE Loop

SW Ramp

SE Ramp

SR 9

CD RD.

US 78

No Access R.O.W. Req'd.

Exist. No Access R.O.W.

Existing Fence (Remove)

Proposed Woven Wire Fence

Woods

Asphalt

Conc. (Remove)

Pvd Dt.

Bench Dt.

Impact Attenuator Req'd. 17+00

Remove 28' of Exist. 24" RCP & Headwall.

Remove Headwall.

Remove 3 Box & 8' of Exist. 18" RCP.

Remove J. Box & 8' of Exist. 18" RCP.

Remove 1118 S.Y. of Exist. Concrete Slope Paving

Remove 1005 S.Y. of Exist. Concrete Slope Paving

175' of W-Beam Guardrail
1 Type "I" Br. End Section
1 Terminal End Section Req'd.

11+18 Begin
1.5" Overlay

851+84.61 CD RD =
21+38 SR 9

851+84.49 US 78 =
20+00 SR 9

15+52.39 SR 9 =
152+13.23 SW RAMP
10+00.00 SE RAMP

SEC 16
SEC 17

US 78

0 100 200 300
SCALE: 1"=100' HOR.

Wk. Sh.	Sh. No.
5	45

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

08/13/2008 16:07:46 wk5.DGN

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SCALE: 1"=10' VERT.

US 78 OVERLAY

Exist. Grade
US 78 W.B. Lane

Exist. 18' &
Median Inlet
Fl. 518.59 (In Place)

Exist. 18' &
Median Inlet
Fl. 512.11 (In Place)

CONC. SLOPE PAVING REQ'D.

SR 9

CONC. SLOPE PAVING REQ'D.

US 78 OVERLAY

Exist. 18' &
Median Inlet
Fl. 502.16 (In Place)

Exist. Grade
US 78 W.B. Lane

Exist. 18' &
Median Inlet
(In Place)

Exist. 18"
Fl. 490.21
(In Place)

Exist. 58"X36"
Fl. 483.95
(Plugged)

Exist. 18"
Fl. 490.21
(In Place)

Exist. 30"
Fl. 485.58
(Plugged)

Sta.	526.84	527.65	528.19	528.53	528.51	528.18	527.67	526.87	525.91	524.89	523.80	522.74	521.78	520.78	505.45	493.80	517.82	516.85	515.54	514.33	512.86	511.07	509.13	506.71	504.44	501.65	498.78	495.88	492.82	489.60	486.03
	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867

Wk. Sh. 5A
Sh. No. 46

08/13/2008@07:39WK5A.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5a.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

ADDENDUM

NW RAMP
PI 836+47.453
Δ = 23° 43' 26.741" (LT)
D = 4° 00' 00.000"
L = 593.102
T = 300.862
R = 1,432.394
PCC 833+46.590
PT 839+39.693
V = 50 mph
SUPER EL. 0.072 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NW RAMP
PI 847+73.987
Δ = 30° 00' 00.000" (RT)
D = 6° 00' 00.000"
L = 500.000
T = 255.873
R = 954.930
PC 845+18.114
PT 850+18.114
V = 50 mph
SUPER EL. 0.092 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NW LOOP
PI 11+01.679
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.000
T = 101.679
R = 450.000
PC 10+00.000
PCC 12+00.000
V = 30 mph
SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NW LOOP
PI 19+03.597
Δ = 219° 07' 19.141" (RT)
D = 22° 55' 05.922"
L = 956.100
T = 703.597
R = 250.000
PCC 12+00.000
PCC 21+56.100
V = 30 mph
SUPER EL. 0.10 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NW LOOP
PI 22+57.779
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.000
T = 101.679
R = 450.000
PCC 21+56.100
PT 23+56.100
V = 30 mph
SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NE LOOP
PI 11+01.679
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.00
T = 101.679
R = 450.000
PC 10+00.000
PCC 12+00.000
V = 30 mph
SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NE LOOP
PI 19+05.609
Δ = 219° 01' 07.871" (RT)
D = 22° 55' 05.922"
L = 955.650
T = 705.609
R = 250.000
PCC 12+00.000
PCC 21+55.650
V = 30 mph
SUPER EL. 0.10 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NE LOOP
PI 22+57.329
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.000
T = 101.679
R = 450.000
PCC 21+55.650
PT 23+55.650
V = 30 mph
SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

NE RAMP
PI 856+10.062
Δ = 29° 56' 54.365" (RT)
D = 6° 00' 00.000"
L = 499.141
T = 255.412
R = 954.930
PC 853+54.650
PT 858+53.790
V = 50 mph
SUPER EL. 0.092 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE 1

⚠ REVISED LANE WIDTHS.

REVISIONS	
DATE	BY
10/10/08	F&H

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

853+18.77 NW RAMP =
850+54.53 NE RAMP =
27+65.70 SR 9

SR 9 — PC 853+54.650 — PT 850+18.114 — 850 — 855 — 300' Taper — S 47° 57' 14" E

NW Ramp — S 77° 57' 14" E — 840 — 845 — PT 839+39.693 — PC 845+18.114

NW Loop — PCC 21+56.100 — PCC 12+00 — PT 23+56.100 = 31' LT. 23+33.17 SR 9 — PC 10+00.000 = 12' LT. 849+70.43 CD ROAD

NE Loop — PCC 12+00 — PC 10+00.000 = 31' LT. 23+33.17 SR 9 — PT 23+55.650 = 12' LT. 853+99.31 CD ROAD — PCC 21+55.650

NE Ramp — PT 858+53.790 — PC 863+99.029 — S 18° 00' 19" E — 860 — 865

CD RD. — 840 — 845 — 850 — 855 — 860 — 865 — 360' Taper — S 48° 00' 19" E

← To Memphis

US 78 — 840 — 845 — 850 — 855 — 860 — 865 — S 48° 00' 19" E

To Tupelo →

SW Ramp — S 38° 34' 48" E — 140 — 145 — 150

SE Ramp — S 68° 54' 22" E — 300' Taper — PCC 22+17.085 — PI 22+99.018 — PT 23+80.905

N 42° 02' 46" E — SR 9

851+84.61 CD ROAD =
21+38 SR 9

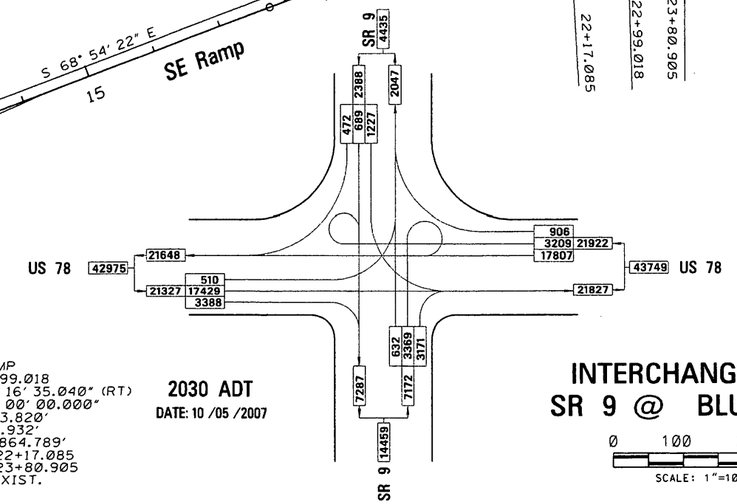
851+84.49 US 78 =
20+00 SR 9

15+52.39 SR 9 =
152+13.23 SW RAMP
10+00.00 SE RAMP

SE RAMP
PI 19+98.531
Δ = 17° 37' 28.662" (RT)
D = 4° 00' 00.000"
L = 440.616'
T = 222.062'
R = 1,432.395'
PC 17+76.470
PCC 22+17.085
SE = EXIST.

SE RAMP
PI 22+99.018
Δ = 3° 16' 35.040" (RT)
D = 2° 00' 00.000"
L = 163.820'
T = 81.932'
R = 2,864.789'
PCC 22+17.085
PT 23+80.905
SE = EXIST.

2030 ADT
DATE: 10 /05 /2007



INTERCHANGE LAYOUT
SR 9 @ BLUE SPRINGS

0 100 200 300
SCALE: 1"=100' HOR.

Wk. Sh. 5B
Sh. No. 47

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 10:52:11 wk5b.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. | FILENAME: wk5b.dgn | COUNTY : UNION / PONTOTOC | PROJECT No. SP-0006-01(087) | SHEET ID: INTERCHANGE LAYOUT US 78

ADDENDUM

15 + 52.39 SR 9
152 + 13.23 SW RAMP
10 + 00.00 SE RAMP

851 + 84.49 US 78 =
20 + 00.00 SR 9

851 + 84.61 CD ROAD =
21 + 38 SR 9

27 + 65.70 SR 9 =
853 + 18.77 NW RAMP
850 + 54.53 NE RAMP

EARTHWORK TOTAL THIS SHEET		
Cut	34996	Cu. Yds
Fill	23324	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

WELLSPRING
(Site Grading In Progress)

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		243
SOIL REINF. MATERIAL	S.Y.		68
PAVED DITCH	C.Y.		53
RIP RAP	TON		253
SILT FENCE	L.F.	—SF—	793
GEOTEXTILE	S.Y.		0
SOLID SOD	S.Y.		287
EROSION CHECKS	BALE		192
SILT BASIN TYPE "D"	EACH		2

For Profile of US 78 See Wk. Sheet 5A.
For Profile of SW Ramp See Wk. Sheet 5L.
For Profile of NW Loop See Wk. Sheet 5I.
For Profile of NW Ramp See Wk. Sheet 5H.
For Profile of CD Road See Wk. Sheet 5F.
For Profile of SE Ramp See Wk. Sheet 5M.
For Profile of NE Loop See Wk. Sheet 5K.
For Profile of NE Ramp See Wk. Sheet 5J.

Sta. 27 + 65.70 & 33 + 54 S.R. 9 Channelized Intersections Req'd. See Wk. Sh. ID-1 For Details.

⚠ REVISED SR 178 INTERSECTION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

REVISIONS		
DATE	BY	
10/10/08	F&H	⚠

ADT = 2500
SR 9
@BLUE SPRINGS
0 100 200 300
SCALE: 1"=100' HOR.

END 1.5" OVERLAY
BEGIN FULL DEPTH PAVING
STA. 21 + 50

BEGIN 1.5" OVERLAY
STA. 11 + 18.34

STA. 22 + 76 33' LT.
52' OF 18" PIPE REQ'D.
(CLASS III)
90° SKEW
1 – PC–1 REQ'D.
FL. 483.83

STA. 23 + 30 33' LT.
12' OF 18" PIPE REQ'D.
(CLASS III)
0° SKEW
1 – 18" FES REQ'D.
1 – SS–2 REQ'D.
T.C. 487.47
INV. 482.47
FL. 482.68
L = 10'
W = 2.5'
H = 5.5'
OPENINGS 2@18"

STA. 26 + 97 REMOVE 28'
OF EXIST. 24" RCP
(15' RT. 27 + 08 TO 36' RT. 27 + 26)

STA. 27 + 19 33' RT.
12' OF 36" PIPE REQ'D
(CLASS III)
0° SKEW
1 – 36" FES REQ'D.
1 – SS–2 REQ'D.
T.C. 479.33
INV. 471.79
FL. 472.12
L = 10'
W = 2.5'
H = 8.04'
OPENINGS 2 @36"

STA. 27 + 19
68' OF 36" PIPE REQ'D
JACKED OR BORED
(CLASS V)
0° SKEW
100 Yr. Discharge = 33.5 cfs
Design Velocity = 7.7 fps
D.A. = 14.5 AC.

STA. 22 + 76 33' LT. & RT.
REMOVE EXIST. J. BOX
& 8' OF EXIST. 18" RCP.

STA. 26 + 97 PLUG & ABANDON
EXIST. 24" RCP. PLUG W/8 CU. YDS.
OF FLOWABLE FILL. (35' LT. 26 + 71
TO 15' RT. 27 + 08)

STA. 29 + 15 31' LT.
1 – PF–1 TYPE "A" REQ'D.

STA. 31 + 80 43' RT.
12' OF 18" PIPE REQ'D.
(CLASS III)
0° SKEW
1 – 18" FES REQ'D.
1 – SS–2 REQ'D.
T.C. 472.16
INV. 467.16
FL. 467.37
L = 10'
W = 2.5'
H = 5.5'
OPENINGS 1 @18"

STA. 32 + 60 95' RT.
1–Type D Silt Basin
L = 50', H = 3'

STA. 33 + 57 191' RT.
1 – PF–1 TYPE "C" MODIFIED REQ'D.

STA. 23 + 30 33' LT.
12' OF 18" PIPE REQ'D.
(CLASS III)
0° SKEW
1 – 18" FES REQ'D.
1 – SS–2 REQ'D.
T.C. 487.47
INV. 482.47
FL. 482.68
L = 10'
W = 2.5'
H = 5.5'
OPENINGS 2@18"

STA. 27 + 19 33' LT.
12' OF 36" PIPE REQ'D.
(CLASS III)
0° SKEW
1 – 36" FES REQ'D.
1 – SS–2 REQ'D.
T.C. 479.33
INV. 472.14
FL. 472.47
L = 10'
W = 2.5'
H = 7.69'
OPENINGS 2 @36"

⚠ STA. 31 + 25 43' LT.
28' OF 18" PIPE REQ'D.
(CLASS III)
0° SKEW
1 – 18" FES REQ'D.
1 – SS–2 REQ'D.
T.C. 472.87
INV. 467.87
FL. 468.08
L = 10'
W = 2.5'
H = 5.5'
OPENINGS 1 @18"

⚠ STA. 33 + 76
28' OF 24" PIPE EXT. REQ'D.
(CLASS III)
55° SKEW RT. FWD.
1 – 24" FES REQ'D.
100 Yr. Discharge = 17.4 cfs
Design Velocity = 12.5 fps
D.A. = 7.2 AC.

⚠ STA. 31 + 90 54' LT.
1 – PF–1 TYPE "A" REQ'D.

STA. 32 + 28 105' LT.
1 – 24" JB–1 REQ'D.
FL. 451.86
H = 3.85'
OPENINGS
W1 = EXIST. 24"
W3 = 24"

STA. 30 + 00 59' LT.
1–Type D Silt Basin Req'd
L = 50', H = 4'

⚠ STA. 31 + 25 63' LT.
1 – 18" JB–1 REQ'D.
FL. 462.10
H = 3.40'
OPENINGS
W1 = 18"
W3 = 18"

END CONST.
STA. 36 + 53.43

Mill & Overlay Blue Springs Rd. @ SR 178 Intersection Sta. 33 + 41.65 to Sta. 36 + 53.43

494.43 495.89 496.01 497.08 497.20 498.21 498.33 498.93 499.05 499.17 499.29 498.94 499.06 498.23 498.35 497.06 497.18 495.40 495.52 493.28 493.40 490.66 490.86 488.09 488.35 485.71 486.00 483.48 483.79 481.37 481.74 479.46 479.83 477.73 478.07 476.25 476.47 474.70 475.01 473.25 473.60 471.78 472.19 470.56 470.79 470.59 470.95 471.10 471.11

9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37

Wk. Sh. 5C
Sh. No. 48

10/15/2009 10:52:19 wk5c.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5c.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP–0006–01(087) SHEET ID: SR 9 @ BLUE SPRINGS

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		0
SOIL REINF. MATERIAL	S.Y.		133
PAVED DITCH	C.Y.		7
RIP RAP	TON		0
SILT FENCE	L.F.	SF	233
GEOTEXTILE	S.Y.		0
SOLID SOD	S.Y.		44
EROSION CHECKS	BALE		32
SILT BASIN TYPE "D"	EACH		0

EARTHWORK	TOTAL THIS SHEET	
Cut	973	Cu. Yds
Fill	559	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

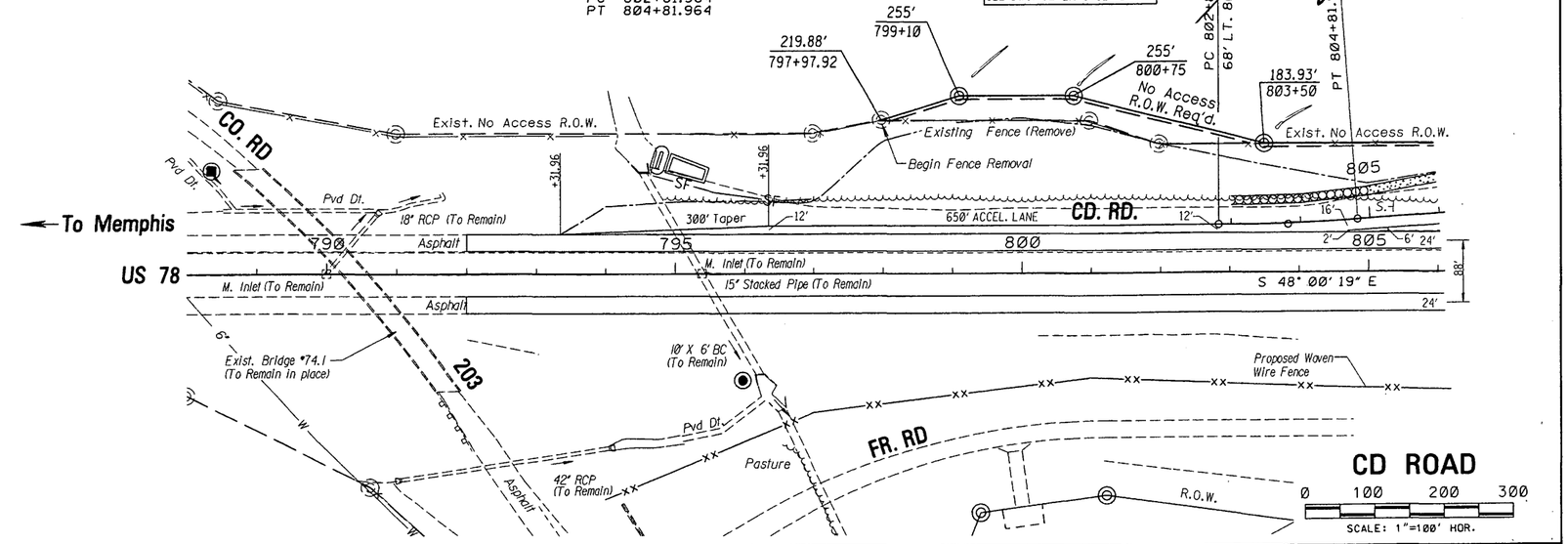
For Profile of US 78 See Wk. Sheet 3.

B.M.ELEV. 440.39
796+29.53 144.28' RT.
CHIS. "G" SE CNR HDWL.

CD ROAD
PI 803+82.004
Δ = 4° 00' 00" (LT)
D = 2° 00' 00"
L = 200
T = 100.041
R = 2,864.789
PC 802+81.964
PT 804+81.964
V = 50 mph
SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

CD ROAD
PI 803+82.004
Δ = 4° 00' 00" (LT)
D = 2° 00' 00"
L = 200
T = 100.041
R = 2,864.789
PC 802+81.964
PT 804+81.964

ED BRIDGES, et ux JOYCE BRIDGES





PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:07:24 wk5d.dgn

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5d.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: CD ROAD

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

CD ROAD
PI 813+85.414
Δ = 4° 00' 00.000" (RT)
D = 2° 00' 00.000"
L = 200.000
T = 100.041
R = 2,864.789
PC 812+85.374
PT 814+85.374
V = 50 mph

SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

B.M.ELEV. 433.42
811+79.33 155.03' RT.
CHIS. "□" NE CNR HDWL.

THOMAS WILLIAM HUNN, et ux
PATTI MARIE HUNN PROPERTY

B.M.ELEV. 484.16
822+01.81
CHIS. "□" NE CNR INLET

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		667
SOIL REINF. MATERIAL	S.Y.		867
PAVED DITCH	C.Y.		201
RIP RAP	TON		334
SILT FENCE	L.F.	-SF-	733
GEOTEXTILE	S.Y.		203
SOLID SOD	S.Y.		1162
EROSION CHECKS	BALE		620
SILT BASIN TYPE "D"	EACH		3

TEMP NW RAMP TIE TO US 78
PI 11+00.163
Δ = 8° 00' 00.000" (LT)
D = 4° 00' 00.000"
L = 200.000
T = 100.163
R = 1,432.394
PC 10+00.000
PT 12+00.000
V = 50 mph

SUPER EL. 0.072 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

TEMP NW RAMP TIE TO US 78
PI 16+02.808
Δ = 8° 00' 00.000" (RT)
D = 2° 00' 00.000"
L = 400.000
T = 200.326
R = 2,864.789
PC 14+02.482
PT 18+02.482
V = 50 mph

SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

EARTHWORK TOTAL THIS SHEET		
Cut	115060	Cu. Yds
Fill	56092	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

For Profile of NW Ramp
See Wk. Sheet 5H.

B.M.ELEV. 517.15
833+81.91
CHIS. "□" SE CNR. INLET

NW RAMP
PI 831+91.135
Δ = 6° 13' 27.624" (LT)
D = 2° 00' 00.000"
L = 311.217
T = 155.762
R = 2,864.789
PC 830+35.374
PCC 833+46.590
V = 50 mph

SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

ED BRIDGES, et ux JOYCE BRIDGES

MARTHA KIRK PROPERTIES, LLC

Exist. 15" RCP (To be plugged & abandoned)
Plug w/approx. 7 cu. yds. of Flowable Fill
(To Exist. J. Box)

Exist. 30" RCP (To be plugged & abandoned)
Plug w/approx. 28 cu. yds. of Flowable Fill
(To Exist. M. Inlet)

812+85.374 TO 818+00
OMITTED SECTION
FOR RR BRIDGE CONST.

TEMP. NW RP.
TIE TO US 78

TEMP.
22"X13"
ARCH PIPE

Exist. J. Box (To be plugged & abandoned)
Plug w/approx. 11 cu. yds. of Flowable Fill.

Exist. 42" RCP (To be plugged & abandoned)
Plug w/approx. 116 cu. yds. of Flowable Fill
(To Exist. J. Box)

Exist. 36" RCP (To be plugged & abandoned)
Plug w/approx. 78 cu. yds. of Flowable Fill.

For Profile of US 78
See Wk. Sheet 4.

For Profile of Temp NW Ramp Tie
to US 78 See Wk. Sheet 4.

CD ROAD
0 100 200 300
SCALE: 1"=100' HOR.

STA. 808+00
96' OF 24" PIPE REQ'D.
(CLASS III)
0° SKEW
1 - 24" FES REQ'D.
1 - MI-1 REQ'D. 27' RT.
T.G. 453.30
FL. 449.59
H = 4.21'
OPENINGS 1@24"
100 Yr. Discharge = 4.8 cfs
Design Velocity = 7.5 fps
D.A. = 0.90 AC.

STA. 808+00 48' LT.
1 - 24" JB-1 REQ'D.
FL. 434.60
H = 3.99'
OPENINGS
W1 = 24"
W3 = 24"

STA. 811+73.27' LT.
102' OF 10'x6' RCBC EXT. REQ'D.
45° SKEW LT FWD.
1 - 3:1 Wing Req'd.
1 - BOX COLLAR REQ'D.
1 - BOX BEND REQ'D.
1 - EXIST. WING REMOVE
2 - TYPE D SILT BASINS REQ'D.
L = 50', H = 4'
(STA. 812+10 127' LT.)
100 Yr. Discharge = 1121 cfs
Design Velocity = 18.7 fps
D.A. = 943 AC.

STA. 808+00 9' LT.
1 - 24" JB-1 REQ'D.
FL. 445.74
H = 3.97'
OPENINGS
W1 = 24"
W3 = 24"

STA. 813+95
80' OF 24" PIPE REQ'D.
0° SKEW
(CLASS III)
1 - 24" FES REQ'D.
1 - DITCH PLUG REQ'D.
1 - MI-1 REQ'D. 44' RT.
T.G. 460.02
F.L. 456.98
H = 3.54'
OPENINGS 1@24"
100 Yr. Discharge = 7.4 cfs
Design Velocity = 6.7 fps
D.A. = 1.42 AC.

STA. 821+16
16' OF 18" PIPE EXT. REQ'D.
96' OF 24" PIPE REQ'D.
(CLASS III)
30° SKEW RT. FWD.
1 - 24" FES REQ'D.
1 - PC-1 REQ'D.
1 - DITCH PLUG REQ'D.
1 - MI-1A REQ'D. 48' RT.
T.G. 481.97
FL. 478.22
H = 4.50'
OPENINGS 1@18", 1@24"
100 Yr. Discharge = 5.4 cfs
Design Velocity = 5.8 fps
D.A. = 1.07 AC.

STA. 821+45 51' RT.
REMOVE 8' OF EXIST. 18" PIPE
& HEADWALL.

STA. 827+50 49' RT.
REMOVE 10' OF EXIST. 18" PIPE
& HEADWALL.

STA. 829+40.172' LT.
1 - TYPE D SILT BASIN REQ'D.
L = 50', H = 3'

STA. 827+21
20' OF 18" PIPE EXT. REQ'D.
104' OF 24" PIPE REQ'D.
(CLASS III)
30° SKEW RT. FWD.
1 - 24" FES REQ'D.
1 - PC-1 REQ'D.
1 - DITCH PLUG REQ'D.
1 - MI-1A REQ'D. 45' RT.
T.G. 500.30
FL. 496.55
H = 4.50'
OPENINGS 1@18", 1@24"
100 Yr. Discharge = 8.0 cfs
Design Velocity = 5.9 fps
D.A. = 1.70 AC.

Wk. Sh.	Sh. No.
5E	50

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5e.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: CD ROAD

08/15/2008 11:07:37 WK5E.DGN

PLANSPROF LIC
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 521.53
844+56.52
CHIS. "O" NW CNR. INLET

B.M.ELEV. 488.32
865+05.10
CHIS. "O" NW CNR. INLET

MARTHA KIRK PROPERTIES, LLC

SEC 16 / SEC 17

PT 839+39.693

839+02.87 NO CORNER FOUND

R.O.W. Req'd.

No Access

840 NW Ramp

S 77° 57' 14" E 845

PC 845+18.114

NW Loop

50' of W-Beam Guardrail
1 Type "I" Br. End Section
1 Type 1 Cable Anchorage Req'd.

Woods
KIRK FAMILY LIMITED PARTNERSHIP

Exist. No Access R.O.W.

Existing Fence (Remove)

71°03'17"

CD. RD.

840 845 850

24' Asphalt

US 78

S 48° 00' 19" E

839+25.28 ℄

24' 46°34'45"

MI-1

58"X36" RCP (PLUGGED)

18" RCP (To Remain)

29"X18" RCP (To Remain)

50' of W-Beam Guardrail
1 Type "I" Br. End Section
1 Type 1 Cable Anchorage Req'd.

851+84.61 CD ROAD =
21+38 SR 9

851+84.49 US 78 =
20+00 SR 9

SR 9

Remove Headwall 24" RCP

22"x13" Arch 15

22"x13" Arch

36"x23" Arch

22"x13" Arch

19+67.49

14+42.04

PCC 21+56.100

PT 23+56.100

Remove Headwall 18" RCP (Remove)

Remove J. Box & 8' of Exist. 18" RCP.

PC 10+00

18" RCP (To Remain)

PC-1

SS-2

GI-1

GI-1A

PCC 12+00

PCC 21+55.650

PT 23+55.650

30" RCP (PLUGGED)

PF Type "B"

137.5' of W-Beam Guardrail
1 Type "I" Br. End Section
1 Terminal End Section Req'd.

NE Loop

NE Ramp

71°36'45" Lt.

17+66.88

JB-1

Woods
VERNEL HOWARD HANCOCK, TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

No Access R.O.W.

S 18° 00' 19" E

Exist. Fence (Remove)

18+38.89

864+84.76

Exist. No Access R.O.W.

CD. RD.

855 860 865

MI-1

M. Inlet (To Remain)

PI 19+98.531

SE Ramp 20

15" RCP (To Remain)

Pvd Dr.

CD ROAD

0 100 200 300
SCALE: 1"=100' HOR.

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		567
SOIL REINF. MATERIAL	S.Y.		438
PAVED DITCH	C.Y.		61
RIP RAP	TON		0
SILT FENCE	L.F.	SF	0
GEOTEXTILE	S.Y.		0
SOLID SOD	S.Y.		369
EROSION CHECKS	BALE		364
SILT BASIN TYPE "D"	EACH		0

EARTHWORK	TOTAL THIS SHEET	
Cut	405/5	Cu. Yds
Fill	137/45	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

For Profile of NW Loop
See Wk. Sheet 5I.

For Profile of US 78
See Wk. Sheet 5A.

For Profile of SR 9 @ Blue Springs
See Wk. Sheet 5C.

For Profile of NE Loop
See Wk. Sheet 5K.

STA. 837+00
84' OF 24" PIPE REQ'D.
(CLASS III)
0° SKEW
1 - 24" FES REQ'D.
1 - DITCH PLUG REQ'D.
1 - MI-1 REQ'D. 46' RT.
T.G. 521.78
FL. 518.74
H = 3.54'
OPENINGS 1@24"
100 Yr. Discharge = 2.9 cfs
Design Velocity = 4.1 fps
D.A. = 0.58 AC.

24" Req'd.
DSFL 518.29
84' of 24" Pipe Req'd. @ 0.5% Lt.

VPI 837+00.000
EL 532.613
1,400.000' V.C.
K = 354
SSD = 686'

-1.00000%

Exist. Ground Line

Spl. Dt. Rt.

Plan Grade

STA. 850+50
104' OF 24" PIPE REQ'D.
(CLASS III)
0° SKEW
1 - 24" FES REQ'D.
1 - MI-1 REQ'D. 50' RT.
T.G. 514.47
FL. 511.19
H = 3.78'
OPENINGS 1@24"
100 Yr. Discharge = 7.6 cfs
Design Velocity = 5.3 fps
D.A. = 1.90 AC.

104' of 24" Pipe Req'd. @ 0.5% Lt.

24" Req'd.
DSFL 510.67

Begin Bridge 850+65.44

End Bridge 852+95.78

SR 9

Spl. Dt. Lt.

Exist. Ground Line

CONC. SLOPE PAVING REQ'D.

Exist. 58"X36" FL. 488.13 (Plugged)

Exist. 18" FL. 487.36 (In Place)

Exist. 18" FL. 487.36 (In Place)

VPT 844+00.000 EL 525.613

BRIDGE "A"
STA. 850+65.44
CD. RD. OVER SR. 9
3 SPAN BRIDGE REQUIRED
1@ 71', 1@ 94', 1@ 63'
TOTAL LENGTH = 230.34'

Plan Grade

-1.00000%

Spl. Dt. Rt.

Exist. 30" FL. 489.55 (Plugged)

VPT 855+00.000 EL 514.613

Exist. Ground Line

CONC. SLOPE PAVING REQ'D.

STA. 853+05.22' LT.
1 - PF-1 TYPE "B" REQ'D.

STA. 853+05.22' RT.
1 - PF-1 TYPE "B" REQ'D.

VPI 859+00.000
EL 510.613
600.000' V.C.
K = 317
SSD = 702'

-3.15841%

Spl. Dt. Rt.

Exist. Grade US 78

STA. 861+50
84' OF 24" PIPE REQ'D.
(CLASS III)
0° SKEW
1 - 24" FES REQ'D.
1 - DITCH PLUG REQ'D.
1 - MI-1 REQ'D. 46' RT.
T.G. 498.49
FL. 495.45
H = 3.54'
OPENINGS 1@24"
100 Yr. Discharge = 6.9 cfs
Design Velocity = 5.1 fps
D.A. = 1.56 AC.

84' of 24" Pipe Req'd. @ 0.5% Lt.

24" Req'd.
DSFL 495.03

Spl. Dt. Lt.

VPT 863+00.000 EL 497.880

SCALE: 1"=10' VERT.

836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866
524.58	525.70	526.53	527.09	527.36	527.34	527.05	526.47	525.61	524.61	523.61	522.61	521.61	520.61	519.61	518.61	517.61	516.61	515.61	514.61	513.48	512.07	510.40	508.45	506.24	503.76	501.00	497.98	494.82	491.66	488.50
534.78	534.85	534.67	533.48	531.23	527.93	521.27	518.59	515.82	508.11	504.66	502.71	503.59	505.50	506.04	500.98	491.72	498.86	494.79	496.07	496.42	496.59	497.21	496.22	498.04	496.04	492.01	499.24	500.88	501.35	499.87

550 540 530 520 510 500 490 480 470

wk. Sh. 5F
Sh. No. 51

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5f.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: CD ROAD

PLANNING DIVISION
ROADWAY DESIGN SECTION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:07:14 WK5F.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

For Profile of NE Ramp
See Wk. Sheet 5J.

B.M.ELEV. 453.71
878+08.36
CHIS. "D" NE CNR INLET

NE RAMP
PI 867+29.723
Δ = 26° 00' 00" (LT)
D = 4° 00' 00"
L = 650
T = 330.694
R = 1,432.394
PC 863+99.029
PT 870+49.029
V = 50 mph

SUPER EL. 0.072 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

VERNEL HOWARD HANCOCK,
TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

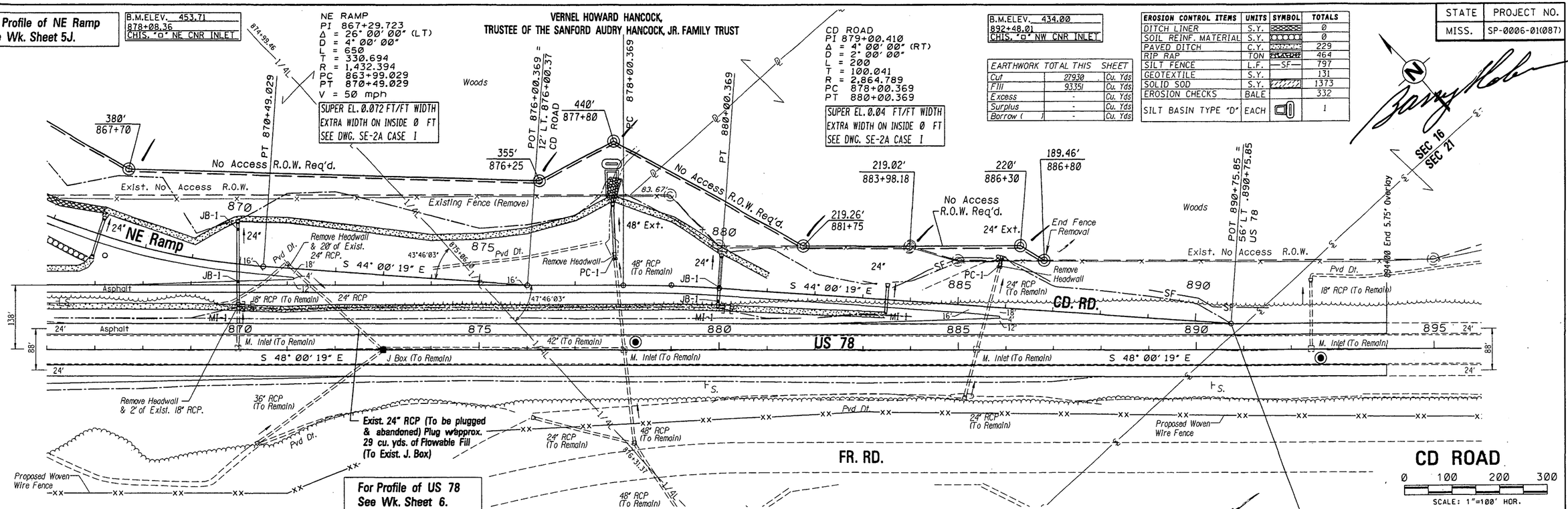
CD ROAD
PI 879+00.410
Δ = 4° 00' 00" (RT)
D = 2° 00' 00"
L = 200
T = 100.041
R = 2,864.789
PC 878+00.369
PT 880+00.369

SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

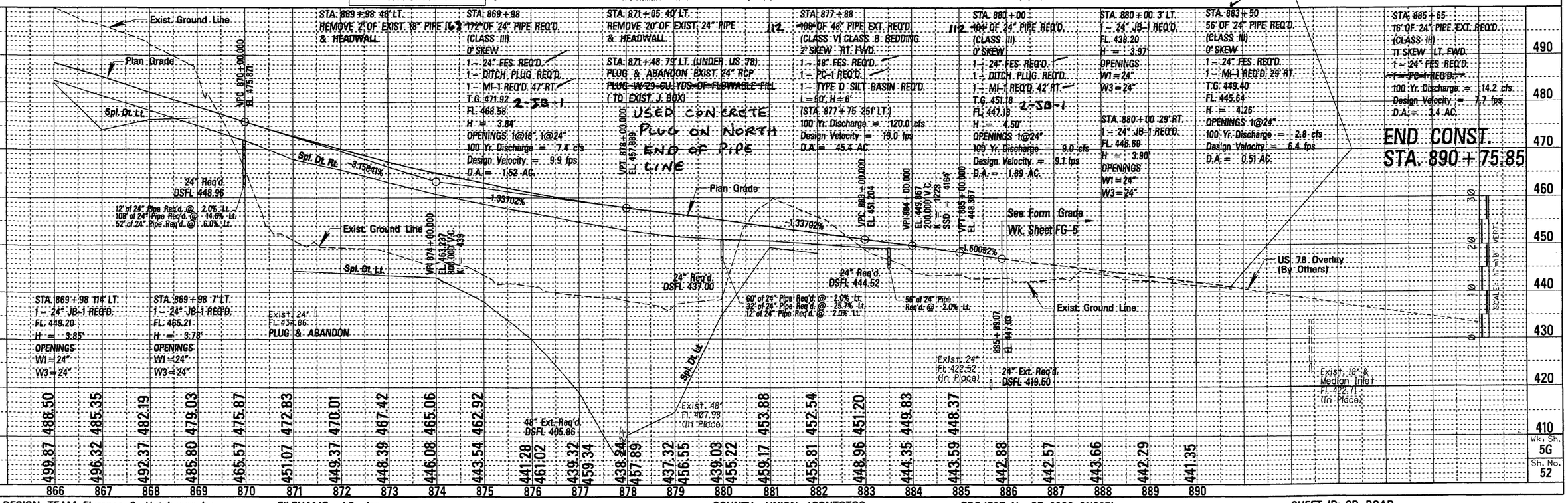
B.M.ELEV. 434.00
892+48.01
CHIS. "D" NW CNR INLET

EARTHWORK	TOTAL THIS SHEET	
Cut	27930	Cu. Yds
Fill	93351	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		0
SOIL REINF. MATERIAL	S.Y.		0
PAVED DITCH	C.Y.		229
RIP RAP	TON		464
SILT FENCE	L.F.	-SF-	797
GEOTEXTILE	S.Y.		131
SOLID SOD	S.Y.		1373
EROSION CHECKS	BALE		332
SILT BASIN TYPE "D"	EACH		1



For Profile of US 78
See Wk. Sheet 6.



DESIGN TEAM: Florence & Hutcheson, Inc. | FILENAME: wk5g.dgn | COUNTY : UNION / PONTOTOC | PROJECT No. SP-0006-01(087) | SHEET ID: CD ROAD

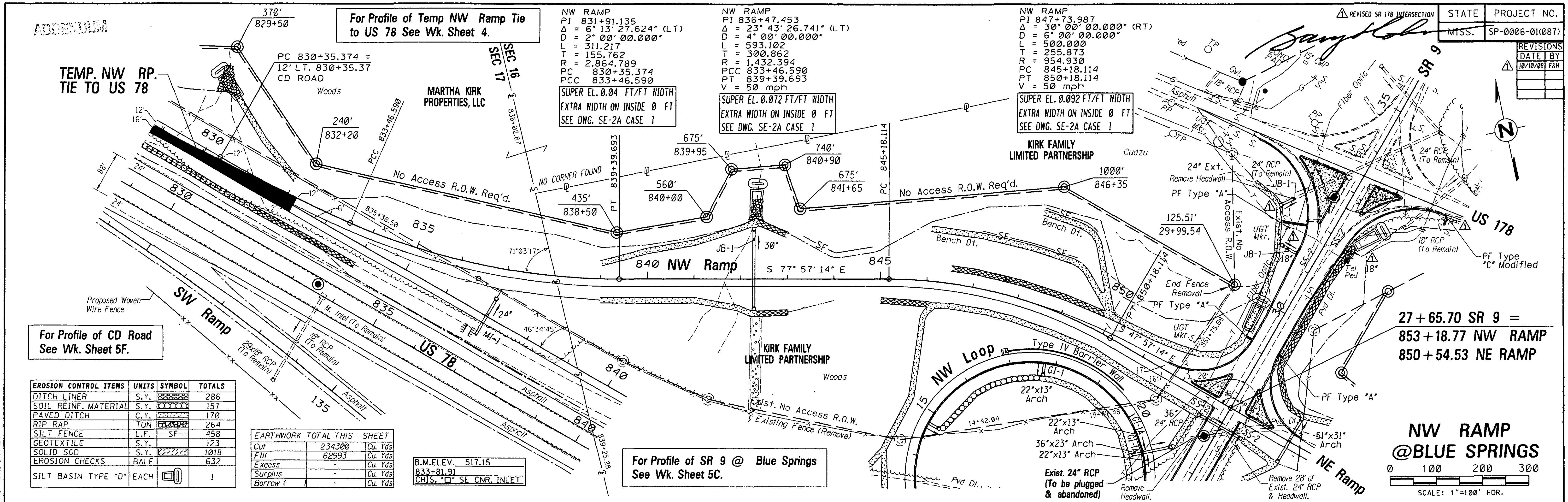
Wk. Sh. 5G
Sh. No. 52

08/15/2008 11:10:31 WK5G.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLANNING DIVISION
ROADWAY DESIGN SECTION

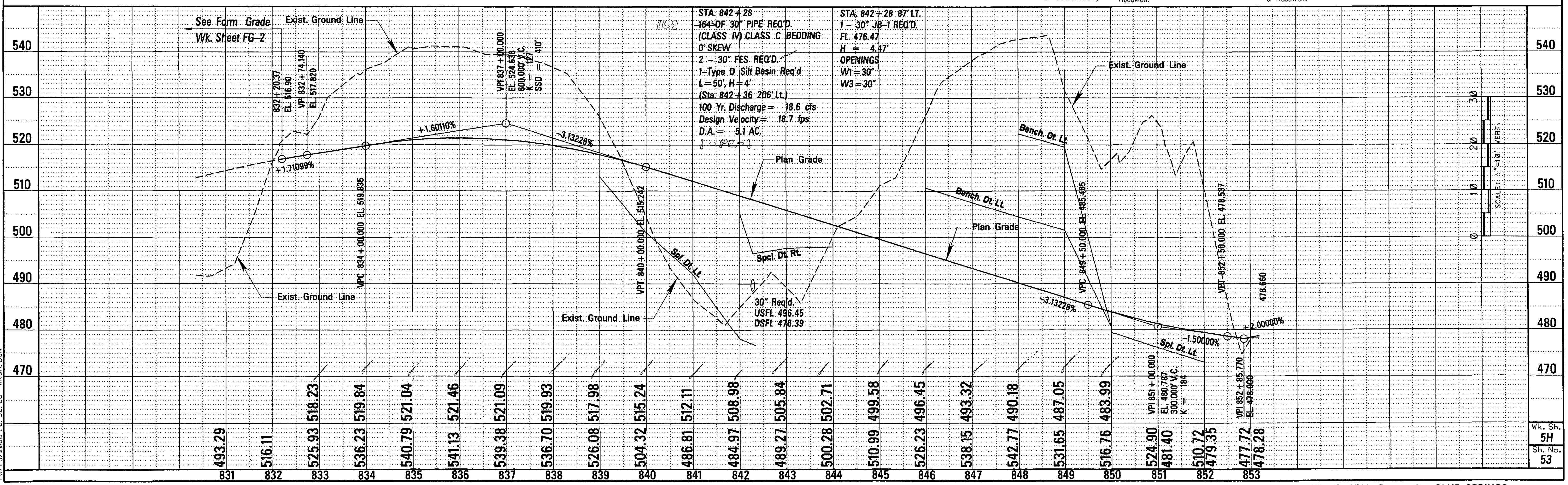
STATE	PROJECT NO.
MISS.	SP-0006-01(087)

REVISED SR 178 INTERSECTION — REVISIONS: DATE 10/10/08, BY F&H



EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		286
SOIL REINF. MATERIAL	S.Y.		157
PAVED DITCH	C.Y.		170
RIP RAP	TON		264
SILT FENCE	L.F.	—SF—	458
GEOTEXTILE	S.Y.		123
SOLID SOD	S.Y.		1018
EROSION CHECKS	BALE		632
SILT BASIN TYPE "D"	EACH		1

EARTHWORK TOTAL THIS SHEET		
Cut	234300	Cu. Yds
Fill	62993	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds



Wk. Sh. 5H

Sh. No. 53

10/15/2008 10:52:26 wk5h.dgn

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5h.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: NW Ramp @ BLUE SPRINGS

NW LOOP
PI 11+01.679
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.000
T = 101.679
R = 450.000
PC 10+00.000
PCC 12+00.000
V = 30 mph

SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

NW LOOP
PI 19+03.597
Δ = 219° 07' 19.141" (RT)
D = 22° 55' 05.922"
L = 956.100
T = 703.597
R = 250.000
PCC 12+00.000
PCC 21+56.100
V = 30 mph

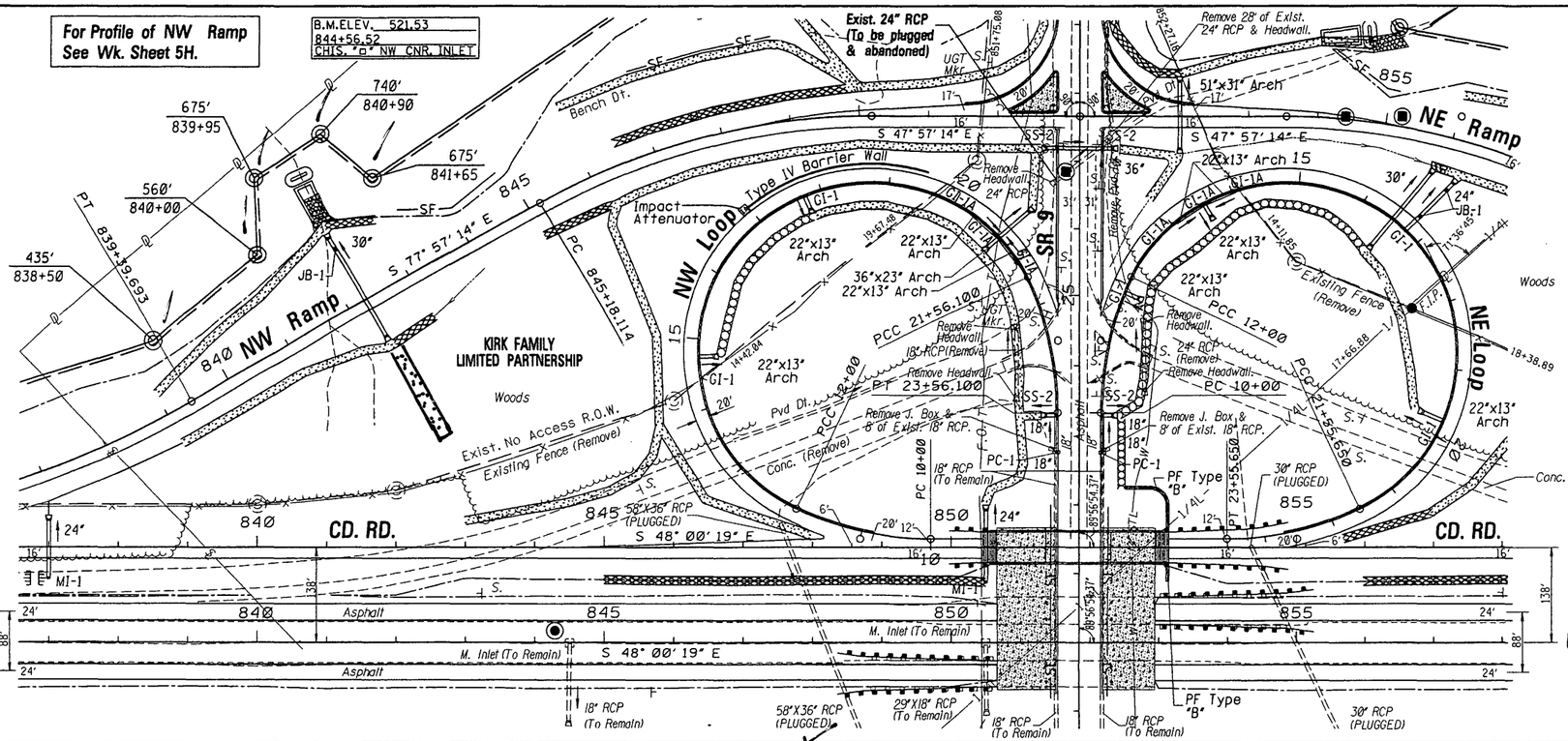
SUPER EL. 0.10 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

NW LOOP
PI 22+57.779
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.000
T = 101.679
R = 450.000
PCC 21+56.100
PT 23+56.100
V = 30 mph

SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

For Profile of NW Ramp
See Wk. Sheet 5H.

B.M.ELEV. 521.53
844+56.52
CHIS. "G" NW CNR. INLET



For Profile of NE Loop
See Wk. Sheet 5K.

For Profile of SR 9 @ Blue Springs
See Wk. Sheet 5C.

For Profile of CD Road
See Wk. Sheet 5F.

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		0
SOIL REINF. MATERIAL	S.Y.		173
PAVED DITCH	C.Y.		79
RIP RAP	TON		0
SILT FENCE	L.F.	SF	0
GEOTEXTILE	S.Y.		0
SOLID SOD	S.Y.		475
EROSION CHECKS	BALE		156
SILT BASIN TYPE "D"	EACH		0

EARTHWORK	TOTAL THIS SHEET	
Cut	240960	Cu. Yds
Fill	29085	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

NW LOOP @BLUE SPRINGS

0 100 200 300
SCALE: 1"=100' HOR.

STA. 17+00 TO STA. 19+50 26' LT.
278 L.F. OF TYPE IV CONCRETE MEDIAN BARRIER REQ'D.
1 IMPACT ATTENUATOR REQ'D.
40 C.Y. CLASS "B" CONCRETE AND 1841 LBS. REINF. STEEL FOR BARRIER FOOTER REQ'D.

STA. 14+75 2' RT.
20 OF 22"x13" ARCH PIPE REQ'D.
(CLASS AIII)
0° SKEW
1 - 22"x13" ARCH FES REQ'D.
1 - GI-1 REQ'D.
T.G. 505.43
FL. 501.56
H = 4.58'
OPENINGS 1 @22"x13"

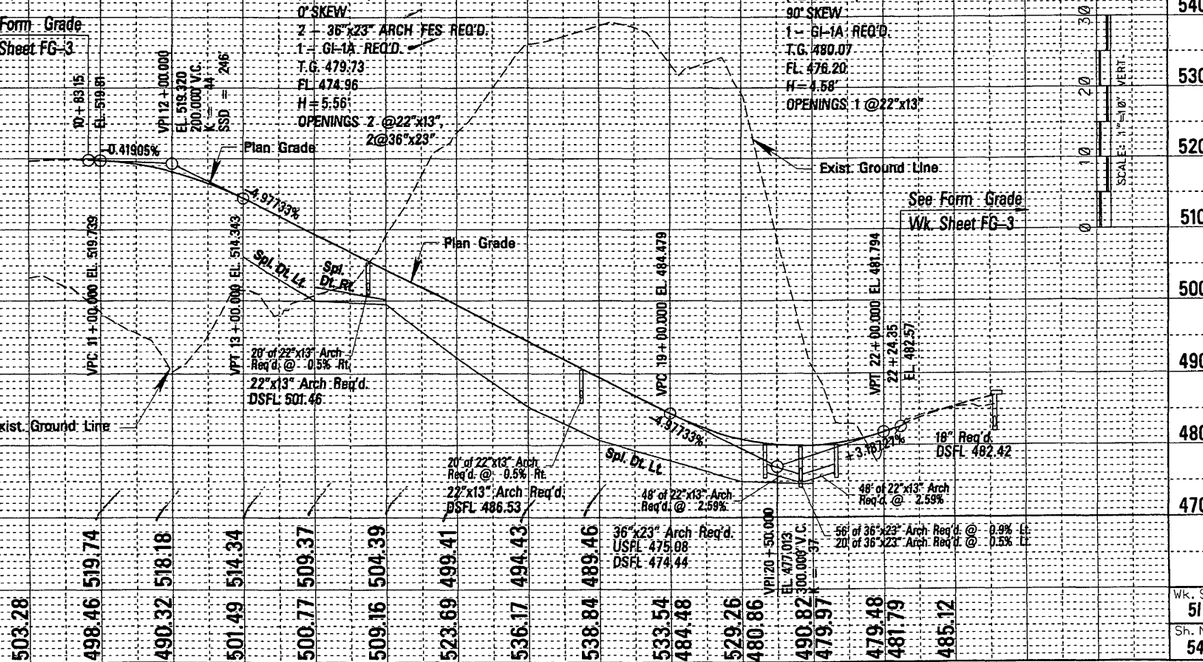
STA. 17+75 2' RT.
20 OF 22"x13" ARCH PIPE REQ'D.
(CLASS AIII)
0° SKEW
1 - 22"x13" ARCH FES REQ'D.
1 - GI-1 REQ'D.
T.G. 490.50
FL. 486.63
H = 4.58'
OPENINGS 1 @22"x13"

STA. 20+33 2' RT.
48' OF 22"x13" ARCH PIPE REQ'D.
(CLASS AIII)
90° SKEW
1 - GI-1A REQ'D.
T.G. 480.07
FL. 476.20
H = 4.58'
OPENINGS 1 @22"x13"

See Form Grade
Wk. Sheet FG-3

STA. 20+83 2' RT.
70 OF 36"x23" ARCH PIPE REQ'D.
(CLASS AIII)
0° SKEW
2 - 36"x23" ARCH FES REQ'D.
1 - GI-1A REQ'D.
T.G. 479.73
FL. 474.96
H = 5.56'
OPENINGS 2 @22"x13", 2@36"x23"

STA. 21+33 2' RT.
48' OF 22"x13" ARCH PIPE REQ'D.
(CLASS AIII)
90° SKEW
1 - GI-1A REQ'D.
T.G. 480.07
FL. 476.20
H = 4.58'
OPENINGS 1 @22"x13"



STA.	Exist. Ground Line	Proposed Grade
10	503.28	
11	498.46	519.74
12	490.32	518.18
13	501.49	514.34
14	500.77	509.37
15	509.16	504.39
16	523.69	499.41
17	536.17	494.43
18	538.84	489.46
19	533.54	484.48
20	529.26	480.86
21	490.82	479.97
22	479.48	481.79
23	485.12	

Wk. Sh. 5I
Sh. No. 54

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5i.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: NW Loop @ BLUE SPRINGS

PLAN-PROFILE
ROAD PLAN-PROFILE DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:06:53 wk5i.DGN

ADDENDUM

For Profile of SR 9 @ Blue Springs See Wk. Sheet 5C.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

REVISIONS		
NO.	DATE	BY
1	10/10/08	F&H

⚠1 REVISED SR 178 INTERSECTION

NE RAMP
PI 856+10.062
Δ = 29° 56' 54.365" (RT)
D = 6° 00' 00.000"
L = 499.141
T = 255.412
R = 954.930
PC 853+54.650
PT 858+53.790
V = 50 mph

SUPER EL. 0.092 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

NE RAMP
PI 867+29.723
Δ = 26° 00' 00.000" (LT)
D = 4° 00' 00.000"
L = 650.000
T = 330.694
R = 1,432.394
PC 863+99.029
PT 870+49.029
V = 50 mph

SUPER EL. 0.072 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

B.M.ELEV. 488.32
865+05.10
CHIS. "Q" NW CNR. INLET

KIRK FAMILY LIMITED PARTNERSHIP

VERNEL HOWARD HANCOCK, TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

SR 9

NW Ramp

NE Ramp

15 NE Loop

CD RD. 865

US 78

Woods

Existing Fence (Remove)

Asphalt

Pvd Dt.

Remove Headwall & 20' of Exist. 24" RCP.

Remove Headwall & 2' of Exist. 18" RCP.

Remove 28' of Exist. 24" RCP & Headwall.

Remove Headwall

Exist. 24" RCP (To be plugged & abandoned)

Exist. 24" RCP (To be plugged & abandoned)

Proposed Woven Wire Fence

Exist. No Access R.O.W.

No Access R.O.W. Req'd.

Exist. No Access R.O.W. 24" Ext.

PF Type "A"

PF Type "C" Modified

PF Type "A" Modified

24" RCP (To Remain)

18" RCP (To Remain)

36" RCP (To Remain)

M. Inlet (To Remain)

Box (To Remain)

JB-1

MI-1

SE-855

170' 31+51.93

170' 29+50

960' 856+10

920' 855+10

890' 860+50

835' 859+80

895' 856+50

835' 861+40

765' 861+30

380' 867+70

125.51' 29+99.54

PC 853+54.650

PT 858+53.790

PC 863+99.029

PT 870+49.029

POT 876+00.369 = PT 876+00.37

875+06.10

51"x31" Arch

22"x13" Arch

27+65.70 SR 9 =
853+18.77 NW RAMP
850+54.53 NE RAMP

For Profile of CD Road See Wk. Sheet 5G.

EARTHWORK TOTAL THIS SHEET		
Cut	166230	Cu. Yds
Fill	154282	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		639
SOIL REINF. MATERIAL	S.Y.		67
PAVED DITCH	C.Y.		115
RIP RAP	TON		916
SILT FENCE	L.F.	—SF—	350
GEOTEXTILE	S.Y.		247
SOLID SOD	S.Y.		692
EROSION CHECKS	BALE		308
SILT BASIN TYPE "D"	EACH		2

NE RAMP @BLUE SPRINGS

0 100 200 300

SCALE: 1"=100' HOR.

STA. 852+00
-864OF 51"x31" ARCH PIPE REQ'D.
(CLASS A(II))
0° SKEW
2 - 51"x31" ARCH FES REQ'D.
100 Yr. Discharge = 33.7 cfs
Design Velocity = 7.0 fps
D.A. = 15.3 AC.

STA. 854+45 140' LT.
1-Type D Silt Basins Req'd
L = 50', H = 6'

STA. 858+50
-100OF 36" PIPE REQ'D.
(CLASS IV) CLASS C BEDDING
0° SKEW
2 - 36" FES REQ'D.
1-Type D Silt Basin Req'd
L = 50', H = 6'
(Sta. 858+53 215' Lt.)
100 Yr. Discharge = 32.6 cfs
Design Velocity = 23.7 fps
D.A. = 14.0 AC.

STA. 858+50 108' LT.
1 - 36" JB-1 REQ'D.
FL. 437.28
H = 5.13'
OPENINGS
W1 = 36"
W3 = 36"

STA. 867+00
-76OF 24" PIPE REQ'D.
(CLASS III)
0° SKEW
2 - 24" FES REQ'D.
100 Yr. Discharge = 14.0 cfs
Design Velocity = 10.8 fps
D.A. = 3.5 AC.

Exist. Ground Line

Plan Grade

See Form Grade Wk. Sheet FG-4

SCALE: 1"=10' VERT.

478.660 VPI 850+85.530 EL. 478.040

VPC 854+00.000 EL. 476.304

VPT 857+00.000 EL. 474.648 600.000' V.C. K = 409

VPI 857+00.000

VPC 863+00.000 EL. 480.147

VPT 869+00.000 EL. 476.094

VPI 866+00.000 EL. 482.907 600.000' V.C. K = 366.88 SSD = 500'

871+18.99 EL. 471.25

-2.00074%

-0.55208% Spcl. Dt. Rt.

-0.96208%

+0.91655%

Spcl. Dt. Rt.

Spcl. Dt. Lt.

+0.91655%

-2.26769%

Spcl. Dt. Lt.

51"x31" Arch Req'd. USFL 469.89 DSFL 469.46

36" Req'd. USFL 463.88 DSFL 437.20

24" Req'd. USFL 474.34 DSFL 472.57

24" Ext. Req'd. DSFL 448.96

Exist. 24" FL 434.86

PLUG & ABANDON

Exist. Ground Line

477.96	477.41	476.86	476.30	475.87	475.69	475.75	442.50	441.55	471.65	487.53	496.44	501.60	518.05	520.79	509.25	509.18	504.42	482.64	459.44	439.09	448.18	442.42	441.74	441.26	441.27	
474.83	471.96	467.49	474.53	479.12	463.01	447.02	476.05	476.60	477.40	478.31	479.23	480.15	480.80	480.92	480.51	479.57	478.10	476.09	473.83	471.56						
851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	

Wk. Sh. 5J
Sh. No. 55

10/15/2009 10:52:31 wk5J.DGN

ROADWAY PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5j.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: NE Ramp @ BLUE SPRINGS

EROSION CONTROL ITEMS	UNITS	SYMBOL	TOTALS
DITCH LINER	S.Y.		88
SOIL REINF. MATERIAL	S.Y.		385
PAVED DITCH	C.Y.		58
RIP RAP	TON		0
SILT FENCE	L.F.	— SF —	0
GEOTEXTILE	S.Y.		0
SOLID SOD	S.Y.		349
EROSION CHECKS	BALE		80
SILT BASIN TYPE "D"	EACH		0

B.M. ELEV. 488.32
865+05.10
CHIS. "D" NW CNR. INLET

EARTHWORK TOTAL THIS SHEET		
Cut	12070	Cu. Yds
Fill	7815	Cu. Yds
Excess	-	Cu. Yds
Surplus	-	Cu. Yds
Borrow ( )	-	Cu. Yds

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

For Profile of NW Loop See Wk. Sheet 5I.

For Profile of CD Road See Wk. Sheet 5F.

For Profile of SR 9 @ Blue Springs See Wk. Sheet 5C.

NE LOOP
PI 22+57.329
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.000
T = 101.679
R = 450.000
PCC 21+55.650
PT 23+55.650
V = 30 mph
SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

NE LOOP
PI 11+01.679
Δ = 25° 27' 53.247" (RT)
D = 12° 43' 56.624"
L = 200.00
T = 101.679
R = 450.000
PC 10+00.000
PCC 12+00.000
V = 30 mph
SUPER EL. 0.079 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

NE LOOP
PI 19+05.609
Δ = 219° 01' 07.871" (RT)
D = 22° 55' 05.922"
L = 955.650
T = 705.609
R = 250.000
PCC 12+00.000
PCC 21+55.650
V = 30 mph
SUPER EL. 0.10 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

NE LOOP @BLUE SPRINGS

0 100 200 300
SCALE: 1"=100' HOR.

- STA. 11+75 2' RT.
  20' OF 22"x13" ARCH PIPE REQ'D.
  (CLASS AIII)
  0° SKEW
  1 – 22"x13" ARCH FES REQ'D.
  1 – GI-1 REQ'D.
  T.G. 480.93
  FL. 477.08
  H = 4.56'
  OPENINGS 1 @22"x13"

- STA. 13+06 2' RT.
  48' OF 22"x13" ARCH PIPE REQ'D.
  (CLASS AIII)
  90° SKEW
  1 – GI-1A REQ'D.
  T.G. 478.32
  FL. 474.45
  H = 4.58'
  OPENINGS 1 @22"x13"

- STA. 13+56 2' RT.
  20' OF 22"x13" ARCH PIPE REQ'D.
  (CLASS AIII)
  0° SKEW
  1 – 22"x13" ARCH FES REQ'D.
  1 – GI-1A REQ'D.
  T.G. 478.11
  FL. 474.24
  H = 4.58'
  OPENINGS 3 @22"x13"

- STA. 14+06 2' RT.
  48' OF 22"x13" ARCH PIPE REQ'D.
  (CLASS AIII)
  90° SKEW
  1 – GI-1A REQ'D.
  T.G. 478.32
  FL. 474.45
  H = 4.58'
  OPENINGS 1 @22"x13"

- STA. 16+50
  136' OF 30" PIPE REQ'D.
  (CLASS III)
  0° SKEW
  2 – 30" FES REQ'D.
  100 Yr. Discharge = 20.2 cfs
  Design Velocity = 12.2 fps
  D.A. = 6.8 AC.

See Form Grade Wk. Sheet FG-3

- STA. 16+75 2' RT.
  96' OF 24" PIPE REQ'D.
  (CLASS III)
  0° SKEW
  1 – 24" FES REQ'D.
  1 – GI-1 REQ'D.
  T.G. 486.69
  FL. 482.28
  H = 5.17'
  OPENINGS 1 @24"

- STA. 16+75 83' LT.
  1 – 24" JB-1 REQ'D.
  FL. 486.79
  H = 3.98'
  OPENINGS
  W1 = 24"
  W3 = 24"

- STA. 16+75 29' LT.
  1 – 24" JB-1 REQ'D.
  FL. 481.47
  H = 3.90'
  OPENINGS
  W1 = 24"
  W3 = 24"

- STA. 19+75 2' RT.
  32' OF 22"x13" ARCH PIPE REQ'D.
  (CLASS AIII)
  0° SKEW
  1 – 22"x13" ARCH FES REQ'D.
  1 – GI-1 REQ'D.
  T.G. 501.65
  FL. 497.78
  H = 4.64'
  OPENINGS 1 @22"x13"

wk. Sh. 5K
Sh. No. 56

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk5k.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: NE Loop @ BLUE SPRINGS

08/13/2008 11:40:27 wk5k.DGN

PLANS PROPERTY OF MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 521.53
192+65.81 989.23' LT.
CHIS. "O" NW CNR. INLET

B.M.ELEV. 521.53
844+56.52
CHIS. "O" NW CNR. INLET

MARTHA KIRK PROPERTIES, LLC

KIRK FAMILY LIMITED PARTNERSHIP

TEMP. NW RP.
TIE TO US 78

370'
829+50

240'
832+20

245'
827+20

No Access R.O.W. Req'd.

Exist. No Access R.O.W.

Existing Fence (Remove)

Existing Fence (Remove)

24"

18" Ext.

TEMP. 22"X13" ARCH PIPE

To Memphis

To Tupelo

US 78

S 61° 00' 19" E

S 48° 00' 19" E

S 48° 00' 19" E

S 38° 34' 48" E

S 42° 02' 46" E

PC 129+01.340

PI 131+72.805

PT 134+43.865

MI-1A

MI-1

M. Inlet (To Remain)

18" RCP (To Remain)

29"X18" RCP (To Remain)

58"X36" RCP (PLUGGED)

30" RCP (To Remain)

42" RCP (PLUGGED)

29"X 18" RCP (To Remain)

360' Taper

300' Taper

+75 Begin Taper

+66.56 End Taper

SW Ramp

SE Ramp

Proposed Woven Wire Fence

Asphalt

Fiber Optic

Buds Dr.

24" RCP (To Remain)

Toyota Frontage Rd.

SEC 16
SEC 17

SW RAMP
PI 131+72.805
Δ = 5° 25' 30.888" (RT)
D = 1° 00' 00.000"
L = 542.525
T = 271.465
R = 5,729.578
PC Sta. 129+01.340
PT Sta. 134+43.865
V = 50 mph

For Profile of Temp NW Ramp Tie to US 78 See Wk. Sheet 4.

For Profile of SR 9 @ Blue Springs See Wk. Sheet 5C.

15+52.39 SR 9 =
152+13.23 SW RAMP
10+00.00 SE RAMP

ADT = 2000

SW RAMP @BLUE SPRINGS

0 100 200 300

SCALE: 1"=100' HOR.

BEGIN OVERLAY
STA. 123+50

Overlay Transition
From 5" To 1 1/2"
See TS-11 For Details

BEGIN OVERLAY TRANSITION

END OVERLAY TRANSITION

5.00" Overlay

1.50" Overlay

Exist. Grade

Exist. 29"x18" Arch
Fl. 511.00
(In Place)

Exist. 18"
& Inlet
Fl. 494.58
(In Place)

Exist. 30"
Fl. 486.43
(In Place)

Exist. 29"x18"
& Inlet
Fl. 493.58
(In Place)

Exist. 42"
Fl. 473.27
(Plugged)

493.380

SCALE: 1"=10' VERT.

	540	530	520	510	500	490	480	470
124	494.82	494.41						
125	497.71	497.30						
126	500.59	500.18						
127	503.46	503.05						
128	506.32	505.91						
129	509.12	508.70						
130	511.82	511.49						
131	513.87	513.63						
132	515.37	515.25						
133	516.46	516.34						
134	517.02	516.90						
135	517.06	516.94						
136	516.57	516.45						
137	515.56	515.44						
138	514.28	514.16						
139	513.00	512.88						
140	511.73	511.61						
141	510.45	510.33						
142	509.17	509.05						
143	507.90	507.78						
144	506.62	506.50						
145	505.34	505.22						
146	504.06	503.94						
147	502.79	502.67						
148	501.51	501.39						
149	500.23	500.11						
150	499.02	498.90						
151	498.48	498.36						
152	498.98	498.86						

Wk. Sh. 5L
Sh. No. 57

PLANNING & PROJECTS
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 11:11:21 wk5L.DGN

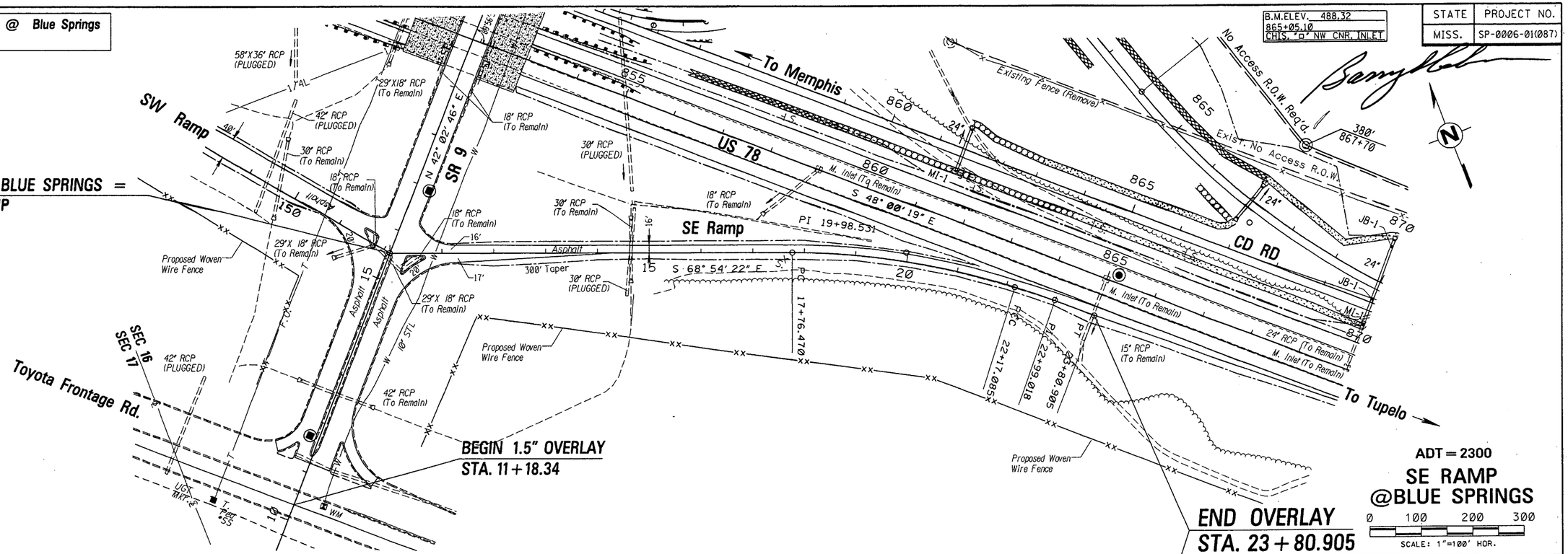
DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk7c.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: S.W. RAMP @ BLUE SPRINGS

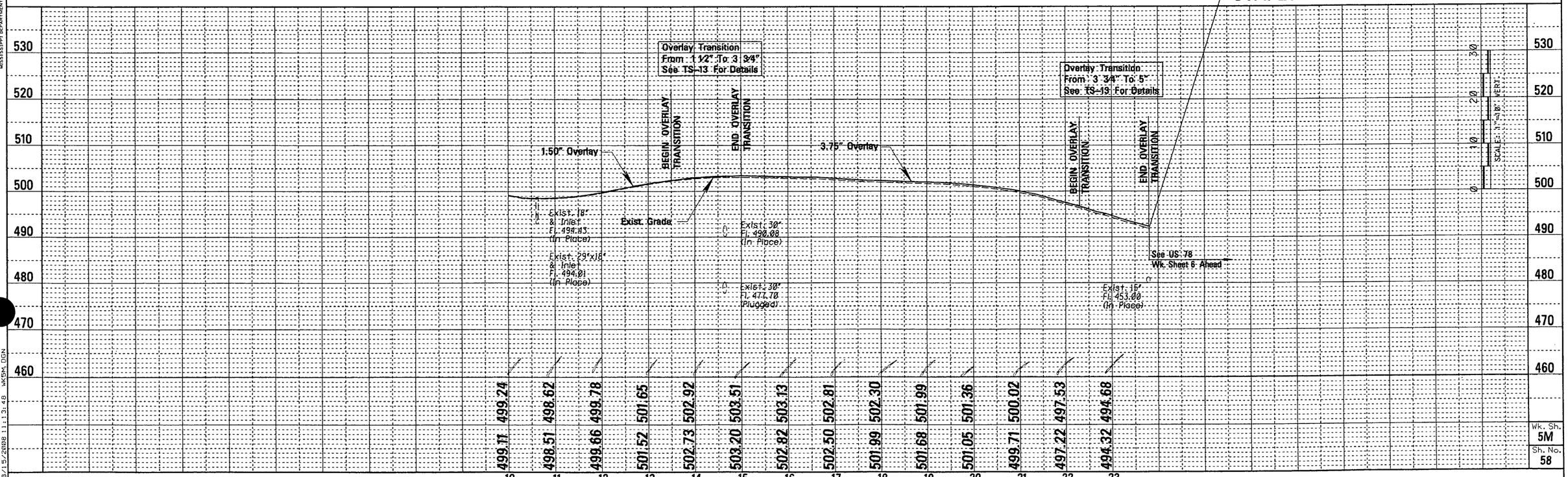
For Profile of SR 9 @ Blue Springs
See Wk. Sheet 5C.

B.M.ELEV. 488.32
865+05.10
CHIS. "□" NW CNR. INLET

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

15+52.39 SR 9 @ BLUE SPRINGS =
152+13.23 SW RAMP
10+00.00 SE RAMP





Wk. Sh. 5M
Sh. No. 58

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk7d.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: S.E. RAMP @ SR 9 BLUE SPRINGS

PLOT PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/19/2008 11:13:48 WK5M.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

VERNEL HOWARD HANCOCK, TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

B.M.ELEV. 453.71
878+08.36
CHIS. "O" NE CNR INLET

Exist. 24" RCP (To be plugged & abandoned) Plug w/approx. 29 cu. yds. of Flowable Fill (To Exist. Median Inlet)

CD ROAD
PI 879+00.410
Δ = 4° 00' 00.000" (RT)
D = 2° 00' 00.000"
L = 200.000
T = 100.041
R = 2,864.789
PC 878+00.369
PT 880+00.369
V = 50 mph

SUPER EL. 0.04 FT/FT WIDTH
EXTRA WIDTH ON INSIDE 0 FT
SEE DWG. SE-2A CASE I

VERNEL HOWARD HANCOCK, TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

B.M.ELEV. 434.00
892+48.01
CHIS. "O" NW CNR INLET

SEC 16
SEC 21

380' 867+70 — No Access R.O.W. Req'd. — PT 870+49.029 — 874.59.46 1/4L

355' 876+25 — POT 876+00.369 12' LT. 876+00.373 CD ROAD — PC 878+00.369

440' 877+80 — PT 880+00.369 — 83.67'

219.02' 883+98.18 — No Access R.O.W. Req'd. — 219.26' 881+75

220' 886+30 — 189.46' 886+80 — End Fence Removal — POT 890+75.85 = 56' LT .890+75.85 US 78

Exist. No Access R.O.W. — Existing Fence (Remove) — Woods — Exist. No Access R.O.W. — Woods

24" NE Ramp — JB-1 — 24" — 16' — Pvd Dt. — Remove Headwall & 20' of Exist. 24" RCP. — 18" — 4' — 12' — S 44° 00' 19" E — 43.46.03 — 1/4L

18" RCP (To Remain) — 24" RCP — MI-1 — 41.46.03 — 24" — 48" Ext. — Remove Headwall — PC-1 — 48" RCP (To Remain) — 24" — JB-1 — CD. RD. S 44° 00' 19" E — SF — PC-1 — 24" RCP (To Remain) — Remove Headwall — SF — 24" Ext. — End 5.75" Overlay 884+00 — Pvd Dt. — 18" RCP (To Remain)

870 — 875 — 880 — Asphalt — 885 — 890 — 895

M. Inlet (To Remain) — 42" (To Remain) — M. Inlet (To Remain) — M. Inlet (To Remain) — M. Inlet (To Remain)

S 48° 00' 19" E — J Box (To Remain) — S 48° 00' 19" E — US 78

Asphalt — To Tupelo

Remove Headwall & 2' of Exist. 18" RCP. — 36" RCP (To Remain) — Pvd Dt. — 24" RCP (To Remain) — 48" RCP (To Remain) — Proposed Woven Wire Fence — 24" RCP (To Remain) — Proposed Woven Wire Fence — 48" RCP (To Remain)

FR. RD.

875+86.10 — 1/4L — 48" RCP (To Remain) — Pvd Dt. — Pvd Dt. — Proposed Woven Wire Fence

For Profile of CD Road See Wk. Sheet 5G.

US 78
0 100 200 300
SCALE: 1"=100' HOR.

Exist. Grade US 78 W.B. Lane — Exist. 18" & Median Inlet Fl. 469.84 (In Place) — US 78 OVERLAY Plan Grade — 888+00 End 5.75" Overlay — 5.75" Overlay (By Others) — Exist. Grade US 78 W.B. Lane

Exist. 24" PLUG & ABANDON — Exist. 36" Fl. 434.86 (In Place) — Exist. 42" (In Place) — Exist. 48" Fl. 412.48 (In Place) — Exist. 29" & Median Inlet Fl. 425.92 (To Remain) — Exist. 18" & Median Inlet Fl. 422.71 (In Place)

SCALE: 1"=10' VERT.

Sta.	Elev.
867	486.03
868	482.80
869	479.68
870	476.36
871	473.43
872	470.56
873	467.82
874	465.48
875	463.28
876	461.37
877	459.70
878	458.15
879	456.77
880	455.42
881	454.09
882	452.73
883	451.31
884	449.88
885	448.39
886	447.03
887	445.66
888	444.34
889	442.98
890	441.60
891	440.19
892	438.72
893	437.20
894	435.74
895	434.33
896	432.86
897	431.54

Wk. Sh. 6
Sh. No. 59

PLANS PREPARED BY THE ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:06:23 WK6.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk6.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 423.84
899+70.56
CHIS. "□" NW CNR INLET

B.M.ELEV. 419.55
908+91.61
CHIS. "□" SW CNR. INLET

B.M.ELEV. 415.52
917+43.45
CHIS. "□" NW CNR. INLET

EXIST. US 78
PI 914+27.061
Δ = 15° 57' 34.471" (LT)
D = 1° 00' 00.000"
L = 1,595.958'
T = 803.179'
R = 5,729.578'
PC 906+23.883
PT 922+19.840
SE = EXIST.

SEC 22
SEC 21

VERNEL HOWARD HANCOCK,
TRUSTEE OF THE SANFORD AUDRY HANCOCK, JR. FAMILY TRUST

Woods

MEMPHIS HARDWOOD PROPERTY

EQUATION:
902+03.790 BK =
902+00 AH

PC 906+23.883

EQUATION:
922+19.840 BK =
922+27.580 AH

Exist. No Access R.O.W.

F.I.P.

PP

℄

48" RCP (To Remain)

18" Pipe (To Remain)

Pvd Dt.

24'

88'

900 905 910 915 920 925

Asphalt

US 78

M. Inlet (To Remain)

18" RCP (TO REMAIN)

18" RCP (To Remain)

S 63° 57' 53" E

PI 914+27.061

18" Pipe (PLUGGED)

S.↳

Proposed Woven Wire Fence

FR. RD.

36" RCP (To Remain)

Exist. R.O.W.

US 78

0 100 200 300

SCALE: 1"=100' HOR.

SCALE: 1"=10' VERT.

0 10 20 30

5.75" Overlay (By Others)

Exist. Grade US 78 W.B. Lane

Exist. 18" & Median Inlet Fl. 410.11 (In Place)

Exist. 18" (Plugged)

Exist. 48" & Median Inlet Fl. 394.55 (In Place)

Exist. 18" & Median Inlet Fl. 412.99 (In Place)

Exist. 18" & Median Inlet Fl. 413.01 (In Place)

Exist. 18" & Median Inlet Fl. 399.62 (In Place)

460 450 440 430 420 410 400 390 380

431.54 430.35 429.01 427.94 427.25 426.67 426.18 425.69 425.01 423.94 422.85 422.26 421.59 421.14 420.90 420.43 419.96 419.50 419.04 418.60 417.80 416.67 415.18 413.43 411.80 410.50 409.65 408.30 406.49 404.75 403.13

897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927

Wk. Sh. 7
Sh. No. 60

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2009 10:05:18 wk7.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk7.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

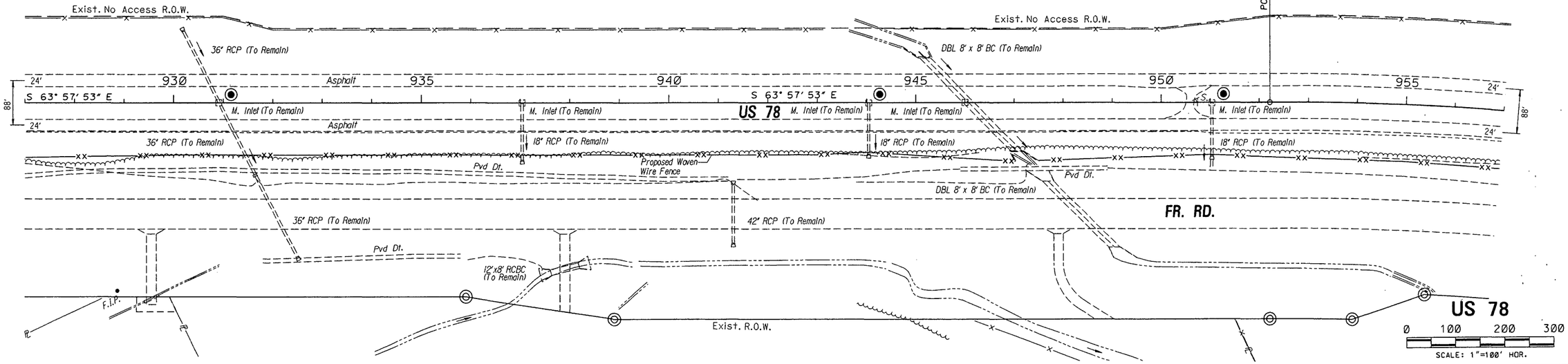
STATE	PROJECT NO.
MISS.	SP-0006-01(087)

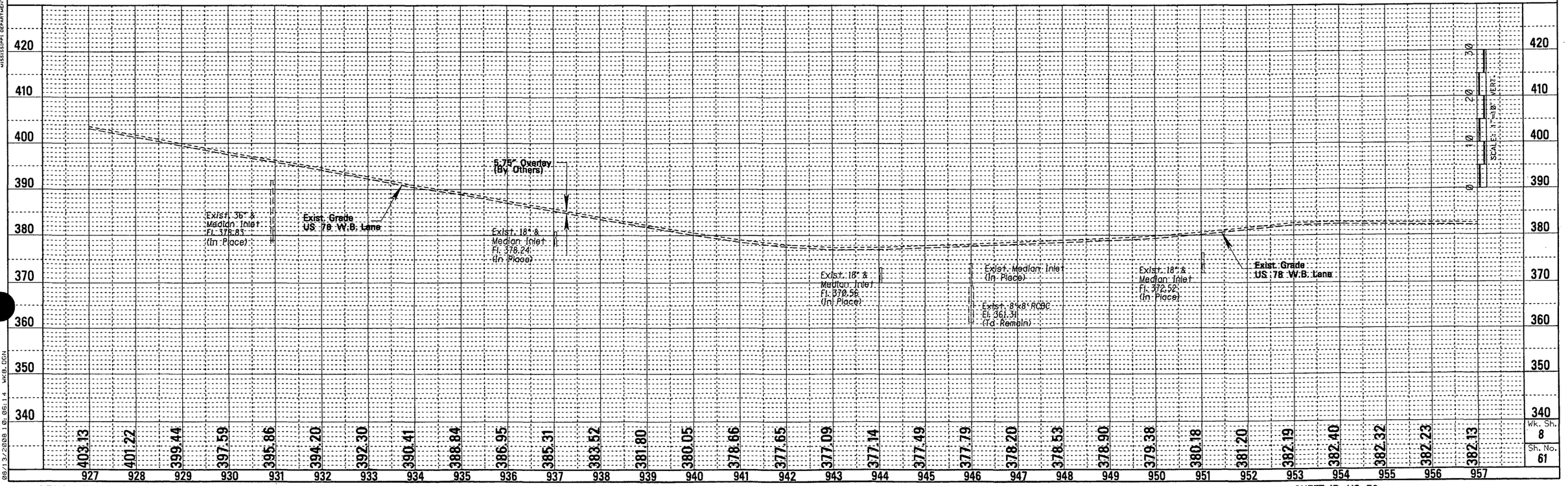
B.M.ELEV. 391.80
930+85.08
CHIS. "□" SW CNR. INLET

B.M.ELEV. 373.14
944+10.00
CHIS. "□" NE CNR. INLET

B.M.ELEV. 376.23
951+09.58
CHIS. "□" NE CNR. INLET

EXIST. US 78
PI 959+22.130
Δ = 13° 56' 12.915" (RT)
D = 1° 00' 00.000"
L = 1,393.692'
T = 700.302'
R = 5,729.578'
PC 952+21.828
PT 966+15.520
SE = EXIST.





Wk. Sh. 8
Sh. No. 61

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:06:14 wk8.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk8.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 372.02
963+96.71
CHIS. "A" SW CNR. INLET

B.M.ELEV. 368.90
979+11.55
CHIS. "B" NW CNR. INLET

EXIST. US 78
PI 959+22.130
Δ = 13° 56' 12.915" (RT)
D = 1° 00' 00.000"
L = 1,393.692'
T = 700.302'
R = 5,729.578'
PC 952+21.828
PT 966+15.520
SE = EXIST.

EQUATION: PT 966+15.520 BK = 966+19.530 AH

EQUATION: 985+89.740 BK = 985+81.000 AH

PI 959+22.130

TVA EASMT

TOWER TVA EASMT

TVA

TOWER

Town Creek

SEC 23
SEC 22

Sherman

Exist. No Access R.O.W.

20' x 12' Box Bridge (To Remain)

COUNTY LINE
985+75.06

Limits SEC 23 SEC 26

960 965 970 975 980 985

Asphalt

24'

88'

M. Inlet (To Remain)

S 50° 01' 40" E

US 78

18" RCP (To Remain)

Proposed Woven Wire Fence

30" (To Remain)

Corp. S.

F.S.

Pvd Dt.

FR. RD.

Limits

UNION CO.

PONTOTOC CO.

Exist. R.O.W.

US 78

0 100 200 300

SCALE: 1"=100' HOR.

410 400 390 380 370 360 350 340 330

382.13 381.70 381.24 380.59 379.93 379.24 378.54 377.90 377.35 376.26 374.92 373.73 372.82 372.15 371.76 371.49 371.39 371.57 371.77 372.22 372.64 372.96 373.17 373.71 374.03 374.29 374.73 375.07 375.41 375.95 376.18

957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987

Exist. Grade US. 78 W.B. Lane

Exist. 18" & Median Inlet El. 369.43 (In Place)

5.75" Overlay (By Others)

Exist. Median Inlet (In Place)

Exist. 12'x12' RCBB El. 352.00 (To Remain)

Exist. 18" & Median Inlet El. 366.57 (In Place)

Exist. Grade US. 78 W.B. Lane

Exist. 18" & Median Inlet El. 369.40 (In Place)

EQUATION: 985+89.740 BK = 985+81.000 AH

SCALE: 1"=10' VERT.

0 10 20 30

wk. Sh. 9

Sh. No. 62

08/13/2008 10:06:10 wk9.dgn

PLANS PREPARED BY THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION ROADWAY DESIGN DIVISION

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk9.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 367.23
999+67.17
CHIS. "a" NW CNR. INLET

B.M.ELEV. 358.15
1013+02.38
CHIS. "a" NE CNR. INLET

Sherman Corp. Limits

Exist. No Access R.O.W.

Exist. No Access R.O.W.

18" RCP (To Remain)

18" RCP (To Remain)

18" RCP (To Remain)

18" RCP (To Remain)

990 995 1000 1005 1010 1015

24' Asphalt

M. Inlet (To Remain)

M. Inlet (To Remain)

M. Inlet (To Remain)

M. Inlet (To Remain)

24' Asphalt

88'

88'

US 78

S 50° 01' 40" E

Pvd Dt.

Pvd Dt.

Proposed Woven Wire Fence

Proposed Woven Wire Fence

FR. RD.

Exist. R.O.W.

T.P.

US 78

0 100 200 300

SCALE: 1"=100' HOR.

8.75" Overlay (By Others)

Exist. Grade US 78 W.B. Lane

Exist. 18" & Median Inlet Fl. 367.93 (In Place)

Exist. 18" & Median Inlet Fl. 364.58 (In Place)

Exist. 18" & Median Inlet Fl. 362.05 (In Place)

Exist. 18" & Median Inlet Fl. 355.43 (In Place)

Exist. Grade US 78 W.B. Lane

SCALE: 1"=10' VERT.

0 10 20 30

400 390 380 370 360 350 340 330 320

987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017
376.18	376.44	376.54	376.37	376.43	376.00	375.33	374.76	374.11	373.46	372.77	372.07	371.44	370.79	370.26	369.47	368.75	368.15	367.52	366.87	366.19	365.51	364.96	364.26	363.60	362.91	362.25	361.59	360.93	360.26	359.60

Wk. Sh. 10

Sh. No. 63

PLAN-PROFILE
ROADWAY DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:06:06 wk10.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk10.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

B.M.ELEV. 351.46
1025+00.00
CHIS. "O" SE CNR. INLET

B.M.ELEV. 356.99
1036+00.00
CHIS. "O" SE CNR. INLET

EXIST. US 78
PI 1041+47.388
Δ = 14° 46' 23.098" (RT)
D = 0° 20' 00.000"
L = 4,431.925'
T = 2,228.321'
R = 17,188.734'
PC = 1019+19.067
PT = 1063+50.991
SE = EXIST.

PC 1019+19.067

Exist. No Access R.O.W.

10' X 5' BC (To Remain)

18" RCP (To Remain)

Asphalt

24'

88'

1020 1025 1030 1035 1040 1045

M. Inlet (To Remain)

1/4L

F.I.P.

Woods

GARY WAYNE PANNELL

MARY SCRUGGS MITCHELL

Exist. R.O.W.

Fwd Dr.

Rvd Dr.

TEL PED

Vent

58"X36" RCP (To Remain)

24" RCP (To Remain)

SR 9

US 78

SEC 25

SEC 26

SCALE: 1"=100' HOR.

0 100 200 300

Exist. Median Inlet (In Place)

Exist. 10'X5' RCBC El. 341.27 (To Remain)

Exist. Grade US 78 W.B. Lane

5.75" Overlay (By Others)

Exist. 18" & Median Inlet Fl. 348.90 (In Place)

Exist. 18" & Median Inlet Fl. 347.59 (In Place)

Exist. 18" & Median Inlet Fl. 348.92 (In Place)

Exist. 24" Fl. 338.93 (To Remain)

Exist. 24" Fl. 338.93 (To Remain)

Exist. Grade US 78 W.B. Lane

SCALE: 1"=10' VERT.

400 390 380 370 360 350 340 330 320

359.60 359.00 358.43 357.74 357.40 356.93 356.56 356.15 355.85 355.52 355.07 354.65 354.28 354.25 354.45 355.18 356.29 357.67 359.31 361.08 362.67 363.97 364.96 366.00 366.71 367.12 347.74 345.49 353.95 366.75 366.02

1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1044 1045 1046 1047

wk. Sh. 11
Sh. No. 64

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 10:05:03 wk11.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk11.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

EXIST. US 78
PI 1041+47.388
Δ = 14° 46' 23.098" (RT)
D = 0° 20' 00.000"
L = 4,431.925'
T = 2,228.321'
R = 17,188.734'
PC 1019+19.067
PT 1063+50.991
SE = EXIST.

EQUATION:
PT 1063+50.991 BK =
1064+13.100 AH

POT 1069+21.304

SEC 25
SEC 36

Asphalt
Exist. No Access R.O.W.
H.S.
S.T.
1050
1055
1060
1065
24' Asphalt
M. Inlet (To Remain)
US 78
S 35° 15' 17" E
88'
24" RCP (To Remain)
18" RCP (To Remain)
DBL 14' x 14' Box Br. (To Remain)
To Tupelo
SR 9
30" RCP (To Remain)
48" RCP (To Remain)
Pvd Dr.
SEC 25
SEC 26
Woods

E.O.P. 1069 + 21.30
SP-0006-01(087)

US 78
0 100 200 300
SCALE: 1"=100' HOR.

5.75" Overlay (By Others)
Exist. Grade US 78 W.B. Lane
Exist. 18" & Median Inlet El. 341.45 (In Place)
Exist. 18" & Median Inlet El. 341.50 (In Place)
Exist. Dbl. 14'x14' BB El. 322.24 (To Remain)

SCALE: 1"=10' VERT.
0 10 20 30

390 380 370 360 350 340 330 320 310

366.02 365.27 364.20 362.94 361.40 359.64 357.69 355.47 353.25 351.04 348.87 347.17 345.82 344.70 343.94 342.75 340.86 339.19 339.51 340.60

1047 1048 1049 1050 1051 1052 1053 1054 1055 1056 1057 1058 1059 1060 1061 1062 1063 1065 1066 1067 1068 1069

Wk. Sh. 12
Sh. No. 65

PLAN-PROFILE
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

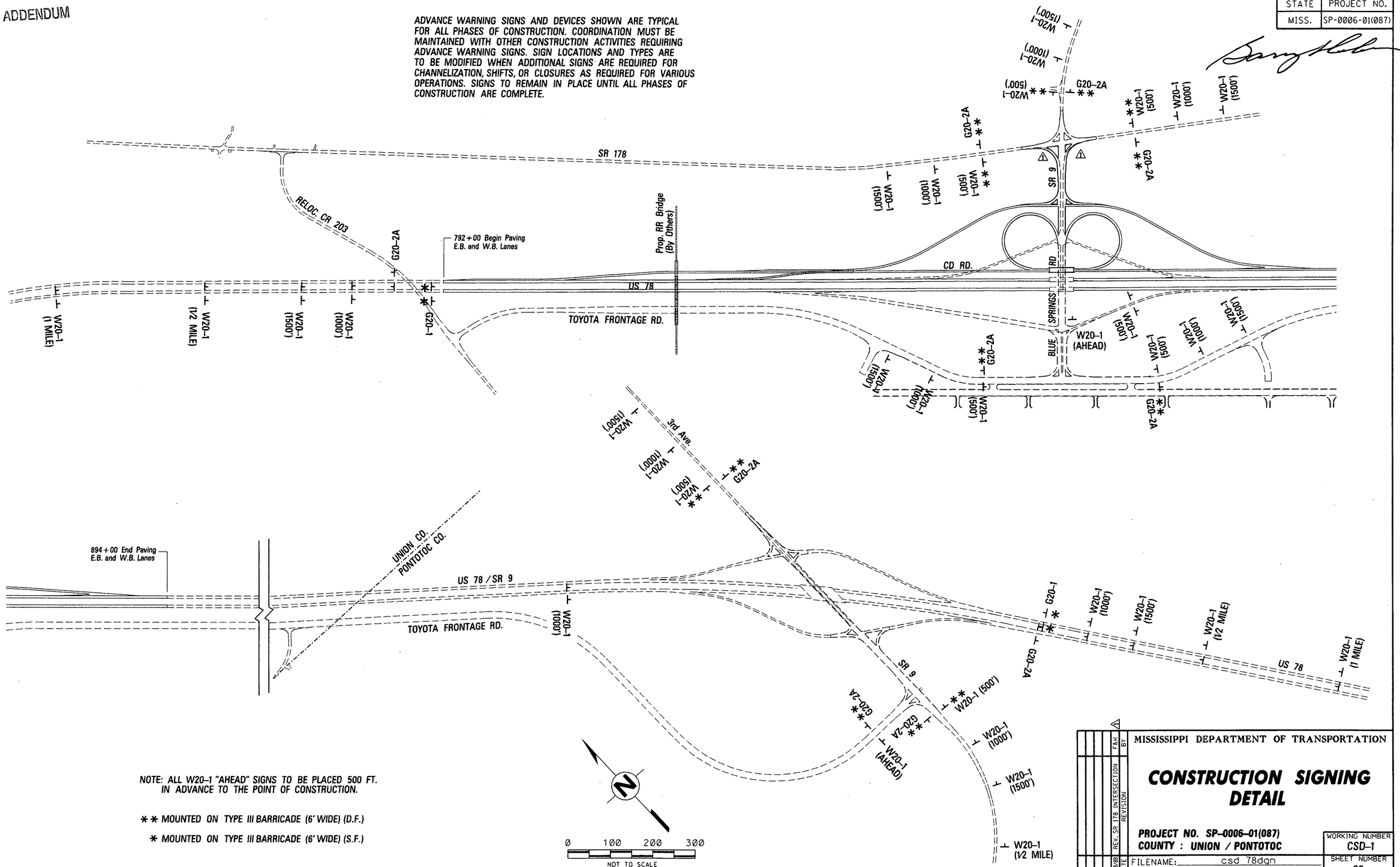
08/13/2009 10:05:59 wk12.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: wk12.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

ADVANCE WARNING SIGNS AND DEVICES SHOWN ARE TYPICAL FOR ALL PHASES OF CONSTRUCTION. COORDINATION MUST BE MAINTAINED WITH OTHER CONSTRUCTION ACTIVITIES REQUIRING ADVANCE WARNING SIGNS. SIGN LOCATIONS AND TYPES ARE TO BE MODIFIED WHEN ADDITIONAL SIGNS ARE REQUIRED FOR CHANNELIZATION, SHIFTS, OR CLOSURES AS REQUIRED FOR VARIOUS OPERATIONS. SIGNS TO REMAIN IN PLACE UNTIL ALL PHASES OF CONSTRUCTION ARE COMPLETE.



NOTE: ALL W20-1 "AHEAD" SIGNS TO BE PLACED 500 FT. IN ADVANCE TO THE POINT OF CONSTRUCTION.

** MOUNTED ON TYPE III BARRICADE (6' WIDE) (D.F.)

* MOUNTED ON TYPE III BARRICADE (6' WIDE) (S.F.)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CONSTRUCTION SIGNING DETAIL

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

DATE	REV. SR 178 INTERSECTION REVISION	BY
10/10/08		F&H

FILENAME: csd 78dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

WORKING NUMBER: CSD-1
SHEET NUMBER: 66

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: csd_78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 10:20:26 CSD_78.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

GENERAL NOTES - TRAFFIC CONTROL

1. ALL TRAFFIC CONTROL DEVICES SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE CURRENT EDITION OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.) AND SECTIONS 618 AND 619 OF THE STANDARD SPECIFICATIONS.

2. THIS PLAN DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF INSTALLING TRAFFIC CONTROL DEVICES IN ACCORDANCE WITH THE M.U.T.C.D. OTHER SIGNS AND TRAFFIC CONTROL DEVICES MAY BE REQUIRED DURING THE VARIOUS PHASES OF CONSTRUCTION. ANY MODIFICATIONS TO THIS PLAN SHALL BE PREPARED BY A LICENSED ENGINEER, AND SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO IMPLEMENTATION.

3. EXISTING GUIDE, REGULATORY, AND WARNING SIGNS THAT CONFLICT WITH CONSTRUCTION TRAFFIC CONTROL SIGNAGE SHALL BE REMOVED DURING CONSTRUCTION AND REINSTALLED AFTER CONSTRUCTION, OR RELOCATED DURING CONSTRUCTION AS REQUIRED BY THE DRAWINGS OR AS DIRECTED BY THE ENGINEER. THE COST OF SAID SIGNAGE ADJUSTMENTS IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 618-A MAINTENANCE OF TRAFFIC.

4. THE COST OF ADJUSTMENT, RELOCATION, AND MAINTENANCE OF TRAFFIC CONTROL DEVICES AS CONSTRUCTION PROGRESSES IS TO BE INCLUDED IN THE PRICE BID FOR ITEM 618-A MAINTENANCE OF TRAFFIC.

5. CHANGEABLE MESSAGE SIGNS SHALL BE POSTED AT TIMES AND AT LOCATIONS AS DIRECTED BY THE ENGINEER.

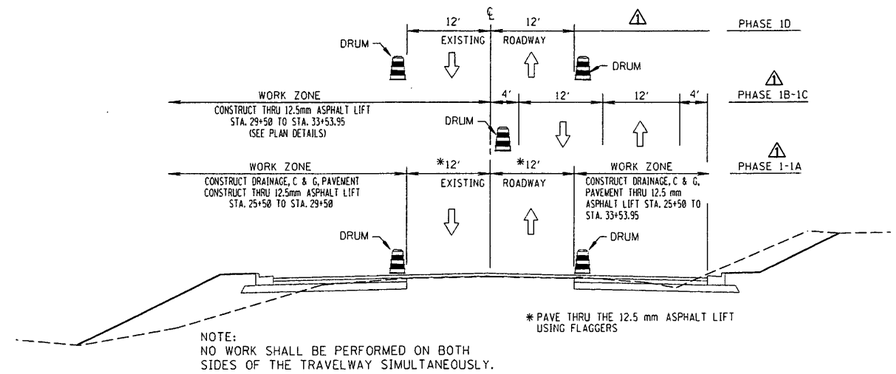
6. ALL EXISTING GUARDRAIL AND IMPACT ATTENUATORS SHALL REMAIN IN PLACE UNTIL REMOVAL OF SAME HAS BEEN SPECIFICALLY APPROVED BY THE ENGINEER.

7. FLUORESCENT ORANGE SHEETING SHALL BE USED ON ALL CONSTRUCTION AND TRAFFIC CONTROL SIGNS EXCEPT FOR THOSE DESIGNATED IN PLANS TO BE BLACK LEGEND AND BORDER ON WHITE BACKGROUND.

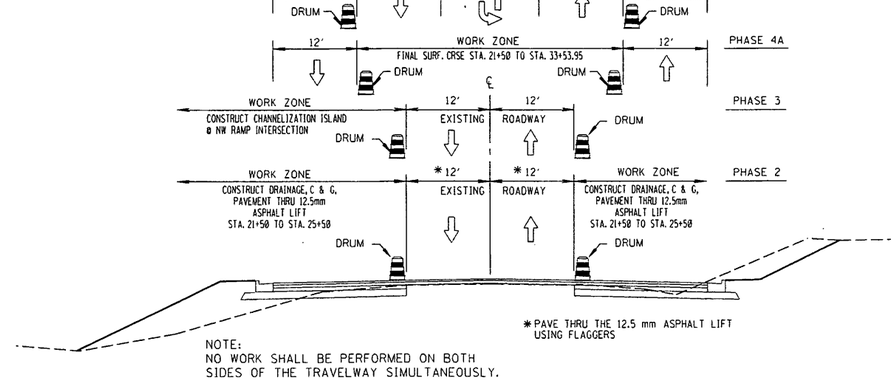
8. THE LOCATION AND SPACING OF SIGNS AS SHOWN ON THE TRAFFIC CONTROL PLANS ARE APPROXIMATE AND MAY REQUIRE ADJUSTMENT TO ACCOMMODATE FIELD CONDITIONS.

9. ALL DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".

10. ALL BARRICADES SHALL BE TYPE III WITH R11-2 SIGN ("ROAD CLOSED", 48" x 30") ON THE PUBLIC ROAD SIDE AND R1-1 SIGN ("STOP", 36" x 36") ON THE CONSTRUCTION SIDE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OR OTHERWISE SHOWN ON THE PLANS.



TRAFFIC CONTROL TYPICAL SECTION
PHASE 1 - BLUE SPRINGS RD / SR 9



TRAFFIC CONTROL TYPICAL SECTION
PHASE 2 - 4 BLUE SPRINGS RD / SR 9

REVISION	DATE	BY
Revised descriptions	10/10/08	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

GENERAL NOTES
SPECIAL DETAILS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: TC-1
SHEET NUMBER: 67

FILENAME: tc-1.dgn
DESIGN TEAM F & H CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN
10/15/2008 10:20:29 TC1.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

TRAFFIC CONTROL PHASING NOTES

PHASE 1

1) PERFORM GRADING AND DRAINAGE WORK ON THE CD ROAD AND THE NW AND NE RAMPS IN AREAS NOT AFFECTING US 78 TRAFFIC.

2) INSTALL PRECAST MEDIAN BARRIERS AND BEGIN CD ROAD BRIDGE WORK. TRAFFIC WILL BE STOPPED FOR SHORT DURATIONS DURING OVERHEAD BRIDGE WORK. SEE TCP-8 FOR DETAILS.

3) CONSTRUCT THE FOLLOWING ROADWAYS THRU THE 12.5mm ASPHALT LIFT:
CD ROAD STA. 793+34.25 TO STA. 812+85.374
CD ROAD STA. 818+00 TO STA. 835+00
CD ROAD STA. 846+50 TO STA. 856+50
CD ROAD STA. 867+50 TO STA. 890+75.85
NW LOOP STA. 10+00 TO STA. 10+83
NE LOOP STA. 22+73 TO STA. 23+55.65
NW RAMP STA. 830+35.37 TO STA. 852+87.77
NE RAMP STA. 850+85.53 TO STA. 876+00.37

4) CONSTRUCT THE TEMP NW RAMP TIE TO WB US 78.

NOTE: USE SHOULDER CLOSURES WHEN CONSTRUCTION IS NEAR THE SHOULDER OF US 78 (SEE SHEET TC-11 FOR DETAILS). CLOSE THE RIGHT LANE DURING EXCAVATION AND WIDENING OF THE US 78 PAVEMENT. SEE STD. DWG. SDTCP-4 FOR DETAILS. ⚠

5) INSTALL CROSS DRAIN AT SR 9 STA. 27+19 UNDER TRAFFIC.

6) GRADE AND CONSTRUCT CURB & GUTTER LEFT OF SR 9 FROM STA. 25+50 TO STA. 29+50 AND RIGHT OF SR 9 FROM STA. 25+50 TO THE SR 178 INTERSECTION WHILE MAINTAINING TRAFFIC ON EXISTING ROADWAYS. SEE SHEET TC-11 FOR DROP-OFF DETAILS.

⚠ 7) CONSTRUCT TEMPORARY WIDENING TO THE LEFT SIDE OF EXISTING RAMP FOR NB SR 9 TO EB SR 178 TRAFFIC.

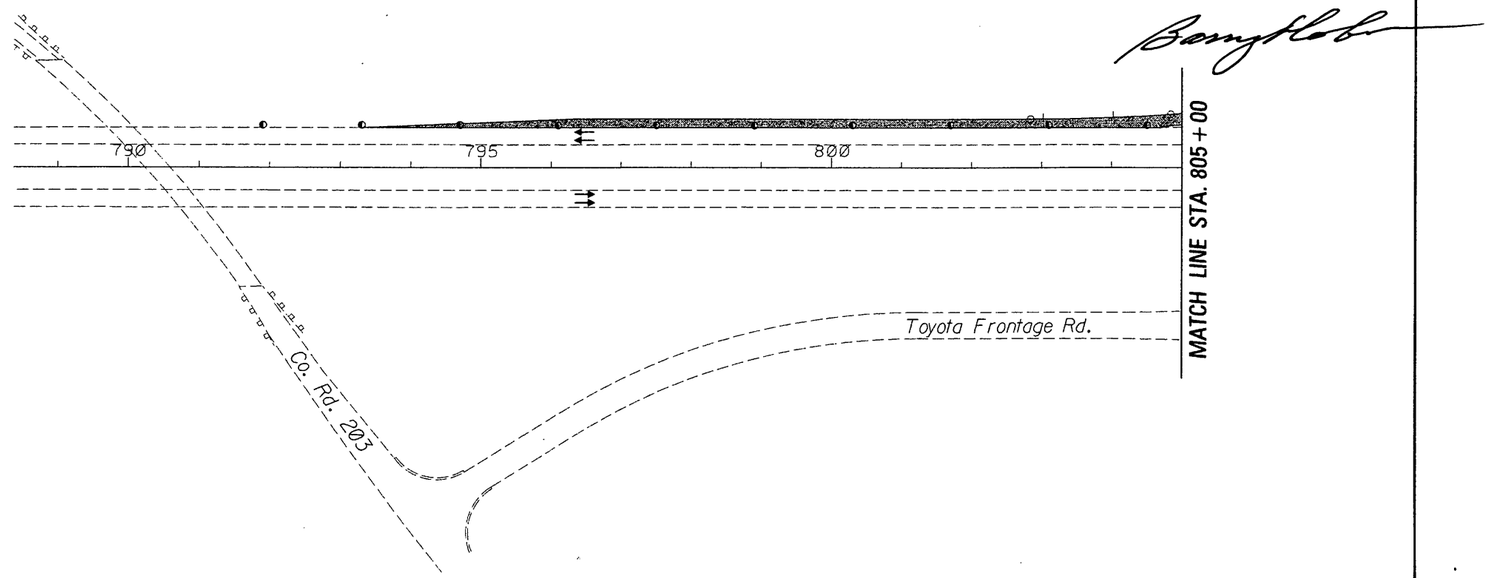
⚠ 8) SHIFT TRAFFIC TURNING FROM NB SR 9 TO EB SR 178 ONTO THE TEMPORARY WIDENING.

⚠ 9) PAVE THE RIGHT SIDE OF SR 9 (CENTERLINE RIGHT) THRU THE 12.5 mm ASPHALT LIFT FROM STA. 25+50 TO STA. 29+50. USE LANE CLOSURES WITH FLAGGERS DURING EXISTING PAVEMENT OVERLAY (SEE STD. DWG. TCP-1 FOR DETAILS).

⚠ 10) PAVE THE LEFT SIDE OF SR 9 (CENTERLINE LEFT) THRU THE 12.5 mm ASPHALT LIFT FROM STA. 25+50 TO STA. 29+50. USE LANE CLOSURES DURING EXISTING PAVEMENT OVERLAY (SEE STD. DWG. TCP-1 FOR DETAILS).

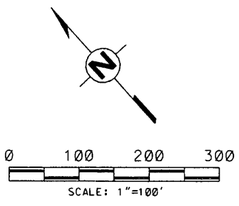
⚠ 11) CONSTRUCT TEMPORARY WIDENING IN THE ISLAND AREA AT THE INTERSECTION OF THE NW RAMP AND SR 9 TO ACCOMODATE LEFT TURNS DURING PHASE 2. ISLAND CURB AND GUTTER CONSTRUCTION WILL BE DELAYED UNTIL AFTER THE PROPOSED LOOP RAMPS ARE OPEN TO TRAFFIC.

NOTE: ALL REFERENCES TO SR 9 IN THE TRAFFIC CONTROL NOTES PERTAIN TO SR 9 AT THE BLUE SPRINGS ROAD / SR 9 INTERCHANGE.



LEGEND

- TRAFFIC FLOW
- CONSTRUCT THIS PHASE
- CONSTRUCT UNDER TRAFFIC
- FREE STANDING PLASTIC DRUM
- SIGN
- TYPE III BARRICADE



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

F&H
TRAFFIC CONTROL
PHASE 1

NO.	REVISION	DATE	BY
1	Revised Notes	10/10/08	F&H

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

FILENAME: tc2.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

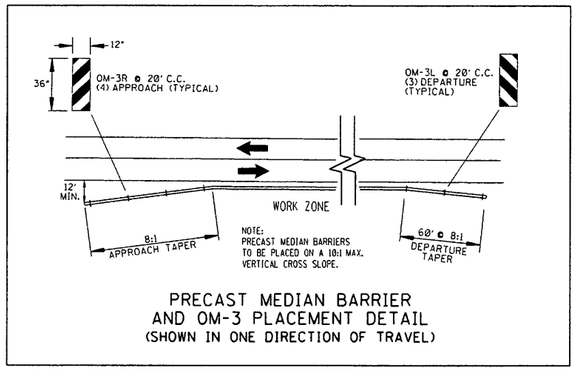
WORKING NUMBER TC-2
SHEET NUMBER 68

10/15/2008 10:20:31 TC2.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: tc2.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PRECAST MEDIAN BARRIER
AND OM-3 PLACEMENT DETAIL
(SHOWN IN ONE DIRECTION OF TRAVEL)

REVISION	BY	DATE
Rev SR 178 intersect & channel TCP	F&H	10/10/08

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

PHASE 1

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TC-3

FILENAME: tc3.dgn

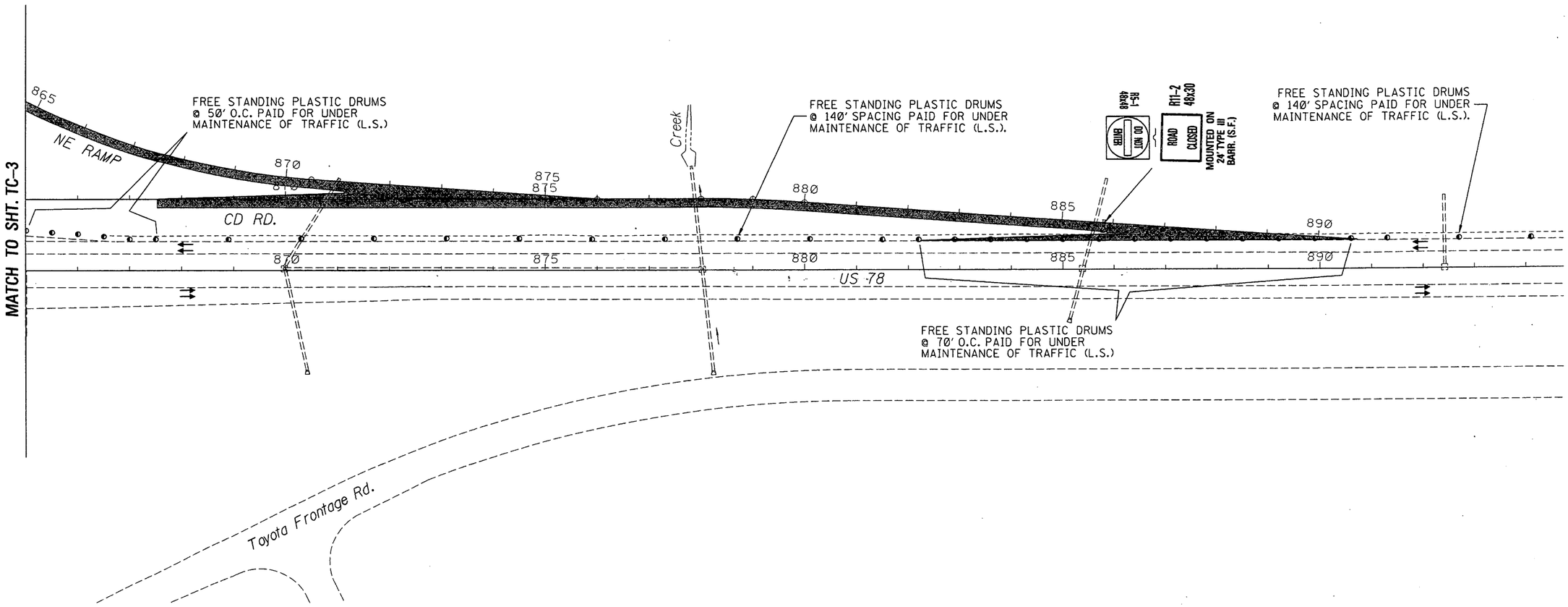
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER 69

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 10:20:38 TC3.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



LEGEND

- TRAFFIC FLOW
- CONSTRUCT THIS PHASE
- CONSTRUCT UNDER TRAFFIC
- FREE STANDING PLASTIC DRUM
- SIGN
- TYPE III BARRICADE

N

0 100 200 300

SCALE: 1"=100'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

PHASE 1

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: TC-4

SHEET NUMBER: 70

FILENAME: tc4.dgn

DESIGN TEAM: F&H, Inc. CHECKED DATE

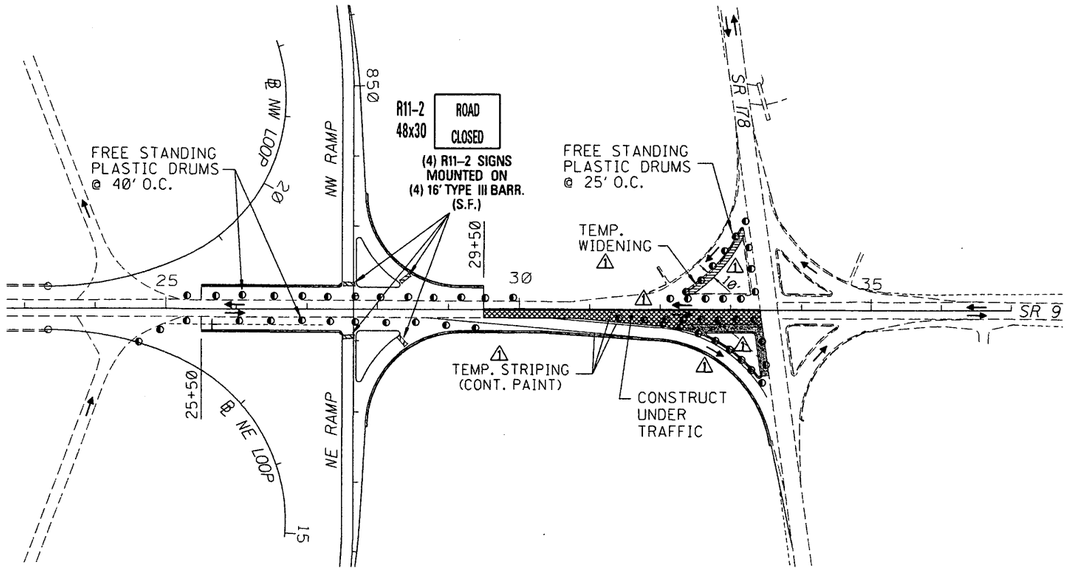
REVISION BY DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

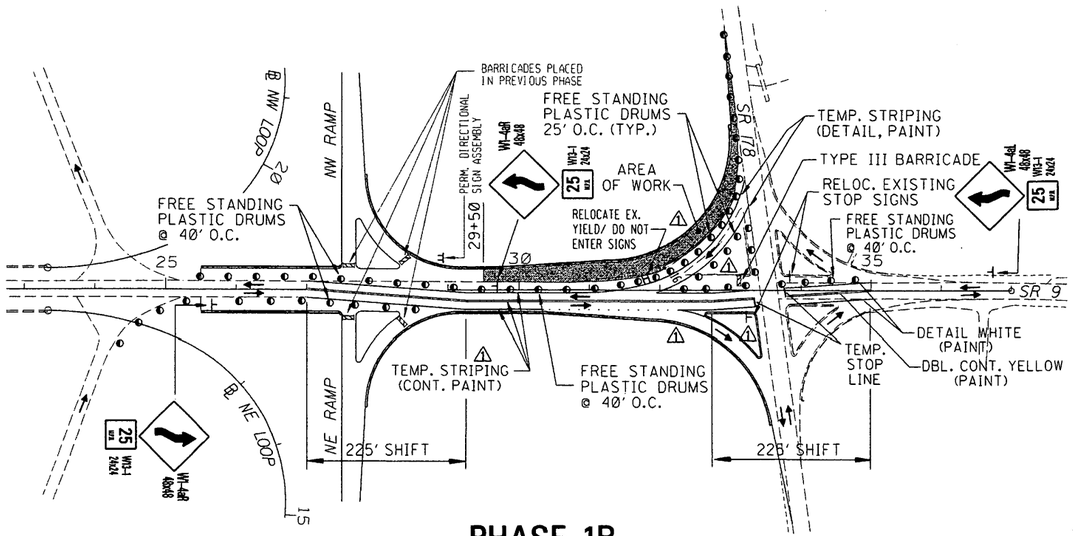
08/13/2008 09:48:41 AFC4.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PHASE 1A



PHASE 1B

LEGEND

- TRAFFIC FLOW
- CONSTRUCT THIS PHASE
- CONSTRUCT UNDER TRAFFIC
- FREE STANDING PLASTIC DRUM
- SIGN
- TYPE III BARRICADE

TRAFFIC CONTROL PHASING NOTES

PHASE 1A

⚠ 1) SHIFT NB SR 9 TRAFFIC TURNING ONTO EB SR 178 TO THE NEWLY CONSTRUCTED PAVEMENT.

⚠ 2) COMPLETE THE WIDENING AND ISLAND CURB & GUTTER ON THE RIGHT OF SR 9 FROM APPROX. STA. 31+50 TO THE SR 178 INTERSECTION.

⚠ 3) PAVE THE RIGHT SIDE OF SR 9 (CENTERLINE RIGHT) THRU THE 12.5 mm ASPHALT LIFT FROM STA. 29+50 TO THE SR 178 INTERSECTION USING LANE CLOSURES WITH FLAGGERS (SEE STD. DWG. TCP-1 FOR DETAILS).

⚠ 4) MAINTAIN TRAFFIC FROM EB SR 178 TO SB SR 9 ALONG THE EXISTING RAMP. CONSTRUCT TEMPORARY WIDENING AS SHOWN USING FLAGGERS.

⚠ NOTE: NO WORK SHALL BE PERFORMED ON BOTH SIDES OF TRAVELWAY SIMULTANEOUSLY.

PHASE 1B

⚠ 1) SHIFT SR 9 TRAFFIC ONTO THE NEW PAVEMENT FROM RIGHT OF STA. 27+00 TO THE SR 178 INTERSECTION.

⚠ 2) SHIFT TRAFFIC TURNING FROM EB SR 178 TO SB SR 9 ONTO THE TEMPORARY WIDENING.

⚠ 3) CONSTRUCT A PORTION OF THE LEFT SIDE OF SR 9 FROM STA. 29+50 TO APPROX. STA. 32+00 THRU THE 12.5mm ASPHALT LIFT.

⚠ 4) CONSTRUCT PROPOSED RAMP FOR EB 178 TO SB SR 9 TRAFFIC THRU THE 12.5mm ASPHALT LIFT.

0 100 200 300

SCALE: 1"=100'

DATE	REVISION	BY
10/10/08	New SR 178 intersect. & changed TCP	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

PHASE 1A & 1B

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TC-5

FILENAME: tc5.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER 71

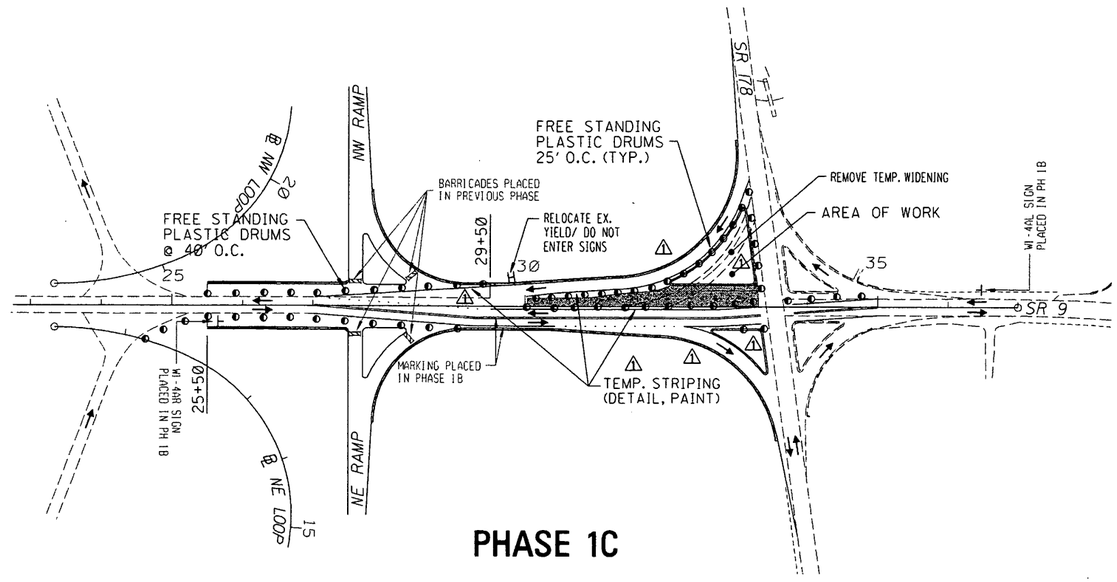
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2009 10:20:43 TC5_1A&1B.DGN

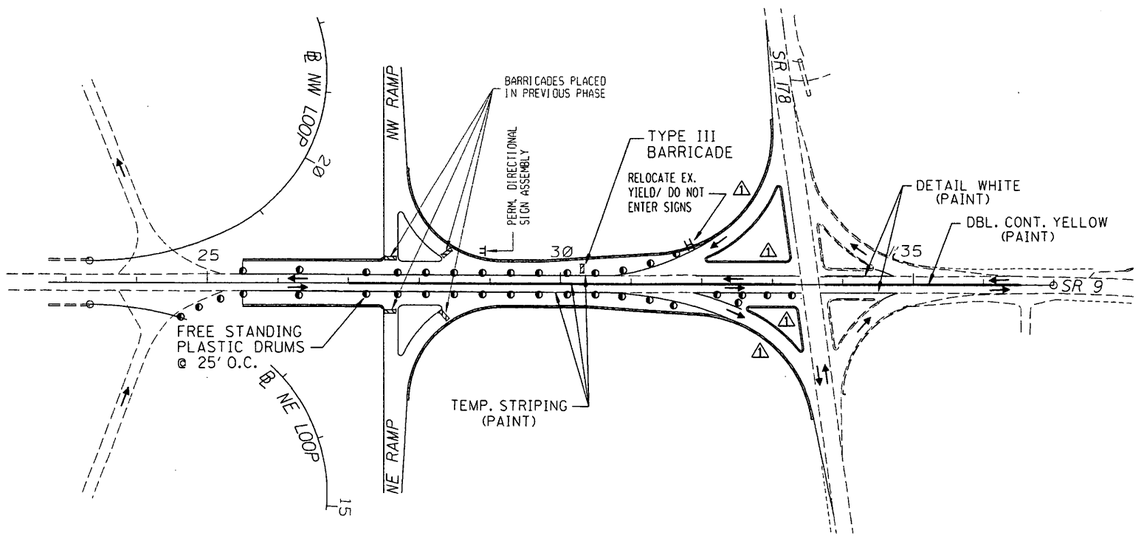
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

Barry Robertson



PHASE 1C



PHASE 1D

TRAFFIC CONTROL PHASING NOTES

PHASE 1C

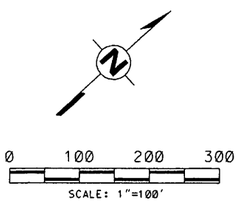
⚠1 1) SHIFT EB SR 178 TRAFFIC TURNING ONTO SB SR 9 FROM THE TEMPORARY WIDENING TO THE NEWLY CONSTRUCTED PAVEMENT.

⚠2 2) MAINTAIN SR 9 TRAFFIC IN THE PHASE 1B PATTERN AND CONSTRUCT THE REMAINING LEFT SIDE OF SR 9 FROM APPROXIMATELY STA. 30+00 TO THE INTERSECTION WITH SR 178 THRU THE 12.5 mm ASPHALT LIFT.

3) CONSTRUCT THE ISLAND CURB AND GUTTER ON THE LEFT SIDE OF SR 9 AT THE INTERSECTION OF SR 178.

PHASE 1D

⚠1 1) SHIFT SR 9 TRAFFIC BACK TO THE ORIGINAL PATTERN. EB SR 178 TRAFFIC ENTERING SB SR 9 AND NB SR 9 EXITING ONTO EB SR 178 USES THE NEW RAMPS.



⚠

BY	REVISION	DATE
F&H	Rev SR 178 intersect & changed TCP	10/10/08

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

PHASE 1C & 1D

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: TC-6

FILENAME: tc6.dgn

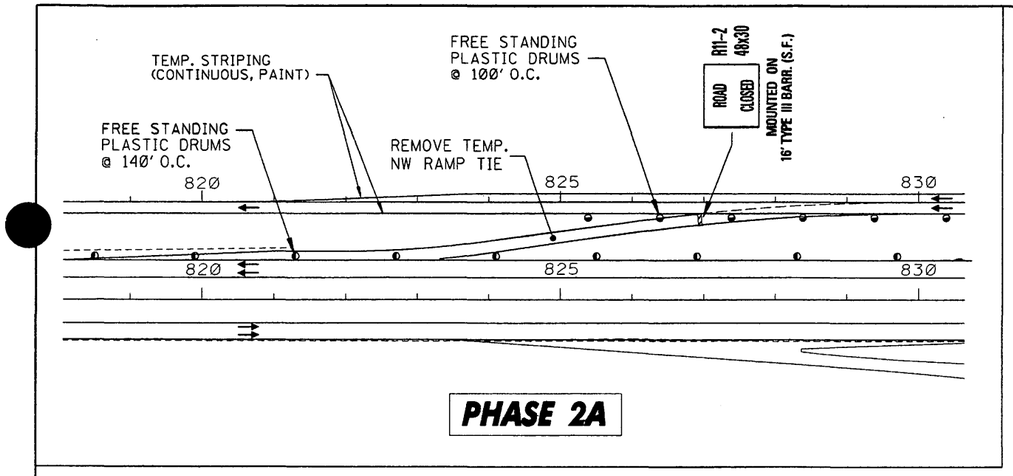
DESIGN TEAM F&H, Inc. CHECKED DATE

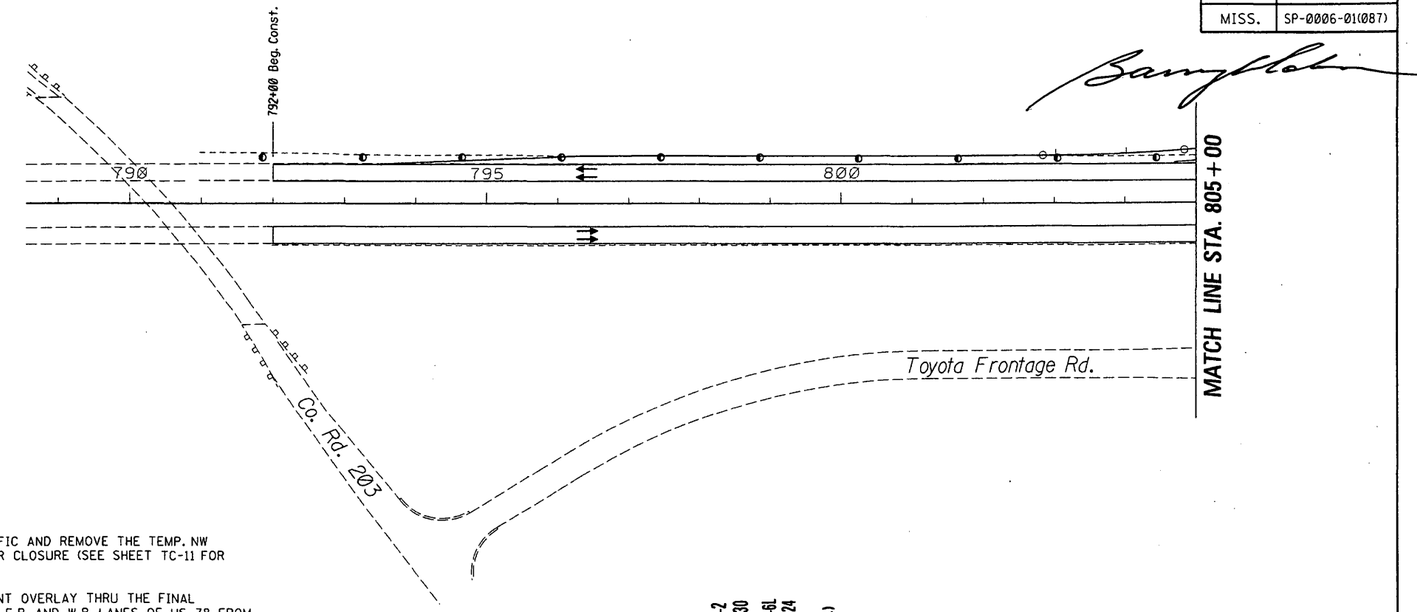
SHEET NUMBER: 72

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: tc6.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
10/15/2008 10:20:46 TC6_1CD.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)





TRAFFIC CONTROL PHASING NOTES

PHASE 2

1) OPEN THE SR 9 NW AND NE RAMPS TO TRAFFIC. WESTBOUND US 78 TO TOYOTA DRIVE USES THE NE RAMP AND NORTHBOUND SR 9 TO WESTBOUND US 78 USES THE NW RAMP AND THE TEMP NW RAMP TIE TO US 78. CLOSE AND REMOVE THE EXISTING WESTBOUND ENTRANCE AND EXIT RAMPS.

2) CONSTRUCT THE FOLLOWING ROADWAYS THRU THE 12.5mm ASPHALT LIFT:
CD ROAD STA. 812+85.374 TO STA. 818+00
CD ROAD STA. 835+00 TO STA. 846+50
CD ROAD STA. 856+50 TO STA. 867+50
NW LOOP STA. 10+83 TO STA. 23+56.10
NE LOOP STA. 10+00 TO STA. 22+73

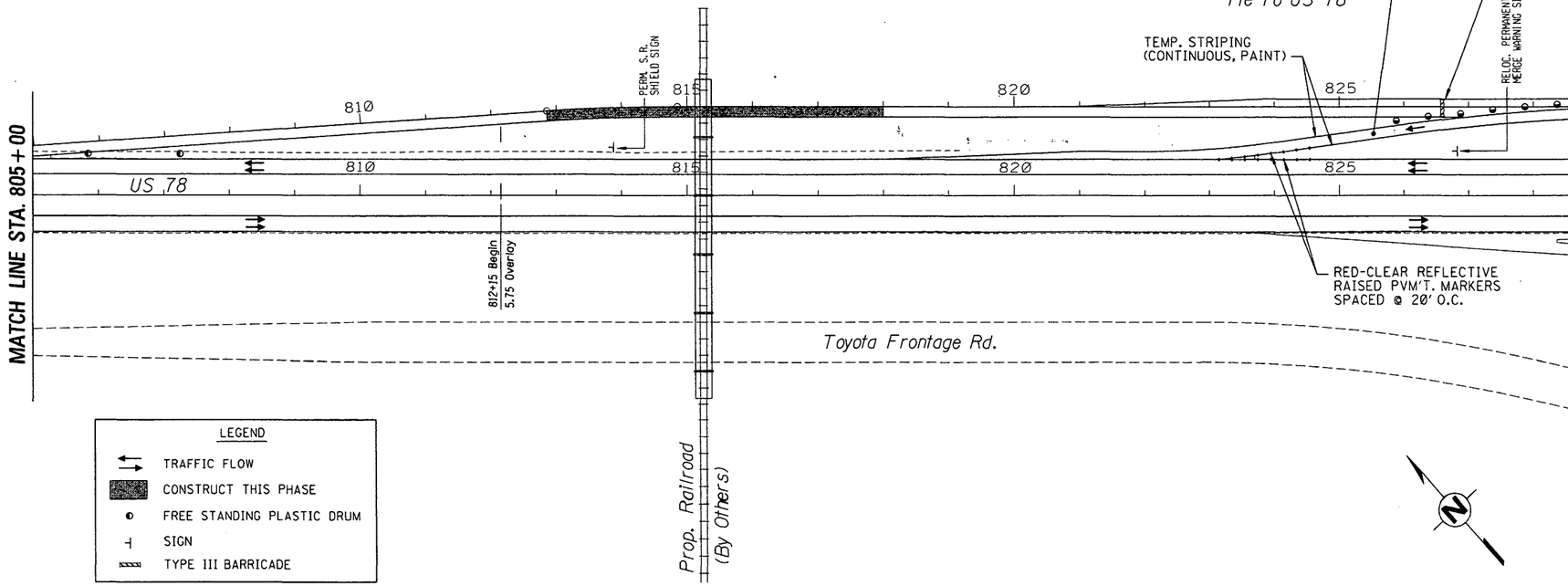
3) CONSTRUCT BOTH SIDES OF SR 9 FROM STA. 21+50 TO STA. 25+50. CONSTRUCT CURB & GUTTER AND PAVE TO MATCH EXISTING PAVEMENT. SEE SHEET TC-11 FOR DROP-OFF DETAILS.

PHASE 2A

1) OPEN THE CD ROAD TO NW RAMP TRAFFIC AND REMOVE THE TEMP. NW RAMP TIE TO US 78 USING A SHOULDER CLOSURE (SEE SHEET TC-11 FOR DETAILS).

2) PERFORM SHOULDER WORK AND PAVEMENT OVERLAY THRU THE FINAL SURFACE COURSE AS REQUIRED ON THE E.B. AND W.B. LANES OF US 78 FROM BEGINNING TO END OF PROJECT. USE SHOULDER CLOSURES WHEN CONSTRUCTION IS NEAR THE SHOULDER OF US 78 (SEE SHEET TC-11 FOR DETAILS). CLOSE THE NEAR LANE DURING EXCAVATION AND WIDENING OF THE US 78 PAVEMENT AND DURING PAVING OPERATIONS (SEE STD. DWG. TCP-4 AND TCP-5 FOR DETAILS).

3) CONSTRUCT THE FINAL SURFACE COURSE ON THE SW & SE RAMPS OF THE SR 9 INTERCHANGE.



LEGEND

- TRAFFIC FLOW
- CONSTRUCT THIS PHASE
- FREE STANDING PLASTIC DRUM
- SIGN
- TYPE III BARRICADE

N

0 100 200 300

SCALE: 1"=100'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

PHASE 2 & 2A

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TC-7

SHEET NUMBER 73

REVISION BY DATE

FILENAME: tc7.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 09:49:48 aKC7.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

LEGEND
- TRAFFIC FLOW
- CONSTRUCT THIS PHASE
- CONSTRUCT UNDER TRAFFIC
- FREE STANDING PLASTIC DRUM
- SIGN
- TYPE III BARRICADE

SR 178

SR 9

FREE STANDING PLASTIC DRUMS @ 40' O.C.

PERM. DIRECTIONAL SIGN ASSEMBLY

PERM. SIGN

PERM. SIGNS

PERM. GROUND MOUNTED SIGN
Blue Springs
To Magnolia Way
SPCL 90X30

TYPE III BARRICADE

TEMP. STRIPING (CONTINUOUS, PAINT)

NW RAMP

NW LOOP

NE LOOP

NE RAMP

FREE STANDING PLASTIC DRUMS @ 90' O.C.

FREE STANDING PLASTIC DRUMS @ 140' O.C.

FREE STANDING PLASTIC DRUMS @ 40' O.C.

FREE STANDING PLASTIC DRUMS @ 70' O.C.

R1-1 36" STOP
R1-2 48x30 ROAD CLOSED
MOUNTED ON 16' TYPE III BARR. (S.F.) RELOCATE TO NW LOOP FOLLOWING C & G CONSTRUCTION.

WEST M3-4 24x12
78 M1-4 24x24
M6-1L 21x15

DETOUR M4-8 24x12
WEST M3-4 24x12
78 M1-4 24x24
M5-1L 21x15

ROAD CLOSED R11-2 48x30
MOUNTED ON 16' TYPE III BARR. (S.F.)

SHIFT R9-6B 48x48
ROAD CLOSED R11-2 48x30
MOUNTED ON 16' TYPE III BARR. (S.F.)

840 845 850 855 860

CD. RD.

US 78

BLUE SPRINGS RD

SW RAMP

SE RAMP

MATCH TO SHT. TC-7

MATCH TO SHT. TC-9

0 100 200 300
SCALE: 1"=100'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL
PHASE 2

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER TC-8
SHEET NUMBER 74

BY	REVISION	DATE
F&H	Revised SR 178 intersection	10/2008

FILENAME: tc8.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

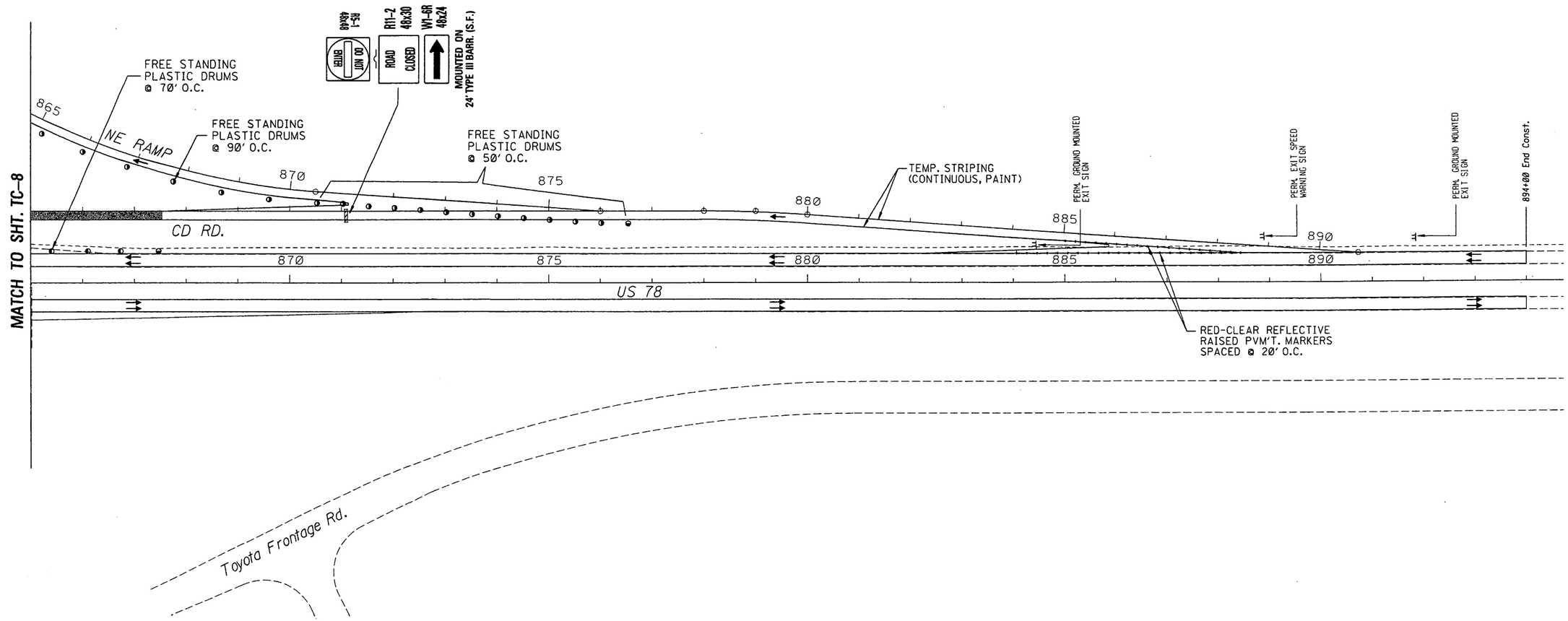
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 10:20:58 TC8.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

LEGEND

- TRAFFIC FLOW
- CONSTRUCT THIS PHASE
- CONSTRUCT UNDER TRAFFIC
- FREE STANDING PLASTIC DRUM
- SIGN
- TYPE III BARRICADE



0 100 200 300

SCALE: 1"=100'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

PHASE 2

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: TC-9
SHEET NUMBER: 75

FILENAME: tc9.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

REVISION | BY | DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2009 09:51:33 APC9.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

TRAFFIC CONTROL PHASING NOTES

PHASE 3

1) OPEN THE NW AND NE LOOPS AND THE CD ROAD FROM STA. 830+00 TO STA. 871+00.

2) CONSTRUCT THE CHANNELIZATION ISLAND AT THE NW RAMP INTERSECTION WITH SR 9.

3) USING FLAGGERS TO DIRECT TRAFFIC, CONSTRUCT THE FINAL SURFACE COURSE ON THE FOLLOWING:
CD ROAD APPROX. STA. 805+00 TO STA. 885+75
NW RAMP, NE RAMP, NW LOOP & NE LOOP

PHASE 4A (SEE SHEET TC-1 FOR TYPICAL DETAILS)

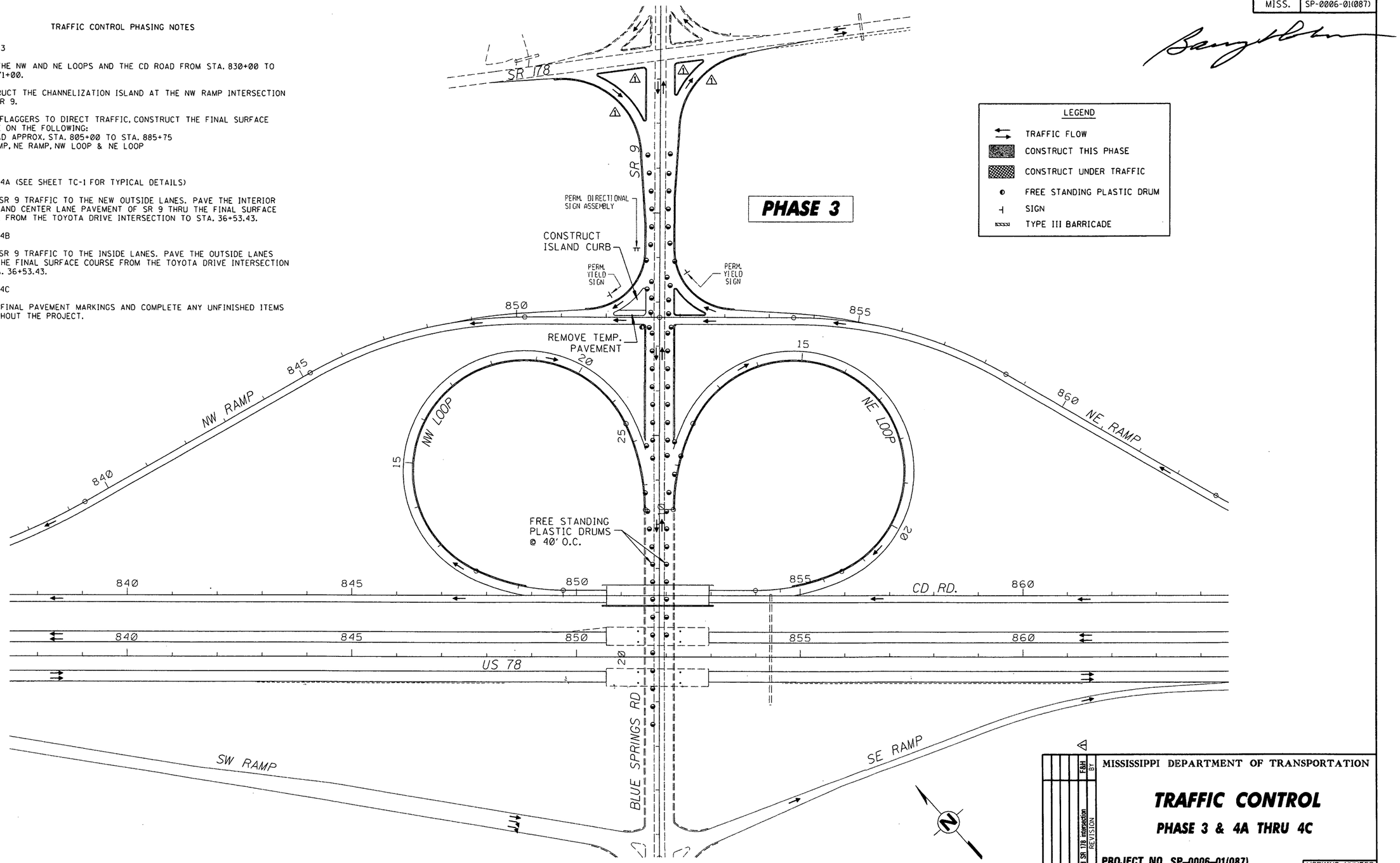
SHIFT SR 9 TRAFFIC TO THE NEW OUTSIDE LANES. PAVE THE INTERIOR LANES AND CENTER LANE PAVEMENT OF SR 9 THRU THE FINAL SURFACE COURSE FROM THE TOYOTA DRIVE INTERSECTION TO STA. 36+53.43.

PHASE 4B

SHIFT SR 9 TRAFFIC TO THE INSIDE LANES. PAVE THE OUTSIDE LANES THRU THE FINAL SURFACE COURSE FROM THE TOYOTA DRIVE INTERSECTION TO STA. 36+53.43.

PHASE 4C

APPLY FINAL PAVEMENT MARKINGS AND COMPLETE ANY UNFINISHED ITEMS THROUGHOUT THE PROJECT.



PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2006 10:20:52 TC10.DGN

BY	DATE	REVISION
F&H	10/4/06	Revised SR 178 intersection

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

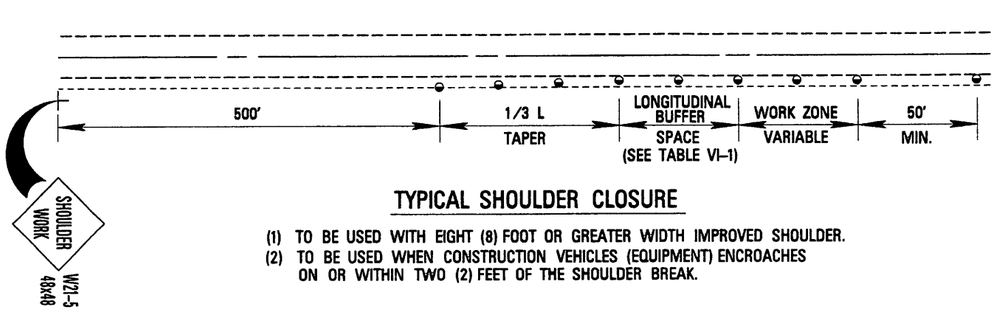
PHASE 3 & 4A THRU 4C

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: TC-10
SHEET NUMBER: 76

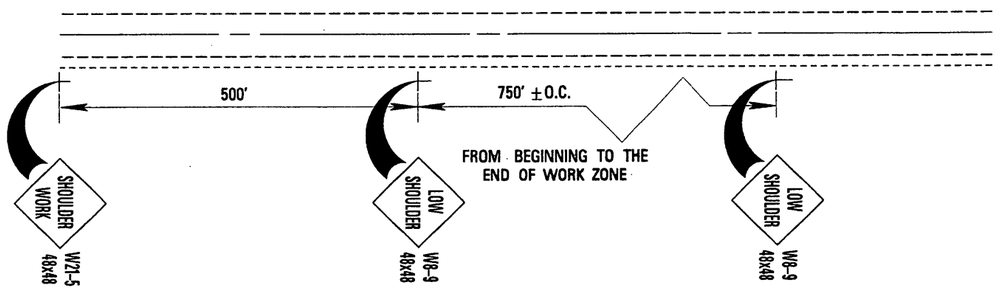
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DESIGN TEAM F&H, Inc. CHECKED _____ DATE _____

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



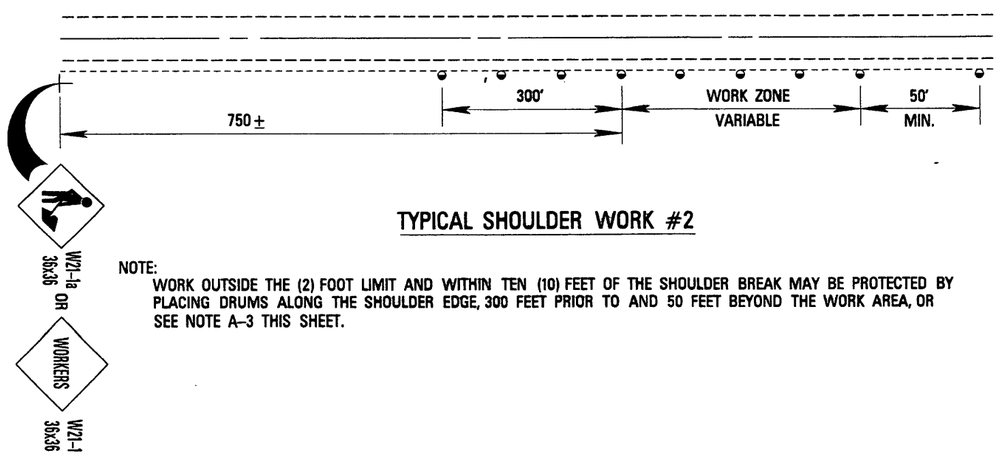
TYPICAL SHOULDER CLOSURE

(1) TO BE USED WITH EIGHT (8) FOOT OR GREATER WIDTH IMPROVED SHOULDER.
(2) TO BE USED WHEN CONSTRUCTION VEHICLES (EQUIPMENT) ENCROACHES ON OR WITHIN TWO (2) FEET OF THE SHOULDER BREAK.



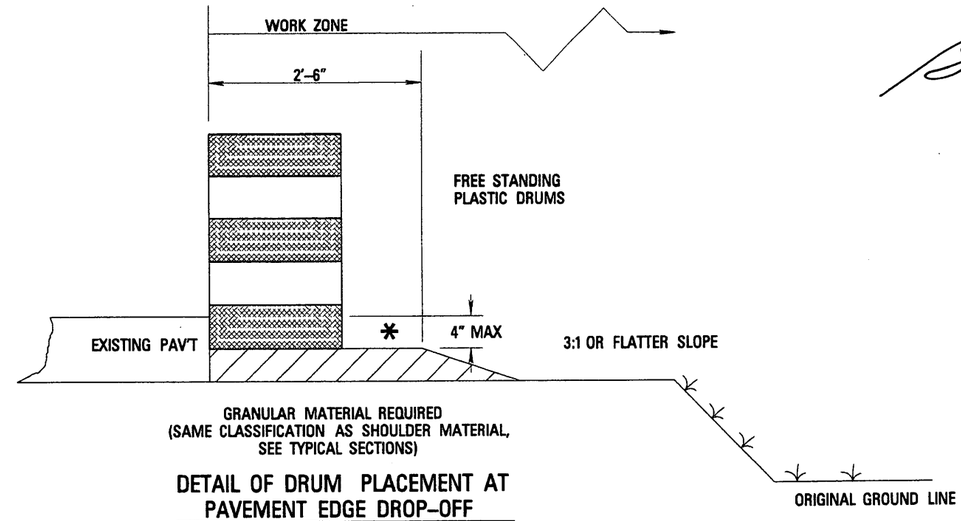
TYPICAL SHOULDER WORK #1

(SEE NOTE A-1 THIS SHEET)



TYPICAL SHOULDER WORK #2

NOTE:
WORK OUTSIDE THE (2) FOOT LIMIT AND WITHIN TEN (10) FEET OF THE SHOULDER BREAK MAY BE PROTECTED BY PLACING DRUMS ALONG THE SHOULDER EDGE, 300 FEET PRIOR TO AND 50 FEET BEYOND THE WORK AREA, OR SEE NOTE A-3 THIS SHEET.



DETAIL OF DRUM PLACEMENT AT PAVEMENT EDGE DROP-OFF

NOTES

* A. PAVEMENT EDGE DROP-OFF

1. IF LESS THAN TWO AND ONE QUARTER (2.25) INCHES-NO PROTECTION REQUIRED. PLACE A SHOULDER WORK SIGN (W21-5) 500 FEET IN ADVANCE OF WORK ZONE SHOULDER AND A LOW SHOULDER SIGN (W8-9) AT THE BEGINNING AND THROUGHOUT THE WORK ZONE @ (750' ± O.C.).
2. TWO AND ONE QUARTER TO FOUR INCHES-PLACE DRUMS, VERTICAL PANELS OR BARRICADES EVERY 100 FEET ON TANGENT SECTIONS FOR SPEEDS OF 50 MILES PER HOUR OR GREATER. CONES MAY BE USED IN PLACE OF DRUMS, PANELS, AND BARRICADES DURING DAYLIGHT HOURS. FOR TANGENT SECTIONS WITH SPEEDS LESS THAN 50 MILES PER HOUR AND FOR CURVES, DEVICES SHOULD BE PLACED EVERY 50 FEET. SPACING FOR TAPERS SHOULD BE IN ACCORDANCE WITH THE M.U.T.C.D. (1/3 L, WHERE L IS THE TAPER LENGTH IN FEET.)
3. GREATER THAN FOUR (4) INCHES-POSITIVE SEPARATION OR WEDGE WITH 3:1 OR FLATTER SLOPE NEEDED. IF THERE IS EIGHT (8) FEET OR MORE DISTANCE BETWEEN THE EDGE OF TRAVEL LANE AND DROP-OFF, THEN DRUMS, PANELS OR BARRICADES MAY BE USED. IF CONCRETE BARRIERS ARE USED, SPECIAL REFLECTIVE DEVICES OR STEADY BURN LIGHTS SHOULD BE USED FOR OVERNIGHT INSTALLATIONS.
4. FOR TEMPORARY CONDITIONS, DROP-OFFS GREATER THAN FOUR (4) INCHES MAY BE PROTECTED WITH DRUMS, VERTICAL PANELS OR BARRICADES FOR SHORT DISTANCES DURING DAYLIGHT HOURS WHILE WORK IS BEING DONE IN THE DROP-OFF AREA.
5. LESSER TREATMENTS THAN THOSE DESCRIBED ABOVE MAY BE CONSIDERED FOR LOW-VOLUME LOCAL STREETS.

B. DRUM SPACING

1. TANGENTS = 2 X S
2. TAPERS = L/3
   WHERE L = S X W
   L = TAPER LENGTH IN FEET
   S = SPEED IN MPH (POSTED OR 85 PERCENTILE)
   W = WIDTH OF OFFSET IN FEET

C. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.

TABLE VI-1. GUIDELINES FOR LENGTH OF LONGITUDINAL BUFFER SPACE

SPEED* (MPH)	LENGTH (FEET)
20	35
25	55
30	85
35	120
40	170
45	220
50	280
55	335
60	415
65	485

* POSTED SPEED, OFF-PEAK 85 PERCENTILE SPEED PRIOR TO WORK STARTING, OR THE ANTICIPATED OPERATING SPEED IN MPH.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL

DRUM PLACEMENT & SHOULDER CLOSURE DETAILS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

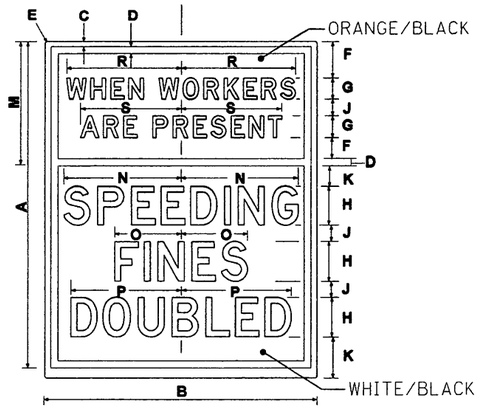
BY	REVISION	DATE

FILENAME: TC-11.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

WORKING NUMBER: TC-11
SHEET NUMBER: 77

ROADWAY DESIGN DIVISION C.A.D.D. SECTION
PLAN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



SIGN	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
STD.	60	48	3/4	1 1/4	3	3 3/4	4 Dm	7 D
	J	K	M	N	O	P	R	S
STD.	3	6 5/8	22 1/8	21	11 1/8	19 7/8	20 5/8	18

48" x 60"
(INTERSTATE USE)

SIGN	DIMENSIONS (INCHES)							
	A	B	C	D	E	F	G	H
STD.	48	36	3/4	1 1/4	3	2 1/4	3 Dm	6 D
	J	K	M	N	O	P	R	S
STD.	3	4 1/8	14 3/4	14	7 1/8	13 1/8	13 5/8	12

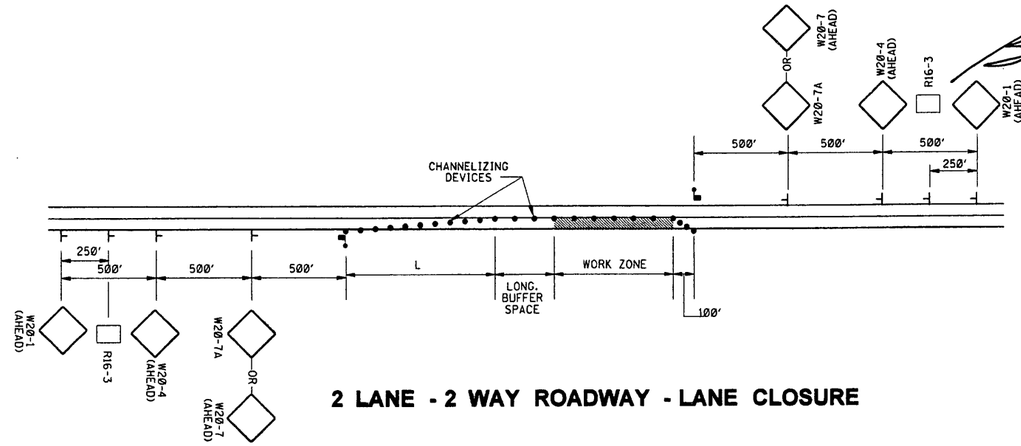
36" x 48"
(ALL OTHER HIGHWAYS)

R16-3

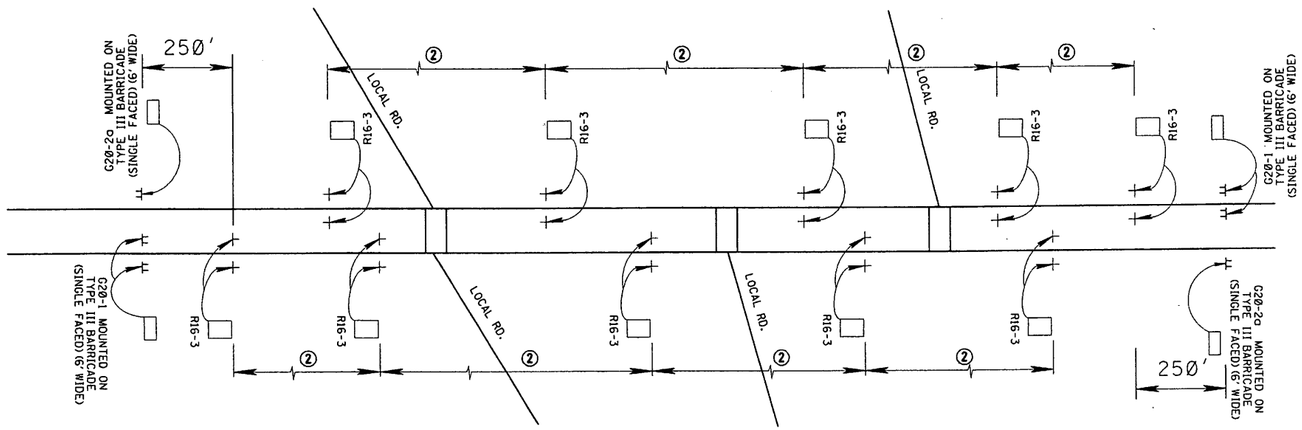
NOTES

① R16-3 SIGN TO BE PLACED AS SHOWN OR AS DIRECTED BY THE ENGINEER.

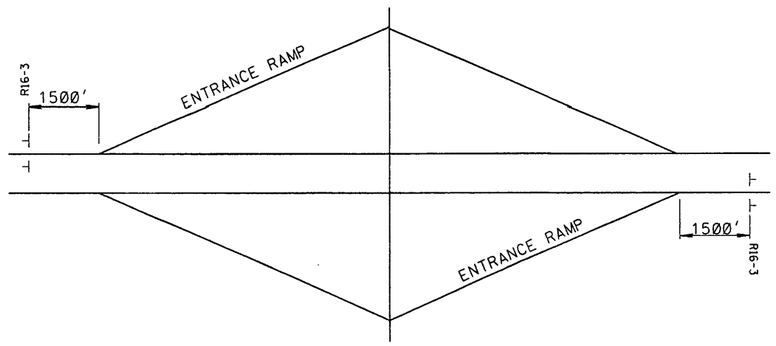
② R16-3 SIGN SHALL BE SPACED AT A MAXIMUM OF 2 MILES THROUGHOUT LENGTH OF PROJECT.



2 LANE - 2 WAY ROADWAY - LANE CLOSURE



DIVIDED HIGHWAY SHOWN
(2 LANE - 2 WAY ROADWAY SIMILAR)
(PROJECT MORE THAN 1 MILE LENGTH)



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SPEEDING FINES DOUBLED DETAIL

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: SSD-1
SHEET NUMBER: 78

FILENAME: ssd-1.dgn
DESIGN TEAM _____ CHECKED _____ DATE 07-23-04

REVISION | BY | DATE

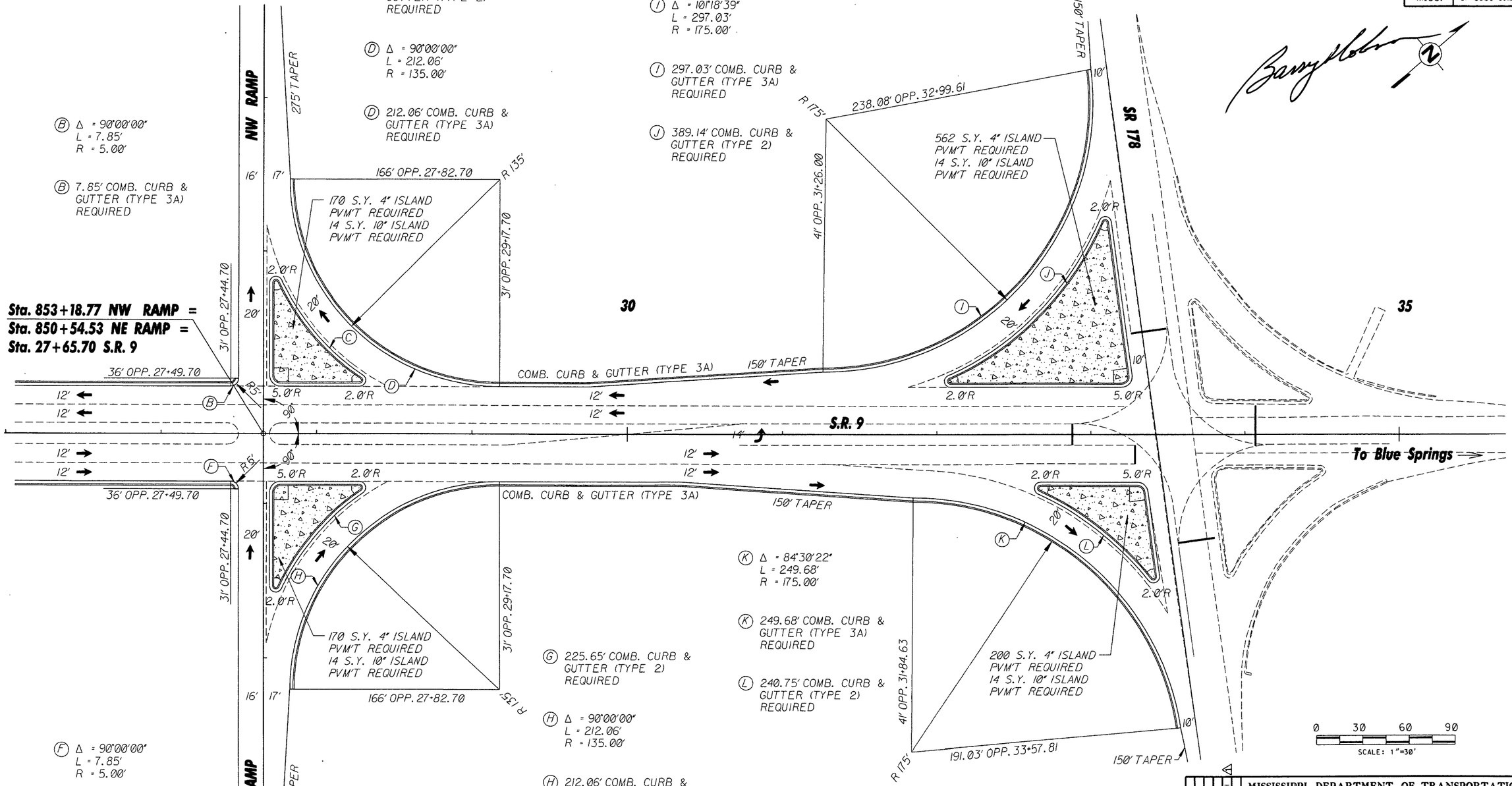
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/13/2008 09:48:27 ARED-1.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

⚠ REVISED SR 178 INTERSECTION



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

INTERSECTION DETAIL

NW & NE RAMPS @ S.R. 9 & S.R. 178 @ S.R. 9

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER ID-1

SHEET NUMBER 79

DATE	REVISION	BY
9/18/08	REV. SR 178 INTERSECTION	F&H

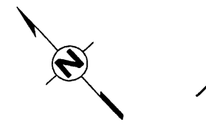
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DESIGN TEAM F&H, Inc. CHECKED DATE

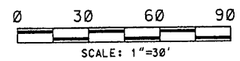
DRAWN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

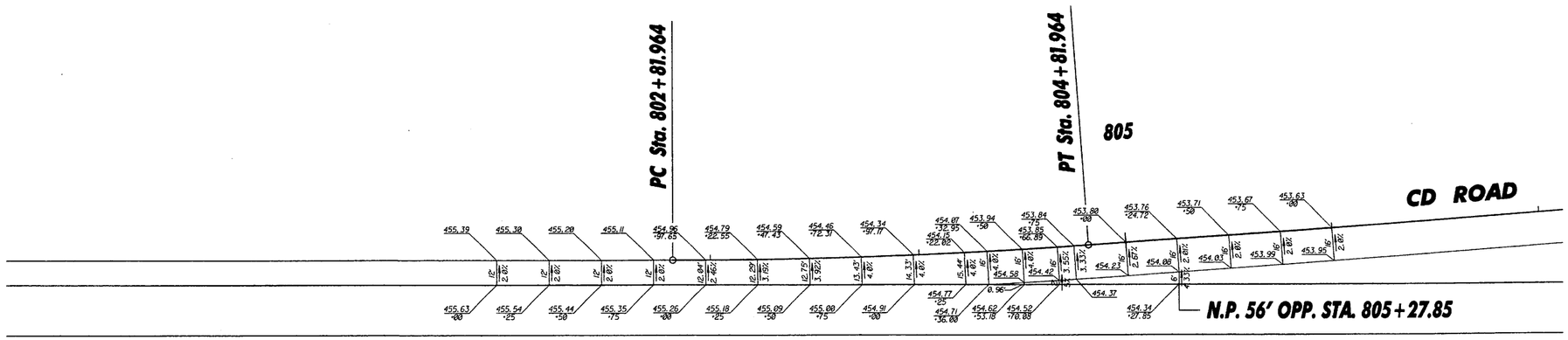
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DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: id-1.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)







PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

05/12/2008 08:37:52 FG-1.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

US 78 & CD ROAD

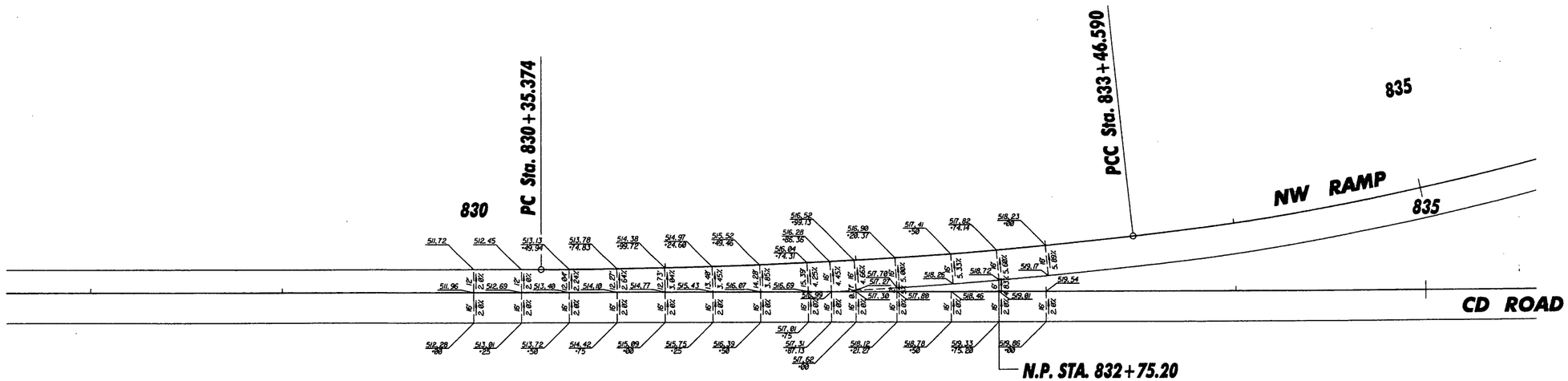
PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FG-1
SHEET NUMBER: 80

REVISION | BY | DATE

FILENAME: fg-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



0 30 60 90
SCALE: 1"=30'

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 08:37:49 FG-2.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

CD ROAD & NW RAMP

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FG-2
SHEET NUMBER: 81

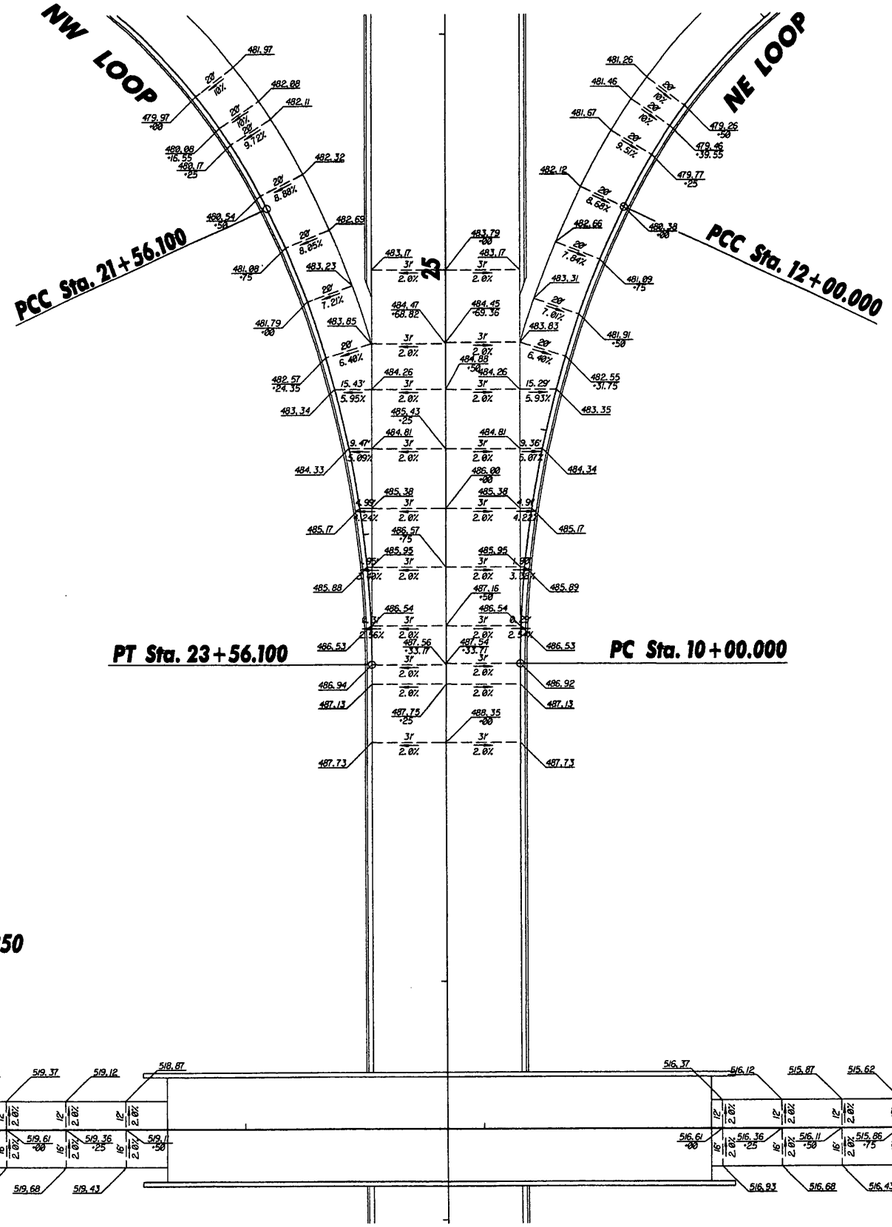
REVISION | BY | DATE

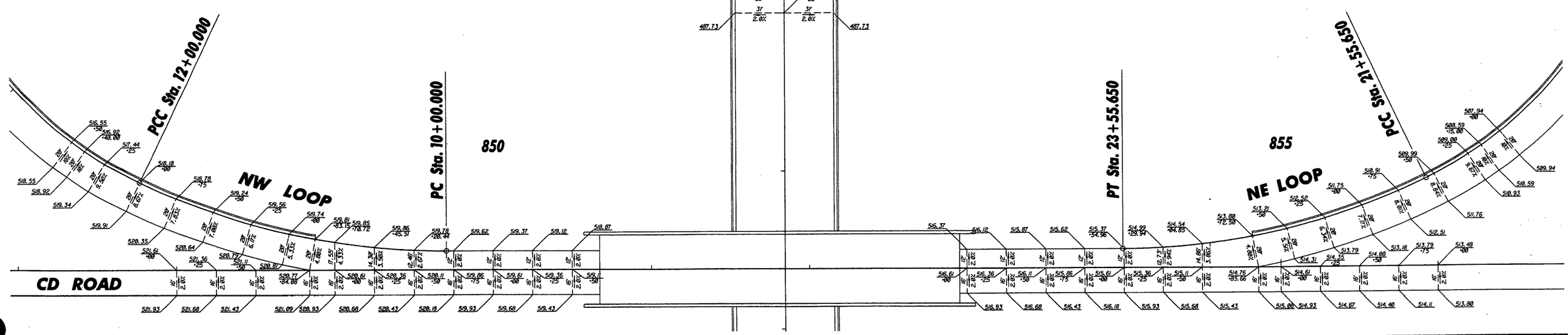
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DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: fg-2.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)







SR 9 @ BLUE SPRINGS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

CD ROAD & NW LOOP /NE LOOP

SR 9 @ BLUE SPRINGS & NW LOOP /NE LOOP

PROJECT NO. SP-0006-01(087)

COUNTY : UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
FG-3	82

BY | REVISION | DATE

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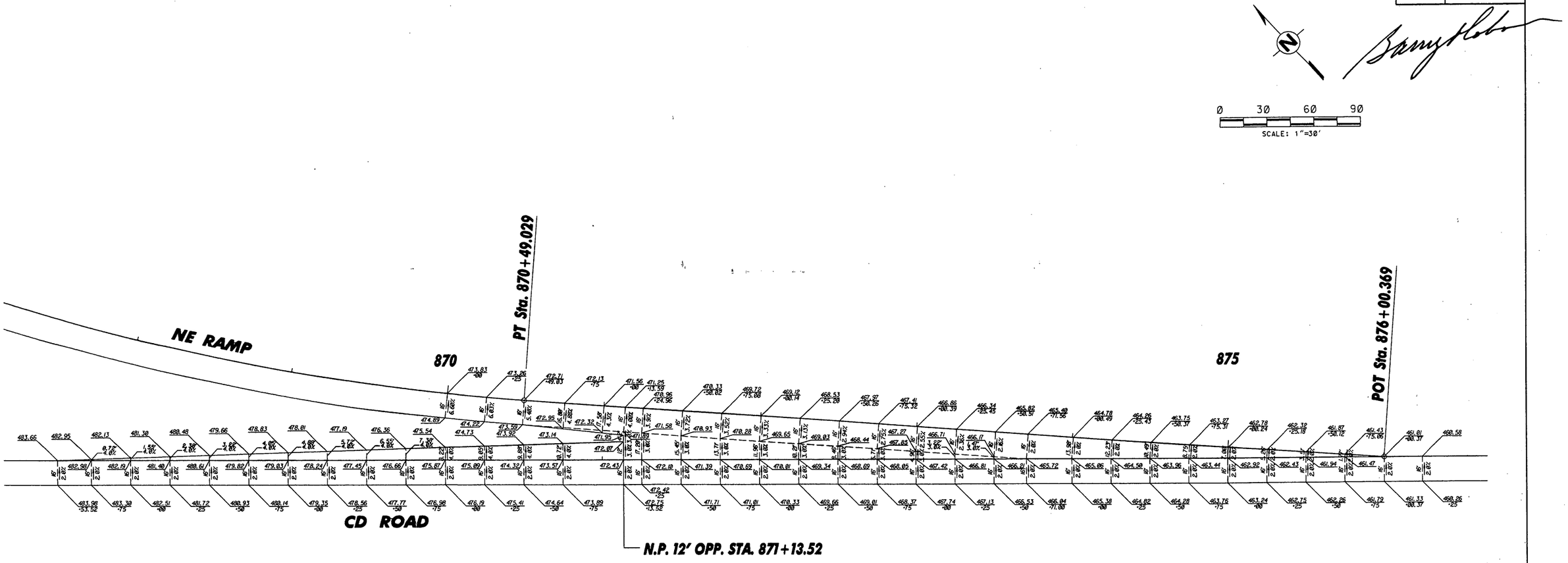
DESIGN TEAM F&H, Inc. CHECKED DATE

FLAH
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 08:37:47 FG-3.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: fg-3.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



0 30 60 90

SCALE: 1"=30'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

CD ROAD & NE RAMP

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FG-4

SHEET NUMBER: 83

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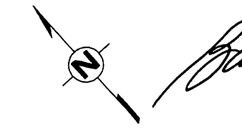
DESIGN TEAM F&H, Inc. CHECKED DATE

REVISION | BY | DATE

ROADWAY PLAN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

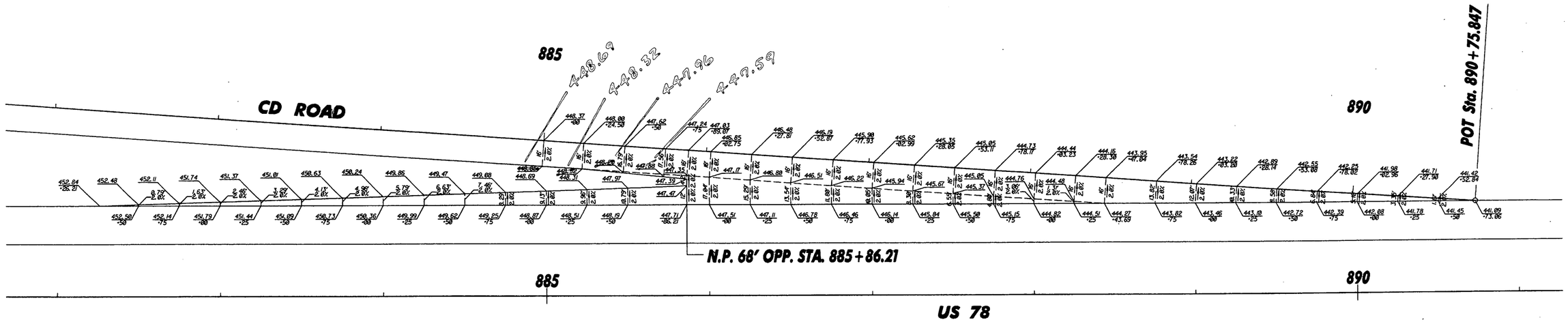
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STATE	PROJECT NO.
MISS.	SP-0006-01(087)



0 30 60 90

SCALE: 1"=30'



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

US 78 & CD ROAD

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FG-5

SHEET NUMBER: 84

REVISION | BY | DATE

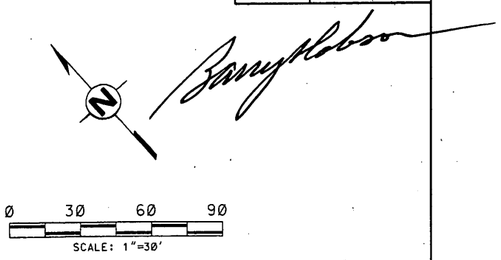
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DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 08:37:44 FG-5.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

08/15/2008 13:17:48 FG-6.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

SR 9 @ BLUE SPRINGS & NW RAMP /NE RAMP

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

BY	REVISION	DATE

WORKING NUMBER	SHEET NUMBER
FG-6	85

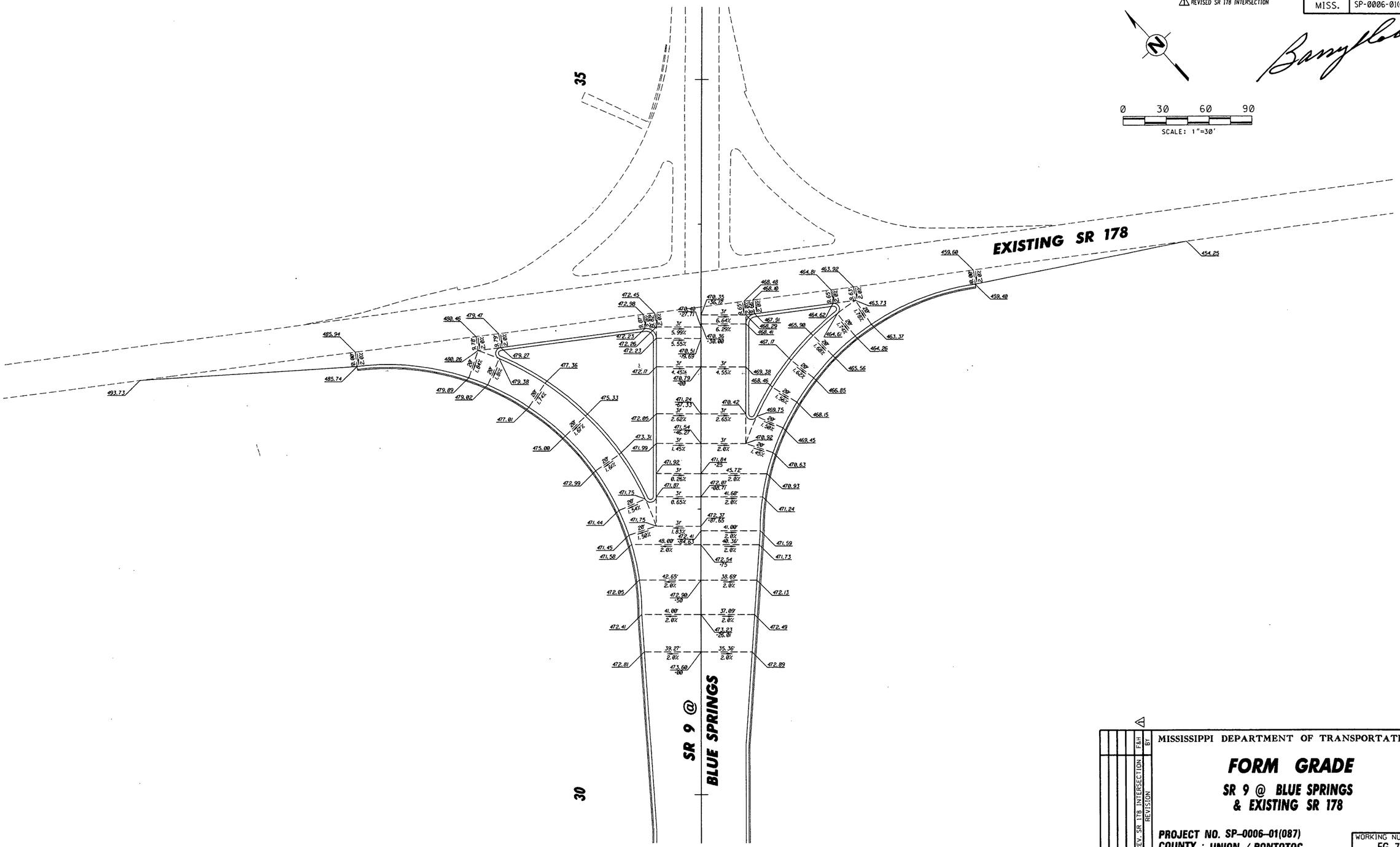
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DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: fg-6.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

⚠ REVISED SR 178 INTERSECTION



PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
10/15/2008 14:21:00 FG-7.DGN

REV. SR 178 INTERSECTION REVISION	F&H	BY
10/18/08 DATE		

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

SR 9 @ BLUE SPRINGS & EXISTING SR 178

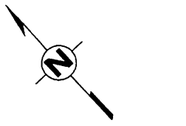
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COUNTY : UNION / PONTOTOC

WORKING NUMBER: FG-7

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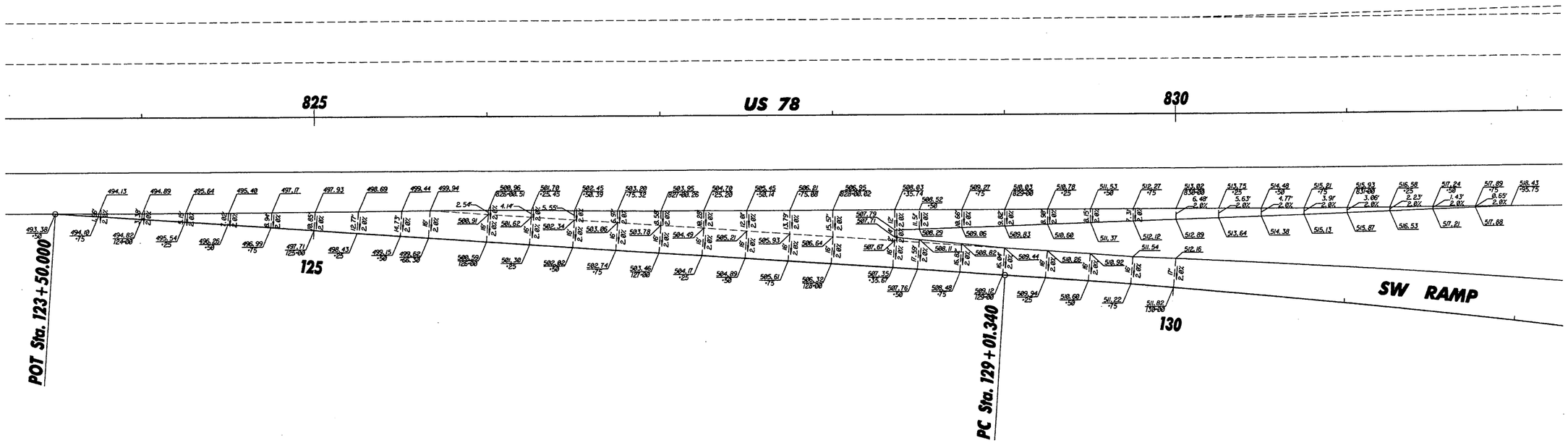
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DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



0 30 60 90

SCALE: 1"=30'



PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 08:37:37 FG-8.DGN

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FORM GRADE

US 78 & SW RAMP

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FG-8

FILENAME: fg-8.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 87

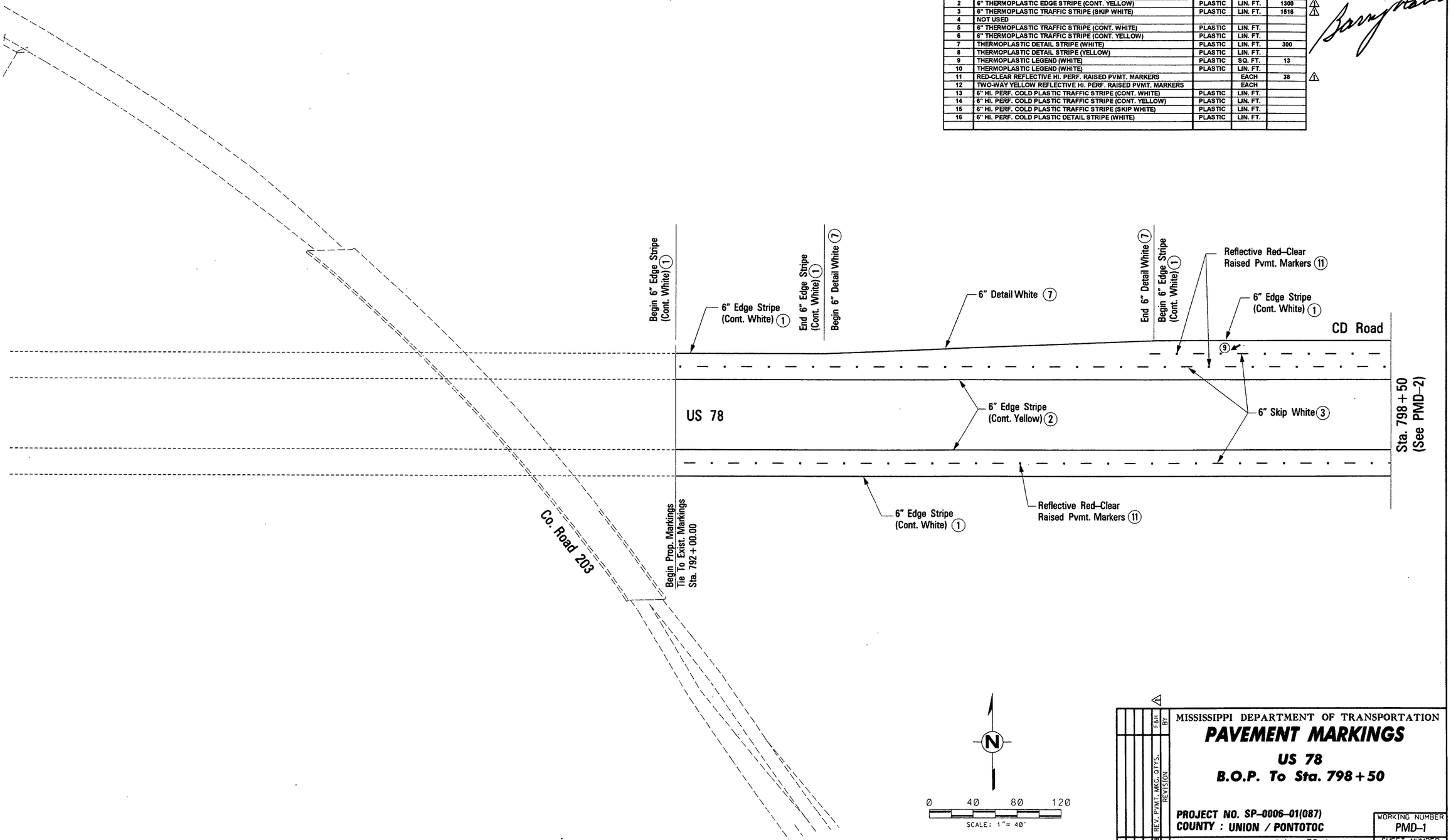
DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: fg-8.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	1000
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	1300
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	1516
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	300
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	13
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	38
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

10/15/2008 11:13:51 PMD-1_US78.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

B.O.P. To Sta. 798+50

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

DATE	REVISION	BY
10/15/08	REV. PVMT. MKG. QTYS.	F&H

WORKING NUMBER: PMD-1
SHEET NUMBER: 88

FILENAME: pmd-1_us78.dgn
DESIGN TEAM: F&H, Inc. CHECKED DATE

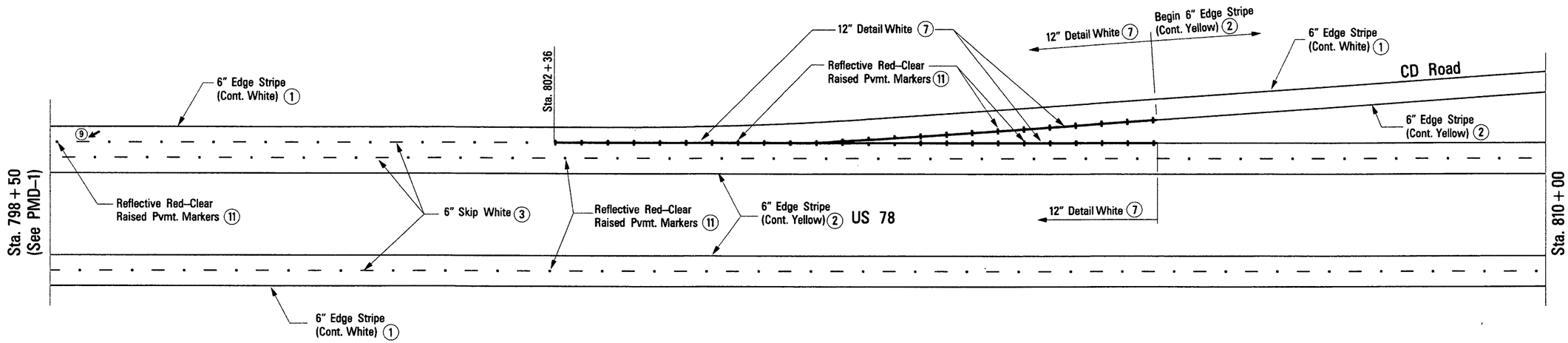
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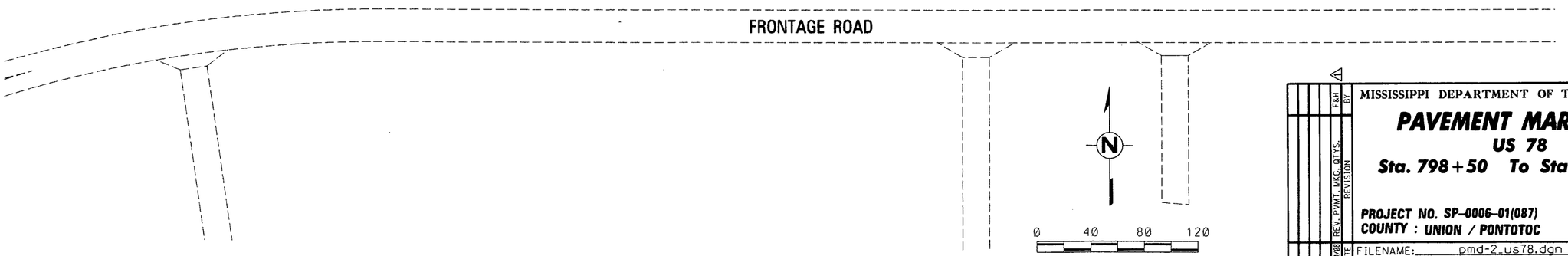
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	2604
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	2602
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	2686
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	1456
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	13
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	142
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	





MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 798+50 To Sta. 810+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: PMD-2

SHEET NUMBER: 89

REVISION: REV. PVMT. MKG. QTYS. — DATE: 08/18/08 — F&H BT

FILENAME: pmd-2_us78.dgn

DESIGN TEAM: F&H, Inc. CHECKED: DATE:

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

0:\5/2008 11:13:54 PMD-2_US78.DGN

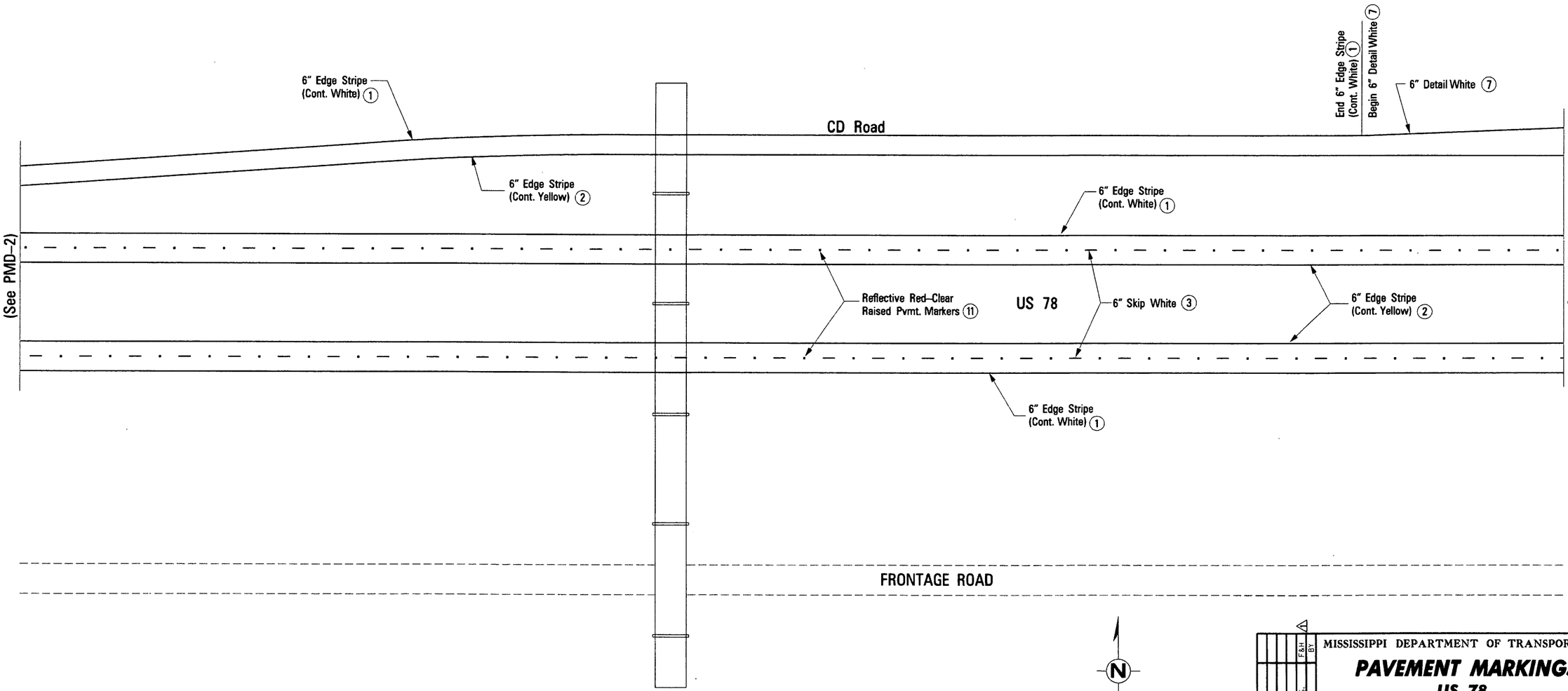
DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-2_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	3585
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	3751
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	2500
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	165
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	63
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



N

0 40 80 120

SCALE: 1"= 40'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 810 + 00 To Sta. 822 + 50

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-3

SHEET NUMBER: 90

10/10/08 DATE | REV. PVMT. MKG. QTY'S. REVISION | F&H BY

FILENAME: pmd-3_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

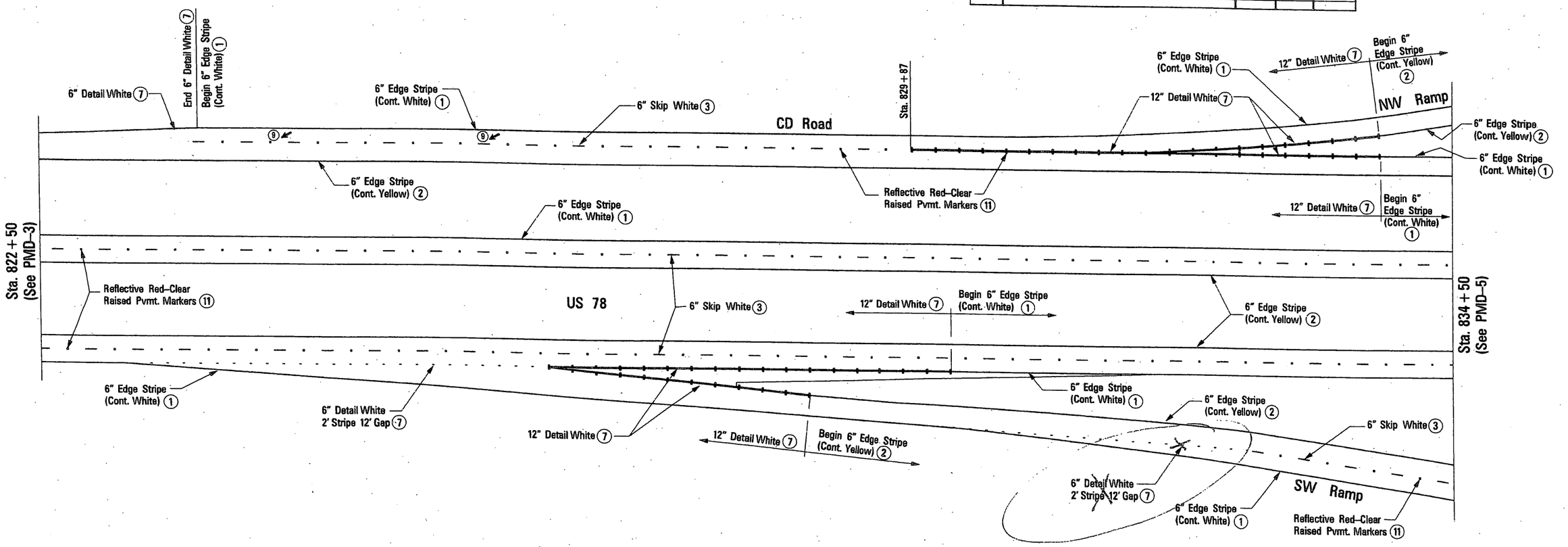
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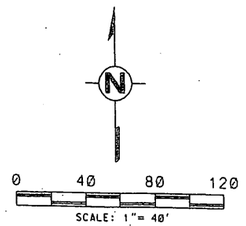
DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-3_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	3984
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	4216
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	3101
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	2664
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	28
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	200
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	





MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 822+50 To Sta. 834+50

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER	SHEET NUMBER
PMD-4	91

FILENAME: pmd-4_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

NO.	REV. PVMT. MKG. QTYS. REVISION	DATE	BY

DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-4_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

P.W. ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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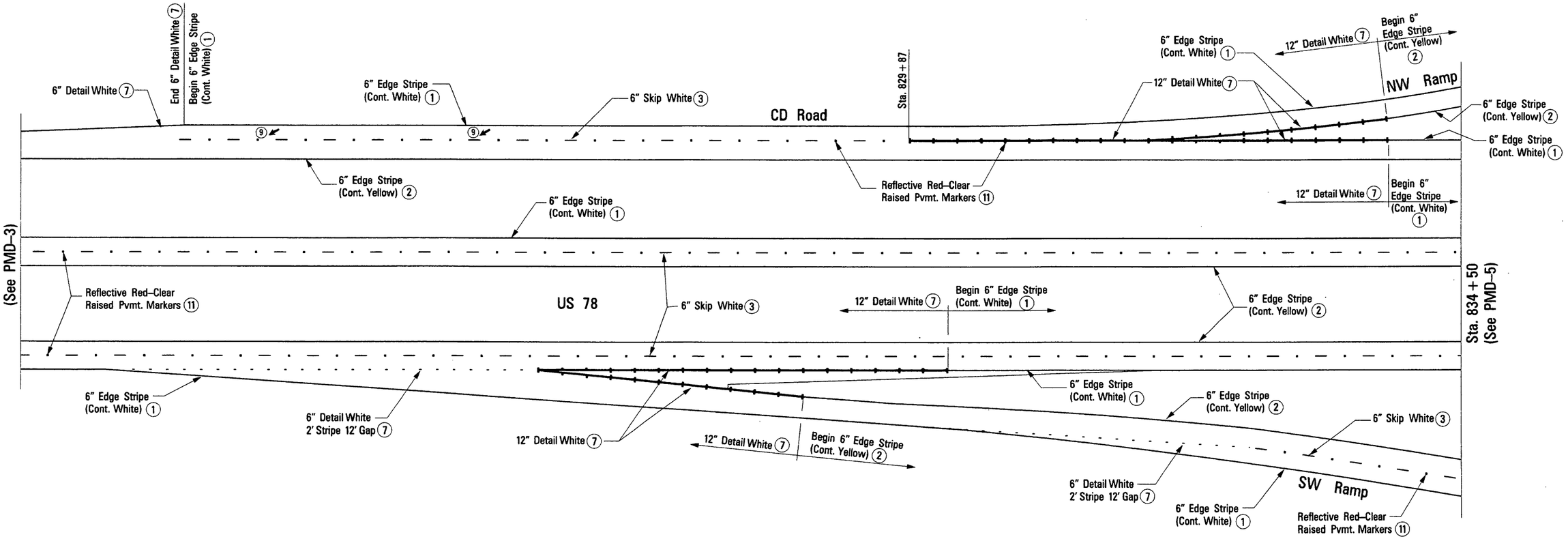
ADDENDUM

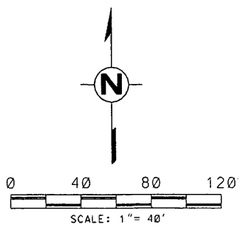
STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	3964
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	4216
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	3181
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	2584
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	25
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	200
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 822+50 To Sta. 834+50

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

DATE	REVISION	REV. PVMT. MKG. QTYS.	F&H	BY
10/18/08		⚠		

FILENAME: pmd-4_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

WORKING NUMBER: PMD-4

SHEET NUMBER: 91

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

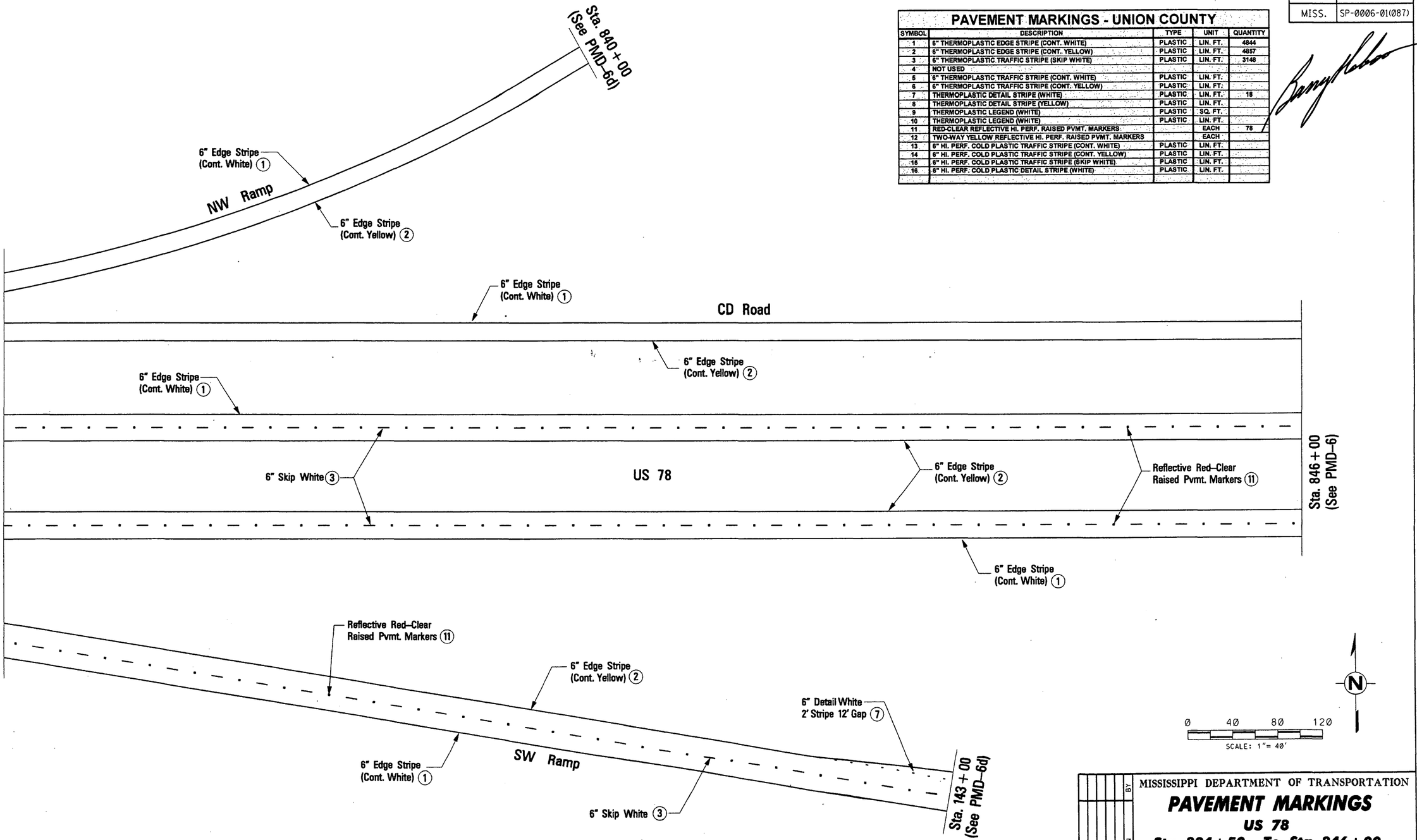
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DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-4_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	4844
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	4857
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	3148
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	18
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	78
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 834+50 To Sta. 846+00

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-5
SHEET NUMBER: 92

FILENAME: pmd-5_us78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

BY | REVISION | DATE

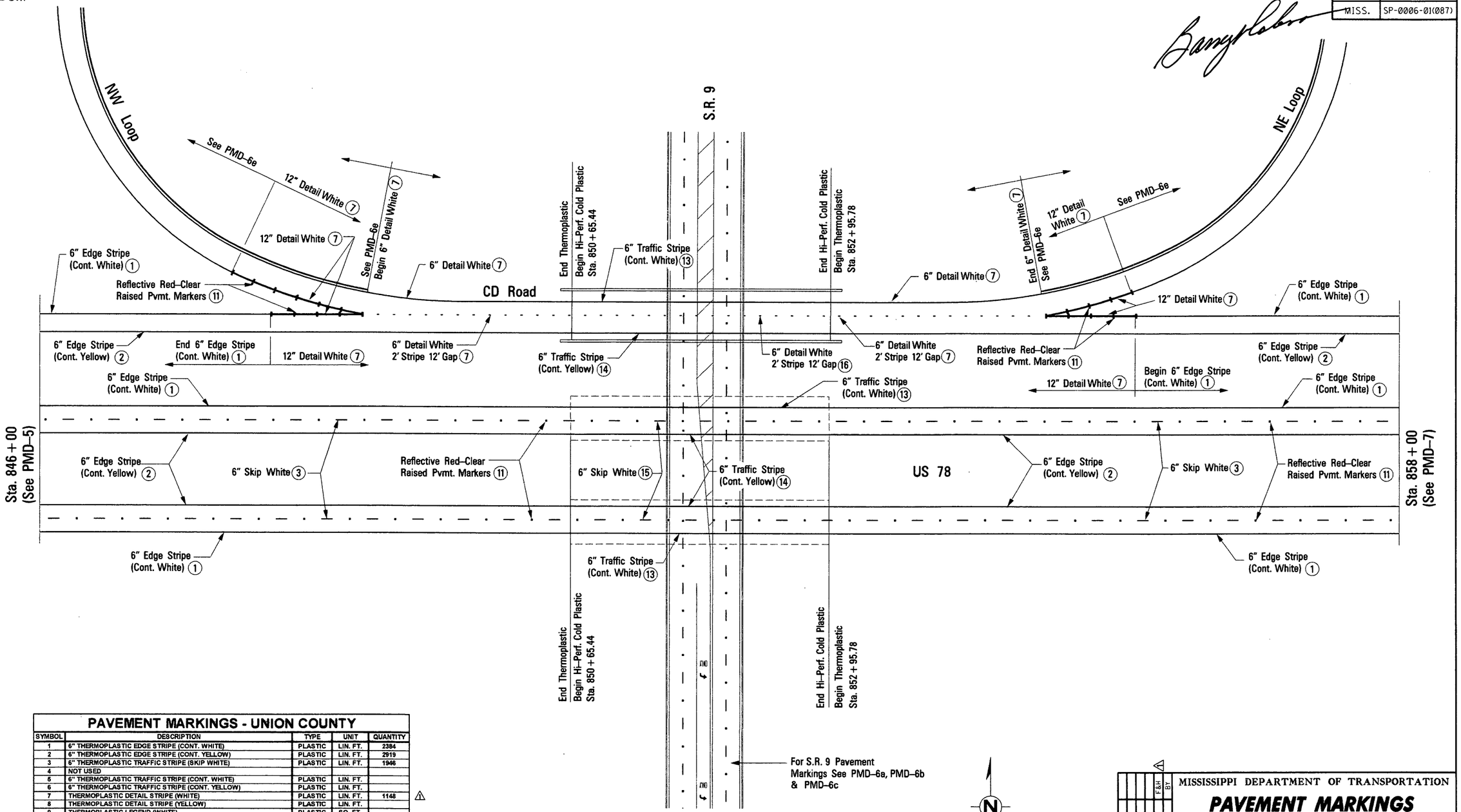
PLAN
MISSISSIPPI ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

8/12/2008 9:24 AM PMD-5_US78.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-5_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	2384
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	2919
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	1946
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	1148
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	100
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	684
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	684
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	456
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	32

BY	REVISION	DATE
F&H	REV. PVMT. MRG. QTYS.	10/8/08

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 846 + 00 To Sta. 858 + 00

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6

FILENAME: pmd-6_us78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 93

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 11:14:01 PMD-6_US78.DGN

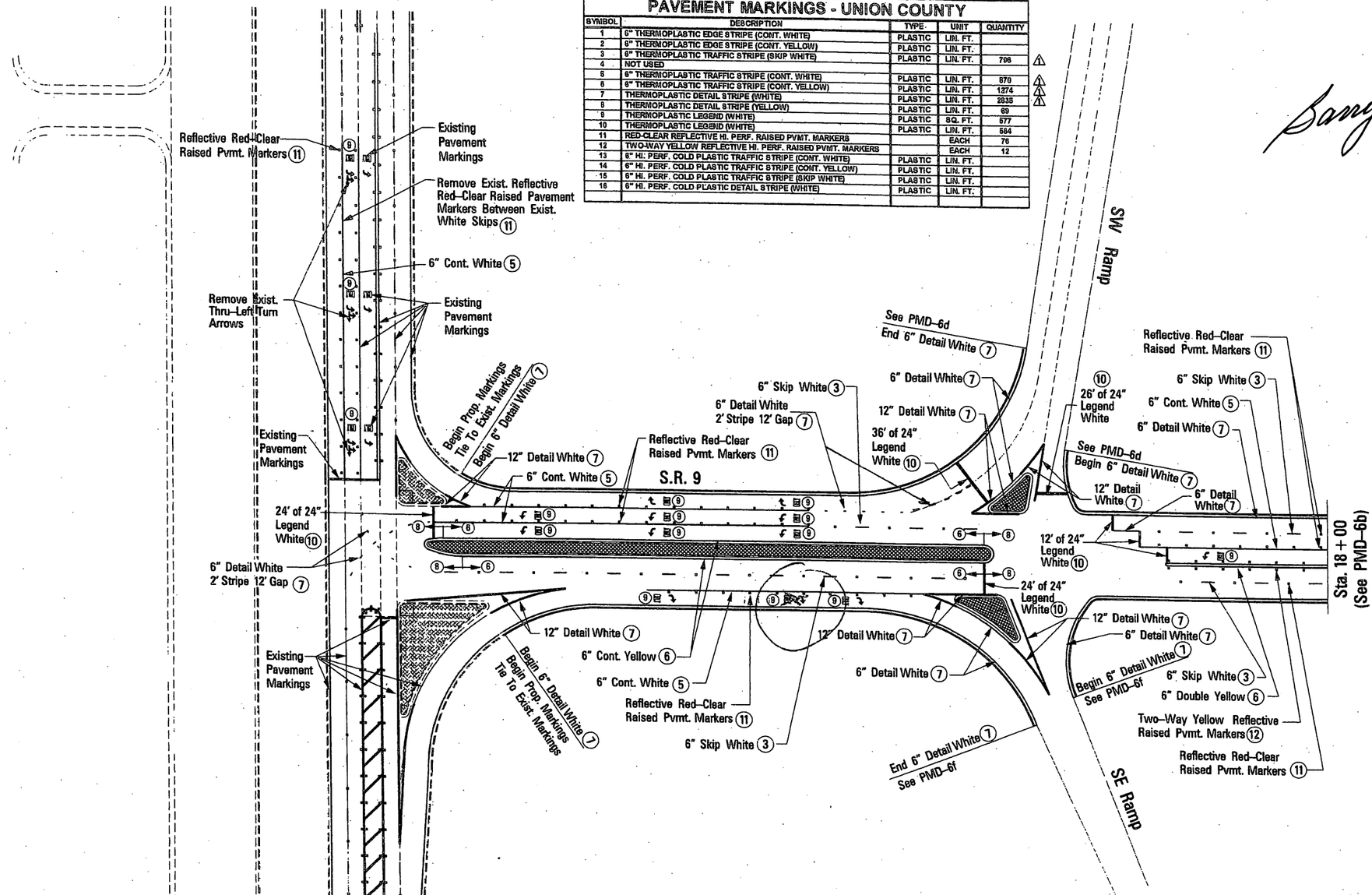
DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-6_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	706
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	870
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	1374
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	2835
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	69
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	577
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	564
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	76
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	12
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



BY	DATE	REV. PVMT. MKG. QTYS. REVISION
F&H	10/09/06	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

S.R. 9 @ Blue Springs

Sta. 10+00 To Sta. 18+00

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6a

SHEET NUMBER: 94

FILENAME: pmd-6a_us78.dgn

DESIGN TEAM: F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-6a_us78.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087)

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

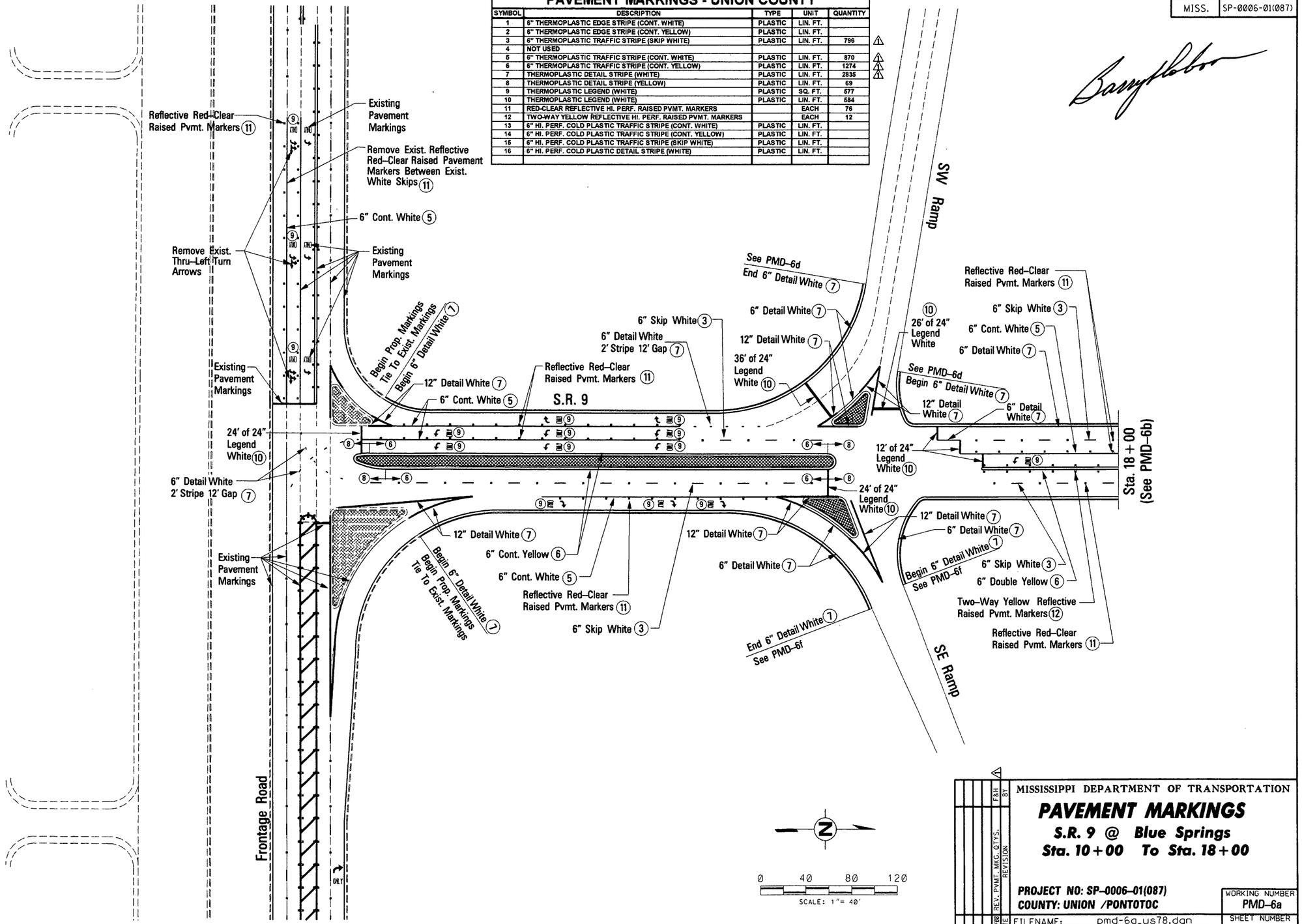
10/15/2006 11:14:05 PMD-6a_US78.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	796
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	870
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	1274
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	2835
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	69
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	677
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	584
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	76
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	12
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

S.R. 9 @ Blue Springs

Sta. 10+00 To Sta. 18+00

REVISION	DATE	BY
REV. PVMT. MKG. QTYS.	10/19/06	F&H

PROJECT NO: SP–0006–01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD–6a
SHEET NUMBER: 94

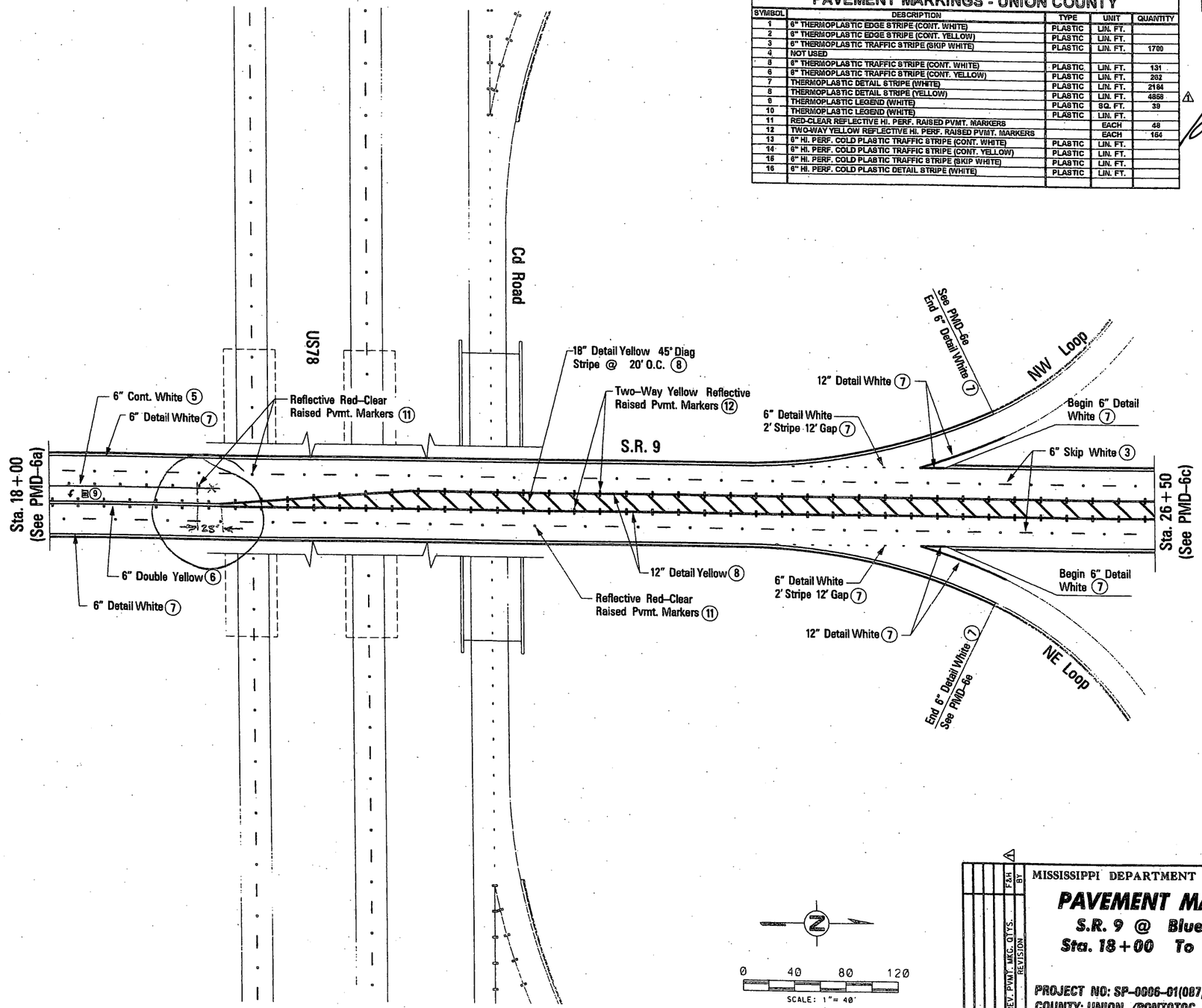
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DESIGN TEAM: F&H, Inc. CHECKED DATE

PLOT: 10/5/2006 11:14:06 PMD-6A_US78.DGN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	1700
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	131
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	262
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	2184
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	4858
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	39
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	-
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	48
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	164
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION

10:15:2003 11:14:10 PMD-6B_US78.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-6b_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

BY	REVISION	DATE
F&H	REV. PVMT. MKG. QTYS.	10/15/03

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

S.R. 9 @ Blue Springs
Sta. 18+00 To Sta. 26+50

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

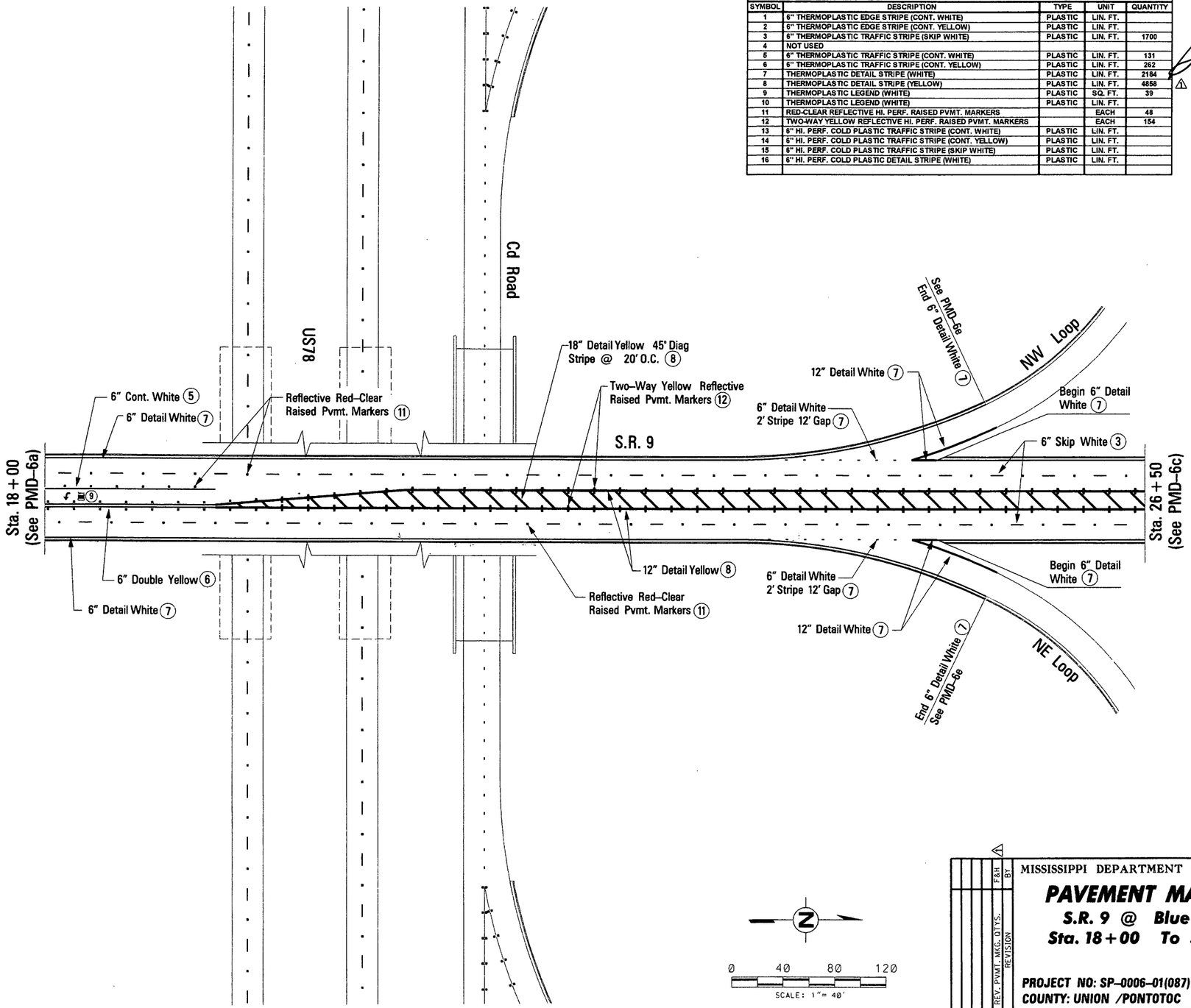
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SHEET NUMBER: 95

FILENAME: pmd-6b_us78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	1700
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	131
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	262
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	2184
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	4858
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	39
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	48
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	154
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



0 40 80 120

SCALE: 1"= 40'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

S.R. 9 @ Blue Springs

Sta. 18+00 To Sta. 26+50

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6b

SHEET NUMBER: 95

DATE	REVISION	BY
10/10/08	REV. PVMT. MKG. QTYS.	F&H

FILENAME: pmd-6b_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 11:14:10 PMD-6B_US78.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-6b_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

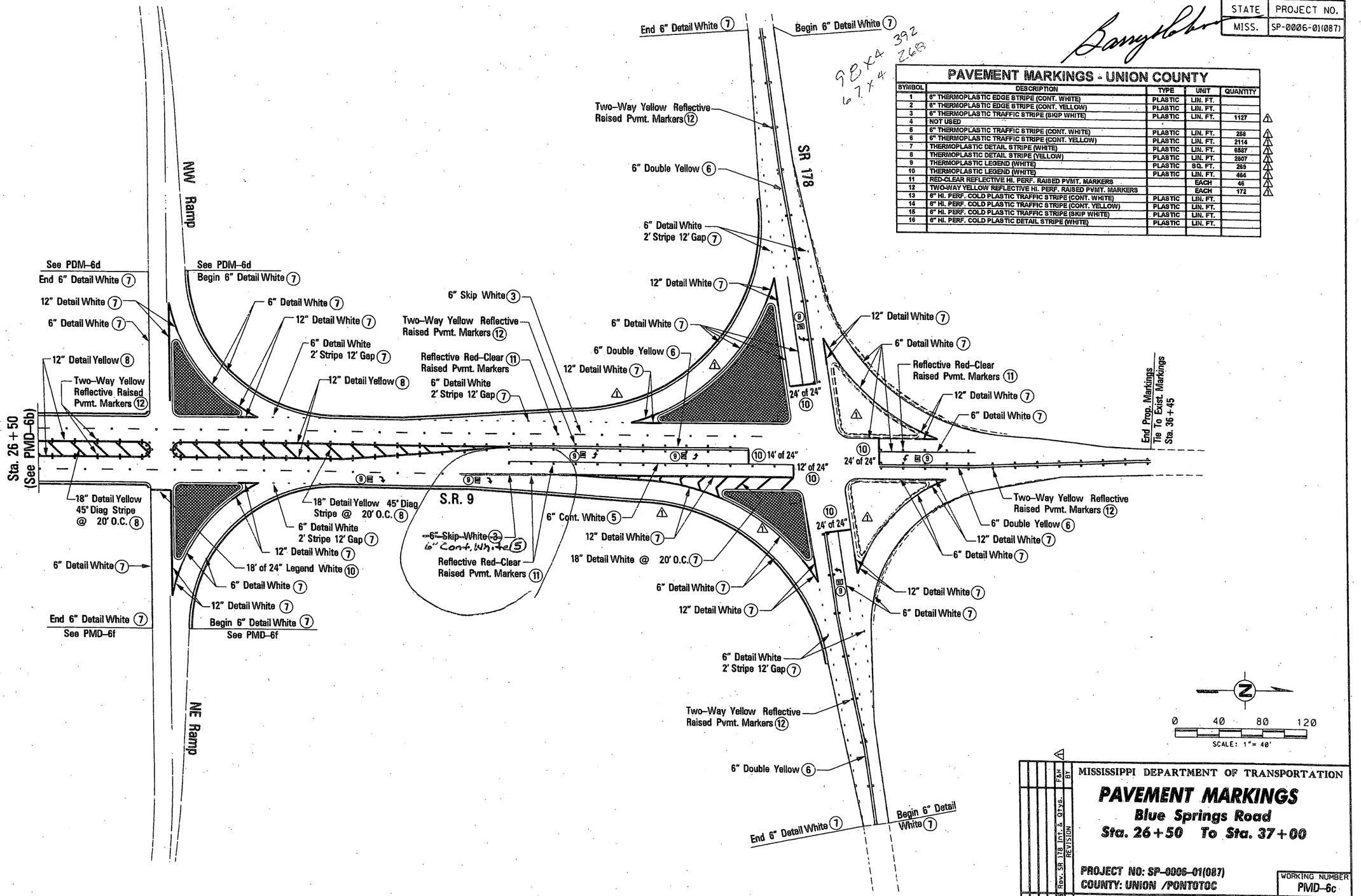
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

98 x 4 392
67 x 4 268

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY	
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.		
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.		
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	1127	⚠
4	NOT USED				
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	258	⚠
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	2114	⚠
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	6587	⚠
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	2607	⚠
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	269	⚠
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	464	⚠
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	46	⚠
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	172	⚠
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.		
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.		
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.		
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.		



N

0 40 80 120

SCALE: 1"= 40'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

Blue Springs Road

Sta. 26+50 To Sta. 37+00

BY	DATE	REVISION
F&H		
	10/16/06	Rev. SR 178 Int. & Qtys.

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD–6c
SHEET NUMBER: 96

FILENAME: pmd-6c_us78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd–6c_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP–0006–01(087)

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

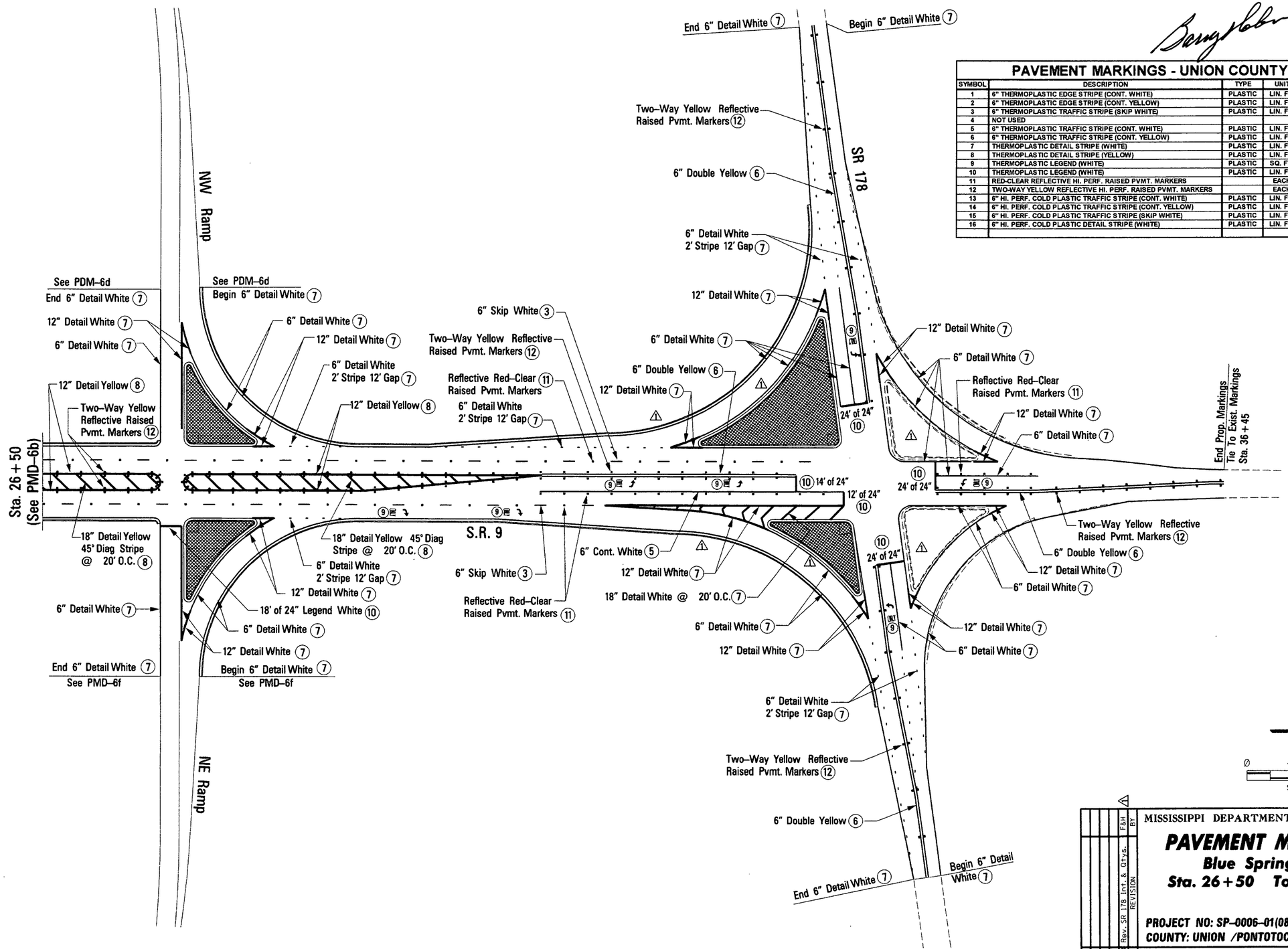
10/15/2006 11:14:18 PMD-6C_US78.DGN

ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY	
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.		
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.		
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	1127	⚠
4	NOT USED				
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	258	⚠
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	2114	⚠
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	6587	⚠
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	2607	⚠
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	269	⚠
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	464	⚠
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	46	⚠
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	172	⚠
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.		
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.		
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.		
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.		



0 40 80 120
SCALE: 1"= 40'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

Blue Springs Road

Sta. 26+50 To Sta. 37+00

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER PMD-6c

SHEET NUMBER 96

10/16/08 DATE — Rev. SR 178 Int. & Qtys. REVISION — F&H BY

FILENAME: pmd-6c_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

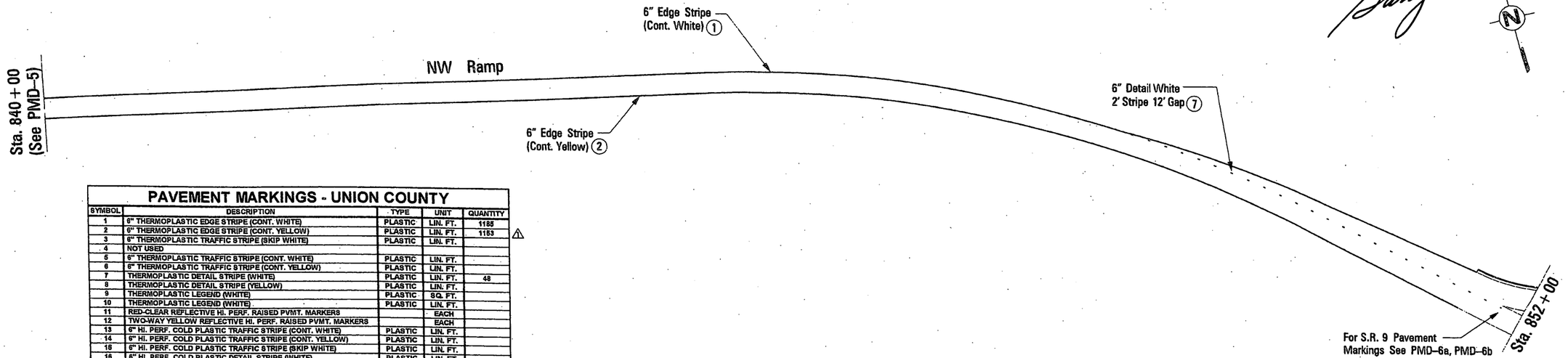
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PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 11:14:18 PMD-6c_US78.DGN

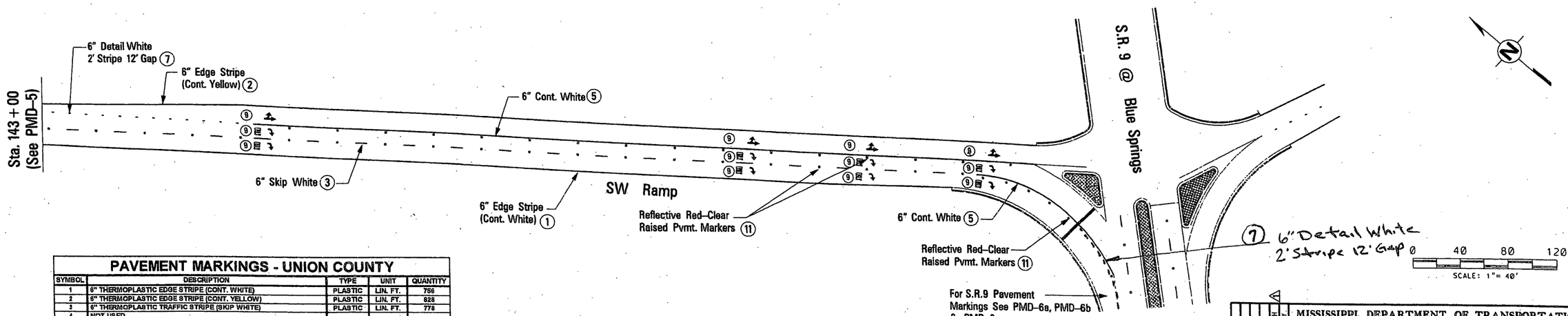
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	1185
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	1153 ⚠
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	48
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	766
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	828
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	778
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	797
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	24
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	416
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	44
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

NW Ramp
Sta. 840+00 To Sta. 852+00
SW Ramp
Sta. 143+00 To S.R. 9 @ Blue Springs

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6d
SHEET NUMBER: 97

DATE	REVISION	REV. PVMT. MKG. QTYS.	BY	F&H
10/16/08				

FILENAME: pmd-6d_us78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

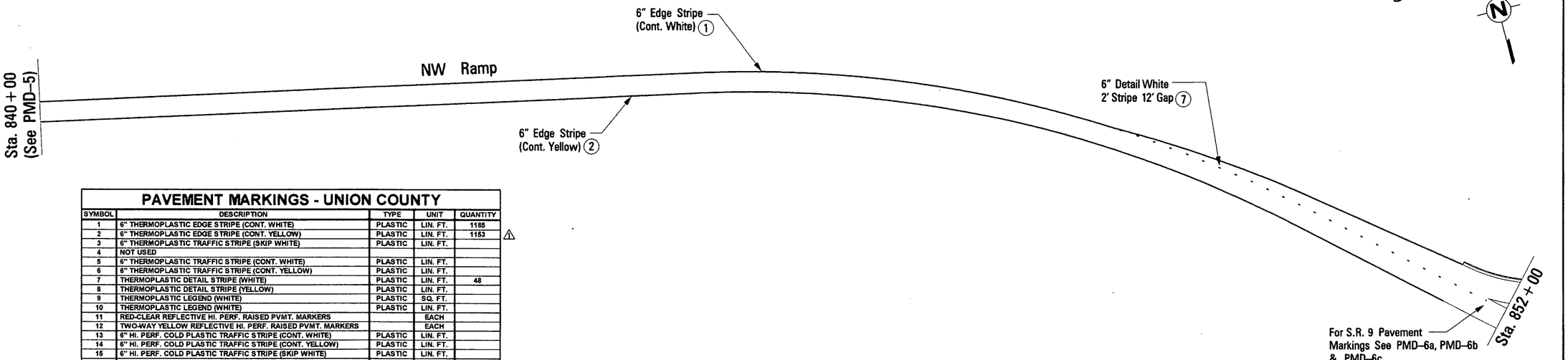
DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd6d_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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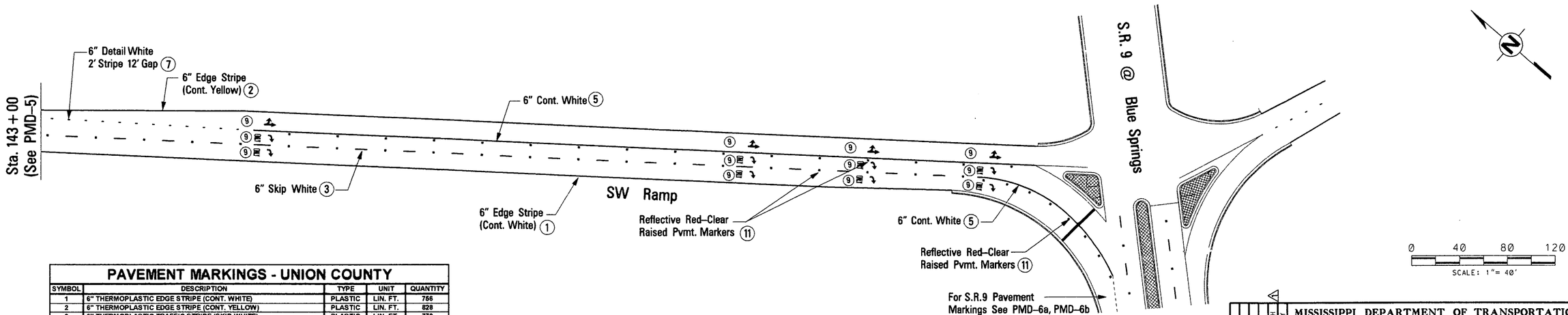
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	1185
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	1153
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	48
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	756
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	828
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	778
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	797
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	24
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	418
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	44
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	

REV.	PVMT. MKG. QTYS.	F&H
DATE	REVISION	BY
10/10/08		

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

NW Ramp
Sta. 840+00 To Sta. 852+00
SW Ramp
Sta. 143+00 To S.R. 9 @ Blue Springs

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6d

FILENAME: pmd-6d_us78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

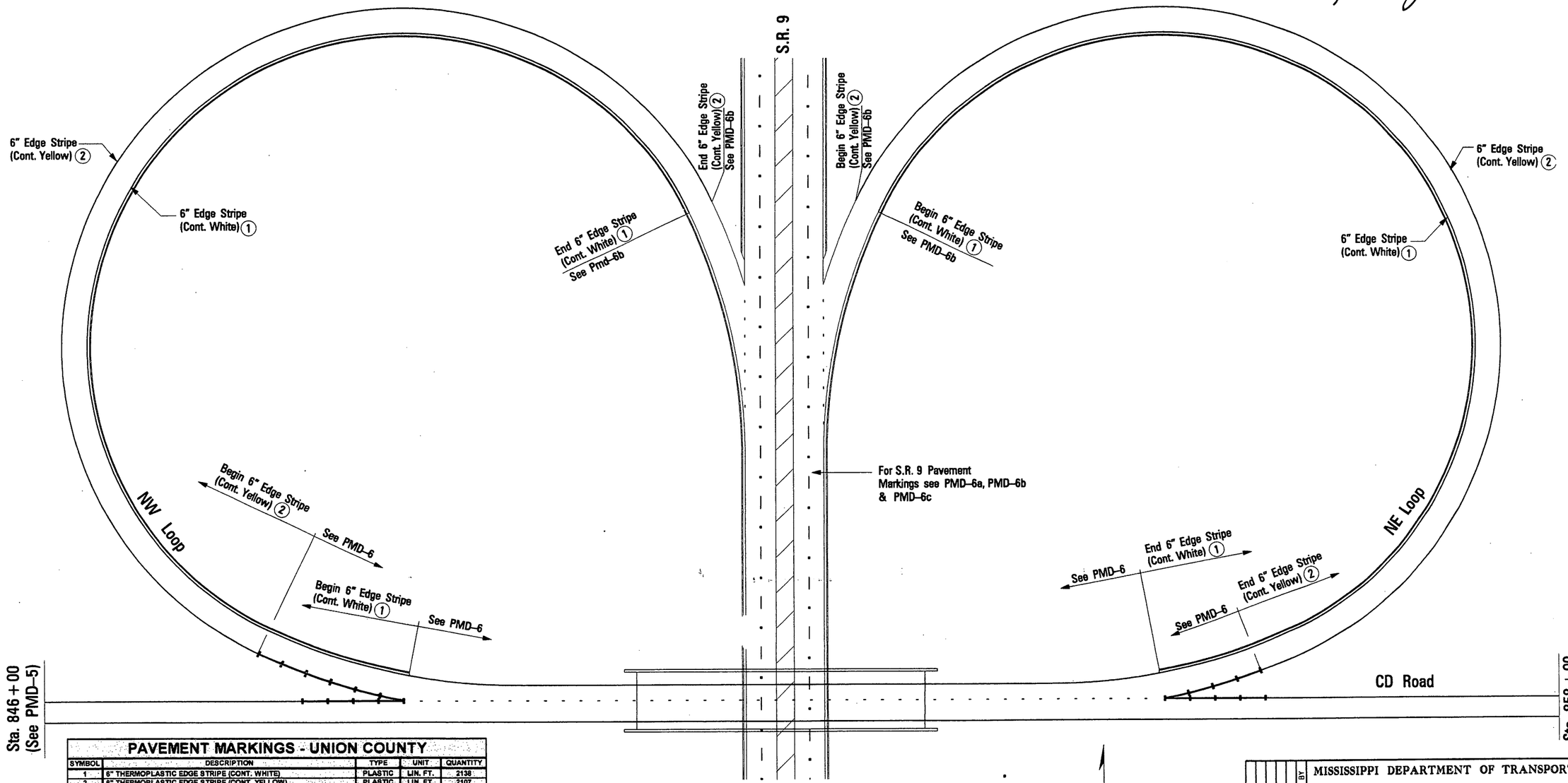
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DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd6d_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

10/15/2008 11:14:22 PMD-6D_US78_UON

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	2138
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	2107
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	

N

0 40 80 120

SCALE: 1"= 40'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

CD RD Sta. 846+00 To Sta. 858+00

NW LOOP & NE LOOP

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6e

FILENAME: pmd-6e_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 98

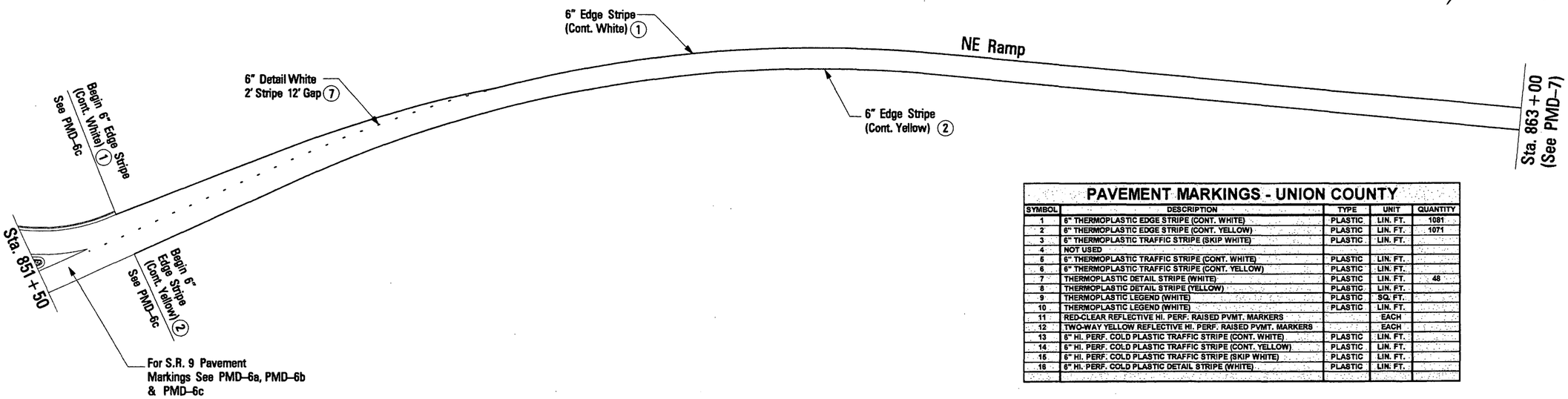
REVISION BY DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

8/12/2008 9:45 AM PMD-6E_US78.DGN

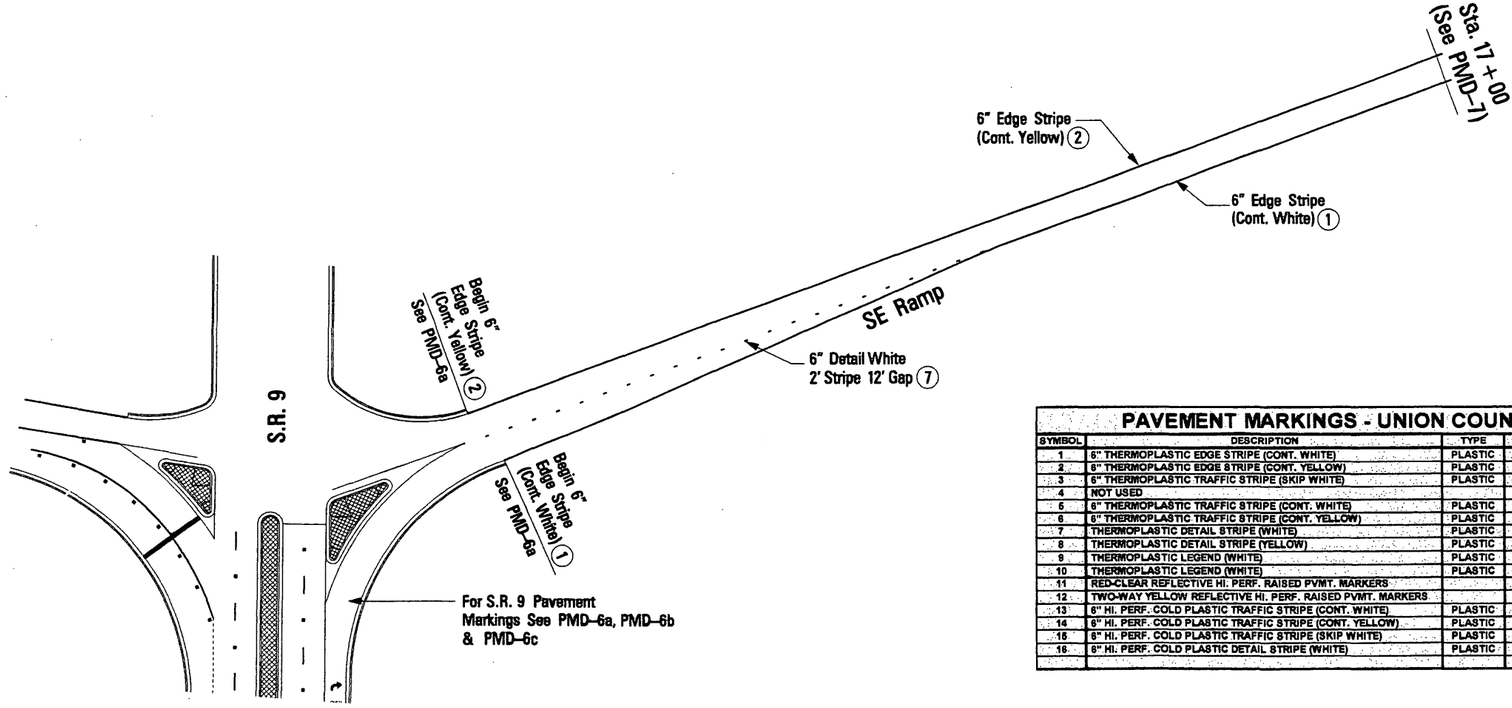
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STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	1081
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	1071
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	48
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	568
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	578
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	46
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	

0 40 80 120
SCALE: 1"= 40'

REVISION | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

NE Ramp Sta. 851+50 To Sta. 863+00

SE Ramp @ S.R. 9 Blue Springs To Sta. 17+00

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-6f

FILENAME: pmd-6f_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 99

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

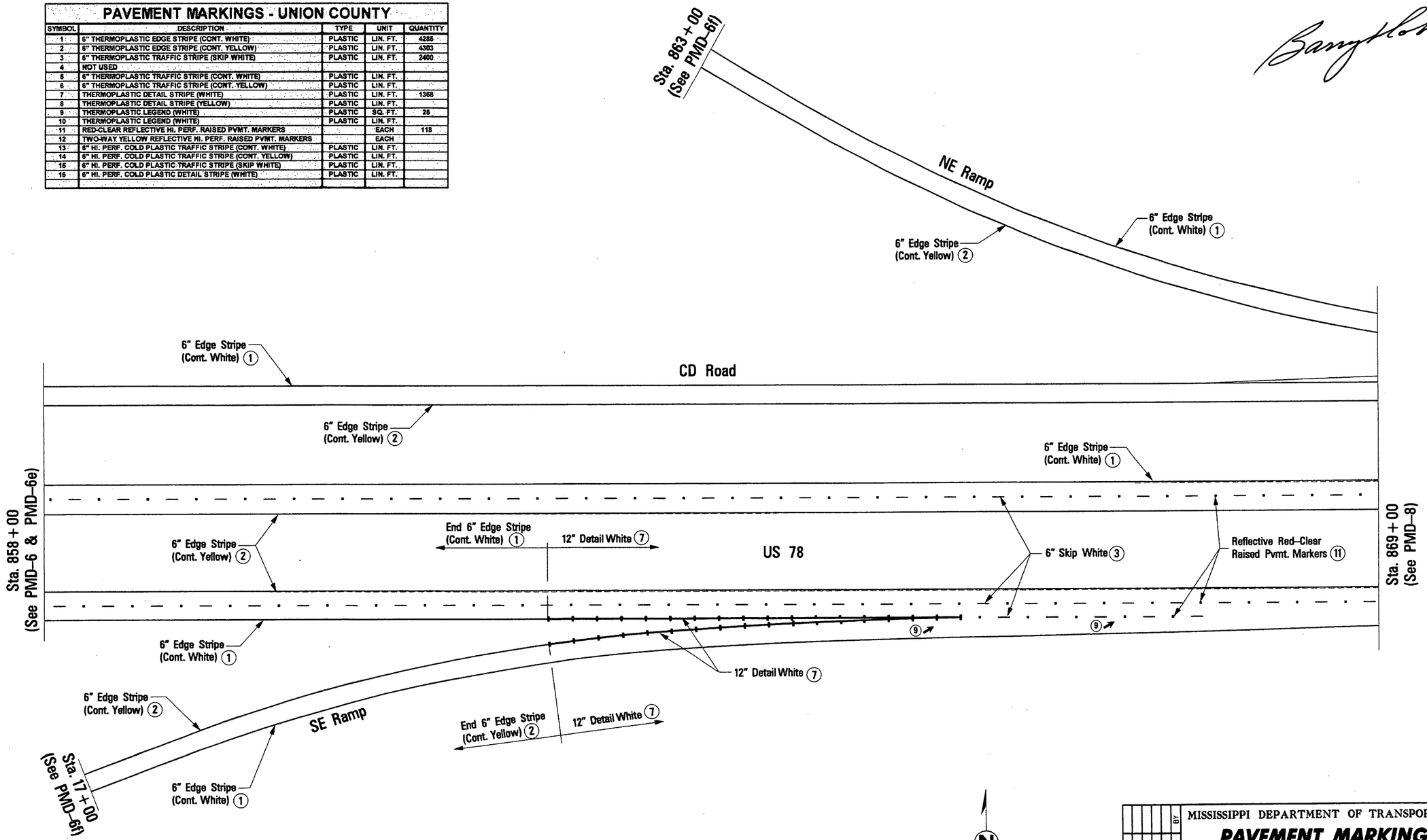
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DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd6f_us78.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	4285
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	4303
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	2400
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	1368
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	25
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	118
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



N

0 40 80 120

SCALE: 1"= 40'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 858+00 To Sta. 869+00

PROJECT NO: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-7

SHEET NUMBER: 100

FILENAME: pmd-7_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

REVISION | BY | DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

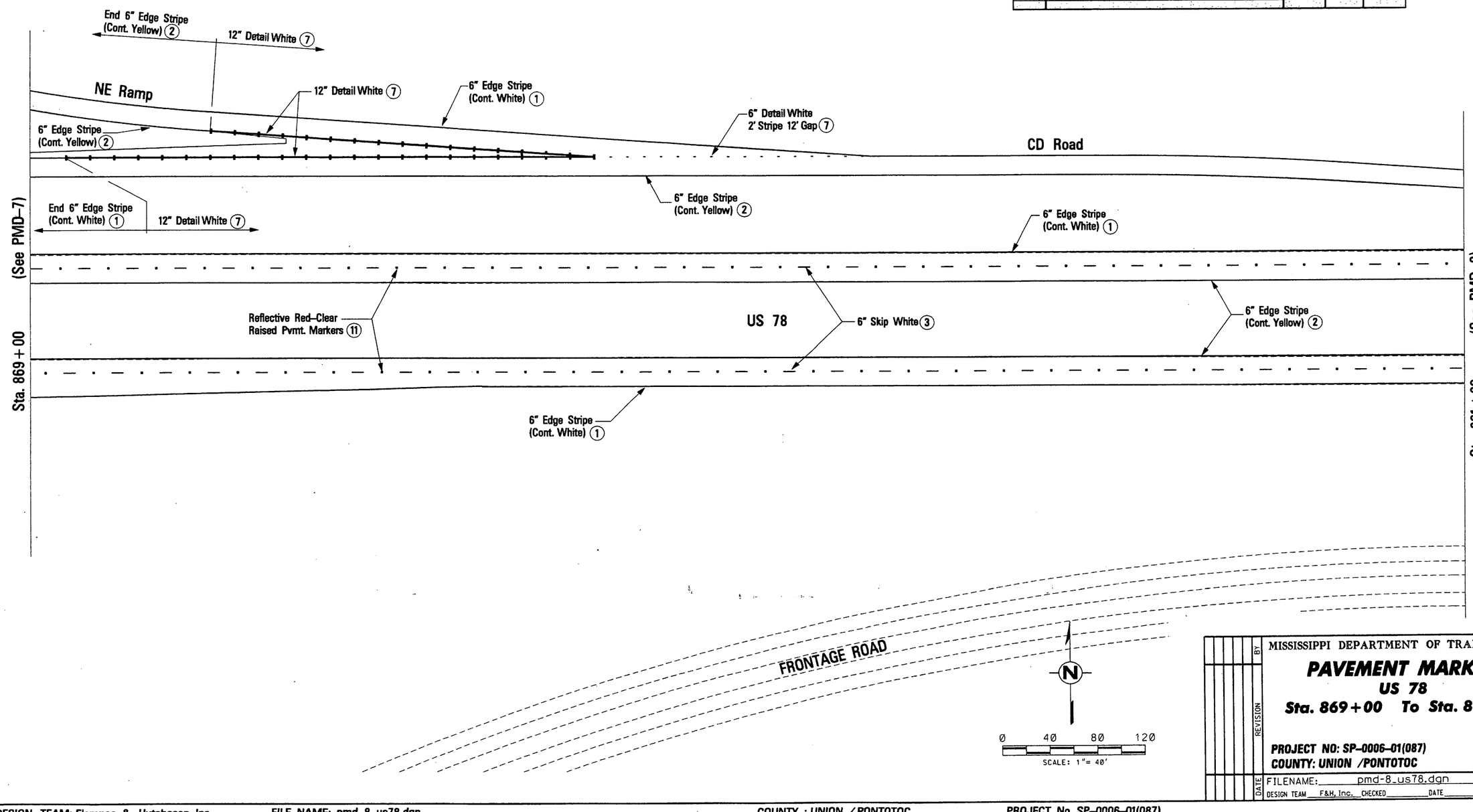
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DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-7 us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	3532
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	3763
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	2400
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	1660
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	60
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 869+00 To Sta. 881+00

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-8

SHEET NUMBER: 100.01

FILENAME: pmd-8_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

REVISION | BY | DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

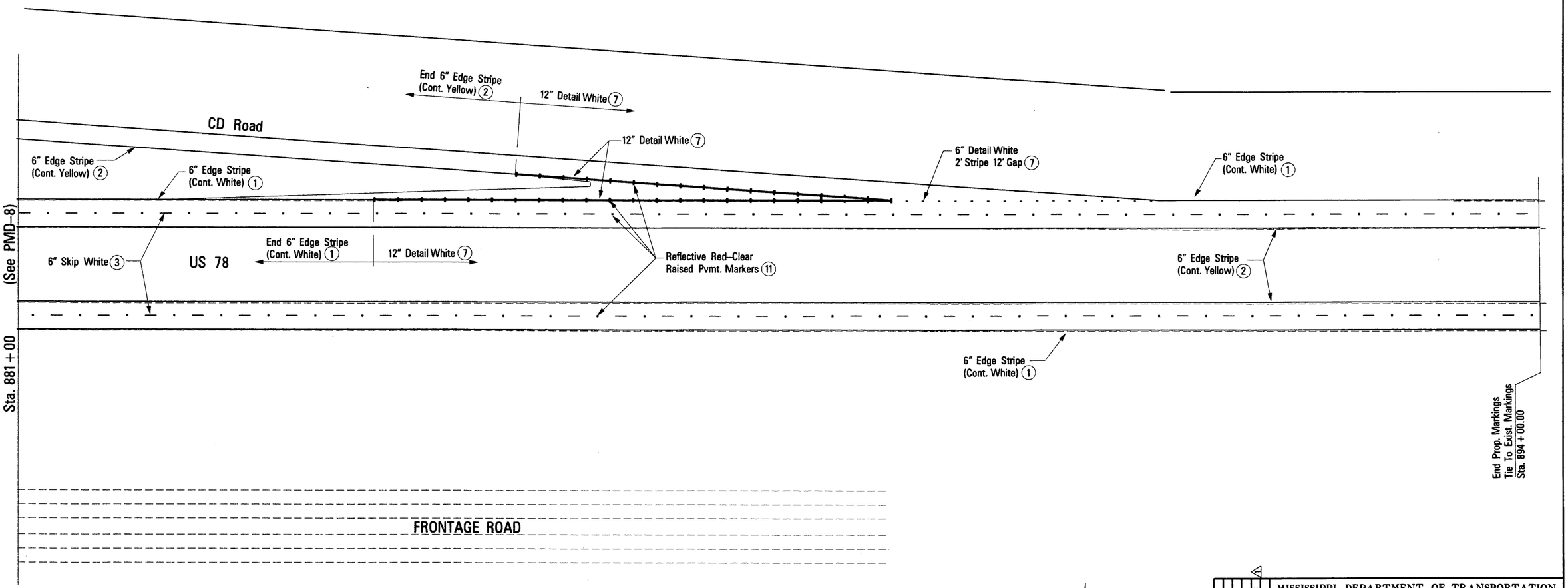
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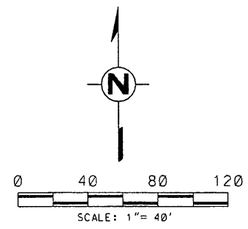
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAVEMENT MARKINGS - UNION COUNTY

SYMBOL	DESCRIPTION	TYPE	UNIT	QUANTITY
1	6" THERMOPLASTIC EDGE STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	2904
2	6" THERMOPLASTIC EDGE STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	3024
3	6" THERMOPLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	2600
4	NOT USED			
5	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
6	6" THERMOPLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
7	THERMOPLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	1560
8	THERMOPLASTIC DETAIL STRIPE (YELLOW)	PLASTIC	LIN. FT.	
9	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	SQ. FT.	
10	THERMOPLASTIC LEGEND (WHITE)	PLASTIC	LIN. FT.	
11	RED-CLEAR REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	144
12	TWO-WAY YELLOW REFLECTIVE HI. PERF. RAISED PVMT. MARKERS		EACH	
13	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. WHITE)	PLASTIC	LIN. FT.	
14	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (CONT. YELLOW)	PLASTIC	LIN. FT.	
15	6" HI. PERF. COLD PLASTIC TRAFFIC STRIPE (SKIP WHITE)	PLASTIC	LIN. FT.	
16	6" HI. PERF. COLD PLASTIC DETAIL STRIPE (WHITE)	PLASTIC	LIN. FT.	





MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PAVEMENT MARKINGS

US 78

Sta. 881+00 To Sta. 893+00

PROJECT NO: SP-0006-01(087)

COUNTY: UNION /PONTOTOC

WORKING NUMBER: PMD-9

SHEET NUMBER: 100.02

FILENAME: pmd-9_us78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

BY	REVISION	DATE
F&H	REV. PVMT. MKG. QTYS.	10/10/08

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

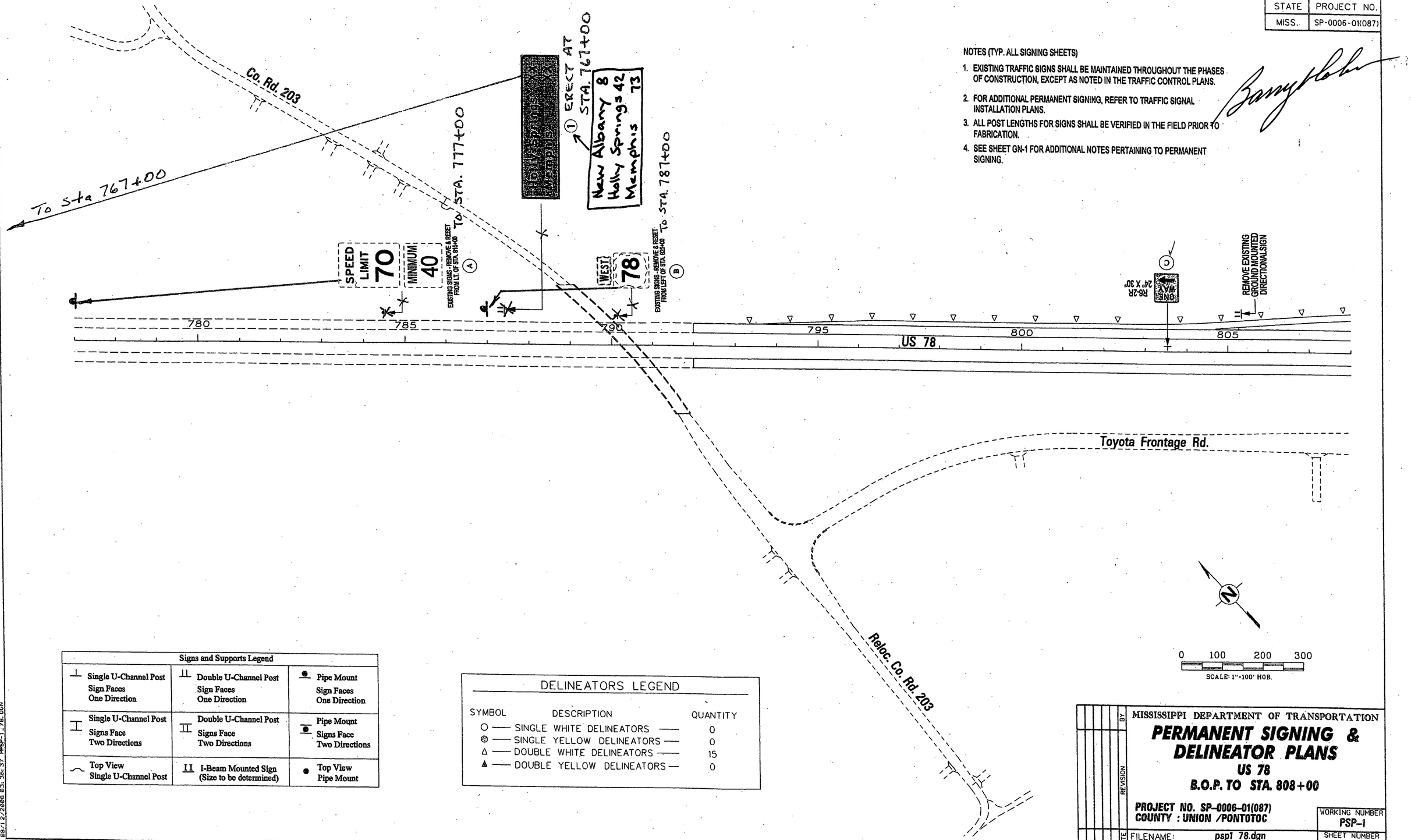
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DESIGN TEAM: Florence & Hutcheson, Inc. FILE NAME: pmd-9_us78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

NOTES (TYP. ALL SIGNING SHEETS)

1. EXISTING TRAFFIC SIGNS SHALL BE MAINTAINED THROUGHOUT THE PHASES OF CONSTRUCTION, EXCEPT AS NOTED IN THE TRAFFIC CONTROL PLANS.
2. FOR ADDITIONAL PERMANENT SIGNING, REFER TO TRAFFIC SIGNAL INSTALLATION PLANS.
3. ALL POST LENGTHS FOR SIGNS SHALL BE VERIFIED IN THE FIELD PRIOR TO FABRICATION.
4. SEE SHEET GN-1 FOR ADDITIONAL NOTES PERTAINING TO PERMANENT SIGNING.



Signs and Supports Legend		
Single U-Channel Post Sign Faces One Direction	Double U-Channel Post Sign Faces One Direction	Pipe Mount Sign Faces One Direction
Single U-Channel Post Signs Face Two Directions	Double U-Channel Post Signs Face Two Directions	Pipe Mount Signs Face Two Directions
Top View Single U-Channel Post	I-Beam Mounted Sign (Size to be determined)	Top View Pipe Mount

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
O	SINGLE WHITE DELINEATORS	0
⊘	SINGLE YELLOW DELINEATORS	0
△	DOUBLE WHITE DELINEATORS	15
▲	DOUBLE YELLOW DELINEATORS	0

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

B.O.P. TO STA. 808+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER PSP-1
SHEET NUMBER 100.03

REVISION BY DATE

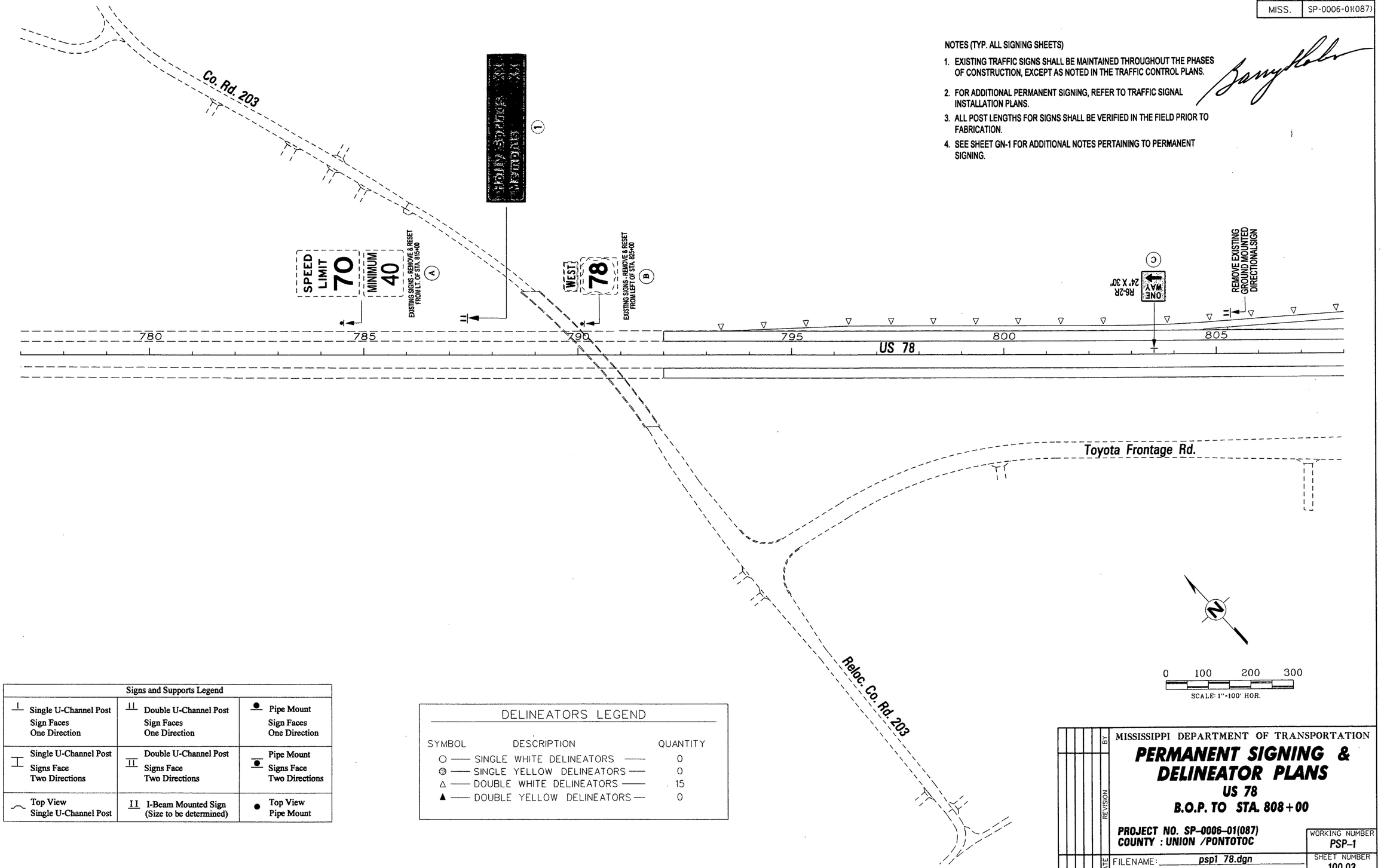
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MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/12/2008 03:36:37

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

NOTES (TYP. ALL SIGNING SHEETS)

1. EXISTING TRAFFIC SIGNS SHALL BE MAINTAINED THROUGHOUT THE PHASES OF CONSTRUCTION, EXCEPT AS NOTED IN THE TRAFFIC CONTROL PLANS.
2. FOR ADDITIONAL PERMANENT SIGNING, REFER TO TRAFFIC SIGNAL INSTALLATION PLANS.
3. ALL POST LENGTHS FOR SIGNS SHALL BE VERIFIED IN THE FIELD PRIOR TO FABRICATION.
4. SEE SHEET GN-1 FOR ADDITIONAL NOTES PERTAINING TO PERMANENT SIGNING.



Signs and Supports Legend		
Single U-Channel Post Sign Faces One Direction	Double U-Channel Post Sign Faces One Direction	Pipe Mount Sign Faces One Direction
Single U-Channel Post Signs Face Two Directions	Double U-Channel Post Signs Face Two Directions	Pipe Mount Signs Face Two Directions
Top View Single U-Channel Post	I-Beam Mounted Sign (Size to be determined)	Top View Pipe Mount

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	0
◎	SINGLE YELLOW DELINEATORS	0
△	DOUBLE WHITE DELINEATORS	15
▲	DOUBLE YELLOW DELINEATORS	0

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

B.O.P. TO STA. 808+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: PSP-1

SHEET NUMBER: 100.03

FILENAME: psp1 78.dgn

DESIGN TEAM: F&H, Inc. CHECKED: DATE:

REVISION BY DATE

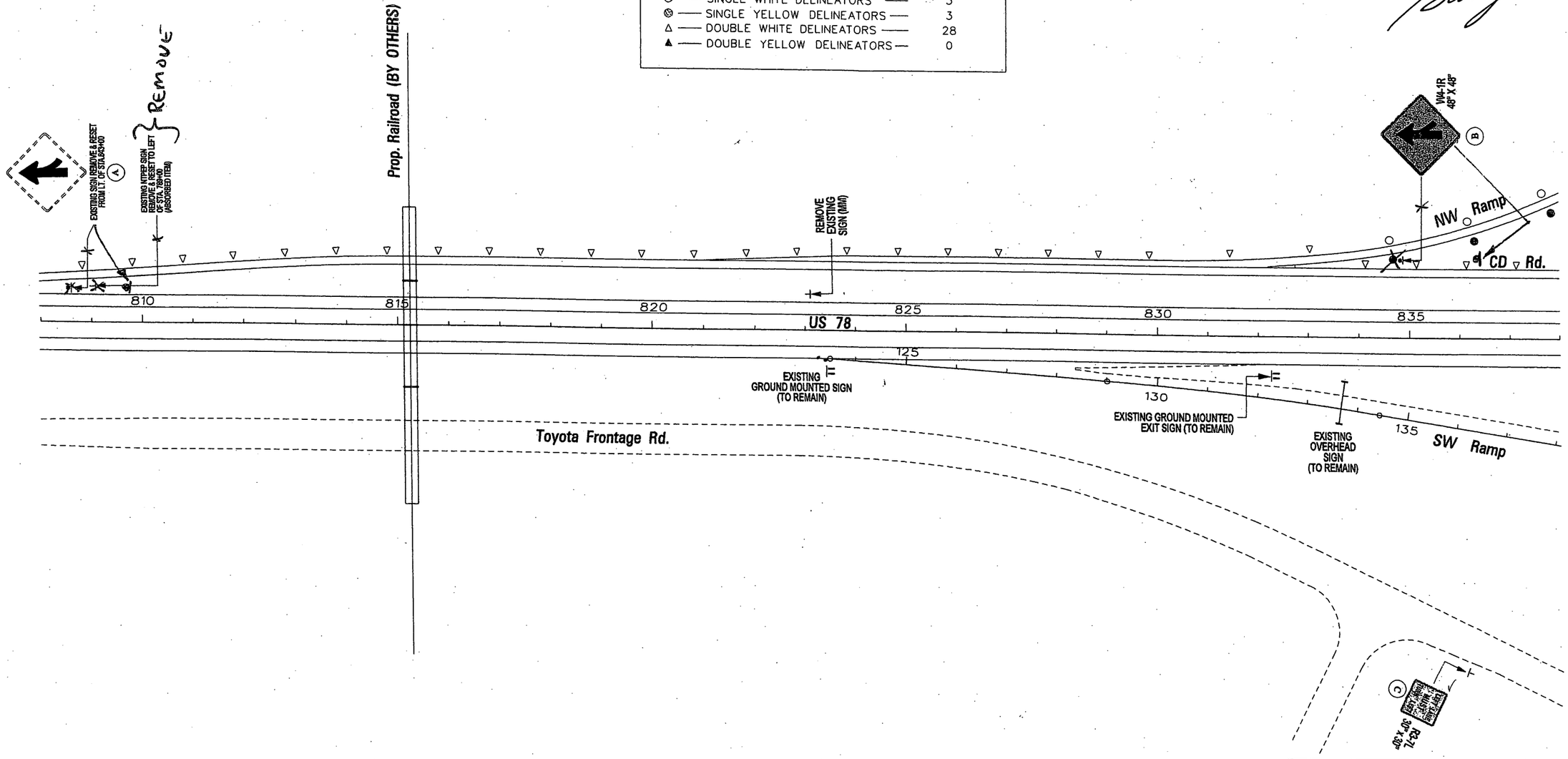
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

09/12/2008 03:36:37 PM SP-1_78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	3
⊘	SINGLE YELLOW DELINEATORS	3
△	DOUBLE WHITE DELINEATORS	28
▲	DOUBLE YELLOW DELINEATORS	0



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 808+00. TO STA. 838+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER	SHEET NUMBER
PSP-2	100.04

BY | REVISION | DATE

FILENAME: psp2 78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: psp2 78.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

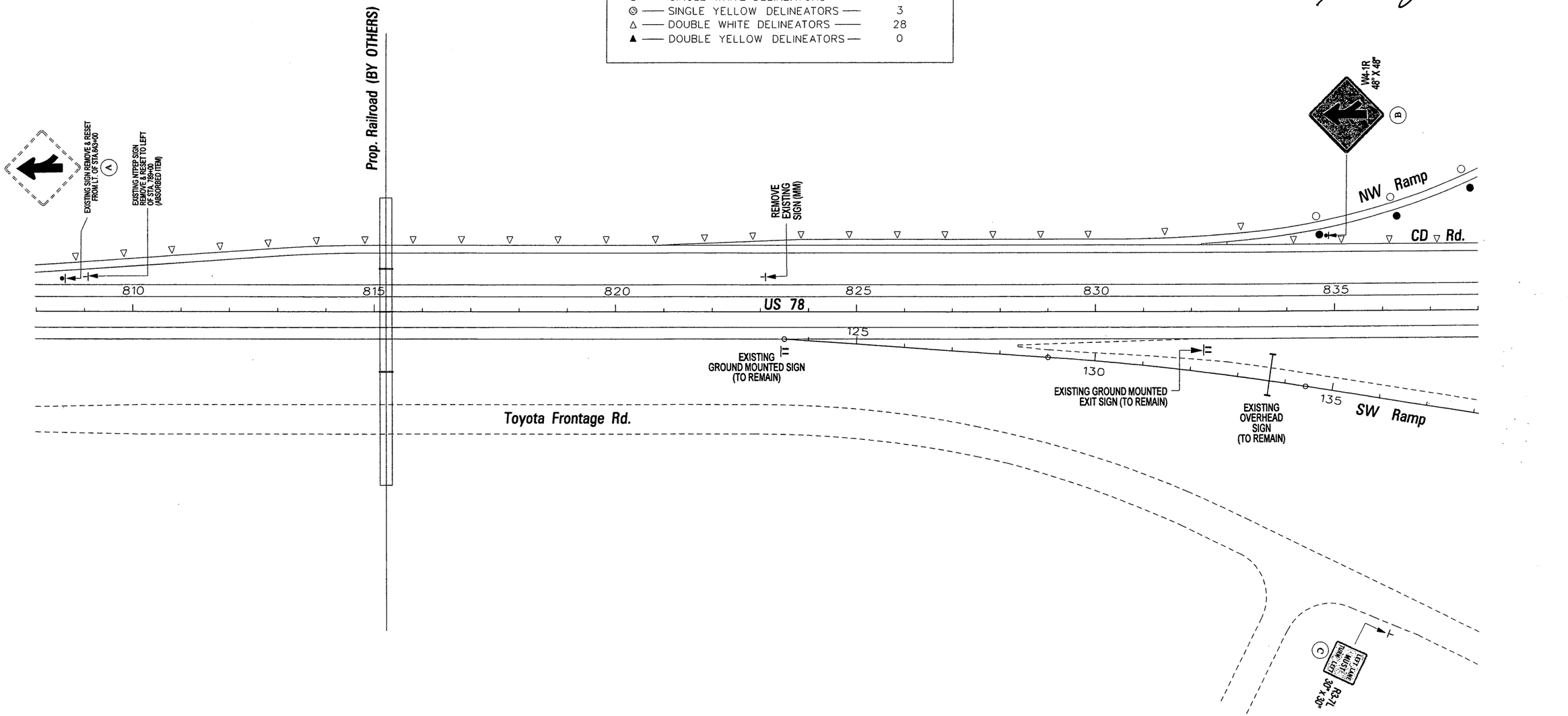
PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

96/12/2008 03:36:32 FRGP-2_78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	3
⊗	SINGLE YELLOW DELINEATORS	3
△	DOUBLE WHITE DELINEATORS	28
▲	DOUBLE YELLOW DELINEATORS	0



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 808+00. TO STA. 838+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

BY	REVISION	DATE

WORKING NUMBER: PSP-2

FILENAME: psp2 78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 100.04

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:36:32 PMSP-2_78.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. | FILENAME: psp2 78.dgn | COUNTY : UNION /PONTOTOC | PROJECT No. SP-0006-01(087) | SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

Locate W3-3 at Sta 22+00

EXISTING ADVANCE GUIDE SIGN TO REMAIN

SR 9

840 845 850 855 860 865

US 78

GUARDRAIL MOUNTED DELINEATORS

GUARDRAIL MOUNTED DELINEATORS

20

20

15

15

140

SW Ramp

145

150

SE Ramp

A EXISTING SIGN REMOVE & RESET — BRIDGE MAY ICE IN COLD WEATHER

B OM-3 (Left) 12" X 36"

C OM-3 (Right) 12" X 36"

I W3-3 48"X48"

EXISTING SIGNS (TO REMAIN)

REMOVE EXISTING R1-1

D OM-3 (Left) 12" X 36"

E OM-3 (Right) 12" X 36"

F EXISTING SIGN REMOVE & RESET — BRIDGE MAY ICE IN COLD WEATHER

G EXISTING SIGN REMOVE & RESET

REMOVE EXISTING GROUND MOUNTED DIRECTIONAL SIGN EXIT 73

H ONE WAY R6-2R 24" X 30"

EXISTING OVERHEAD SIGN (TO REMAIN)

J REMOVE EXIST. SIGN W3-1A REPLACE WITH SIGN W3-3

K W3-3 48"X48"

REMOVE EXISTING SIGN W3-1A

Existing Guide Sign to Remain

EXISTING SIGNS (TO REMAIN)

Blue Springs Rd.

EXISTING SIGNS (TO REMAIN)

REMOVE R3-7R

M W3-3 48"X48" — REMOVE EXIST. SIGN W3-1A REPLACE WITH SIGN W3-3

EXISTING SIGNS (TO REMAIN)

Replace W3-1A With W3-3

L W3-3 48"X48"

EXISTING SIGN R3-9B (TO REMAIN)

N SPCL (See DSD-1) 48"X36" — RIGHT TURN ONLY

Toyota Frontage Rd.

K R3-7L 48"X30" — LEFT TURN ONLY

REMOVE EXISTING SIGN W3-1A

O SPCL (See DSD-1) 48"X36" — LEFT TURN ONLY

REMOVE EXISTING SIGNS R1-1, R1-3

Existing Guide Sign to Remain

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
O	SINGLE WHITE DELINEATORS	0 (14)
Ø	SINGLE YELLOW DELINEATORS	0 (14)
Δ	DOUBLE WHITE DELINEATORS	0
▲	DOUBLE YELLOW DELINEATORS	0

Note: Number in ( ) is for guardrail mount.

N

0 100 200 300

SCALE: 1"=100' HOR.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78 STA. 838+00 TO STA. 868+00

SR 9 @ BLUE SPRINGS STA. 10+00 TO STA. 20+00

PROJECT NO. SP-0006-01(087)

COUNTY : UNION /PONTOTOC

WORKING NUMBER PSP-3

FILENAME: psp3 78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER 100.05

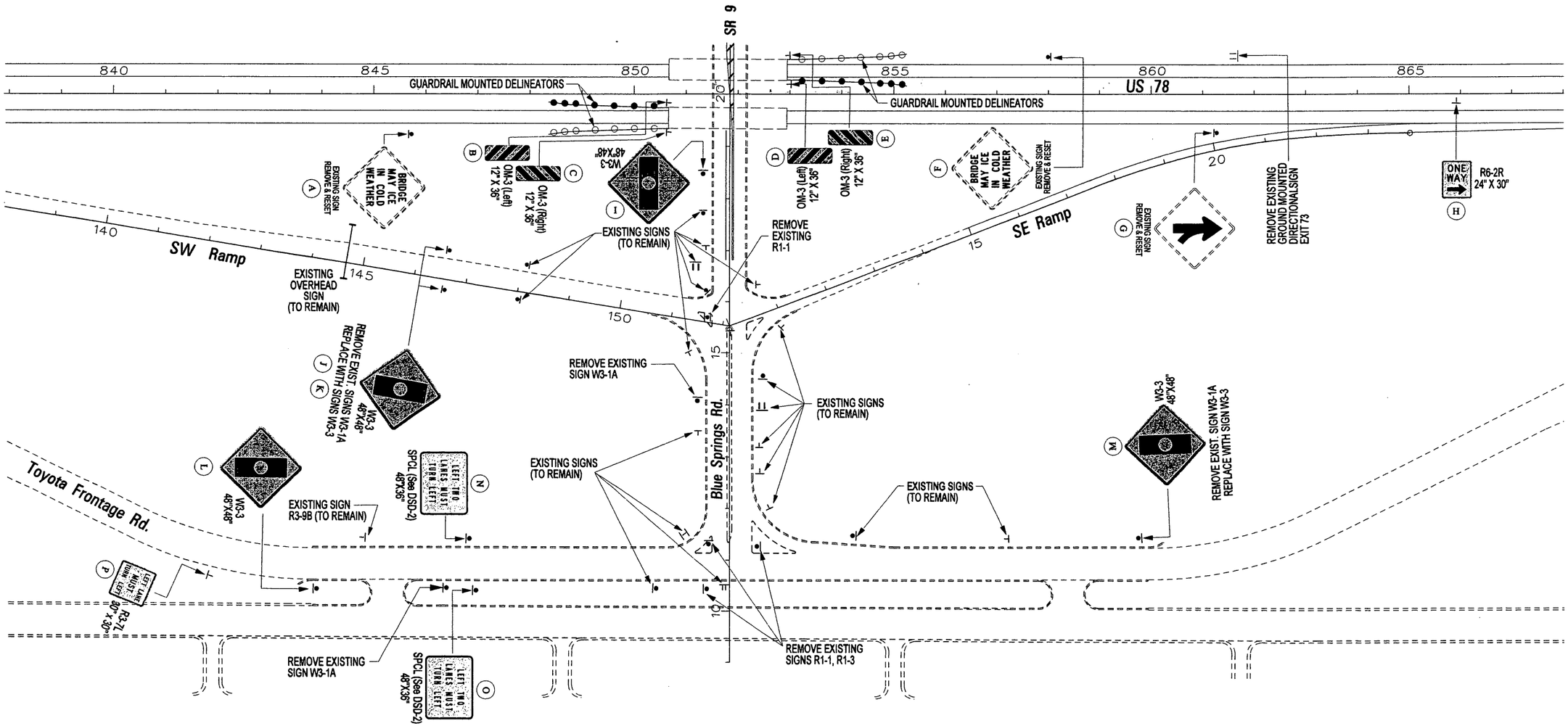
REVISION BY DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: psp3 78.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:36:23 PMSP-3_78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	0 (14)
ⓨ	SINGLE YELLOW DELINEATORS	0 (14)
△	DOUBLE WHITE DELINEATORS	0
▲	DOUBLE YELLOW DELINEATORS	0

Note: Number in ( ) is for guardrail mount.

N

0 100 200 300

SCALE: 1"=100' HOR.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78 STA. 838+00 TO STA. 868+00

SR 9 @ BLUE SPRINGS STA. 10+00 TO STA. 20+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: PSP-3

SHEET NUMBER: 100.05

REVISION | BY | DATE

FILENAME: psp3_78.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:36:23 PMSP-3_78.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: psp3 78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

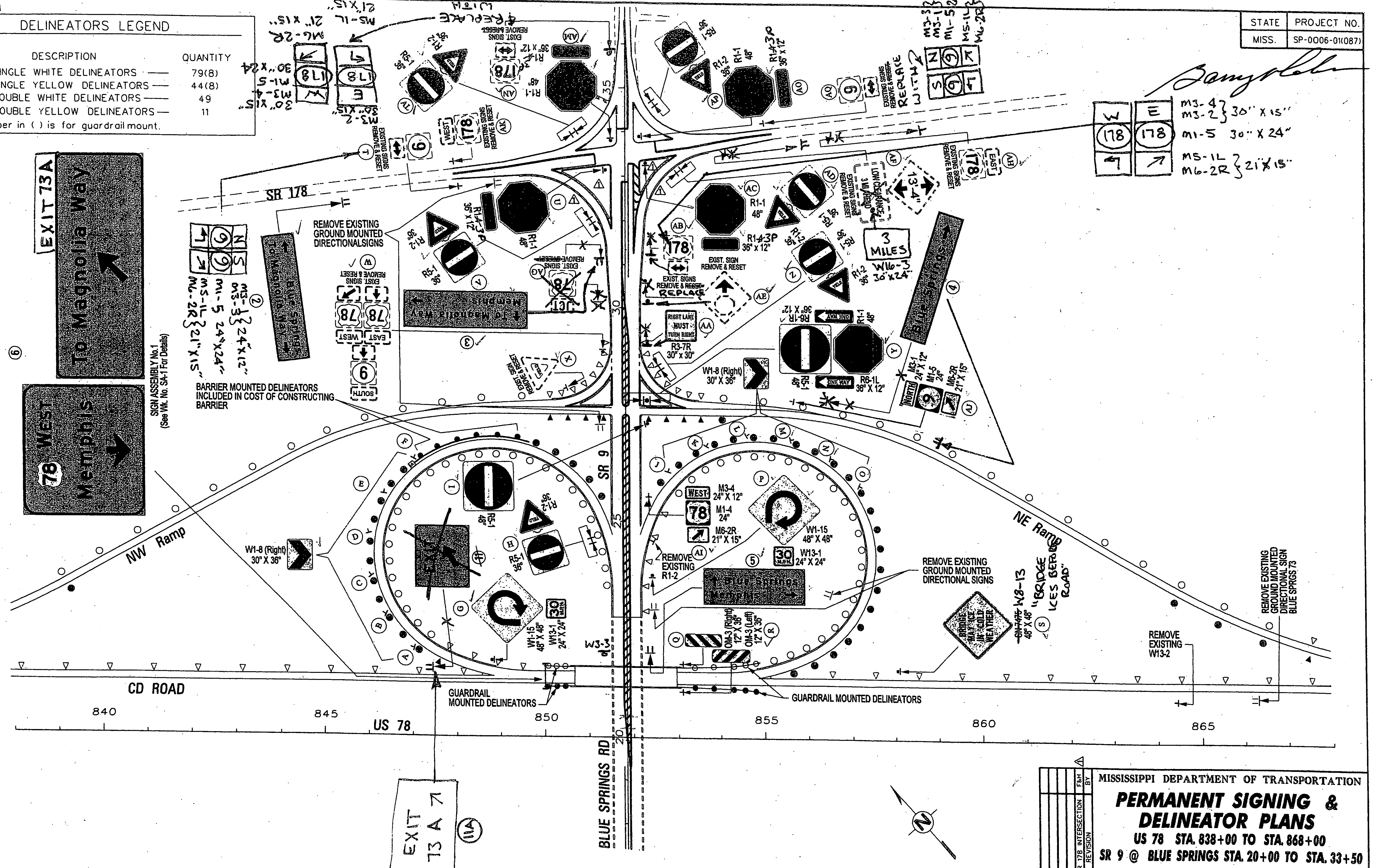
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	79(8)
⊘	SINGLE YELLOW DELINEATORS	44(8)
△	DOUBLE WHITE DELINEATORS	49
▲	DOUBLE YELLOW DELINEATORS	11

Note: Number in ( ) is for guardrail mount.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78 STA. 838+00 TO STA. 868+00

SR 9 @ BLUE SPRINGS STA. 20+00 TO STA. 33+50

PROJECT NO. SP-0006-01(087)

COUNTY : UNION /PONTOTOC

REV. SR 178 INTERSECTION — F&H — 10/10/08

WORKING NUMBER PSP-3a

FILENAME: psp3a_78.dgn

DESIGN TEAM F&H, Inc. CHECKED ____ DATE ____

SHEET NUMBER 100.06

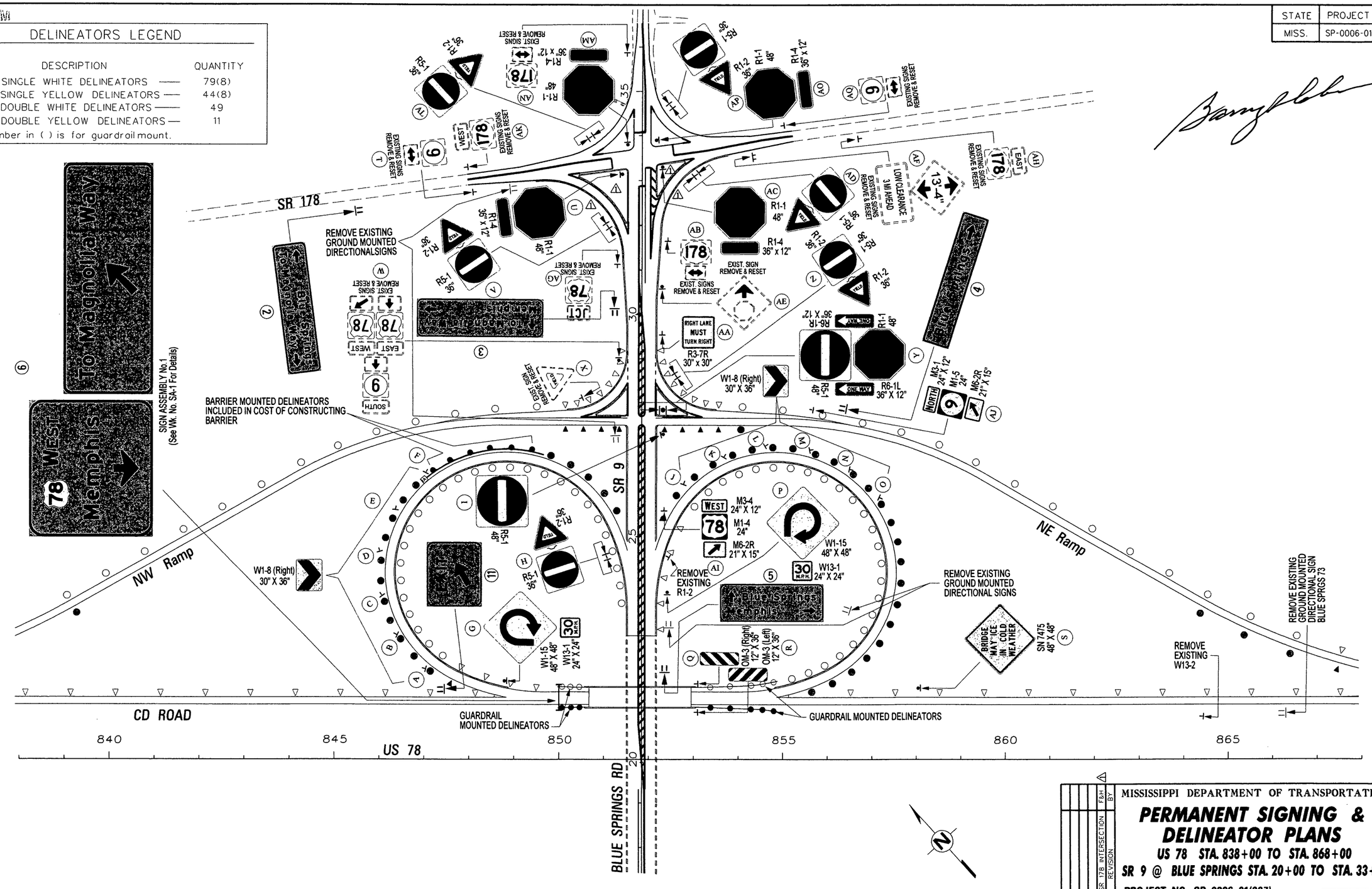
ADDENDUM

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	79(8)
●	SINGLE YELLOW DELINEATORS	44(8)
△	DOUBLE WHITE DELINEATORS	49
▲	DOUBLE YELLOW DELINEATORS	11

Note: Number in ( ) is for guardrail mount.



BY	REVISION	DATE
F&H	REV. SR 178 INTERSECTION	10/10/08

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78 STA. 838+00 TO STA. 868+00

SR 9 @ BLUE SPRINGS STA. 20+00 TO STA. 33+50

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: PSP-3a

SHEET NUMBER: 100.06

FILENAME: psp3a_78.dgn

DESIGN TEAM: F&H, Inc. CHECKED DATE

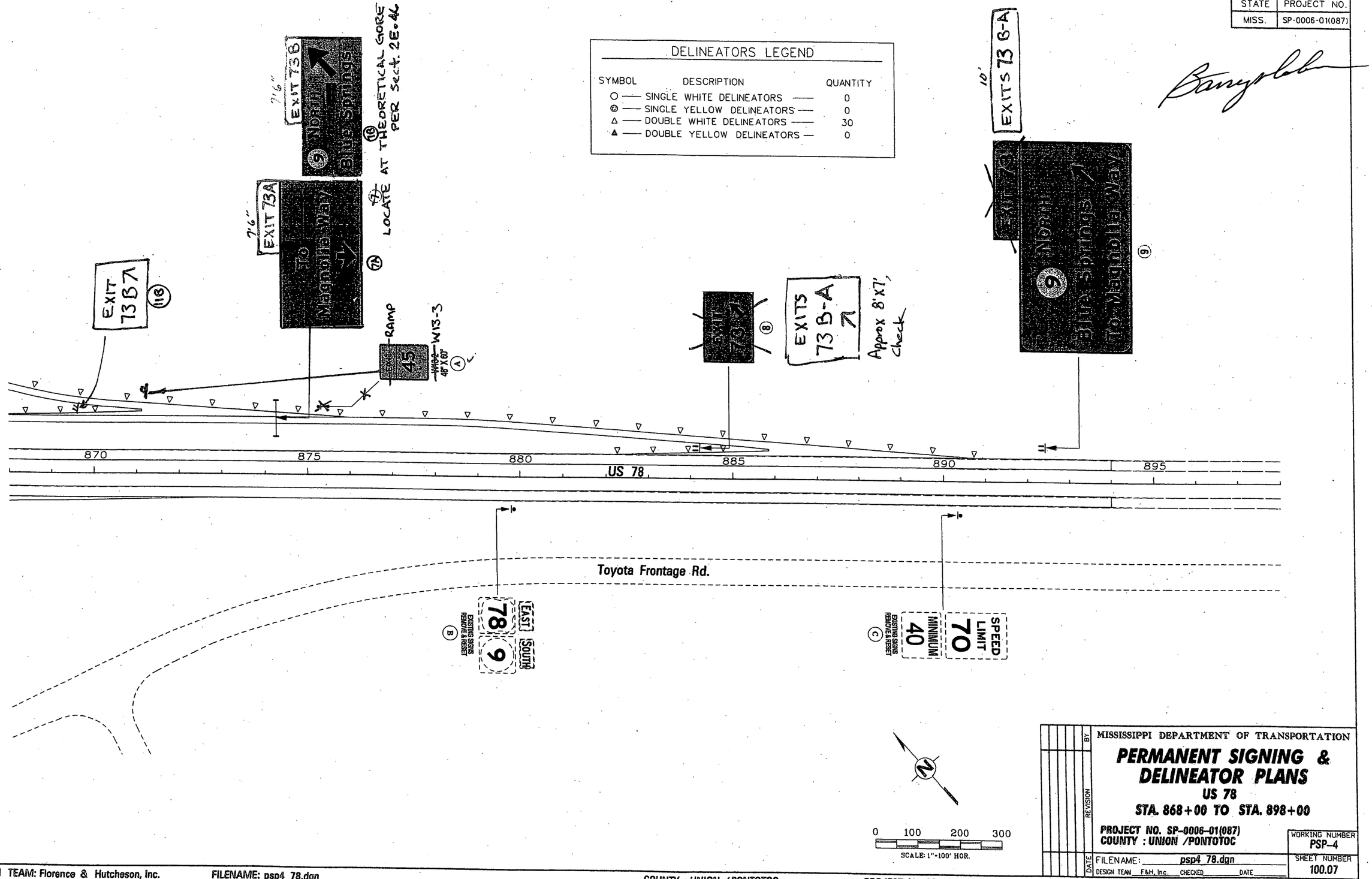
PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	0
②	SINGLE YELLOW DELINEATORS	0
△	DOUBLE WHITE DELINEATORS	30
▲	DOUBLE YELLOW DELINEATORS	0



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 868+00 TO STA. 898+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER	SHEET NUMBER
PSP-4	100.07

REVISION | BY | DATE

FILENAME: psp4 78.dgn
DESIGN TEAM: F&H, Inc. CHECKED DATE

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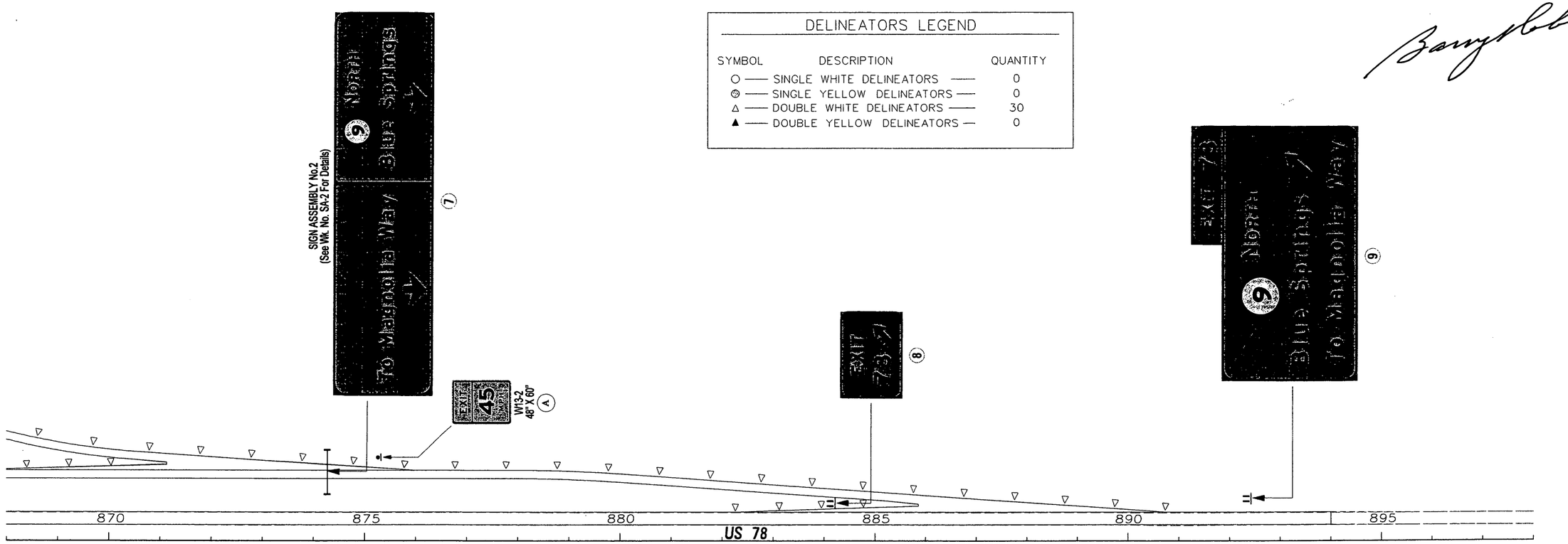
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DELINEATORS LEGEND

SYMBOL	DESCRIPTION	QUANTITY
○	SINGLE WHITE DELINEATORS	0
⊘	SINGLE YELLOW DELINEATORS	0
△	DOUBLE WHITE DELINEATORS	30
▲	DOUBLE YELLOW DELINEATORS	0



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 868+00 TO STA. 898+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: PSP-4

SHEET NUMBER: 100.07

DESIGN TEAM: F&H, Inc. CHECKED DATE

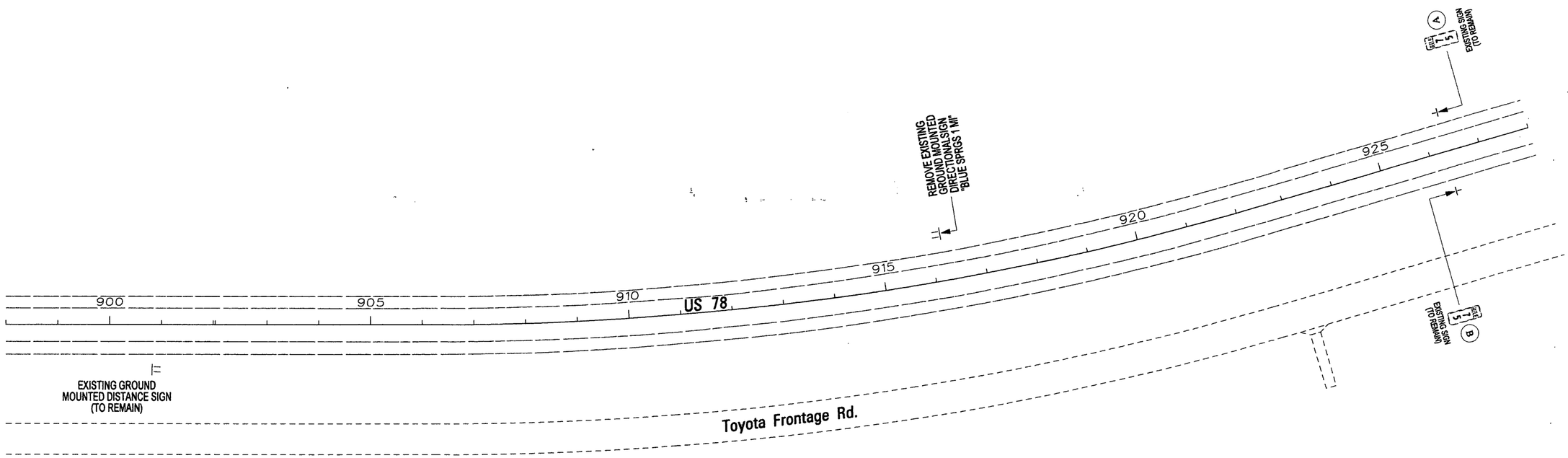
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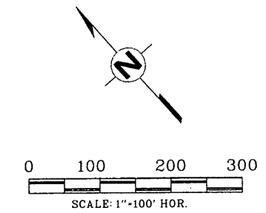
REVISION BY DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:36:04 PMSP-4_78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)





PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08-12-2008 03:35:59 PSP-5_78.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 898+00. TO STA. 928+00

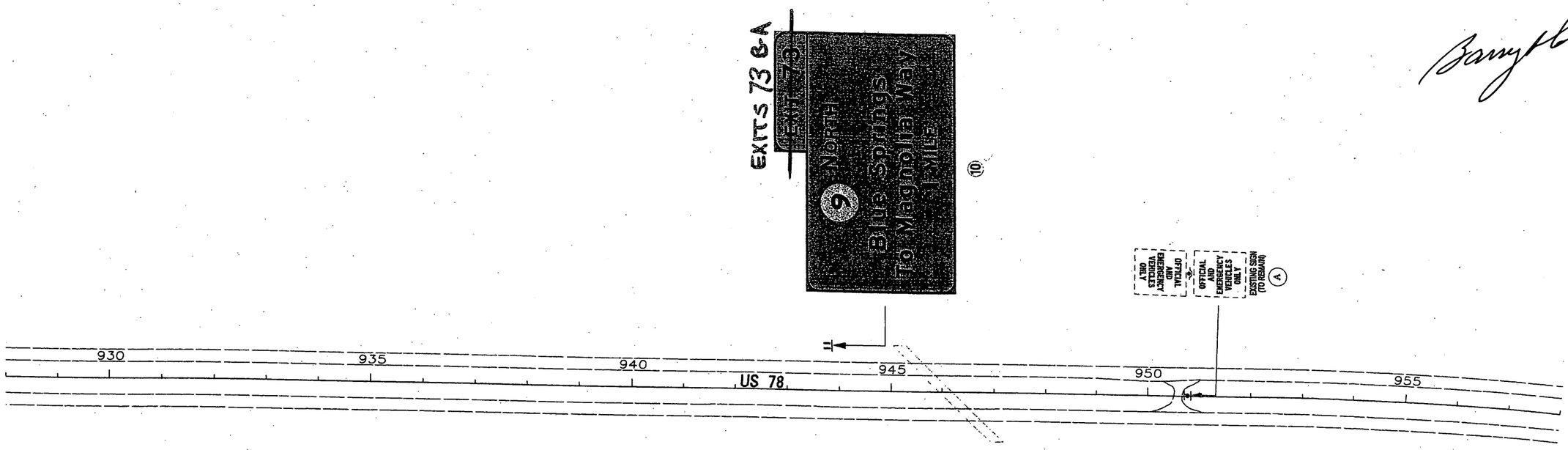
PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

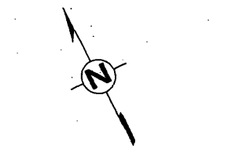
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PSP-5	100.08

REVISION | BY | DATE

FILENAME: psp5 78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)





MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 928+00 TO STA. 958+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

BY	REVISION	DATE

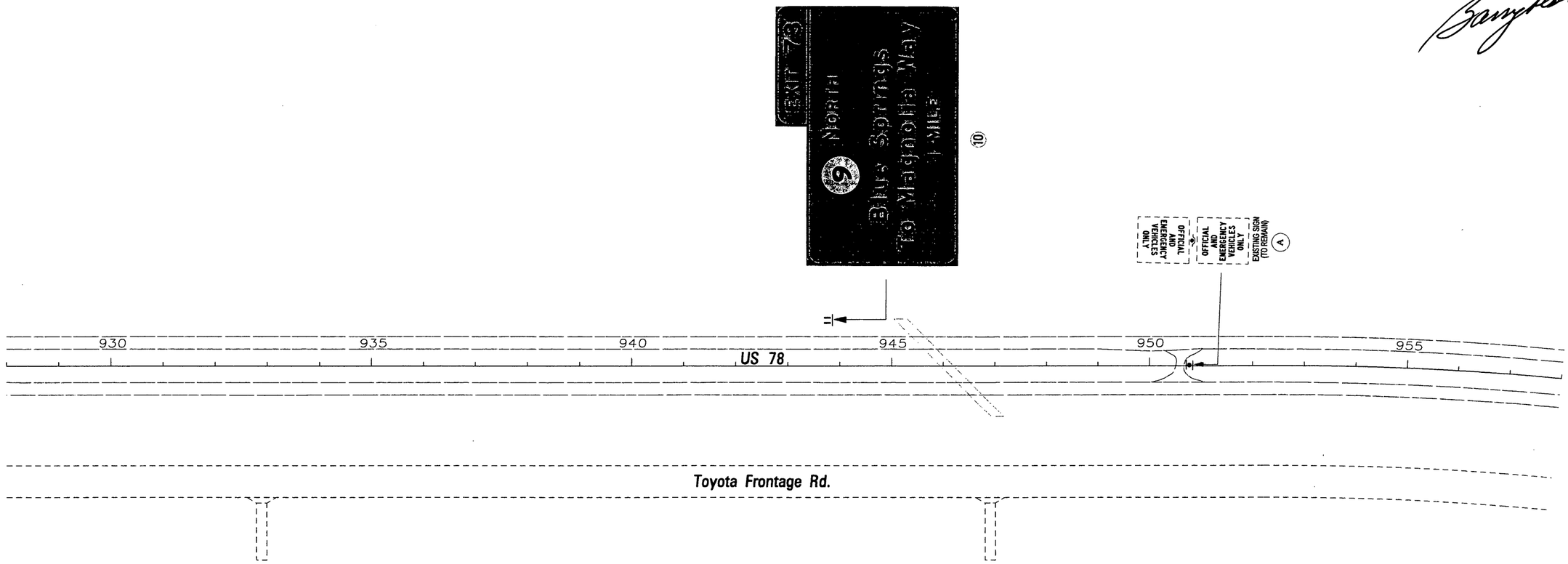
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DESIGN TEAM F&H, Inc. CHECKED DATE

WORKING NUMBER: PSP-6
SHEET NUMBER: 100.09

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: psp6 78.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/12/2008 03:35:59 SP-6_78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)





PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:35:55 PMSP-6-78.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PERMANENT SIGNING & DELINEATOR PLANS

US 78

STA. 928+00 TO STA. 958+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

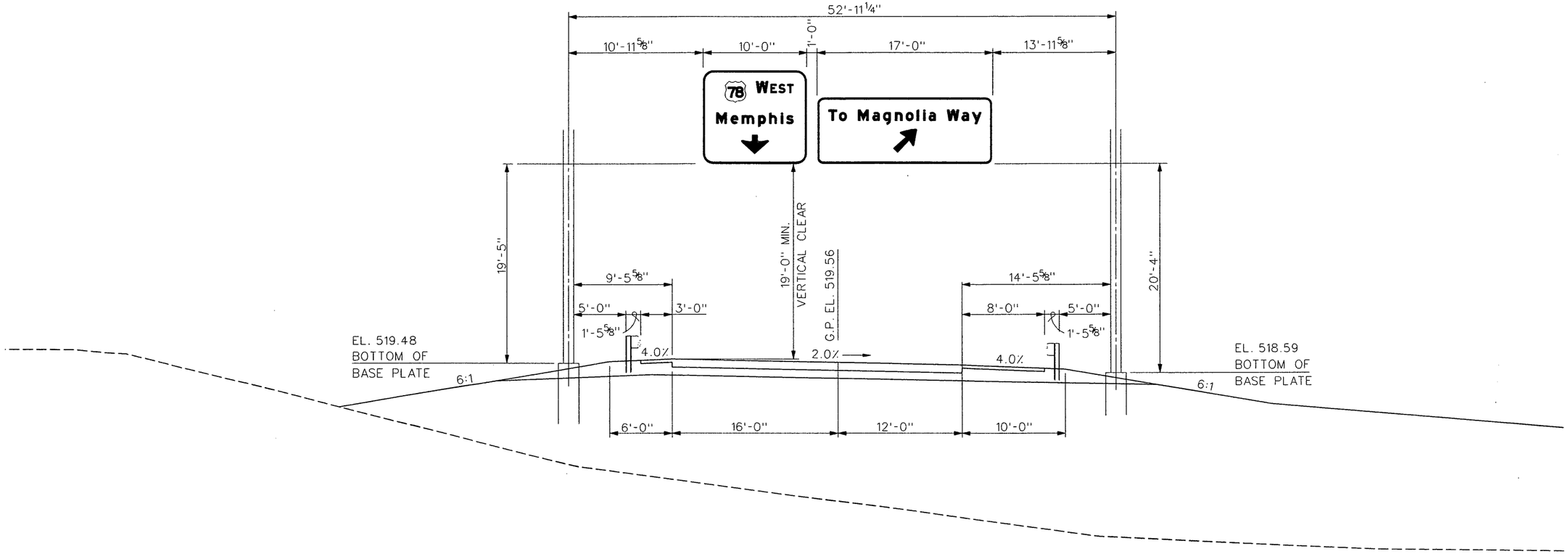
WORKING NUMBER	SHEET NUMBER
PSP-6	100.09

REVISION | BY | DATE

FILENAME: psp6_78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: psp6 78.dgn COUNTY : UNION /PONTOTOC PROJECT No. SP-0006-01(087) SHEET ID: US 78

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



ASSEMBLY #1
OVERHEAD TRUSS MOUNT
STA. 850+05 CD ROAD

NOTES:
1. FOR SIGN DETAILS, SEE WK. NO. DSD-1.
2. PRIOR TO FABRICATION, TRUSS SHOP DRAWINGS TO BE SUBMITTED TO MDOT BRIDGE DIVISION FOR THEIR REVIEW AND APPROVAL.
3. DESIGN FOR SNOW LOAD AND WIND SPEED OF 90 MPH.

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN ASSEMBLY

NO. 1

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

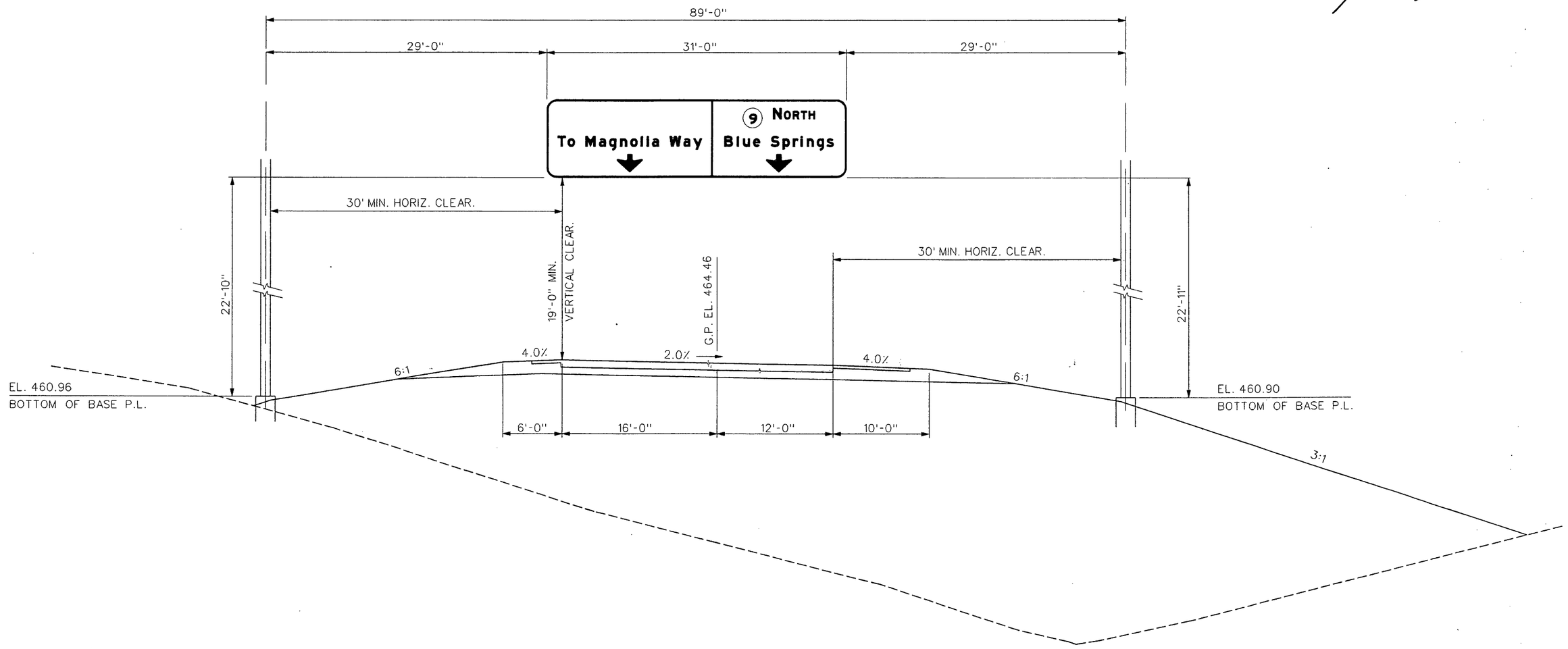
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SHEET NUMBER: 100.10

REVISION | BY | DATE

FILENAME: SA-1.dgn
DESIGN TEAM: F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. **FILENAME: SA-1.dgn** **COUNTY : UNION /PONTOTOC** **PROJECT No. SP-0006-01(087)**

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



ASSEMBLY #2
OVERHEAD TRUSS MOUNT
CD ROAD STA. 874+27

NOTES:

1. FOR SIGN DETAILS, SEE WK. NO. DSD-2.
2. PRIOR TO FABRICATION, TRUSS SHOP DRAWINGS TO BE SUBMITTED TO MDOT BRIDGE DIVISION FOR THEIR REVIEW AND APPROVAL.
3. DESIGN FOR SNOW LOAD AND WIND SPEED OF 90 MPH.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERHEAD SIGN ASSEMBLY

NO. 2

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: SA-2
SHEET NUMBER: 100.11

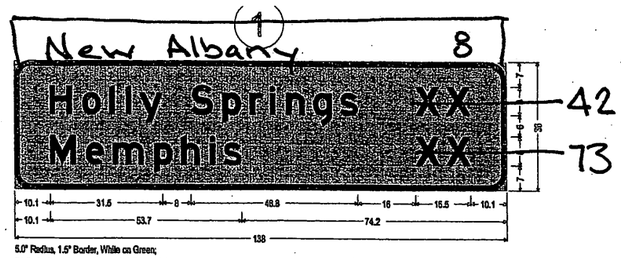
REVISION / BY / DATE

FILENAME: SA-2.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

09/12/2008 @3:35:47 PM SA-2.DGN

(1)

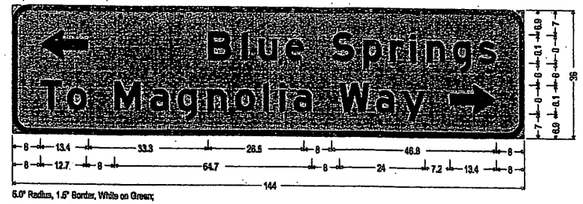


5.0" Radius, 1.5" Border, White on Green;
[Holly Springs] E Mod; [Memphis] E Mod; [XX] E Mod; [XX] E Mod;
Table of distances between letter and object lefts.

	H	o	l	l	y	S	p	r	i	n	g	s	X	X	
10.1	9.1	7.7	4.5	3.8	14.4	9.0	7.5	5.8	4.6	7.5	7.3	21.1	8.6	8.9	10.1

	M	e	m	p	h	i	s	X	X	
10.1	10.1	7.6	11.5	7.6	8.1	3.8	53.6	8.6	8.9	10.1

(2)

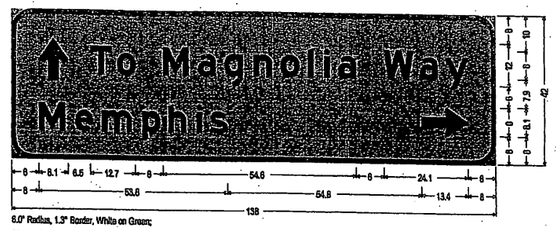


6.0" Radius, 1.5" Border, White on Green;
Standard Arrow Custom 13.4" X 8.1" 180; [Blue Springs] E Mod; [To Magnolia Way] E Mod;
Standard Arrow Custom 13.4" X 8.1" 0;
Table of distances between letter and object lefts.

	←	B	l	u	e	S	p	r	i	n	g	s			
8.0	46.7	9.3	4.5	7.8	13.1	8.9	7.8	5.7	4.6	7.6	7.3	5.1	8.0		

	T	o	M	a	g	n	o	l	i	a	W	a	y	→	
8.0	7.5	13.2	10.2	7.5	8.1	7.6	7.7	4.6	3.9	13.1	10.3	7.3	15.8	13.4	8.0

(3)

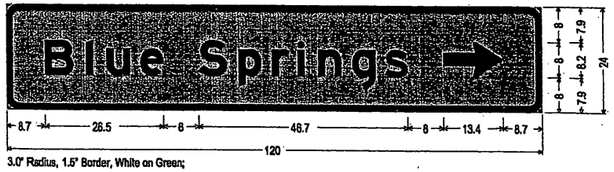


6.0" Radius, 1.5" Border, White on Green;
Standard Arrow Custom 12.0" X 8.1" 90; [To Magnolia Way] E Mod; [Memphis] E Mod;
Standard Arrow Custom 13.4" X 8.1" 0;
Table of distances between letter and object lefts.

8.0	↑	T	o	M	a	g	n	o	l	i	a	W	a	y	
	14.8	7.4	13.3	10.1	7.5	8.2	7.5	7.7	4.6	4.0	13.0	10.3	7.3	8.5	8.0

8.0	M	e	m	p	h	i	s	→		
	10.1	7.7	11.8	7.5	8.2	3.7	53.9	13.4	8.0	

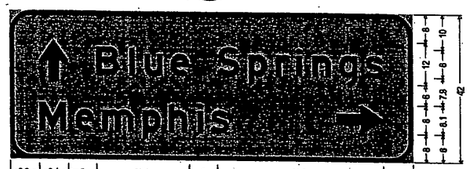
(4)



3.0" Radius, 1.5" Border, White on Green;
[Blue Springs] E Mod; Standard Arrow Custom 13.4" X 8.1" 0;
Table of distances between letter and object lefts.

	B	l	u	e	S	p	r	i	n	g	s	→	
8.7	9.2	4.6	7.6	13.1	8.9	7.5	5.8	4.6	7.5	7.4	13.0	13.4	8.7

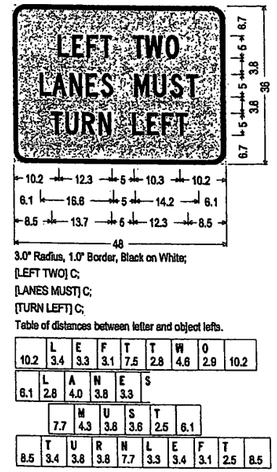
(5)



6.0" Radius, 1.5" Border, White on Green;
Standard Arrow Custom 12.0" X 8.1" 90; [Blue Springs] E Mod;
[Memphis] E Mod; Standard Arrow Custom 13.4" X 8.1" 0;
Table of distances between letter and object lefts.

8.3	↑	B	l	u	e	S	p	r	i	n	g	s			
	16.1	8.3	4.6	7.5	13.1	8.9	7.6	5.8	4.5	7.6	7.3	5.1	8.3		

8.3	M	e	m	p	h	i	s	→		
	10.1	7.7	11.8	7.5	8.2	3.7	35.9	13.4	8.3	



3.0" Radius, 1.0" Border, Black on White;
[LEFT TWO] C;
[LANES MUST] C;
[TURN LEFT] C;
Table of distances between letter and object lefts.

	L	E	F	T	T	W	O	
10.2	3.4	3.3	3.1	7.5	2.8	4.8	2.9	10.2

	L	A	N	E	S	
6.1	2.8	4.0	3.8	3.3		

	M	U	S	T		
7.7	4.3	3.8	3.6	2.5	6.1	

	T	U	R	N	L	E	F	T	
8.5	3.4	3.8	3.8	7.7	3.3	3.4	3.1	2.5	8.5

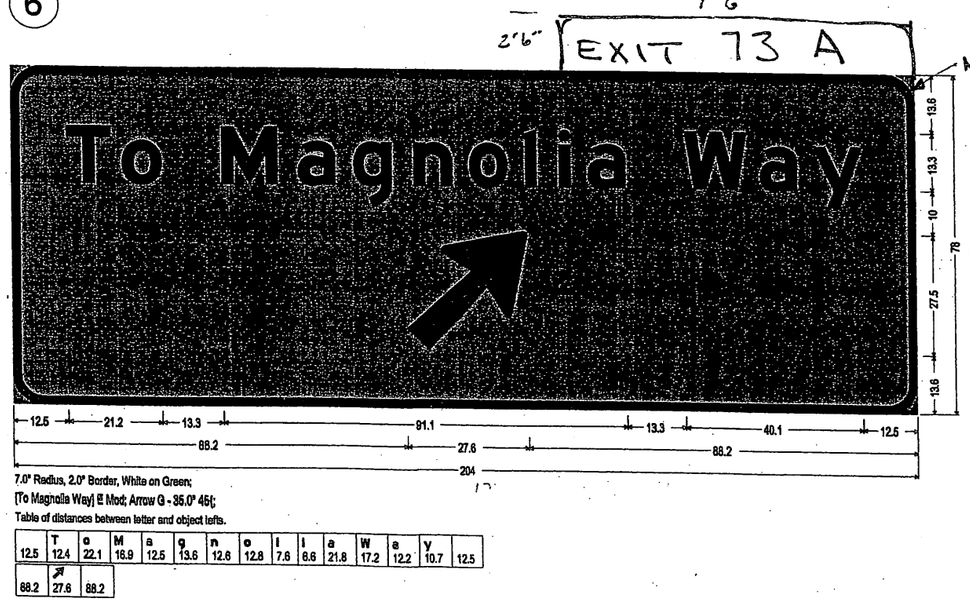
(6)

12.0" Radius, 2.0" Border, White on Green;
[WEST] E Mod; [Memphis] E Mod; Down Arrow 22.0" 270;
Table of distances between letter and object lefts.

	⬇	W	E	S	T	
25.4	38.0	16.5	9.4	10.1	7.4	15.2

15.2	M	e	m	p	h	i	s	
	16.9	12.6	19.2	12.6	13.6	6.3	8.4	15.2

44.0	⬇	44.0
	32.0	



7.0" Radius, 2.0" Border, White on Green;
[To Magnolia Way] E Mod; Arrow G - 35.0° 45;
Table of distances between letter and object lefts.

12.5	T	o	M	a	g	n	o	l	i	a	W	e	y		
	12.4	22.1	16.9	12.5	13.6	12.8	12.8	7.6	8.6	21.8	17.2	12.2	10.7	12.5	

88.2	↗	88.2
	27.6	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DIRECTIONAL SIGN DETAILS 1, 2, 3, 4, 5, & 6

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER DSD-1
SHEET NUMBER 100.12

REVISION | BY | DATE

FILENAME: dsd1 78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

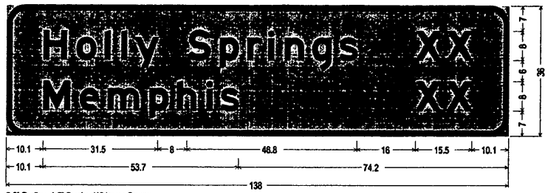
PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:35:41 R95D1_78.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: dsd1 78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

1



5.0" Radius, 1.5" Border, White on Green;
[Holly Springs] E Mod; [Memphis] E Mod; [XX] E Mod; [XX] E Mod;
Table of distances between letter and object lefts.

	H	o	l	l	y	S	p	r	i	n	g	s	X	X	
10.1	9.1	7.7	4.5	3.8	14.4	9.0	7.5	5.8	4.6	7.5	7.3	21.1	8.6	6.9	10.1
	M	e	m	p	h	i	s	X	X						
10.1	10.1	7.6	11.5	7.6	8.1	3.8	53.6	8.6	6.9	10.1					

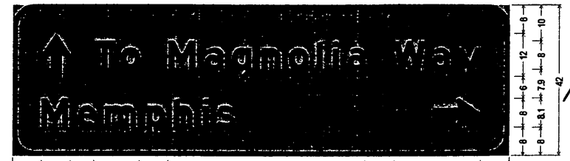
2



5.0" Radius, 1.5" Border, White on Green;
Standard Arrow Custom 13.4" X 8.1" 180[; [Blue Springs] E Mod; [To Magnolia Way] E Mod;
Standard Arrow Custom 13.4" X 8.1" 0[;
Table of distances between letter and object lefts.

8.0	← 46.7	B 9.3	l 4.5	u 7.6	e 13.1	S 8.9	p 7.6	r 5.7	l 4.6	n 7.6	g 7.3	s 5.1	8.0		
8.0	T 7.5	o 13.2	M 10.2	a 7.5	g 8.1	n 7.6	o 7.7	l 4.8	l 3.8	a 13.1	W 10.3	a 7.3	y 13.6	→ 13.4	8.0

3



6.0" Radius, 1.3" Border, White on Green;
Standard Arrow Custom 12.0" X 8.1" 90[; [To Magnolia Way] E Mod; [Memphis] E Mod;
Standard Arrow Custom 13.4" X 8.1" 0[;
Table of distances between letter and object lefts.

8.0	↑ 14.6	T 7.4	o 13.3	M 10.1	e 7.5	g 8.2	h 7.5	o 7.7	l 4.6	l 4.0	a 13.0	W 10.3	a 7.3	y 6.5	8.0		
8.0	M 10.1	e 7.7	m 11.5	p 7.5	h 8.2	l 3.7	a 59.9	→ 13.4	8.0								

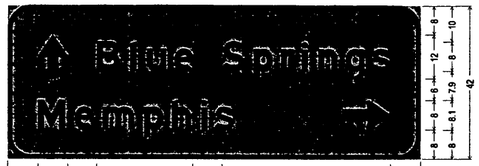
4



3.0" Radius, 1.5" Border, White on Green;
[Blue Springs] E Mod; Standard Arrow Custom 13.4" X 8.1" 0[;
Table of distances between letter and object lefts.

	B	l	u	e	S	p	r	l	n	g	s	→	
8.7	9.2	4.6	7.6	13.1	8.9	7.5	5.8	4.6	7.5	7.4	13.0	13.4	8.7

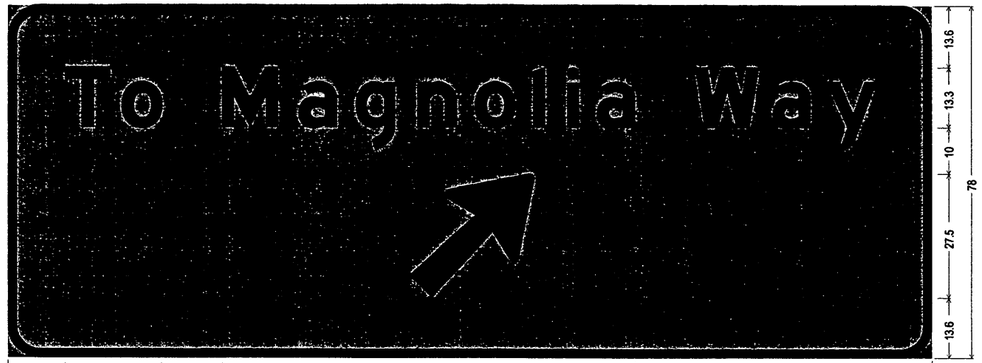
5



6.0" Radius, 1.3" Border, White on Green;
Standard Arrow Custom 12.0" X 8.1" 90[; [Blue Springs] E Mod;
[Memphis] E Mod; Standard Arrow Custom 13.4" X 8.1" 0[;
Table of distances between letter and object lefts.

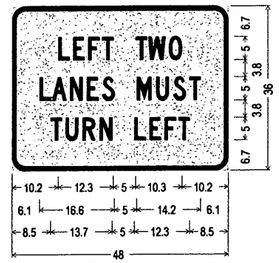
8.3	↑ 16.1	B 9.3	l 4.6	u 7.5	e 13.1	S 8.9	p 7.6	r 5.8	l 4.5	n 7.8	g 7.3	s 5.1	8.3		
8.3	M 10.1	e 7.7	m 11.5	p 7.5	h 8.2	l 3.7	s 35.3	→ 13.4	8.3						

6



7.0" Radius, 2.0" Border, White on Green;
[To Magnolia Way] E Mod; Arrow G - 35.0° 45[;
Table of distances between letter and object lefts.

12.5	T 12.4	o 22.1	M 16.9	a 12.5	g 13.6	n 12.6	o 12.8	l 7.6	l 6.6	a 21.8	W 17.2	a 12.2	y 10.7	12.5	
88.2	↗ 27.6	88.2													



3.0" Radius, 1.0" Border, Black on White;
[LEFT TWO] C;
[LANES MUST] C;
[TURN LEFT] C;
Table of distances between letter and object lefts.

	L	E	F	T	T	W	O								
10.2	3.4	3.3	3.1	7.5	2.8	4.6	2.9	10.2							
	L	A	N	E	S										
6.1	2.8	4.0	3.8	3.3											
		M	U	S	T										
	7.7	4.3	3.8	3.6	2.5	6.1									
	T	U	R	N	L	E	F	T							
8.5	3.4	3.8	3.8	7.7	3.3	3.4	3.1	2.5	8.5						

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DIRECTIONAL SIGN DETAILS 1, 2, 3, 4, 5, & 6

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: DSD-1
SHEET NUMBER: 100.12

DATE | REVISION | BY

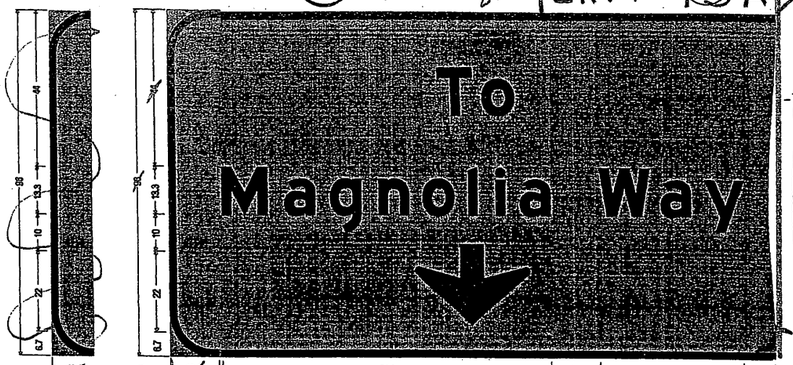
FILENAME: dsd1 78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:35:41 P:\SD\1_78.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

7A



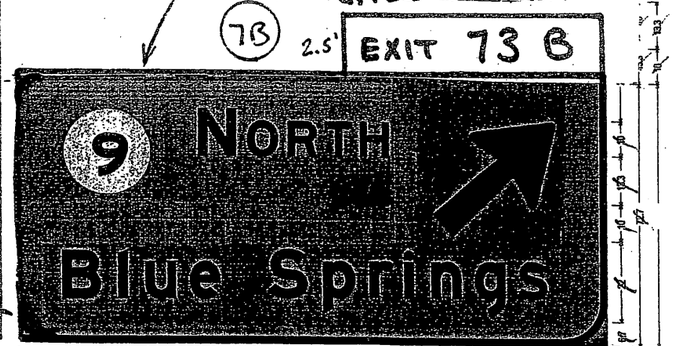
12.0" Radius, 2.0" Border, White on Green;
[ ] E Mod; [To Magnolia Way] E Mod; Down Arrow 22.0° 270];
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; Down Arrow 22.0° 270];
Table of distances between letter and object lefts.

-168.0	559.0																		
13.5	T 12.4	o 22.1	M 16.9	a 12.5	q 13.8	n 12.6	o 12.8	l 7.8	i 6.8	a 21.8	W 17.2	a 12.2	y 10.7	179.5					
87.0	↓ 32.0	283.0																	
243.3	' 37.4	N 13.6	O 10.9	R 10.0	T 9.5	H 9.0	39.3												
220.3	B 15.4	l 7.8	u 12.6	e 21.8	S 14.9	p 12.6	r 9.8	l 7.6	n 12.6	g 12.3	s 8.4	16.3							
272.0	↓ 32.0	68.0																	

7B

Make Two Signs

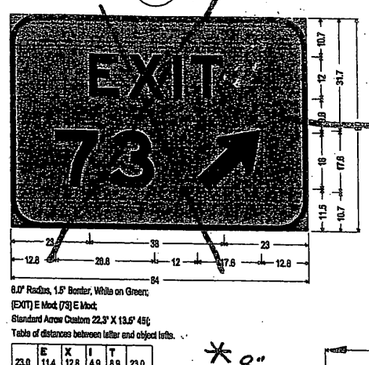
Change down arrow to exit directional arrow as shown



12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; Down Arrow 22.0° 270];
Table of distances between letter and object lefts.

-168.0	559.0																		
13.5	T 12.4	o 22.1	M 16.9	a 12.5	q 13.8	n 12.6	o 12.8	l 7.8	i 6.8	a 21.8	W 17.2	a 12.2	y 10.7	179.5					
87.0	↓ 32.0	283.0																	
243.3	' 37.4	N 13.6	O 10.9	R 10.0	T 9.5	H 9.0	39.3												
220.3	B 15.4	l 7.8	u 12.6	e 21.8	S 14.9	p 12.6	r 9.8	l 7.6	n 12.6	g 12.3	s 8.4	16.3							
272.0	↓ 32.0	68.0																	

8



6.0" Radius, 1.5" Border, White on Green;
(EXIT) E Mod; [73] E Mod;
Standard Arrow Custom 22.5° X 13.5° 45];
Table of distances between letter and object lefts.

23.0	E 11.4	X 12.8	I 4.9	T 8.9	23.0
12.8	7 18.1	3 24.7	↗ 17.8	12.8	

EXITS
73 B-A
↗
7'
8'

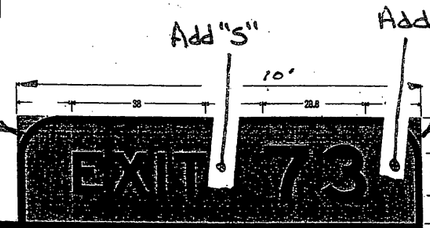
Barry Robinson

10

* 8" Radii

Add "S"

Add "B-A"

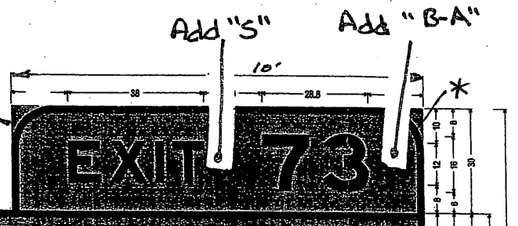


9

* 8" Radii

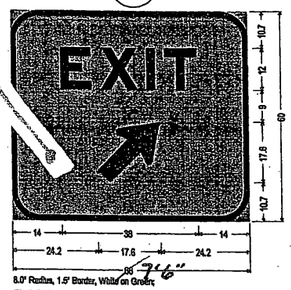
Add "S"

Add "B-A"



Add "73 A"

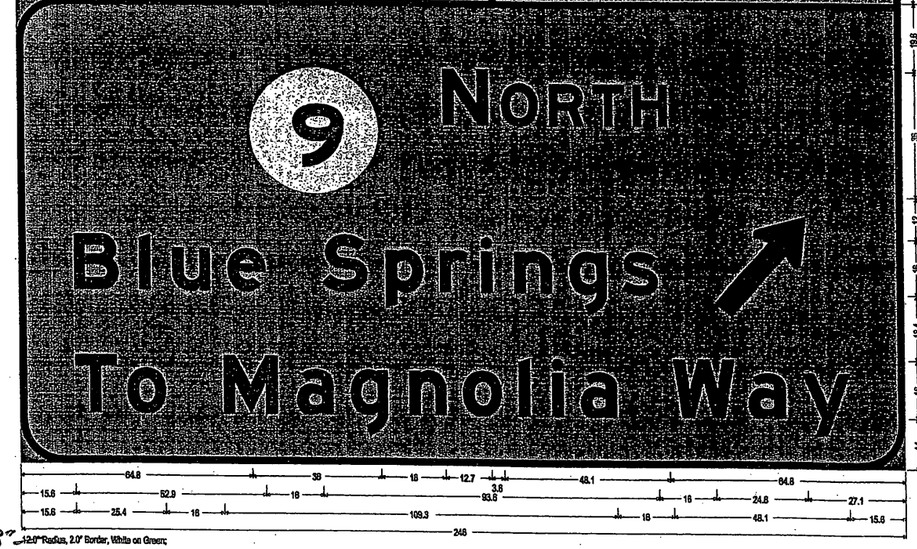
11A



8.0" Radius, 1.5" Border, White on Green;
[EXIT] E Mod;
Standard Arrow Custom 22.5° X 13.5° 45];
Table of distances between letter and object lefts.

14.0	E 11.4	X 12.8	I 4.9	T 8.9	14.0
24.2	↗ 17.8	24.2			

7'6"



12.0" Radius, 2.0" Border, White on Green;
[EXIT 73] E Mod;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; Standard Arrow Custom 35.0° X 16.1° 60]; [To Magnolia Way] E Mod;
Table of distances between letter and object lefts.

147.6	E 11.4	X 12.8	I 4.9	T 24.9	7 16.1	3 12.7	15.6												
64.8	⊗ 54.0	N 16.3	O 13.1	R 12.1	T 11.4	H 9.5	64.8												
15.6	B 18.5	l 9.1	u 15.1	e 26.2	S 17.9	p 15.1	r 11.5	l 9.2	n 15.1	g 14.7	s 28.1	↗ 24.8	27.1						
15.6	T 14.9	o 28.5	M 20.2	a 15.1	g 16.3	n 15.1	o 15.4	l 9.2	l 7.9	a 28.1	W 20.6	a 14.6	y 12.9	15.6					

8"

12.0" Radius, 2.0" Border, White on Green;
[EXIT 73] E Mod;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; [To Magnolia Way] E Mod; [1 MILE] E Mod;
Table of distances between letter and object lefts.

147.6	E 11.4	X 12.8	I 4.9	T 24.9	7 16.1	3 12.7	15.6												
67.1	↗ 49.3	N 18.4	O 13.1	R 12.0	T 11.4	H 9.8	67.1												
41.6	B 18.4	l 8.2	u 15.1	e 26.2	S 17.9	p 15.1	r 11.5	l 9.1	n 15.1	g 14.7	s 10.1	41.6							
15.6	T 14.9	o 28.5	M 20.2	a 15.1	g 16.3	n 15.1	o 15.4	l 9.2	l 7.9	a 28.1	W 20.6	a 14.6	y 12.9	15.6					
109.7	1 18.1	M 14.1	I 5.5	L 11.4	E 8.9	87.3													

11B

EXIT
73 B ↗
5'
7'6"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DIRECTIONAL SIGN DETAILS
7, 8, 9, 10, & 11

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER DSD-2

SHEET NUMBER 100.13

REVISION | BY | DATE

FILENAME: dsd2 78.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: dsd2 78.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

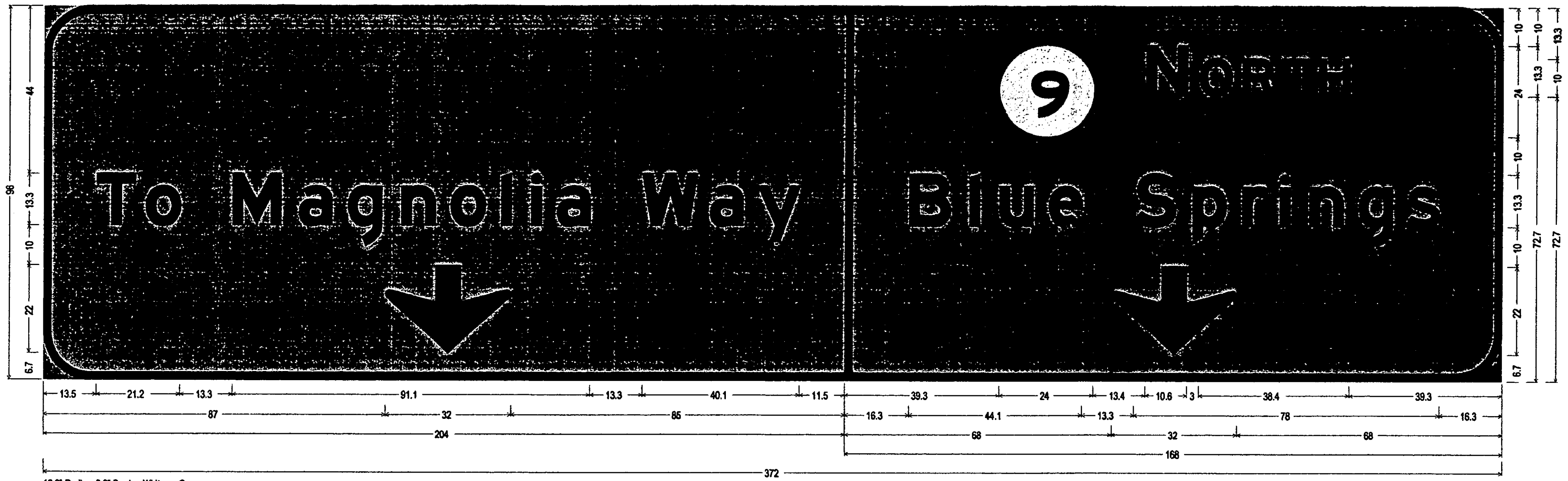
DSD2_78.DGN

8/1/2/2006 9:35:36 PM

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

7



12.0" Radius, 2.0" Border, White on Green;
[ ] E Mod; [To Magnolia Way] E Mod; Down Arrow 22.0" 270{;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; Down Arrow 22.0" 270{;
Table of distances between letter and object lefts.

-186.0	558.0

	T	o	M	a	g	n	o	l	i	a	W	a	y	
13.5	12.4	22.1	16.9	12.5	13.6	12.6	12.8	7.8	6.6	21.8	17.2	12.2	10.7	179.5

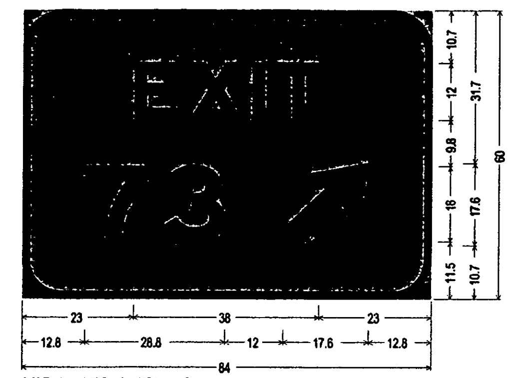
	↓	
87.0	32.0	253.0

	9	N	O	R	T	H	
243.3	37.4	13.6	10.9	10.0	9.5	8.0	39.3

	B	l	u	e	S	p	r	i	n	g	s	
220.3	15.4	7.6	12.6	21.8	14.9	12.6	9.6	7.6	12.6	12.3	8.4	16.3

	↓	
272.0	32.0	68.0

8

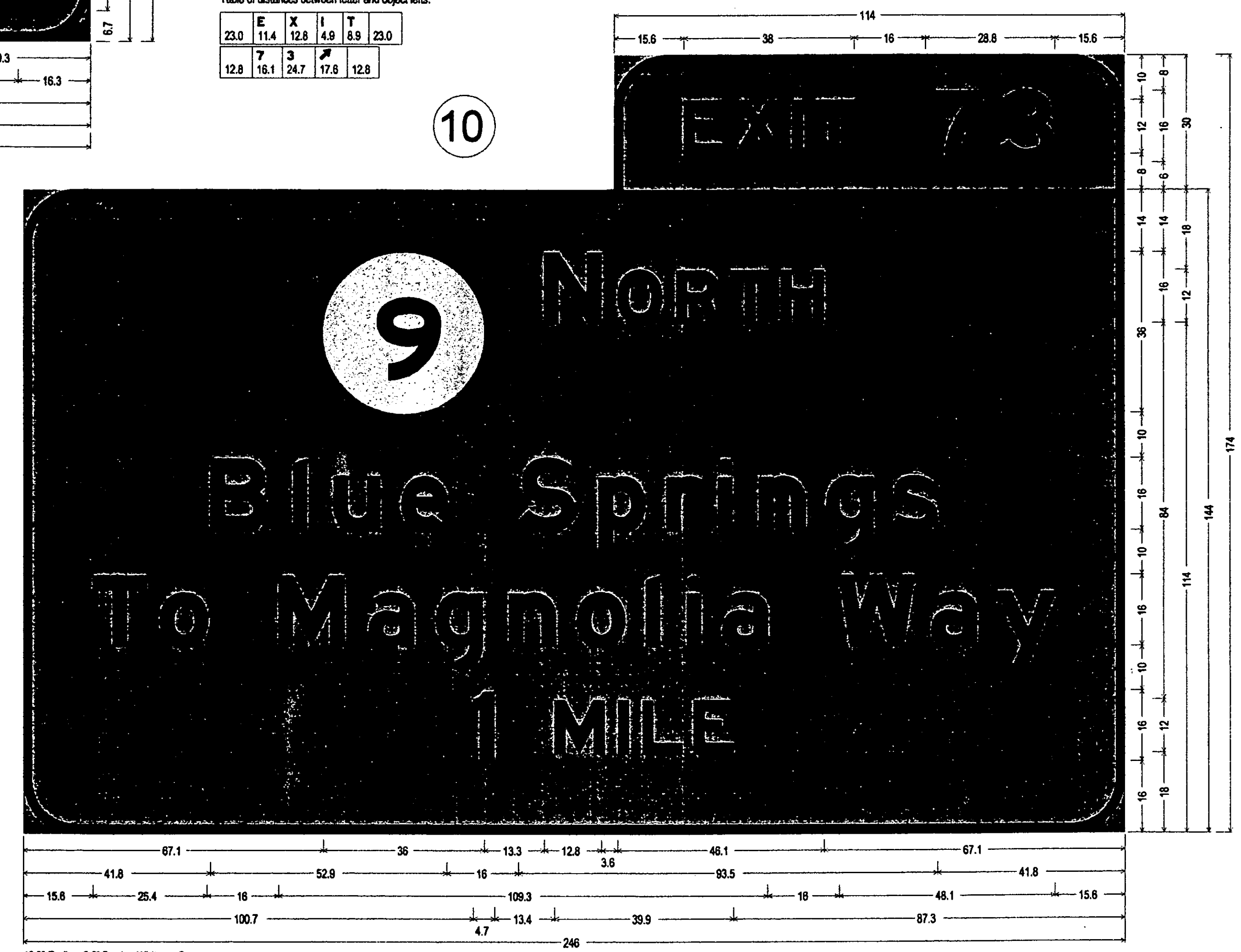


8.0" Radius, 1.5" Border, White on Green;
[EXIT] E Mod; [73] E Mod;
Standard Arrow Custom 22.3" X 13.5" 45{;
Table of distances between letter and object lefts.

	E	X	I	T	
23.0	11.4	12.8	4.9	8.9	23.0

	7	3	↗	
12.8	16.1	24.7	17.6	12.8

10



12.0" Radius, 2.0" Border, White on Green;
[EXIT 73] E Mod;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; [To Magnolia Way] E Mod; [1 MILE] E Mod;
Table of distances between letter and object lefts.

	E	X	I	T	7	3	
147.6	11.4	12.8	4.9	24.9	16.1	12.7	15.6

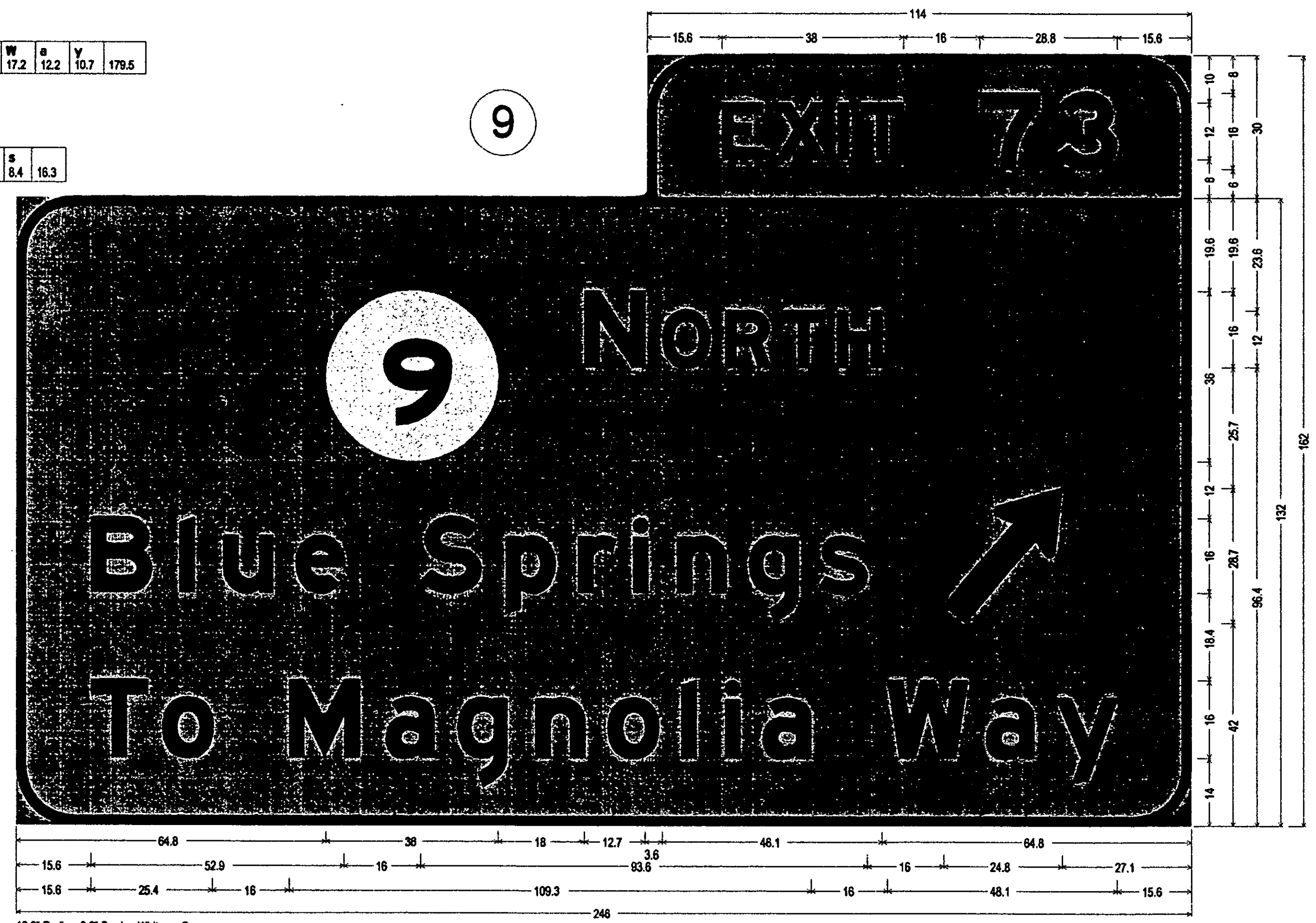
	9	N	O	R	T	H	
67.1	49.3	16.4	13.1	12.0	11.4	9.6	67.1

	B	l	u	e	S	p	r	i	n	g	s	
41.8	18.4	9.2	15.1	26.2	17.9	15.1	11.5	9.1	15.1	14.7	10.1	41.8

	T	o	M	a	g	n	o	l	i	a	W	a	y	
15.6	14.9	26.5	20.2	15.1	16.3	15.1	15.4	9.2	7.9	26.1	20.6	14.6	12.9	15.6

	1	M	I	L	E	
100.7	18.1	14.1	5.5	11.4	8.9	87.3

9



12.0" Radius, 2.0" Border, White on Green;
[EXIT 73] E Mod;
12.0" Radius, 2.0" Border, White on Green;
[NORTH] E Mod; [Blue Springs] E Mod; Standard Arrow Custom 35.0" X 16.1" 50{; [To Magnolia Way] E Mod;
Table of distances between letter and object lefts.

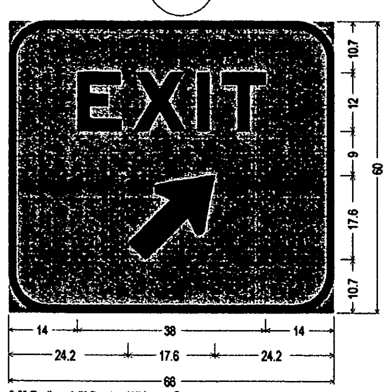
	E	X	I	T	7	3	
147.6	11.4	12.8	4.9	24.9	16.1	12.7	15.6

	●	N	O	R	T	H	
64.8	54.0	16.3	13.1	12.1	11.4	9.5	64.8

	B	l	u	e	S	p	r	i	n	g	s	↗	
15.6	18.5	9.1	15.1	26.2	17.9	15.1	11.5	9.2	15.1	14.7	26.1	24.8	27.1

	T	o	M	a	g	n	o	l	i	a	W	a	y	
15.6	14.9	26.5	20.2	15.1	16.3	15.1	15.4	9.2	7.9	26.1	20.6	14.6	12.9	15.6

11



8.0" Radius, 1.5" Border, White on Green;
[EXIT] E Mod;
Standard Arrow Custom 22.3" X 13.5" 45{;
Table of distances between letter and object lefts.

	E	X	I	T	
14.0	11.4	12.8	4.9	8.9	14.0

	↗	
24.2	17.6	24.2

ROADWAY DESIGN DIVISION
PLAN
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 03:35:36 PM DSD2_78.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DIRECTIONAL SIGN DETAILS
7, 8, 9, 10, & 11

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER DSD-2
SHEET NUMBER 100.13

REVISION | BY | DATE

FILENAME: dsd2 78.dgn
DESIGN TEAM F&H, Inc. CHECKED ____ DATE ____

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

LEGEND

- PROPOSED SIGNAL FACE
- SIGN "A"
- VEHICLE DETECTOR LOOP ZONE
- VEHICLE DETECTOR LOOP
- Z5 — VEHICLE DETECTOR LOOP ZONE NUMBER
- (A) — SIGNAL POLE DESIGNATION
- VIDEO DETECTION CAMERA
- BASE MOUNTED CABINET
- TYPE 1 PULLBOX
- TYPE 2 PULLBOX
- CONDUIT
- WIRE

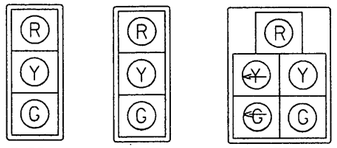
POLE CHART

POLE	MAST ARM(S) LENGTH	MAST ARM ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE)	VERTICAL SHAFT LENGTH	TYPE	MATERIAL	SIGNAL HEAD SPACING *	OFFSET **	
							S.R. 9 N	RAMP
A	35′	180°	17′	II	STEEL	19′-31′	43′	63′
B	45′	270°	17′	II	STEEL	24′-43′	41′	14′
C	45′	270°	17′	II	STEEL	20′-32′-41′-44′	43′	10′
D	35′	270°	17′	II	STEEL	21′-34′	58′	86′

* NOTE: NUMBERS REPRESENT THE DISTANCE FROM THE POLE TO EACH SIGNAL OR SIGN. THESE FIGURES SHOULD BE FIELD-VERIFIED.
** NOTE: MEASURED ALONG 90° OFFSET FROM CENTER LINE TANGENT OR ALONG RADIUS.

LED SIGNAL FACES

12" LENSES



TYPE 1 OPTICAL PROGRAM #8&9 — TYPE 1 #1,2,3, 4,6,7&10 — TYPE 7L #5

SIGN A



R10-12
24"x30"
(INCLUDED IN COST OF TYPE 7L SIGNAL HEAD)

15+52.39 SR 9 =
Sta. 152+13.23 SW RAMP =
Sta. 10+00.00 SE RAMP

0 20 40 60
SCALE: 1"= 20'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION

SIGNAL LAYOUT SR 9 AT SW/SE RAMPS

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: TSI-1
SHEET NUMBER: 100.14

REVISION | BY | DATE

FILENAME: TSI-1.DGN
DESIGN TEAM F&H, INC. CHECKED CSS DATE

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: TSI-1.DGN COUNTY: UNION / PONTOTOC PROJECT NO.: SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

06/12/2008 15:47:19 TSI-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

SIGNAL PHASING DIAGRAM

	BARRIER 1		BARRIER 2	
RING 1	#1	#2	SPARE #3	#4
RING 2	SPARE #5	#6	SPARE #7	SPARE #8

VOLUME/ DENSITY TIMING IS REQUIRED BECAUSE OF HIGH APPROACH SPEED.

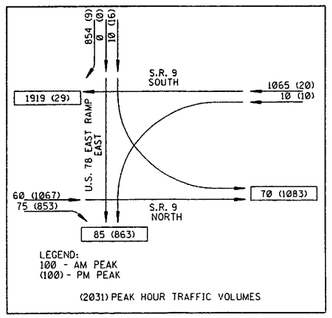
PHASES 2 & 6 ARE MINIMUM RECALL PHASES.

FLASHING OPERATION PHASES: 2 & 6-YELLOW
PHASES: 4 - RED
PHASES: 1 - NO FLASH

FURNISH AND INSTALL A FULLY-ACTUATED EIGHT (8) PHASE CONTROLLER AND CABINET WITH ALL LOAD SWITCHES AND OTHER REQUIRED EQUIPMENT.

THE INITIAL OPERATION SHALL BE FOR THE FOLLOWING PHASES:
1, 1+6, 2, 2+6, & 4

TRAFFIC FLOW DIAGRAM



DETECTOR CHART

LOOP/ ZONE NO.	SIZE	CAMERA	COMMENTS	AMP CHANNEL
Z1	VIDEO (6'x50')	V2	BEGIN AT STOP BAR, CENTER IN LANE	1-1
2A	LOOP (6'x6')	NA	260' FROM STOP BAR, CENTER IN LANE	1-2
2B	LOOP (6'x6')	NA	260' FROM STOP BAR, CENTER IN LANE	NA
Z4A	VIDEO (6'x50')	V3	BEGIN AT STOP BAR, CENTER IN LANE	NA
Z4B	VIDEO (6'x50')	V3	BEGIN AT STOP BAR, CENTER IN LANE	NA
Z4C	VIDEO (6'x50')	V1	BEGIN AT STOP BAR, CENTER IN LANE	1-3
6A	LOOP (6'x6')	NA	260' FROM STOP BAR, CENTER IN LANE	1-4
6B	LOOP (6'x6')	NA	260' FROM STOP BAR, CENTER IN LANE	NA

DETECTOR NUMBER CORRESPONDS WITH INPUT PHASE NUMBER.

0 20 40 60
SCALE: 1"= 20'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION

WIRING DIAGRAM
S.R. 9 AT SW/SE RAMPS

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: TSI-2

FILENAME: TSI-2.DGN
DESIGN TEAM F&H, INC. CHECKED CSS DATE

SHEET NUMBER: 100.15

REVISION BY DATE

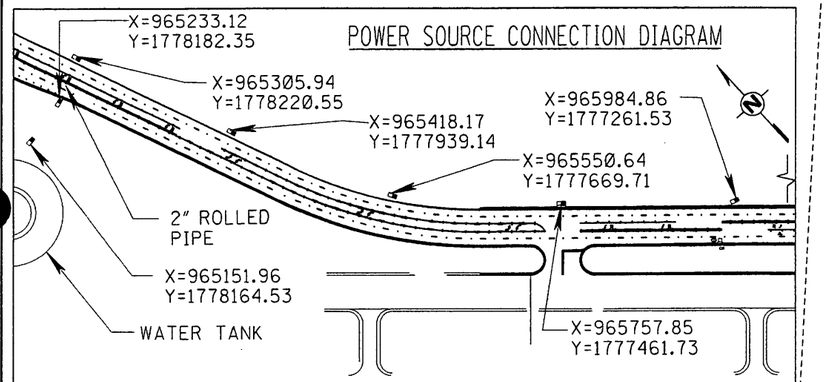
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08/12/2008 15:47:17 TSI-2.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: TSI-2.DGN COUNTY: UNION /PONTOTOC PROJECT NO.: SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

POWER SOURCE CONNECTION DIAGRAM



NOTE: CONDUIT NOT ILLUSTRATED ARE 1" TYPE IV CONDUIT.
PULLBOXES ARE TYPE 1 AND ARE LOCATED BY COORDINATES.

N.T.S.

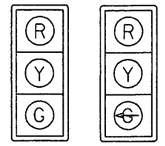
POLE CHART

POLE	MAST ARM(S) LENGTH	MAST ARM ORIENTATION ANGLE FROM HAND HOLE (CLOCKWISE)	VERTICAL SHAFT LENGTH	TYPE	MATERIAL	SIGNAL HEAD SPACING *	OFFSET **	
							S.R. 9 N	TOYOTA
A	45'	180°	17'	II	STEEL	17'-28'-38'-42'	47'	42'
B	35'	270°	17'	II	STEEL	18'-30'	43'	42'
C	25'	270°	17'	II	STEEL	13'-20'	44'	29'

* NOTE: NUMBERS REPRESENT THE DISTANCE FROM THE POLE TO EACH SIGNAL OR SIGN. THESE FIGURES SHOULD BE FIELD-VERIFIED.
** NOTE: MEASURED ALONG 90° OFFSET FROM CENTER LINE TANGENT OR ALONG RADIUS.

LED SIGNAL FACES

12" LENSES



TYPE 1 #3,6&7 — TYPE 5L #1,2,4&5

SIGN A



R10-10(L)
24" x 30"
(INCLUDED IN COST OF TYPE 7L SIGNAL HEAD)

LEGEND

- PROPOSED SIGNAL FACE
- SIGN "A"
- VEHICLE DETECTOR LOOP ZONE
- VEHICLE DETECTOR LOOP
- Z5 — VEHICLE DETECTOR LOOP ZONE NUMBER
- SIGNAL POLE DESIGNATION
- VIDEO DETECTION CAMERA
- BASE MOUNTED CABINET
- TYPE 1 PULLBOX
- TYPE 2 PULLBOX
- CONDUIT
- WIRE
- STREET NAME SIGN (SEE TSD-4)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
PLAN

08/12/2008 15:47:15 TSI-3.DGN

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION

SIGNAL LAYOUT
SR 9 AT TOYOTA DR.

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: TSI-3
SHEET NUMBER: 100.16

FILENAME: TSI-3.DGN
DESIGN TEAM F&H, INC. CHECKED CSS DATE

DESIGN TEAM: Florence & Hutcheson, Inc. **FILENAME: TSI-3.DGN** **COUNTY: UNION / PONTOTOC** **PROJECT NO.: SP-0006-01(087)**

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

SIGNAL PHASING DIAGRAM

	BARRIER 1		BARRIER 2	
RING 1	SPARE #1	#2	SPARE #3	#4
RING 2	#5	#6	SPARE #7	SPARE #8

VOLUME/ DENSITY TIMING IS REQUIRED BECAUSE OF HIGH APPROACH SPEED.

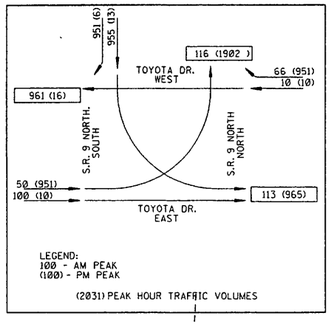
PHASES 2 & 6 ARE MINIMUM RECALL PHASES.

FLASHING OPERATION PHASES: 2 & 6-YELLOW
PHASES: 4-RED
PHASES: 5-YELLOW

FURNISH AND INSTALL A FULLY-ACTUATED EIGHT (8) PHASE CONTROLLER AND CABINET WITH ALL LOAD SWITCHES AND OTHER REQUIRED EQUIPMENT.

THE INITIAL OPERATION SHALL BE FOR THE FOLLOWING PHASES:
2+5, 2+6, & 4

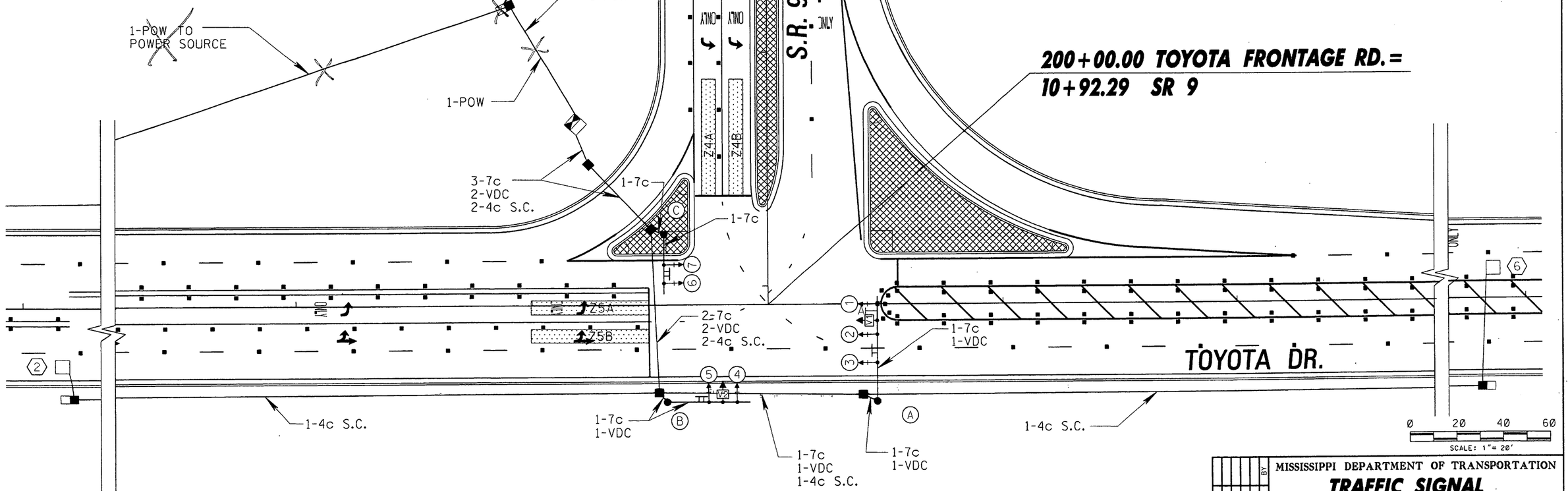
TRAFFIC FLOW DIAGRAM



DETECTOR CHART

LOOP/ ZONE NO.	SIZE	CAMERA	COMMENTS	AMP-CHANNEL
2	(6'x6') LOOP	NA	330' FROM STOP BAR, CENTER IN LANE	1-1
Z4A	VIDEO (6'x50')	V2	BEGIN AT STOP BAR, CENTER IN LANE	NA
Z4B	VIDEO (6'x50')	V2	BEGIN AT STOP BAR, CENTER IN LANE	NA
Z5A	VIDEO (6'x50')	V1	BEGIN AT STOP BAR, CENTER IN LANE	NA
Z5B	VIDEO (6'x50')	V1	BEGIN AT STOP BAR, CENTER IN LANE	NA
6	(6'x6') LOOP	NA	330' FROM STOP BAR, CENTER IN LANE	1-2

DETECTOR NUMBER CORRESPONDS WITH INPUT PHASE NUMBER.



MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC SIGNAL INSTALLATION

WIRING DIAGRAM
S.R. 9 AT TOYOTA FR. RD

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER	TSI-4
SHEET NUMBER	100.17

FILENAME: TSI-4.DGN
DESIGN TEAM F&H, INC. CHECKED CSS DATE

REVISION BY DATE

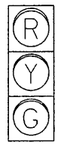
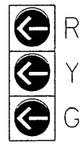
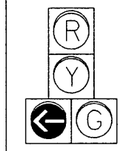
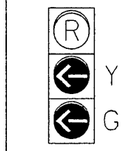
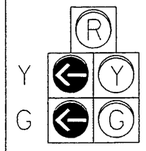
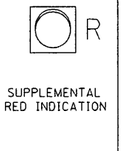
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 15:47:13 TSI-4.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: TSI-4.DGN COUNTY: UNION / PONTOTOC PROJECT NO.: SP-0006-01(087)

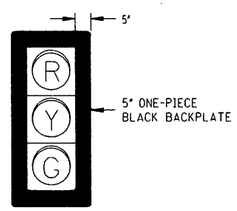
STATE	PROJECT NO.
MISS.	SP-0006-01(087)

DETAIL OF TYPICAL TRAFFIC SIGNAL HEADS

TYPE 1	TYPE 2	TYPE 3	TYPE 4	TYPE 5	TYPE 6	TYPE 7	TYPE 8
							

NOTES:
1. TYPE "A" SIGNAL HEAD IS TO BE OPTICALLY PROGRAMMED.
2. LETTER "R" ON HEAD TYPES MEANS RIGHT TURN ARROW(S).
3. TYPE 6 SIGNAL HEAD TO BE FURNISHED WITH PEDESTRIAN PUSHBUTTON (PELCO # SE 2039 WITH SE 1013 OR EQUAL).
4. TYPE 7 SIGNAL HEAD TO BE FURNISHED WITH R10-12 SIGN WHEN INDICATED ON PLANS.
5. FOR SPAN WIRE INSTALLATION, THE HOUSING FOR THE RED INDICATION OF A TYPE 7 HEAD, SHALL BE ALUMINUM.

DETAIL OF TRAFFIC SIGNAL WITH BACKPLATE



NOTE:
TYPE 1, 2, 3, 4, 5, & 7 SIGNAL HEADS SHALL INCLUDE BACKPLATES UNLESS OTHERWISE NOTED ON TRAFFIC SIGNAL INSTALLATION SHEETS.

DETAIL OF TYPICAL TRAFFIC SIGNAL SIGNS



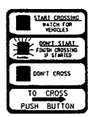
R10-3a(R)
6" x 9"



R10-4a(R)
6" x 9"



R10-3b
6" x 9"



R10-3c
6" x 9"



R10-10(L)
24" x 30"



R10-10(R)
24" x 30"



R10-11a
24"x 30"



R10-12
24" x 30"

NOTES:
1. ALUMINUM SIGN BLANKS ARE TO BE ALLOY 5052-H38 AND 0.08" (NOMINAL) THICK.
2. THE SIGNS ARE TO BE SUPPLIED WITH MOUNTING BRACKETS FOR SPAN WIRE MOUNTING OR POLE MOUNTING AS REQUIRED.
3. NUMBER 12 PLATED JACK CHAINS SHALL BE ATTACHED TO THE BOTTOM OF ALL SPAN WIRE MOUNTED SIGNS.
4. CHAINS SHALL BE ATTACHED TO SIGN AND TETHER USING "S" HOOKS.
5. THE SIZE OF THE SIGN BLANK, LEGEND, BORDER AND THE COLOR OF THE BACKGROUND AND LEGEND IS TO CONFORM TO THE M.U.T.C.D.
6. THE BACKGROUND SHALL BE REFLECTORIZED USING ENCAPSULATED LENS SHEETING.
7. TYPE R10-3a SIGN REQUIRED WITH PEDESTRIAN PUSHBUTTON WHEN TYPE 6 SIGNAL IS NOT USED.

GENERAL NOTES

1. INTERCONNECT CABLE SHALL BE EITHER IMSA 40-2-1991 OR IMSA 40-4-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
2. SIGNAL SUPPLY CABLE SHALL BE IMSA 20-1-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
3 POWER SUPPLY CABLE SHALL BE IMSA 20-1-1991 SIGNAL CABLE, STRANDED. AWG NUMBER AND NUMBER OF CONDUCTORS AS SHOWN ON PLANS.
4. DETECTOR SHIELDED CABLE SHALL BE IMSA 50-2-1991 SIGNAL CABLE, AWG #14 STRANDED COPPER CONDUCTORS, FROM PULLBOX TO CONTROLLER.
5. POLES, SIGNAL HEADS, EQUIPMENT BOXES, PULLBOXES AND CONDUIT MAY BE VARIED SLIGHTLY TO FIT FIELD CONDITIONS AS DIRECTED BY THE ENGINEER. HOWEVER, SIGNAL HEAD OR POLE LOCATIONS SHALL BE WITHIN REQUIREMENTS OUTLINED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD), SYMBOLS AND ABBREVIATIONS USED ON PLANS AND HIGHWAY DESIGN AND OPERATIONAL PRACTICES RELATED TO HIGHWAY SAFETY.
6. SYMBOLS AND ABBREVIATIONS USED ON PLANS:

SIGNAL HEAD REQUIRED / TYPE		SIGNAL HEAD REQUIRED / TYPE	
→①	SIGNAL HEAD REQUIRED / TYPE		BASE MOUNTED CABINET FOR SIGNAL CONTROLLER
⊣	SIGN		
OR □	VEHICLE LOOP DETECTOR		POLE MOUNTED MOUNTED CABINET FOR SIGNAL CONTROLLER
	QUADRAPOLE VEHICLE LOOP DETECTOR		
⬡	VEHICLE LOOP DETECTOR NUMBER	○	EXISTING POLE
➤	MICROWAVE	●	POLE REQUIRED
▬▶	CAMERA	◎	NEW PEDESTAL POLE
⊙—	OPTICAL DETECTOR UNIT	□	EXISTING PULLBOX
——	CONDUIT	◨	PULLBOX REQUIRED (TYPE 1)
— — —	ROLL PIPE	■	PULLBOX REQUIRED (TYPE 2)
P.B.	PUSH BUTTON	◁+	EXISTING SIGNAL HEAD
S.C.	SHIELDED CABLE	●—	MAST ARM POLE REQUIRED
POW	POWER CABLE	ODC	OPTICAL DETECTOR CABLE
LUM	LUMINAIRE POWER CABLE	4c	NUMBER OF CONDUCTORS
☼—	LUMINAIRE	I.C.	INTERCONNECT CABLE
		+—	RADIO INTERCONNECT ANTENNA

7. LOOP AMPLIFIERS SHALL BE REQUIRED AS SHOWN ON PLANS WHERE TWO OR MORE LOOPS ARE CONNECTED TO THE SAME CHANNEL, THEY SHALL BE WIRED IN SERIES.
*8. DESIGN WIND LOADS FOR TRAFFIC SIGNAL SUPPORTS SHALL BE TO 90 m.p.h. THE CONTRACTOR SHALL PROVIDE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS.
*9. DETERMINATION OF REQUIRED SIZES, LENGTHS AND GAUGES OF TYPE I, II, III AND IV STEEL POLES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR IN ACCORDANCE WITH THE PLANS AND SECTION 722.02 OF THE STANDARD SPECIFICATIONS, UNLESS OTHERWISE SPECIFIED IN PLANS OR SPECIFICATIONS.

GENERAL NOTES (CONTINUED)

10. THE TOP OF THE STRAIN POLE FOUNDATION SHALL BE 6" ABOVE THE GROUND. THE CONTRACTOR SHALL PROVIDE POLES OF SUFFICIENT LENGTH PLUS 2' TO PROVIDE REQUIRED VERTICAL CLEARANCE OF THE TRAFFIC SIGNAL HEADS WITHOUT EXTENDING THE FOUNDATION ABOVE THE GROUND LINE OF THE POINT WHERE THE POLE IS LOCATED, EVEN THOUGH THIS MAY BE BELOW THE FINISHED GRADE OF THE ROADWAY.
11. ALL STRAIN POLES AT AN INTERSECTION SHALL BE THE SAME DIAMETER AND UTILIZE THE SAME BOLT CIRCLE SPACING.
12. POLE AND BASE MOUNTED CABINET - GRADES TO BE ESTABLISHED TO +/- 3" AS DIRECTED BY THE ENGINEER.
13. TRAFFIC SIGNAL CABINETS AND CONTROLLERS ARE TO BE WIRED TO PROVIDE FOR ALL PHASES INCLUDING FUTURE PHASES IN ACCORDANCE WITH THE PHASES SEQUENCE DIAGRAM.
14. THE CONTRACTOR SHALL BE REQUIRED TO PROVIDE ELECTRICAL SERVICE FROM THE POWER COMPANY SERVICE POINT TO THE TRAFFIC SIGNAL POLE NEAREST THE CONTROLLER, TO BE PAID FOR AS PAY ITEM 666-B. THE SERVICE SHALL THEN RUN TO THE CONTROLLER AS SHOWN ON THE PLANS. THE CONTRACTOR SHALL MAKE APPLICATION WITH THE POWER COMPANY IN ADVANCE OF NEEDING THE SERVICE.
15. IF IT IS NECESSARY TO RUN ELECTRIC SERVICE CABLE FROM ONE POLE TO ANOTHER, THE SERVICE CABLE SHALL BE LASHED TO A SEPARATE MESSENGER CABLE LOCATED 1" MIN. ABOVE THE SIGNAL CABLE.
16. VEHICLE LOOP ASSEMBLIES SHALL BE INSTALLED IN THE TOP LAYER OF BINDER OR EXISTING SURFACE BEFORE THE FINAL SURFACE COURSE IS APPLIED.
17. FIELD DRILL AND TAP EXISTING POLES WHERE PEDESTRIAN SIGNALS AND PUSHBUTTONS ARE REQUIRED ON PLANS. (ABSORBED ITEM).
18. REFER TO WORKING NUMBER TSD-5 ±±CONDUIT ENTRANCE DETAIL" WHEN NEW CONDUIT(S) ARE REQUIRED AT EXISTING SIGNAL POLES OR CONTROLLERS.
19. MESSENGER CABLE AND OTHER SUPPORTING DEVICES WHERE REQUIRED SHALL BE ABSORBED IN THE PAY ITEMS FOR ELECTRIC CABLE.
20. FOR PROTECTED/PERMITTED LEFT TURN PHASING, TYPE 7 OR 7A TRAFFIC SIGNAL HEADS (FIVE SECTION HEADS) SHALL OPERATE SUCH THAT THE CIRCULAR INDICATIONS DISPLAYED WILL BE IDENTICAL AND SIMULTANEOUS TO THE CIRCULAR INDICATIONS FOR THE ADJACENT THROUGH MOVEMENT SIGNAL HEADS; i.e. A CIRCULAR RED AND EITHER A GREEN ARROW OR YELLOW ARROW MAY BE DISPLAYED SIMULTANEOUSLY IN THE SAME FIVE SECTION HEAD.
21. CONTRACTOR IS RESPONSIBLE FOR PROVIDING TEMPORARY SIGNALS IF NECESSARY TO ACCOMMODATE ROADWAY CONSTRUCTION AND WILL BE ABSORBED UNDER PAY ITEM 618-A, MAINTENANCE OF TRAFFIC.
22. CONTRACTOR IS RESPONSIBLE FOR SCHEDULING FINAL INSPECTION MEETING WITH APPROPRIATE CITY AND STATE REPRESENTATIVES.

* NOTES NO. 8, 9 & 10 THAT REFERENCE THE CONTRACTOR TO DESIGN SIGNAL POLES DO NOT APPLY IF THE SIGNAL POLE CHART DESIGN(S) ARE INDICATED ON THE PLAN SHEET(S).

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DETAIL OF TRAFFIC SIGNAL HEADS, TRAFFIC SIGNAL SIGNS AND GENERAL NOTES

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

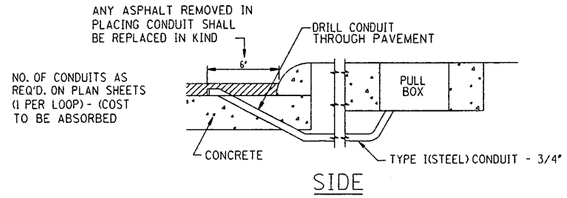
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SHEET NUMBER: 100.18

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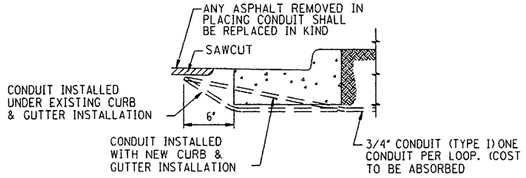
RAH
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

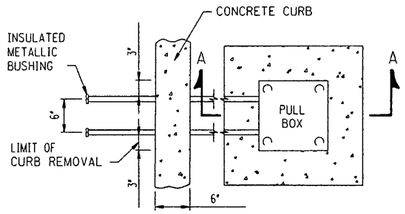
08/12/2008 15:47:51 TSD-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



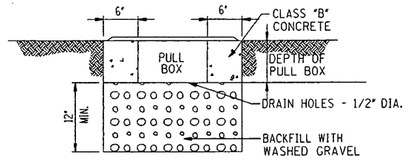
SIDE





TOP

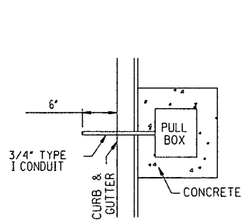
DETAIL OF CONDUIT THROUGH CURB AND GUTTER



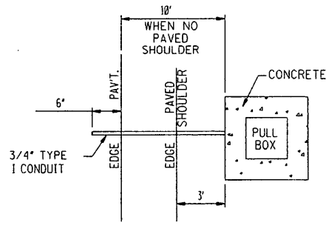
SECTION A-A

PULL BOX DETAILS

NOT TO SCALE



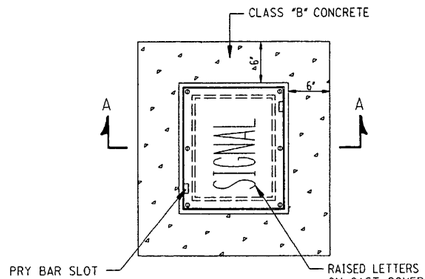
CURB AND GUTTER



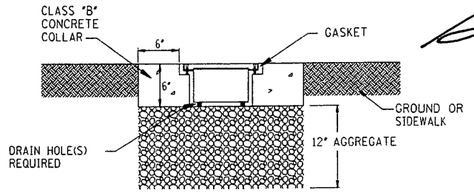
SHOULDER SECTION

PULL BOX LOCATION DETAIL

NOT TO SCALE



PLAN



SECTION A-A

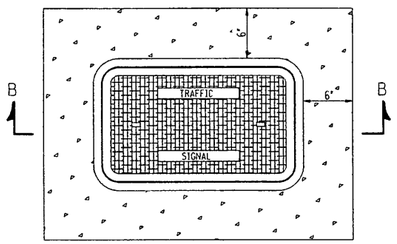
PULLBOX NOTES:

1. GRAVEL, 12" DEEP, IS REQUIRED UNDER PULLBOXES FOR DRAINAGE.
2. CONCRETE COLLAR, 6" x 6", IS REQUIRED FOR PULLBOXES PLACED IN SOIL. (COST ABSORBED)
3. TRAFFIC SIGNAL, TRAFFIC OR SIGNAL LEGEND REQUIRED.
4. COVERS SHALL BOLT DOWN.
5. PULL BOXES AND COVERS SHALL BE TRAFFIC LOAD BEARING BASED ON 15,000 LB. LOAD OVER 10" x 10" AREA.
6. IF PULL BOX IS LOCATED IN EXISTING SIDEWALK, CONTRACTOR TO REMOVE SIDEWALK TO SECTION JOINTS, FOR A CLEAN INSTALLATION. COST TO BE ABSORBED IN BID ITEM FOR CONDUIT, UNLESS SIDEWALK PAY ITEM IS INCLUDED IN PLANS. AVOID LOCATING PULL BOXES IN DRIVEWAYS.

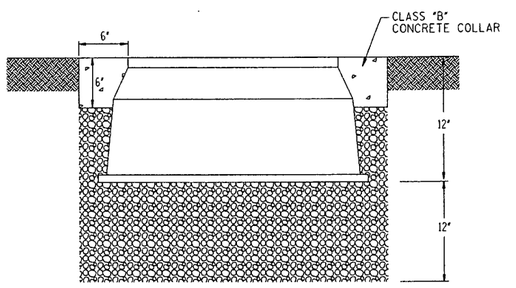
TWO-PIECE PULLBOX (TYPE 1)

NOT TO SCALE

CAST IRON, CAST ALUMINUM, WELDED ALUMINUM, OR APPROVED EQUAL



PLAN



SECTION B-B

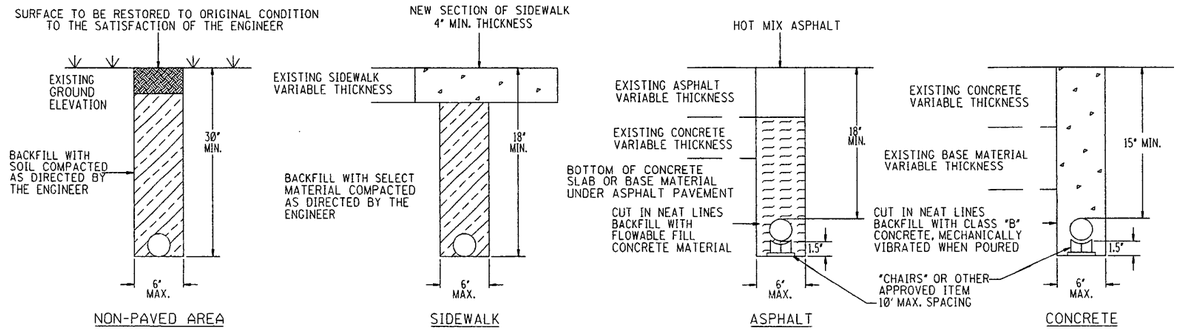
TWO-PIECE PULLBOX (TYPE 2 OR TYPE 3)

NOT TO SCALE

PRECAST CLASS "B" CONCRETE, CAST IRON, COMPOSOLITE, OR APPROVED EQUAL

CONDUIT NOTES:

1. CONDUIT TO BE SEALED WITH DUCT SEALER ONCE CABLE IS INSTALLED.
2. SAWCUT SIDEWALK AT EXISTING JOINTS AND REPLACE ENTIRE SECTION TO MATCH EXISTING MATERIAL. WHEN NEW SIDEWALK IS BEING CONSTRUCTED, CONDUIT, PULLBOX, AND POLE ARE TO BE INSTALLED BEFORE SIDEWALK IS POURED.
3. TYPE I CONDUIT IS RIGID PIPE; TYPE IV CONDUIT IS PVC.
4. ELECTRICAL SUBCONTRACTOR SHALL COORDINATE CONDUIT INSTALLATION WORK UNDER ROADWAY WITH ROADWAY CONSTRUCTION PHASING IN ORDER TO MINIMIZE JACKING.
5. MATERIAL REMOVED THAT IS NOT SUITABLE FOR BACKFILL OR IS EXCESS SHALL BE DISPOSED OF BY THE CONTRACTOR. (COST ABSORBED)



CONDUIT TRENCHING DETAIL

NOT TO SCALE

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

PULL BOX AND CONDUIT TRENCHING DETAILS FOR TRAFFIC SIGNAL INSTALLATION

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

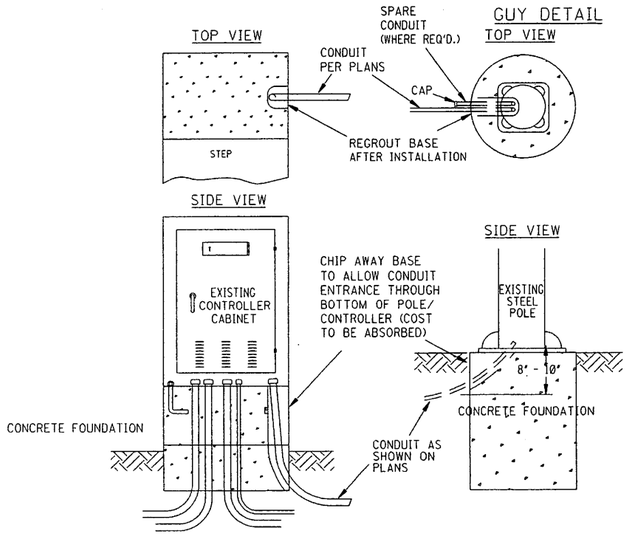
WORKING NUMBER: TSD-2
SHEET NUMBER: 100.19

FILENAME: TSD-2.DGN
DESIGN TEAM: F&H Inc. CHECKED DATE

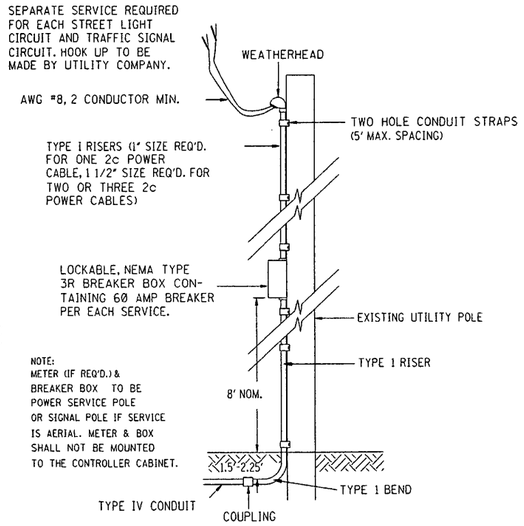
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 15:47:50 TSD-2.DGN

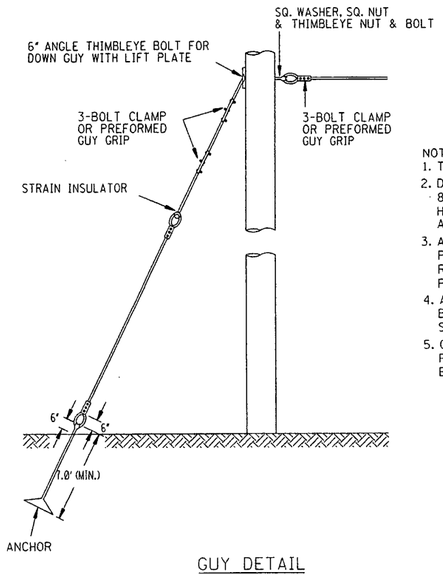
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



CONDUIT ENTRANCE DETAIL
(EXISTING CABINET OR POLE)

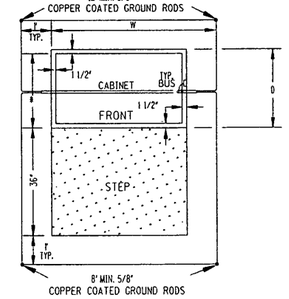


POWER SERVICE DETAIL

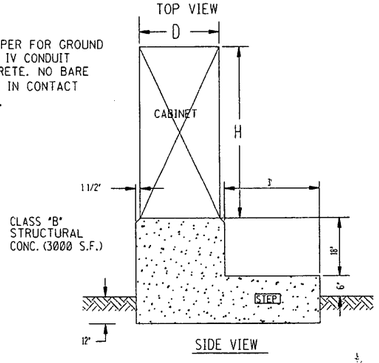


GUY DETAIL

NOTES:
1. THE ANCHOR ROD IS 6" DIAMETER.
2. DIFFERENT ANCHORS ARE: CHANCE 8-WAY EXPANSION ANCHORS OR 3 HELICAL 8" OR AS NECESSARY FOR ADEQUATE HOLD.
3. ANCHORS ARE TO BE 15' BEHIND THE POLE IN LINE WITH THE SPAN. RESTRICTION TO THIS WILL BE PROPERTY LINES OR OBSTRUCTIONS.
4. ALL ATTACHMENT FITTINGS SHALL BE HOT DIP GALVANIZED UNLESS STATED OTHERWISE.
5. GUYS TO BE INSTALLED AS REQUIRED, DETERMINED BY THE ENGINEER (COST ABSORBED).



NOTE: ALL COPPER FOR GROUND TO BE IN TYPE IV CONDUIT WHEN IN CONCRETE. NO BARE COPPER TO BE IN CONTACT WITH CONCRETE.

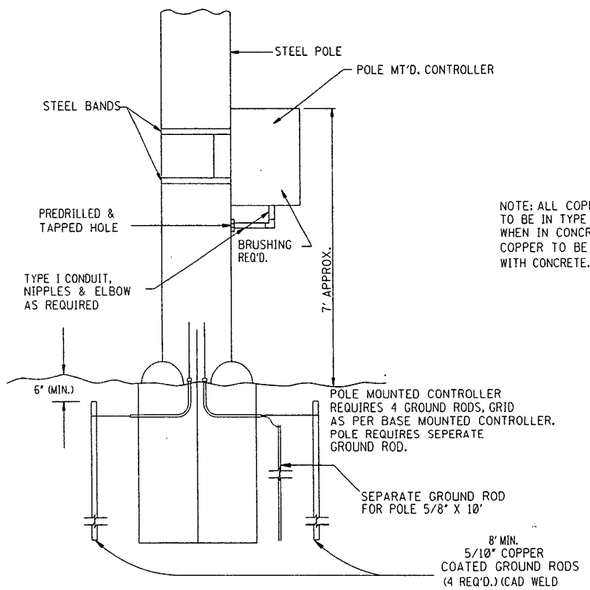


SIDE VIEW

NOTE: THE BASE MOUNTED CABINET IS TO BE SITUATED IN THE OPTIMUM POSITION FOR VIEWING THE CONTROLLER OPERATION AND THE ON STREET SIGNAL DISPLAYS SIMULTANEOUSLY. THIS POSITION IS TO BE DETERMINED IN THE FIELD BY THE ENGINEER.

TYPICAL DETAIL OF BASE FOR CONTROLLER EQUIPMENT CABINET

NOT TO SCALE



TYPICAL DETAIL FOR POLE MOUNTED CONTROLLER

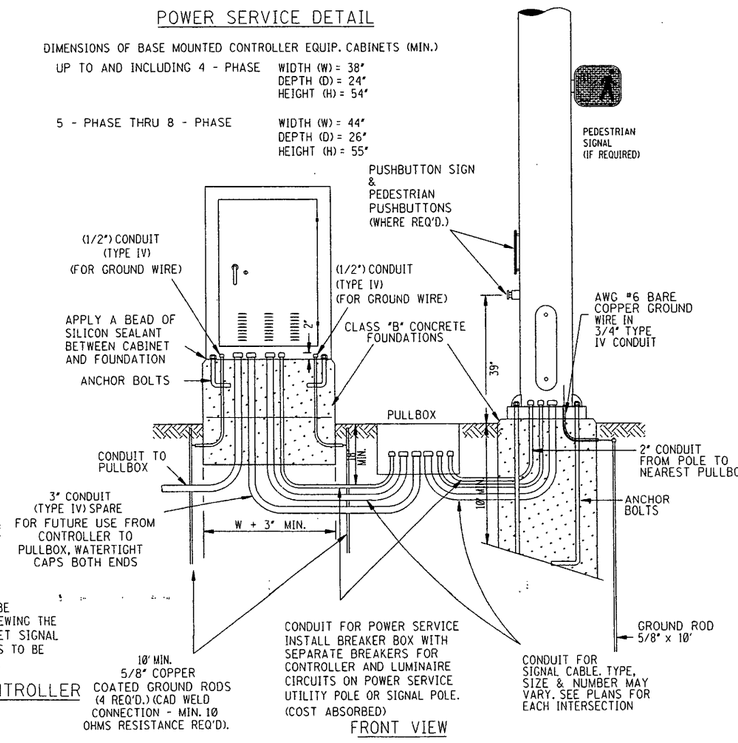
NOT TO SCALE

POWER SERVICE DETAIL

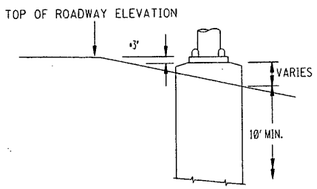
DIMENSIONS OF BASE MOUNTED CONTROLLER EQUIP. CABINETS (MIN.)

UP TO AND INCLUDING 4 - PHASE — WIDTH (W) = 38" DEPTH (D) = 24" HEIGHT (H) = 54"

5 - PHASE THRU 8 - PHASE — WIDTH (W) = 44" DEPTH (D) = 26" HEIGHT (H) = 55"



FRONT VIEW



LOW SHOULDER FOUNDATION DETAIL

REVISION	DATE	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TYPICAL DETAILS OF CONTROLLER CABINET MOUNTINGS, TYPE 1 POLE ATTACHMENTS AND MISCELLANEOUS DETAILS

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

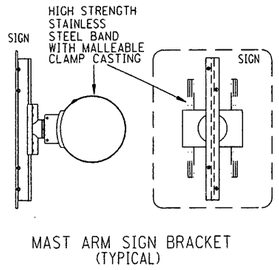
WORKING NUMBER: TSD-3
SHEET NUMBER: 100.20

FILENAME: TSD-3.DGN
DESIGN TEAM: F&H Inc. CHECKED: DATE:

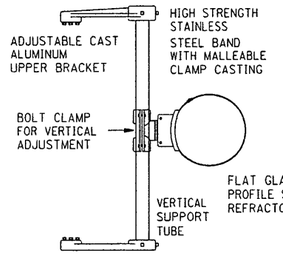
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 15:47:49 TSD-3.DGN

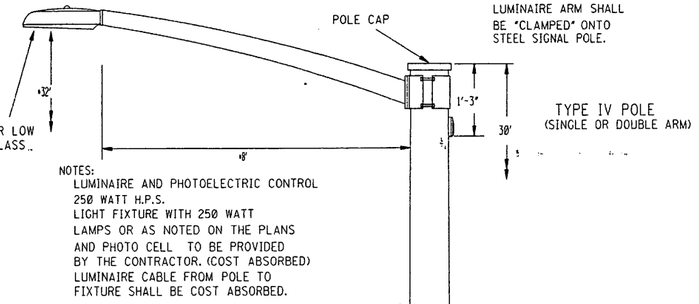
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



MAST ARM SIGN BRACKET
(TYPICAL)

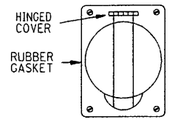


SIGNAL MOUNTING BRACKET
(TYPICAL)



NOTES:
LUMINAIRE ARM SHALL BE "CLAMPED" ONTO STEEL SIGNAL POLE.

NOTES:
LUMINAIRE AND PHOTOELECTRIC CONTROL 250 WATT H.P.S. LIGHT FIXTURE WITH 250 WATT LAMPS OR AS NOTED ON THE PLANS AND PHOTO CELL TO BE PROVIDED BY THE CONTRACTOR. (COST ABSORBED)
LUMINAIRE CABLE FROM POLE TO FIXTURE SHALL BE COST ABSORBED.

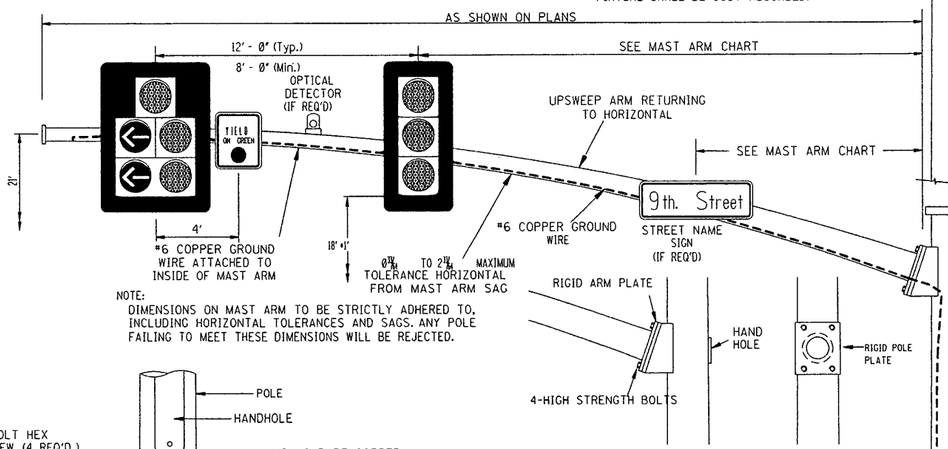


OUTLET BOX WITH SINGLE 15 AMP - 125 VOLT POLARIZED RECEPTACLE (GROUNDING TYPE)

OUTLET

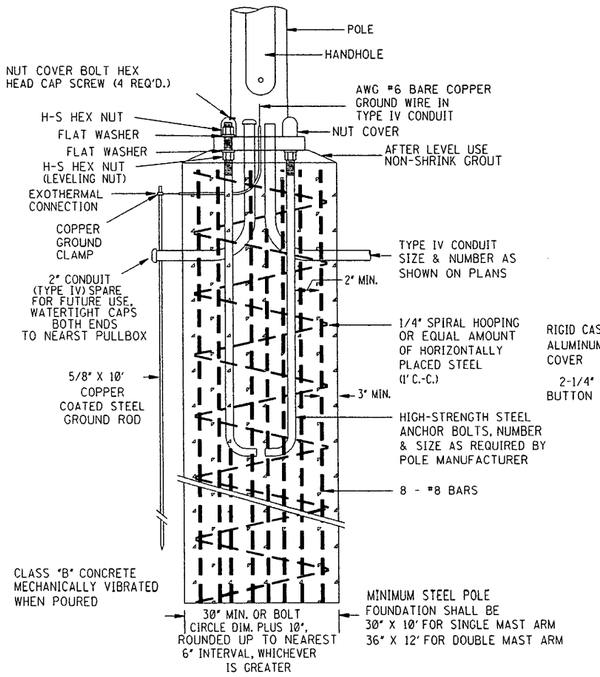
NOTES:

1. WIRE ENTRANCE TO MAST ARM WILL BE FIELD DRILLED TO CORRESPOND TO THE LOCATION OF THE SIGNAL HEADS WHEN ALIGNED IN FIELD.
2. RED SECTION INDICATIONS TO BE APPROXIMATELY SAME HEIGHT. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE POLE MANUFACTURER.
3. DESIGN WIND LOADS FOR TRAFFIC SIGNAL SUPPORTS SHALL BE TO 90 M.P.H. THE CONTRACTOR SHALL PROVIDE DESIGN CERTIFICATION AND CALCULATIONS AS OUTLINED IN SECTION 722.02 OF STANDARD SPECIFICATIONS.
4. #6 COPPER GROUND WIRE INSIDE POLE AND MAST ARM TO BE COST ABSORBED.

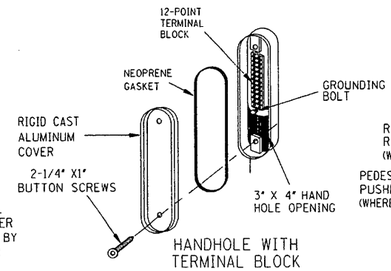


NOTE:
DIMENSIONS ON MAST ARM TO BE STRICTLY ADHERED TO, INCLUDING HORIZONTAL TOLERANCES AND SAGS. ANY POLE FAILING TO MEET THESE DIMENSIONS WILL BE REJECTED.

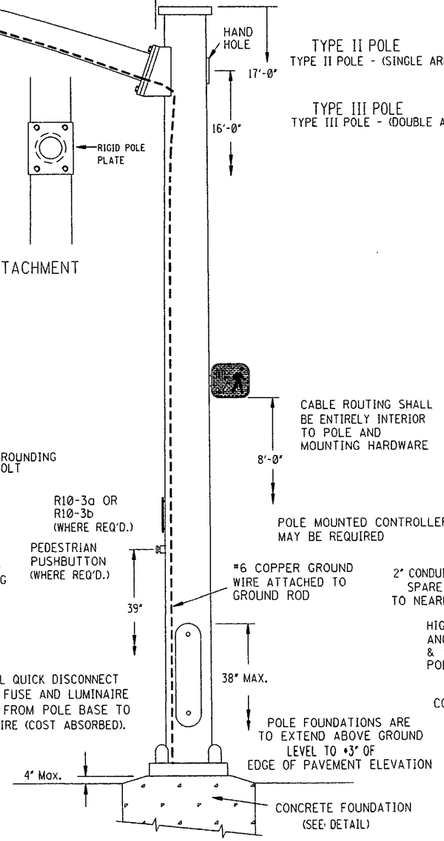
MAST ARM ATTACHMENT



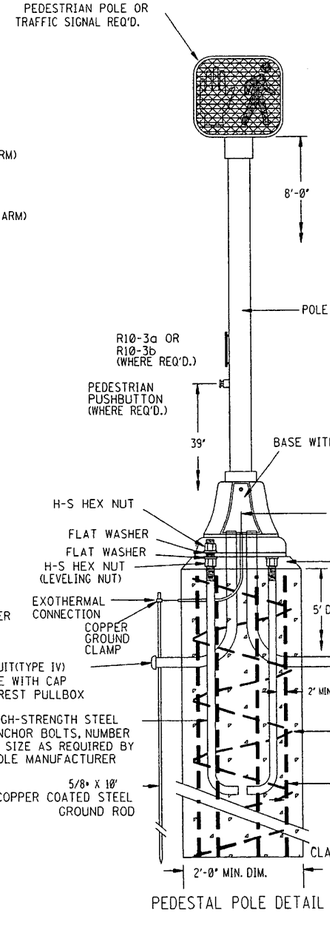
STEEL MAST ARM POLE FOUNDATION DETAIL



HANDHOLE WITH TERMINAL BLOCK

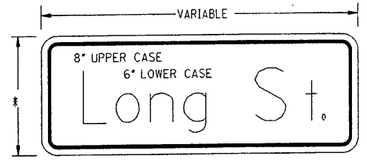


STEEL MAST ARM POLE DETAIL



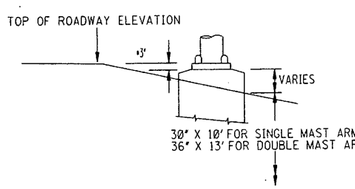
PEDESTAL POLE DETAIL

TYPE V POLE (TRAFFIC SIGNAL) TYPE VI POLE (PEDESTRIAN SIGNAL)



STREET NAME SIGNS
(TYPICAL)(IF REQUIRED)

HEIGHT = 1'-6" FOR SINGLE NAME, 2'-0" FOR 2 NAMES THICKNESS = 0.1" WHITE ON GREEN SHEETING
8" UPPER CASE, 6" LOWER CASE LETTERS; SERIES "C"
STREET NAME SIGNS REQUIRE A MINIMUM OF 2 MOUNTING BRACKETS (30" MAXIMUM SPACING BETWEEN BRACKETS)
(COST ABSORBED)



LOW SHOULDER FOUNDATION DETAIL

GENERAL FOUNDATION NOTES

1. EXACT DIMENSIONS AND LOCATIONS OF ANCHOR BOLTS TO BE SUPPLIED BY THE MANUFACTURER. ANY FOUNDATIONS FAILING TO MEET MINIMUM DIMENSIONS WILL BE REJECTED.
2. MINIMUM STEEL POLE FOUNDATION SHALL BE
   30" X 10' FOR SINGLE MAST ARM
   36" X 12' FOR DOUBLE MAST ARM

BY	DATE
REVISION	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MAST ARM AND PEDESTAL POLE DETAILS FOR TRAFFIC SIGNAL INSTALLATION

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER	SHEET NUMBER
TSD-4	100.21

FILENAME: TSD-4.DGN
DESIGN TEAM F&H Inc. CHECKED DATE

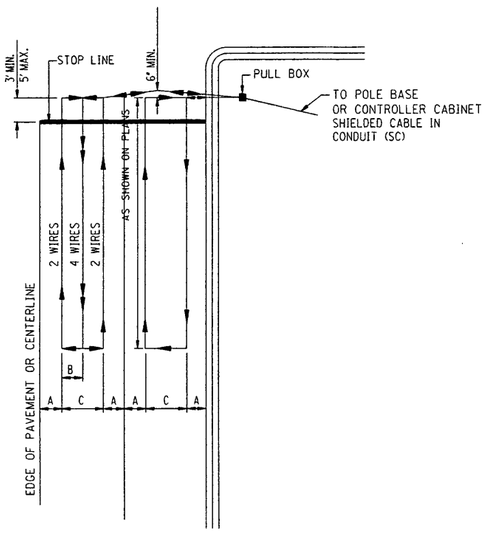
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 15:47:48 TSD-4.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

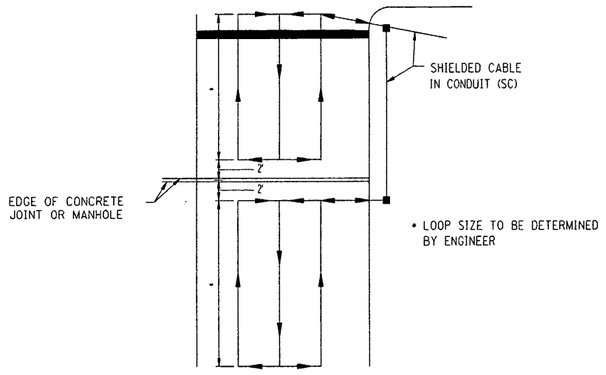
LANE WIDTH	"A"	"B"	"C"
10'	2.5'	2.5'	5'
11'	2.5'	3'	6'
12'	3'	3'	6'
14'	3'	4'	8'

MINIMUM LOOP SEPARATION WHEN NO LANE LINES ARE PRESENT IS 3'

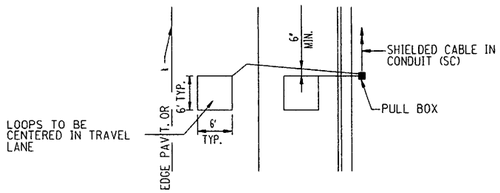


LARGE LOOP DETECTOR INSTALLATION DETAIL
NOT TO SCALE

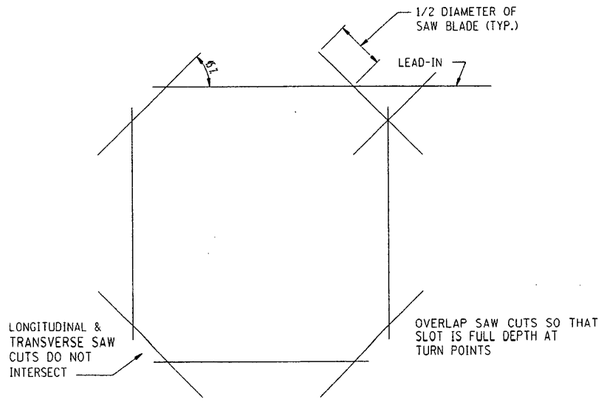
NOTE
NO LOOPS ARE TO BE INSTALLED THROUGH, OVER, OR UNDER TRANSVERSE CONCRETE JOINTS IN CONCRETE PAVEMENT, AND NO MANHOLES, INLETS, ETC. MAY BE LOCATED WITHIN A LOOP. IF ANY OF THE ABOVE ARE ENCOUNTERED THE LOCATION OF THE LOOP MAY BE VARIED SLIGHTLY AS DIRECTED BY THE ENGINEER. IF THE ABOVE ITEMS ARE UNAVOIDABLE, SMALLER LOOPS AS SHOWN BELOW MAY BE USED. SMALLER LOOPS USED TO REPLACE ONE LARGE LOOP MAY BE CONNECTED TO ONE CHANNEL.



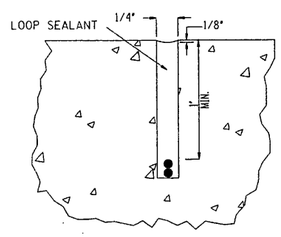
TYPICAL DETAIL OF LOOP DETECTOR WHERE TRANSVERSE CONCRETE JOINTS, MANHOLES, ETC. ARE ENCOUNTERED
NOT TO SCALE



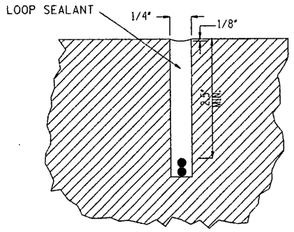
SMALL LOOP DETECTOR INSTALLATION DETAIL
NOT TO SCALE



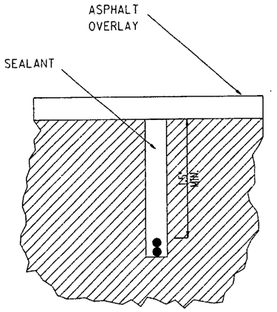
LOOP SLOT CONSTRUCTION DETAIL
NOT TO SCALE



CONCRETE



IN PLACE ASPHALT



ASPHALT
(NEW CONSTRUCTION)

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

LOOP DETECTOR DETAILS FOR TRAFFIC SIGNAL INSTALLATION

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: TSD-5
SHEET NUMBER: 100.22

FILENAME: TSD-5.DGN
DESIGN TEAM: F&H Inc. CHECKED: DATE:

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

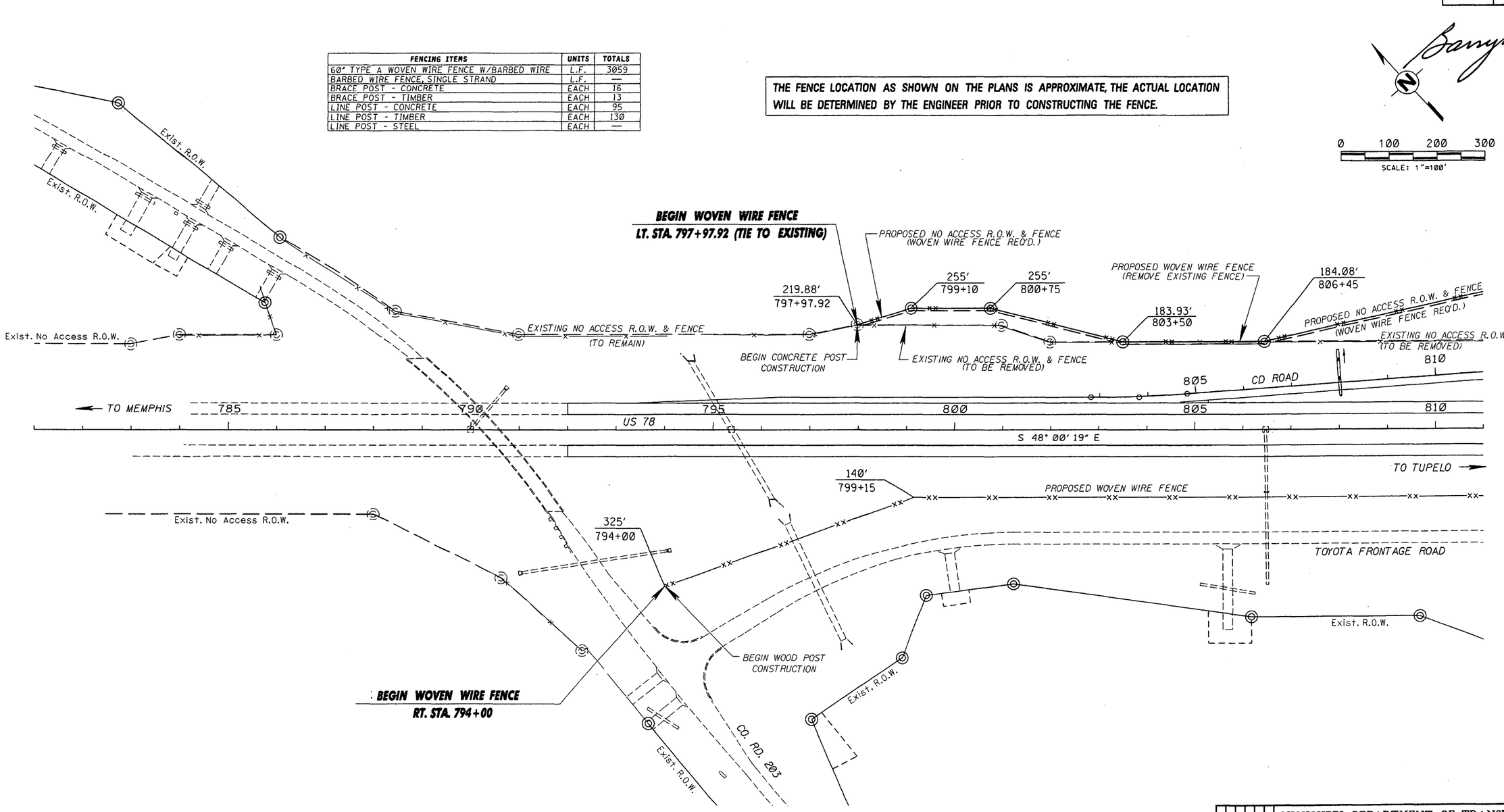
08/12/2008 15:47:47 TSD-5.DGN

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

FENCING ITEMS	UNITS	TOTALS
60' TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	3059
BARBED WIRE FENCE, SINGLE STRAND	L.F.	—
BRACE POST - CONCRETE	EACH	16
BRACE POST - TIMBER	EACH	13
LINE POST - CONCRETE	EACH	95
LINE POST - TIMBER	EACH	130
LINE POST - STEEL	EACH	—

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.



REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78
B.O.P. TO STA. 811+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FNC-1
SHEET NUMBER: 100.23

FILENAME: fnc-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

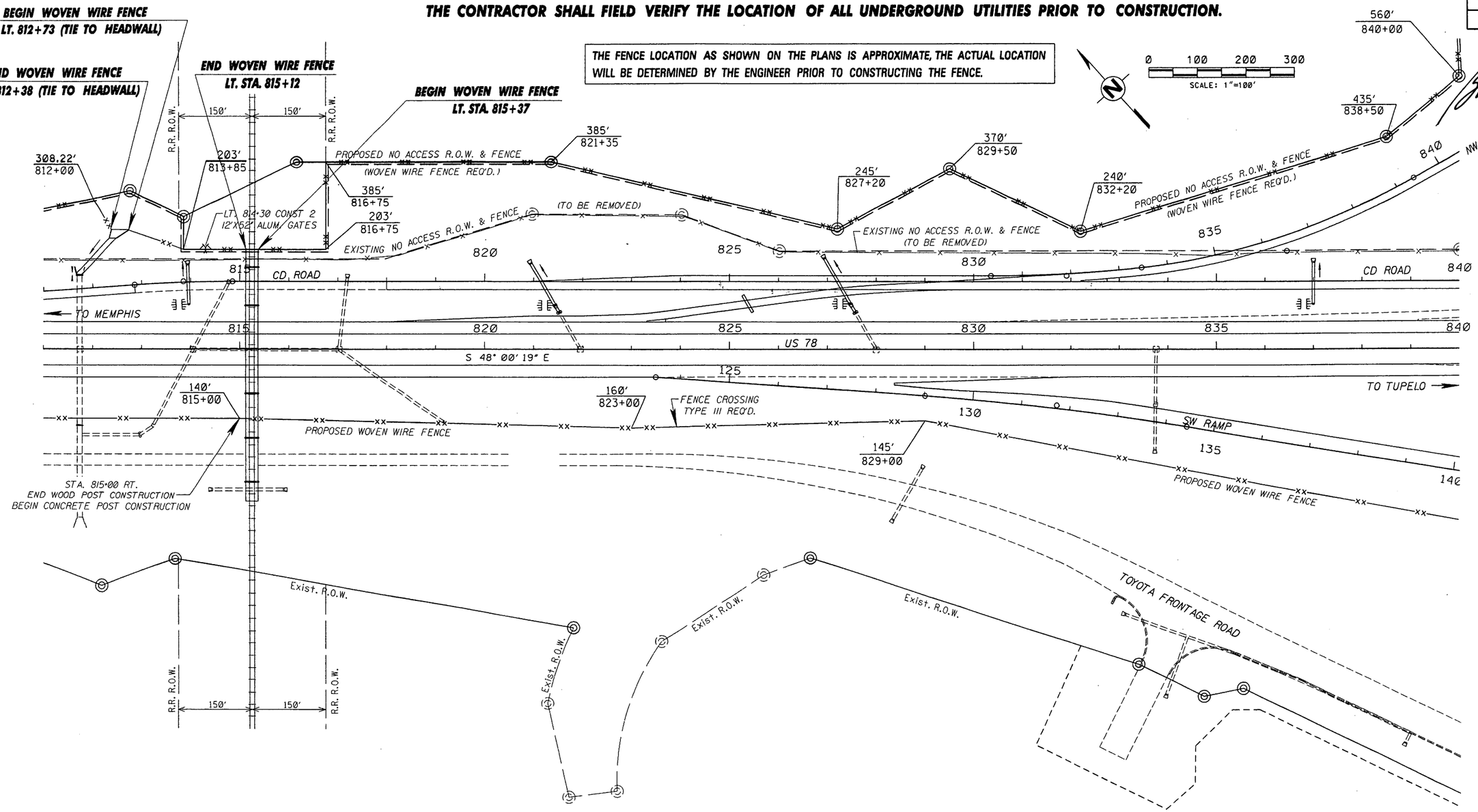
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 08:15:09 FNC-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.



FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	5960
BARBED WIRE FENCE, SINGLE STRAND	L.F.	150
BRACE POST - CONCRETE	EACH	42
BRACE POST - TIMBER	EACH	1
LINE POST - CONCRETE	EACH	418
LINE POST - TIMBER	EACH	36
LINE POST - STEEL	EACH	2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78
STA. 811+00 TO STA. 840+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FNC-2

SHEET NUMBER: 100.24

REVISION | BY | DATE

FILENAME: fnc-2.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 07:35:48 FNC-2.DGN

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.

0 100 200 300
SCALE: 1"=100'

END WOVEN WIRE FENCE
LT. SR 9 STA. 29+99.54

1000' 846+35
740' 840+90
675' 841+65
675' 839+95
560' 840+90
125.51' 29+99.54
PROPOSED NO ACCESS R.O.W. & FENCE (WOVEN WIRE FENCE REQ'D.)
Exist. No Access R.O.W.

BEGIN WOVEN WIRE FENCE
RT. SR 9 STA. 31+51.93

170' 31+51.93
170' 29+50
920' 855+10
960' 856+10
895' 856+50
835' 859+80
890' 860+50
835' 861+40
765' 861+30
PROPOSED NO ACCESS R.O.W. & FENCE (WOVEN WIRE FENCE REQ'D.)
380' 867+70

FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	6842
BARBED WIRE FENCE, SINGLE STRAND	L.F.	300
BRACE POST - CONCRETE	EACH	73
BRACE POST - TIMBER	EACH	—
LINE POST - CONCRETE	EACH	497
LINE POST - TIMBER	EACH	—
LINE POST - STEEL	EACH	4

NW RAMP
NE RAMP
SW RAMP
SE RAMP
NW LOOP
NE LOOP
SR 9
US 78
CD ROAD
TO MEMPHIS
TO TUPELO
EXISTING NO ACCESS R.O.W. & FENCE (TO BE REMOVED)
PROPOSED WOVEN WIRE FENCE
FENCE CROSSING TYPE III REQ'D.
Asphalt
E

END WOVEN WIRE FENCE
LT. SR 9 STA. 12+25
150' 14+50
150' 12+25

BEGIN WOVEN WIRE FENCE
RT. SR 9 STA. 12+25
200' 15+00
190' 12+25

300' 871+00
300' 862+50

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78
STA. 840+00 TO STA. 871+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
FNC-3	100.25

BY | REVISION | DATE

FILENAME: fnc-3.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

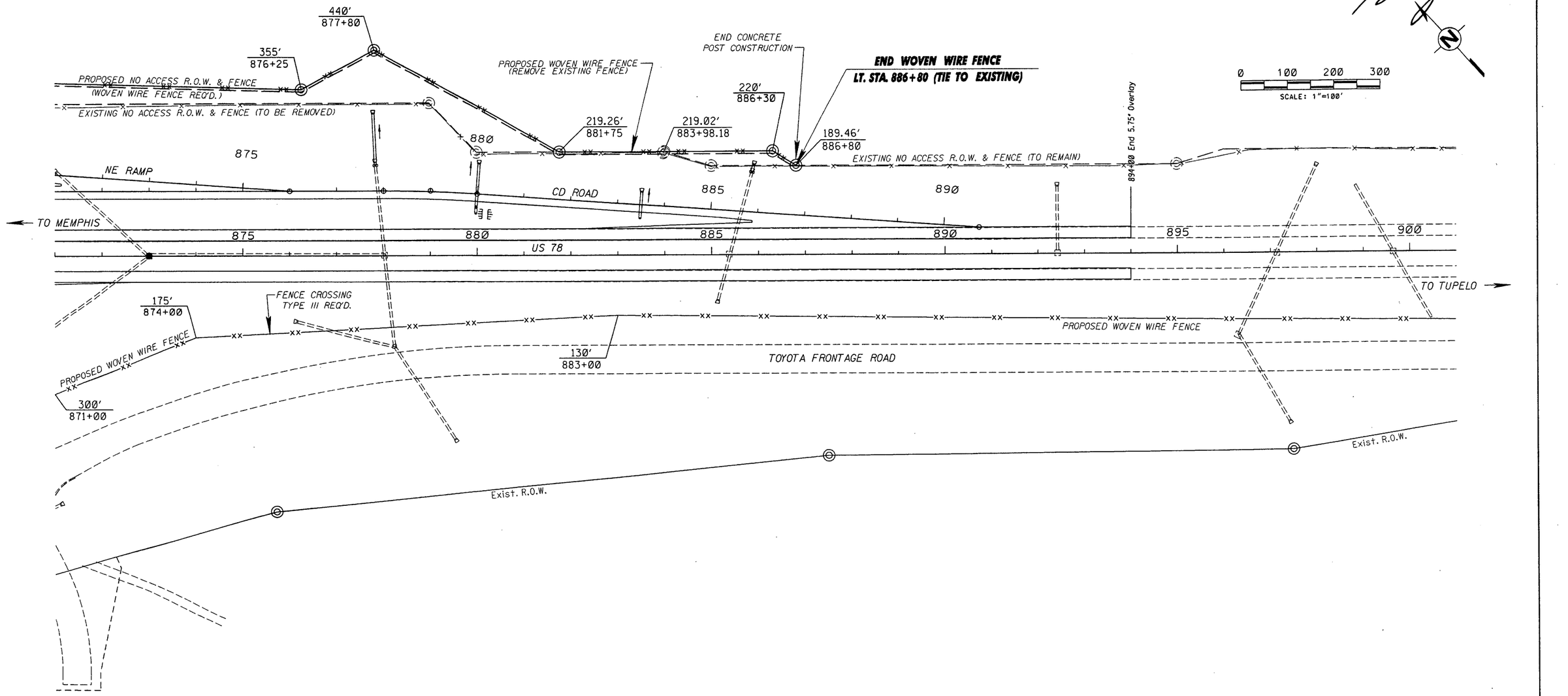
PLAN PRODUCTION DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/02/2006 FNC-3.DGN

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: fnc-3.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.



FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	4692
BARBED WIRE FENCE, SINGLE STRAND	L.F.	150
BRACE POST - CONCRETE	EACH	32
BRACE POST - TIMBER	EACH	0
LINE POST - CONCRETE	EACH	358
LINE POST - TIMBER	EACH	0
LINE POST - STEEL	EACH	2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78

STA. 871+00 TO STA. 901+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FNC-4

SHEET NUMBER: 100.26

REVISION | BY | DATE

FILENAME: fnc-4.dgn

DESIGN TEAM F&H, Inc. CHECKED DATE

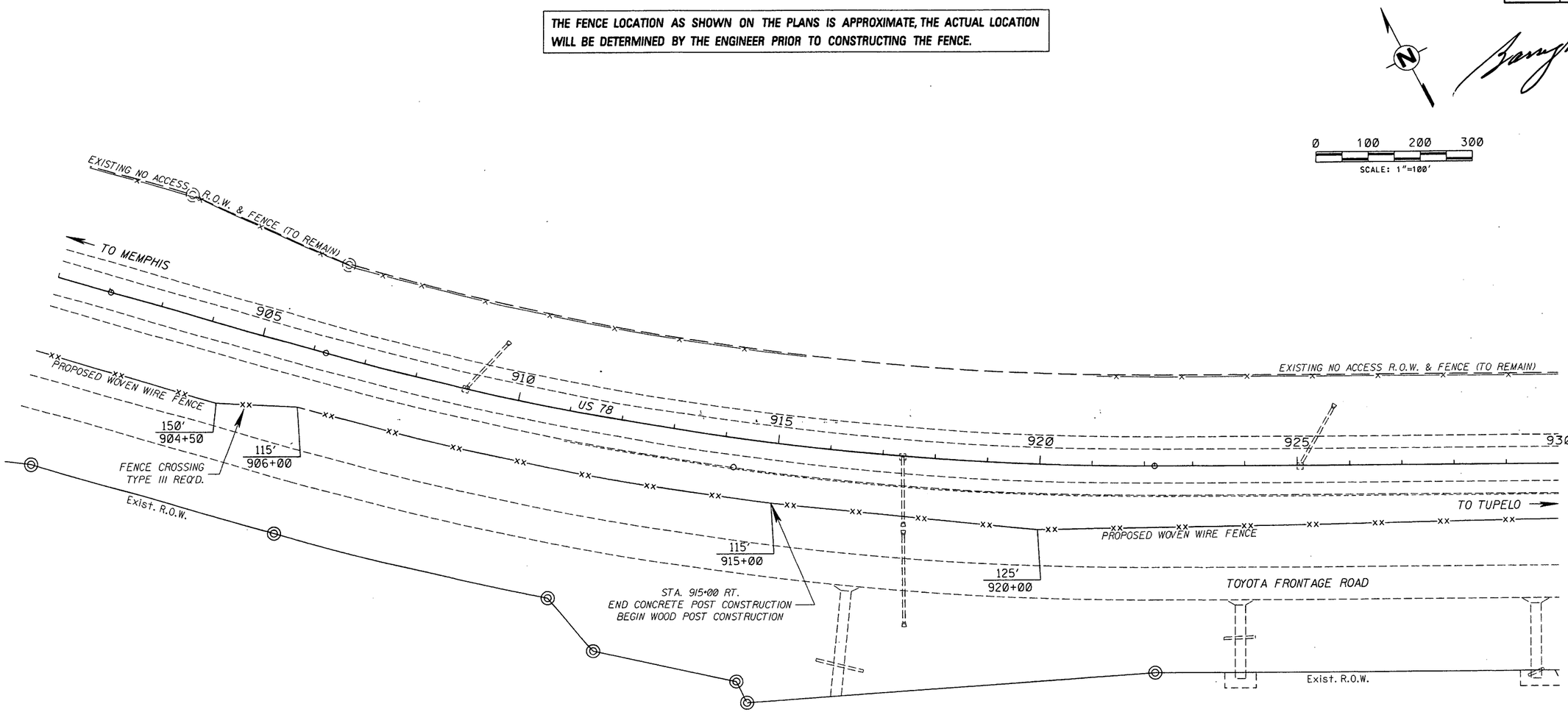
PLANS
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

06/12/2008 07:51:53 FNC-4.DGN

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.



FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	2934
BARBED WIRE FENCE, SINGLE STRAND	L.F.	150
BRACE POST - CONCRETE	EACH	12
BRACE POST - TIMBER	EACH	5
LINE POST - CONCRETE	EACH	105
LINE POST - TIMBER	EACH	123
LINE POST - STEEL	EACH	2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78

STA. 901+00 TO STA. 930+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FNC-5
SHEET NUMBER: 100.27

REVISION / BY / DATE

FILENAME: fnc-5.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

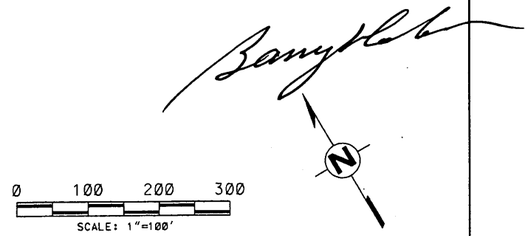
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

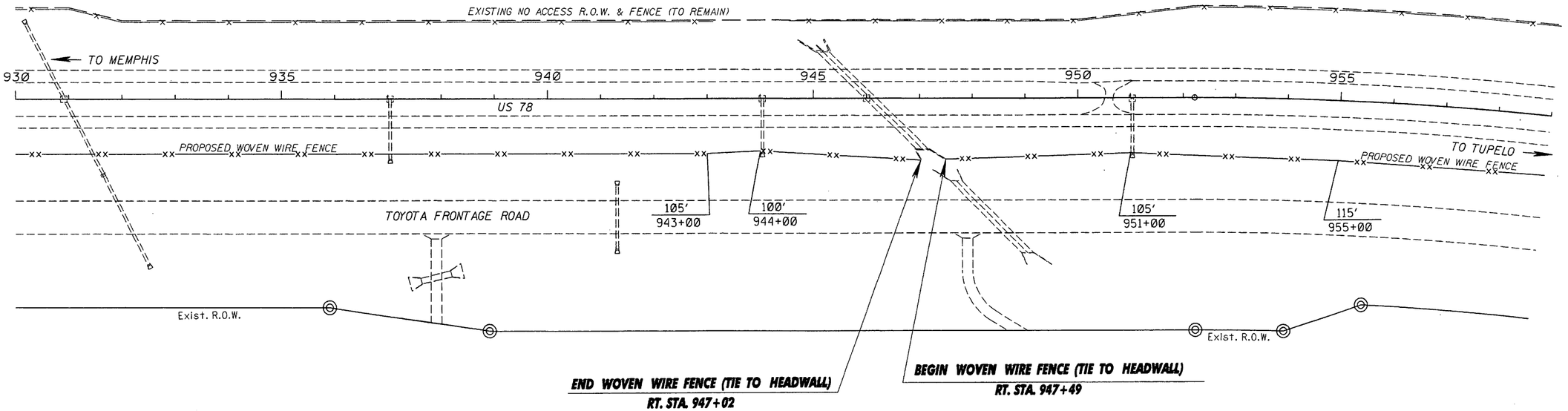
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THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.





FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	2840
BARBED WIRE FENCE, SINGLE STRAND	L.F.	—
BRACE POST - CONCRETE	EACH	—
BRACE POST - TIMBER	EACH	20
LINE POST - CONCRETE	EACH	—
LINE POST - TIMBER	EACH	217
LINE POST - STEEL	EACH	—

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:51:49 FNC-6.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78
STA. 930+00 TO STA. 959+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

BY	REVISION	DATE

FILENAME: fnc-6.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

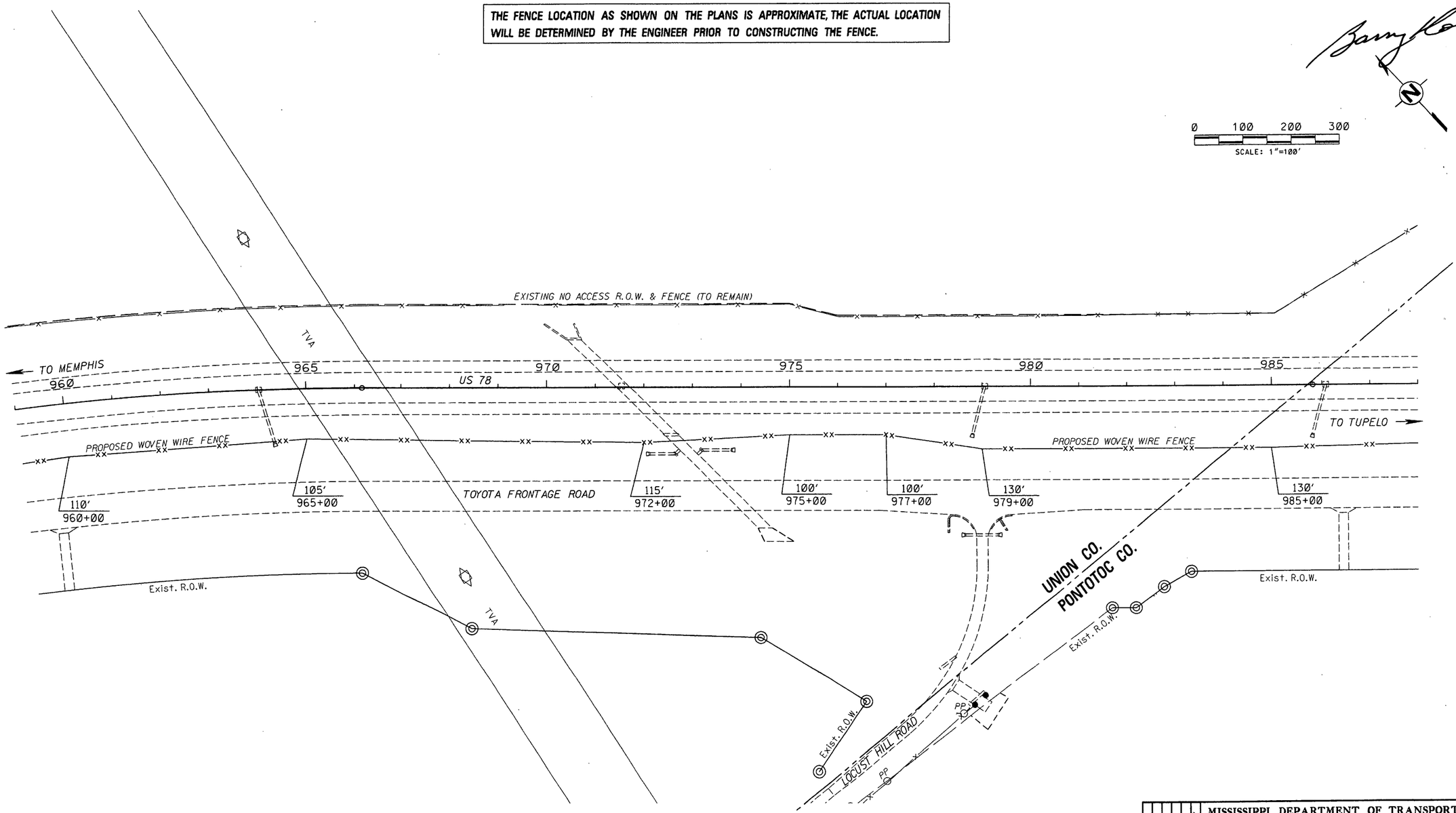
WORKING NUMBER: FNC-6
SHEET NUMBER: 100.28

DESIGN TEAM: Florence & Hutcheson, Inc. FILENAME: fnc-6.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.



FENCING ITEMS	UNITS	UNION CO.	PONTOTOC CO.	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	2502	388	2890
BARBED WIRE FENCE, SINGLE STRAND	L.F.	—	—	—
BRACE POST - CONCRETE	EACH	—	—	—
BRACE POST - TIMBER	EACH	20	3	23
LINE POST - CONCRETE	EACH	—	—	—
LINE POST - TIMBER	EACH	189	29	218
LINE POST - STEEL	EACH	—	—	—

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78

STA. 959+00 TO STA. 988+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FNC-7
SHEET NUMBER: 100.29

BY | REVISION | DATE

FILENAME: fnc-7.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

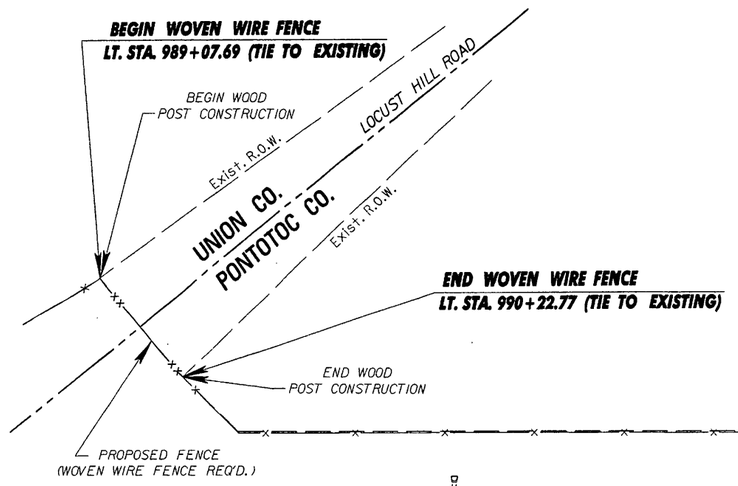
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

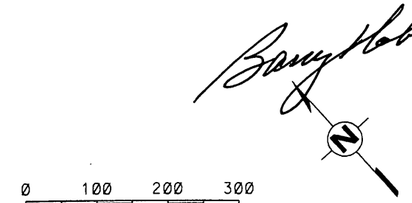
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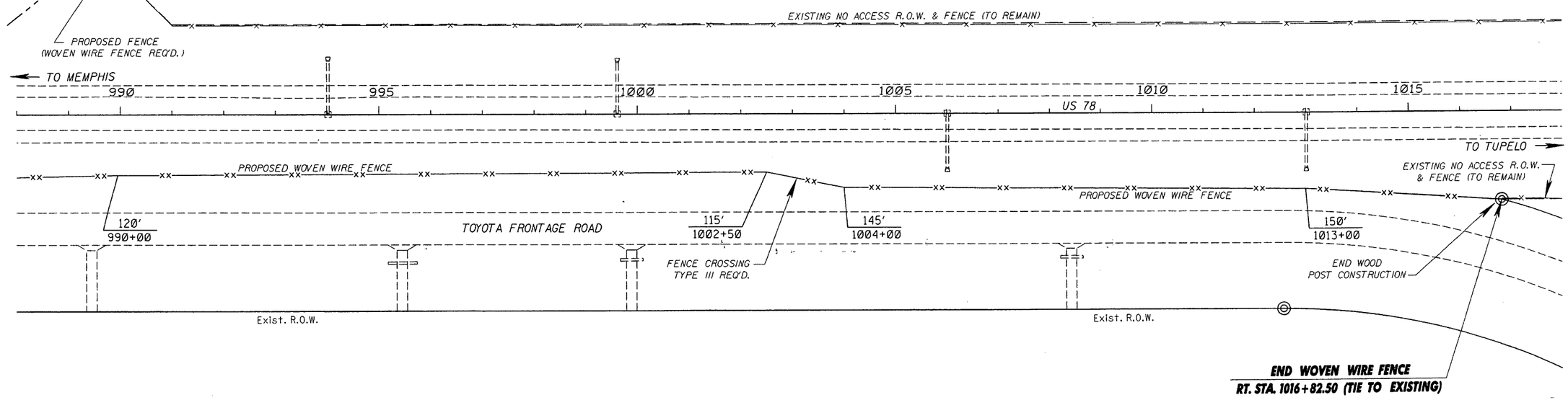
THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.







FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	3066
BARBED WIRE FENCE, SINGLE STRAND	L.F.	150
BRACE POST - CONCRETE	EACH	—
BRACE POST - TIMBER	EACH	24
LINE POST - CONCRETE	EACH	—
LINE POST - TIMBER	EACH	232
LINE POST - STEEL	EACH	2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78

STA. 988+00 TO STA. 1018+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
FNC-8	100.30

REVISION / BY / DATE

FILENAME: fnc-8.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

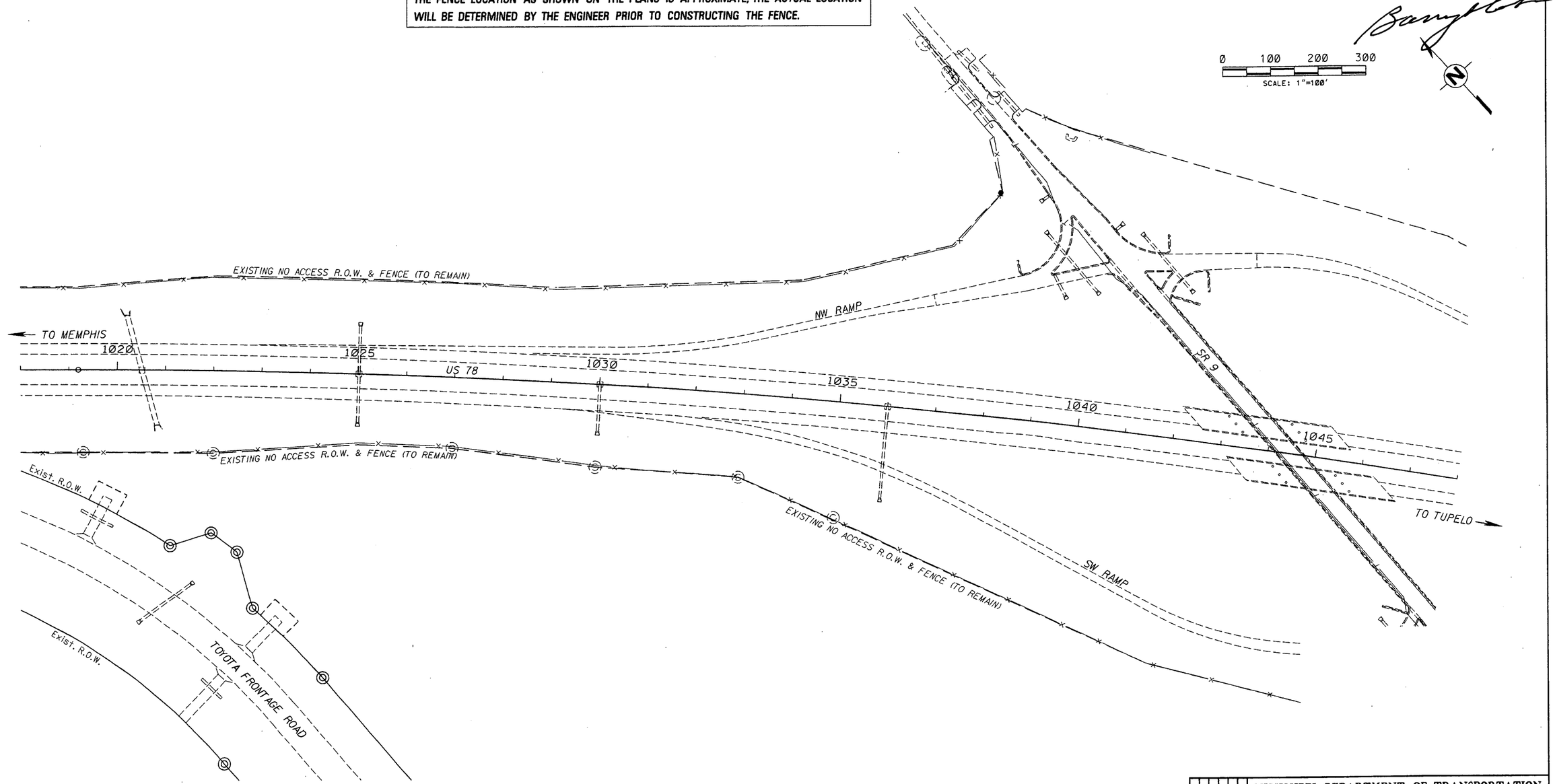
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2009 07:51:46 FNC-8.DGN

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.



PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:51:44 FNC-9.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

US 78

STA. 1018+00 TO STA. 1048+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
FNC-9	100.31

FILENAME: fnc-9.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

REVISION | BY | DATE

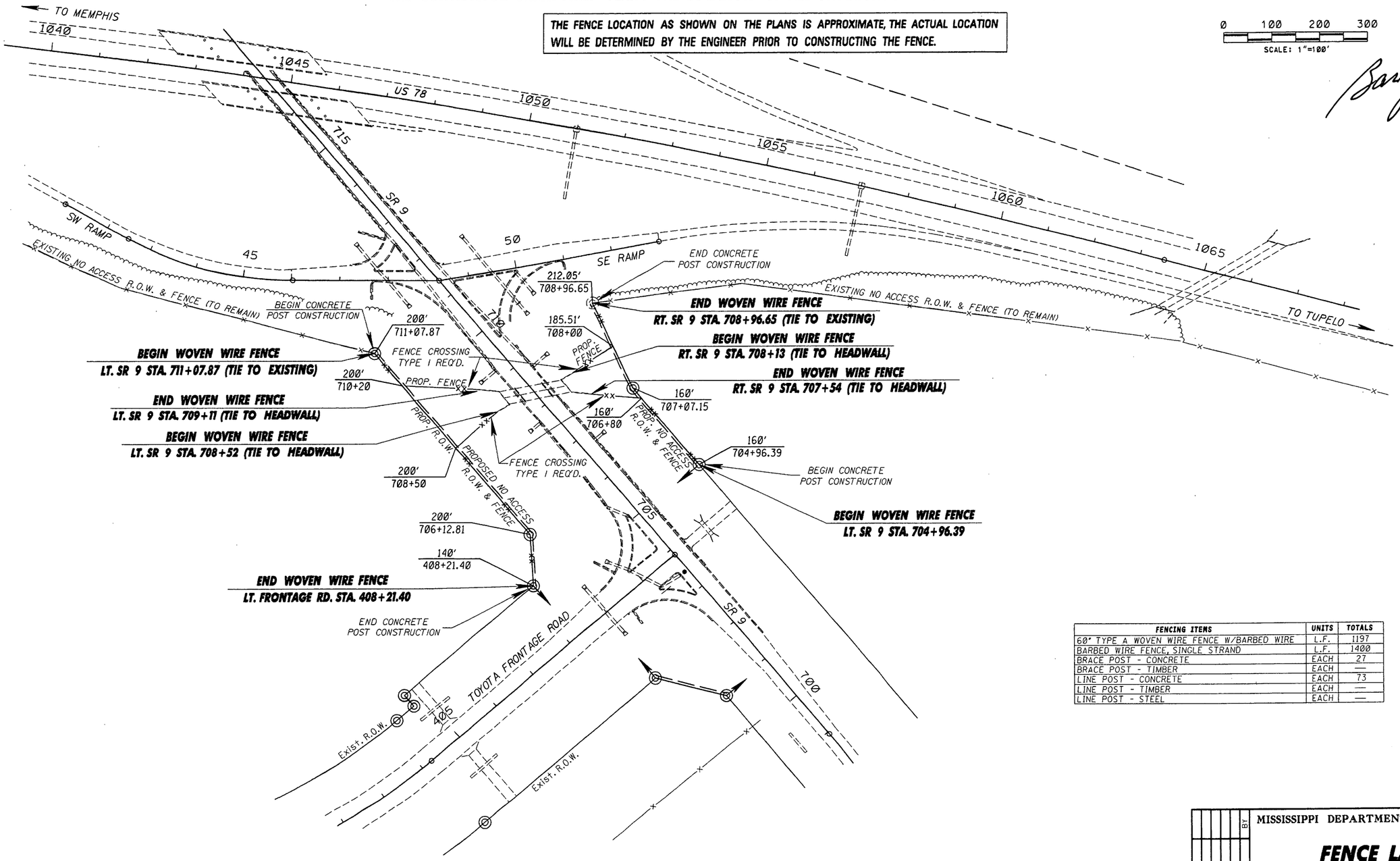
DESIGN TEAM: Florence & Hutcheson, Inc. **FILENAME: fnc-9.dgn** **COUNTY : UNION / PONTOTOC** **PROJECT No. SP-0006-01(087)**

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

THE CONTRACTOR SHALL FIELD VERIFY THE LOCATION OF ALL UNDERGROUND UTILITIES PRIOR TO CONSTRUCTION.

THE FENCE LOCATION AS SHOWN ON THE PLANS IS APPROXIMATE, THE ACTUAL LOCATION WILL BE DETERMINED BY THE ENGINEER PRIOR TO CONSTRUCTING THE FENCE.

0 100 200 300
SCALE: 1"=100'



FENCING ITEMS	UNITS	TOTALS
60" TYPE A WOVEN WIRE FENCE W/BARBED WIRE	L.F.	1197
BARBED WIRE FENCE, SINGLE STRAND	L.F.	1400
BRACE POST - CONCRETE	EACH	27
BRACE POST - TIMBER	EACH	—
LINE POST - CONCRETE	EACH	73
LINE POST - TIMBER	EACH	—
LINE POST - STEEL	EACH	—

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

FENCE LAYOUT

SR 9 @ SHERMAN

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: FNC-10
SHEET NUMBER: 100.32

FILENAME: fnc-10.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

REVISION | BY | DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:51:42 FNC-10.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

VEGETATION SCHEDULE

	EROSION CONTROL ITEMS		SEASONAL APPLICATIONS–DATES & RATES				REQUIREMENTS
			SPRING & SUMMER		FALL & WINTER		
	PAY ITEM NO.	ITEMS	RATES	DATES	RATES	DATES	
⑥	211-B	TOPSOIL FOR SLOPE TREATMENT (LVM)	4" THICK	MARCH 1 TO SEPTEMBER 1	4" THICK	SEPTEMBER 1 TO MARCH 1	TOPSOIL REQUIRED ON SLOPE AREAS (SANDY) SELECTED BY THE ENGINEER DURING CONSTRUCTION
	212-B	STANDARD GROUND PREPARATION	PER SQ.YD.	MARCH 1 TO SEPTEMBER 1	PER SQ.YD.	SEPTEMBER 1 TO MARCH 1	GROUND PREPARATION REQUIRED ON AREAS TO RECEIVE SOLID SODDING OR SEEDING, AS APPLICABLE.
⑦	907-213-A	AGRICULTURAL LIMESTONE	3 TONS/ACRE	MARCH 1 TO SEPTEMBER 1	3 TONS/ACRE	SEPTEMBER 1 TO MARCH 1	LIMESTONE SHALL BE MECHANICALLY SPREAD UNIFORMLY AND INCORPORATED INTO THE SOIL PRIOR TO PLANTING.
	213-B	COMBINATION FERTILIZER (13-13-13)	1000 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	1000 LBS./ACRE	SEPTEMBER 1 TO MARCH 1	FERTILIZER SHALL BE MECHANICALLY SPREAD UNIFORMLY AND INCORPORATED INTO THE SOIL PRIOR TO PLANTING.
①	213-C	SUPERPHOSPHATE	0.5 TONS/ACRE (EST.)	MARCH 1 TO DECEMBER 1			SUPERPHOSPHATE (FOR BID ITEM PURPOSES).
②	214-A	SEEDING (BERMUDAGRASS)	20 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	20 LBS./ACRE	SEPTEMBER 1 TO MARCH 1	SEED REQUIRED ON DISTURBED AREAS. UNHULLED SEED MAY BE REQUIRED DURING THE DORMANT SEASON AS DIRECTED.
②⑤	214-A	SEEDING (BAHIAGRASS)	25 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	25 LBS./ACRE	SEPTEMBER 1 TO MARCH 1	SEED REQUIRED ON DISTURBED AREAS.
②	214-A	SEEDING (TALL FESCUE)	25 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	25 LBS./ACRE	AUGUST 1 TO APRIL 1	SEED REQUIRED ON DISTURBED AREAS.
⑧	214-A	SEEDING (SERICEA LESPEDEZA)	25 LBS./ACRE	MARCH 1 TO SEPTEMBER 1	25 LBS./ACRE	SEPTEMBER 1 TO MARCH 1	SEE NOTE ⑧ BELOW.
③	214-A	SEEDING (CRIMSON CLOVER)	———	———	20 LBS./ACRE	AUGUST 1 TO APRIL 1	SEED REQUIRED ON DISTURBED AREAS.
	215-A	VEGETATIVE MATERIAL FOR MULCH	2 TONS ACRE (EST.)	MARCH 1 TO SEPTEMBER 1	2 TONS/ACRE (EST.)	SEPTEMBER 1 TO MARCH 1	THE ENGINEER WILL DESIGNATE THE RATES OF APPLICATION (SEE SUBSECTION 215.03.3).
	216-A	SOLID SODDING	PER SQ.YD.	MARCH 1 TO SEPTEMBER 1	PER SQ. YD.	SEPTEMBER 1 TO MARCH 1	SOLID SOD REQUIRED ON AREAS SPECIFIED IN THE CONTRACT OR BY THE ENGINEER.
	219-A	WATERING	20 GALS./S.Y. (EST.)	MARCH 1 TO SEPTEMBER 1	20 GALS. S.Y. (EST.)	SEPTEMBER 1 TO MARCH 1	TO BE USED AS DIRECTED IN THE PLANTING AND ESTABLISHING SOLID SOD.
④	220-A	INSECT PEST CONTROL	PER ACRE		PER ACRE		SEE SECTION 220.
		TEMPORARY EROSION CONTROL ITEMS					
	212-A	LIGHT GROUND PREPARATION	PER SQ.YD.		PER SQ.YD.		APPROXIMATELY HALF SQ. YD. STANDARD GROUND PREPARATION
	213-B	COMINATION FERTILIZER (13-13-13)	0.25 TONS/ACRE		0.25 TONS/ACRE		QUANTITY BASED ON LIGHT GROUND PREPARATION
	214-A	SEEDING (BROWN TOP MILLET)	20 LBS./ACRE	APRIL 1 TO AUGUST 31	———	———	QUANTITY BASED ON LIGHT GROUND PREPARATION
	214-A	SEEDING (RYE GRASS)	———	———	25 LBS./ACRE	SEPTEMBER 1 TO MARCH 31	QUANTITY BASED ON LIGHT GROUND PREPARATION
	214-A	SEEDING (OATS)	———	———	90 LBS./ACRE	SEPTEMBER 1 TO DECEMEBER 15	QUANTITY BASED ON LIGHT GROUND PREPARATION
	215-A	VEGETATIVE MATERIAL FOR MULCH	1 TON /ACRE (EST.)		1 TON /ACRE (EST.)		QUANTITY BASED ON LIGHT GROUND PREPARATION

① ALL AREAS THAT HAVE BEEN VEGETATED, UNDER THIS CONTRACT FOR AT LEAST (60) SIXTY DAYS, SHALL RECEIVE ADDITIONAL APPLICATION(S) OF FERTILIZER(S) OF THE TYPE(S) AND RATE(S) OF APPLICATIONS AS DETERMINED BY SOIL TESTS OR AS DIRECTED DURING THE GROWING SEASONS THE CONTRACT IS IN FORCE. GROUND PREPARATION WILL NOT BE REQUIRED FOR THE ADDITIONAL APPLICATIONS. PAYMENT FOR ALL FERTILIZERS ACCEPTABLY APPLIED AS AN ADDITIONAL APPLICATION(S) WILL BE MADE IN ACCORDANCE WITH SUPERPHOSPHATE BID ITEM 213-C.

② PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 100% OF THE ACREAGE WILL BE SEEDED.

③ PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE WILL BE SEEDED.

④ QUANTITY ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE VEGETATED MAY REQUIRE TREATMENT.

⑤ THIS ITEM TO BE OMITTED ON AREAS WITHIN 30' FROM EDGE OF PAVEMENT.

⑥ PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE SEEDED MAY REQUIRE TOPSOIL. (INCLUDES 1,362 C.Y. FOR CUT AREAS.)

⑦ THE ACTUAL RATE/ACRE TO BE DETERMINED BY SOIL TEST DURING CONSTRUCTION.

⑧ SOW, IN ADDITION TO OTHER SPECIFIED SEEDS, ON HIGH FILL AND BACKSLOPE AREAS SELECTED BY ENGINEERS DURING CONSTRUCTION. PROPOSAL QUANTITIES ESTIMATED ON THE BASIS THAT 50% OF THE ACREAGE WILL BE SEEDED.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

VEGETATION SCHEDULE GRADE, DRAIN, & PAVING

PROJECT NO.: SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: VS-1

FILENAME: vs-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

SHEET NUMBER: 100.33

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

08/15/2008 11:15:49 VS-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

GPS CONTROL NOTES

COORDINATES DERIVED FROM GPS SURVEY TIED TO:
NAD' 83 (03) MS EAST ZONE

CONTROL STATION	NORTH	EAST
APL V 6	1739053.1204	934270.7348
APL V 23	1757811.8446	965308.1656
78 V 69	1826774.1878	916997.7354

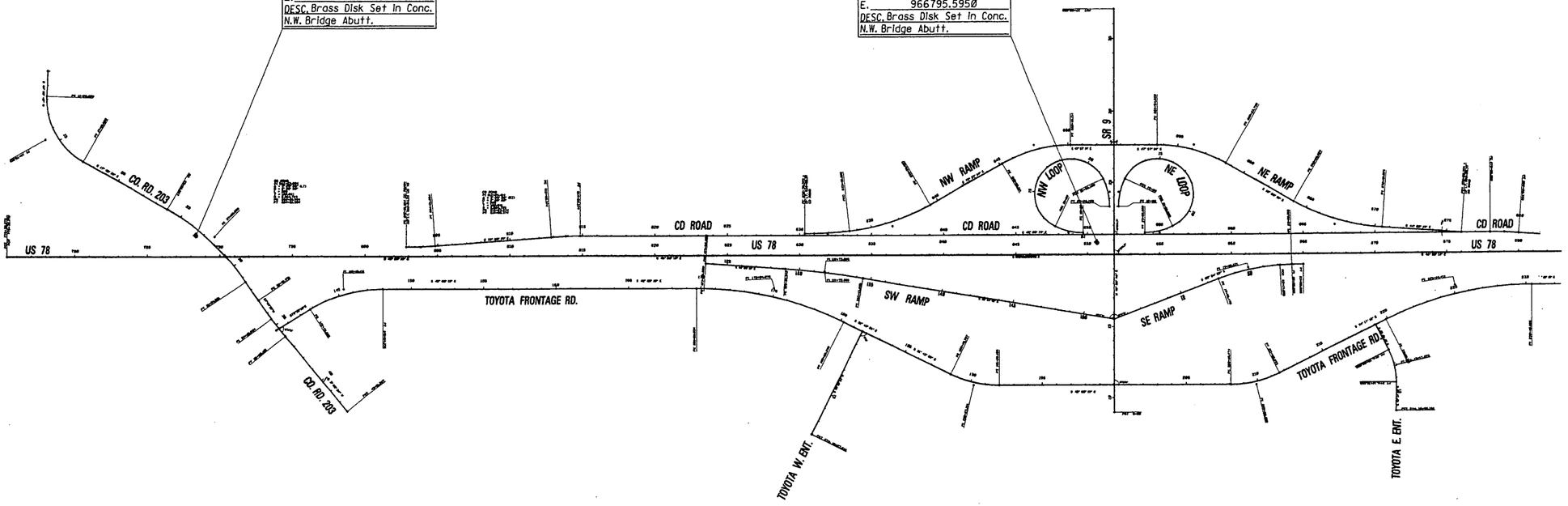
VERTICAL DATUM
NAVD 88

ALL AZIMUTHS AND DISTANCES ARE
NAD' 83/03 MS EAST ZONE GRID VALUES

CONVERSION VALUES	PROJECT AVERAGE BOP	EOP
GROUND TO GRID FACTOR	0.999933	
GRID TO GROUND CORRECTION		
GRID TO GEODETIC AZIMUTH	00°01'07.11"	

H.V.C.M. ELEV. 487.94
N. 1782021.104
E. 962207.1568
DESC. Brass Disk Set in Conc.
N.W. Bridge Abutt.

H.V.C.M. ELEV. 514.69
N. 1777804.151
E. 966795.5950
DESC. Brass Disk Set in Conc.
N.W. Bridge Abutt.



0 400 800 1200
SCALE: 1"= 400' HOR.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SOURCE OF SURVEY CONTROL

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER SC-1
SHEET NUMBER 100.34

BY | REVISION | DATE

FILENAME: sc-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

FILAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:55:56 SC-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

GPS CONTROL NOTES

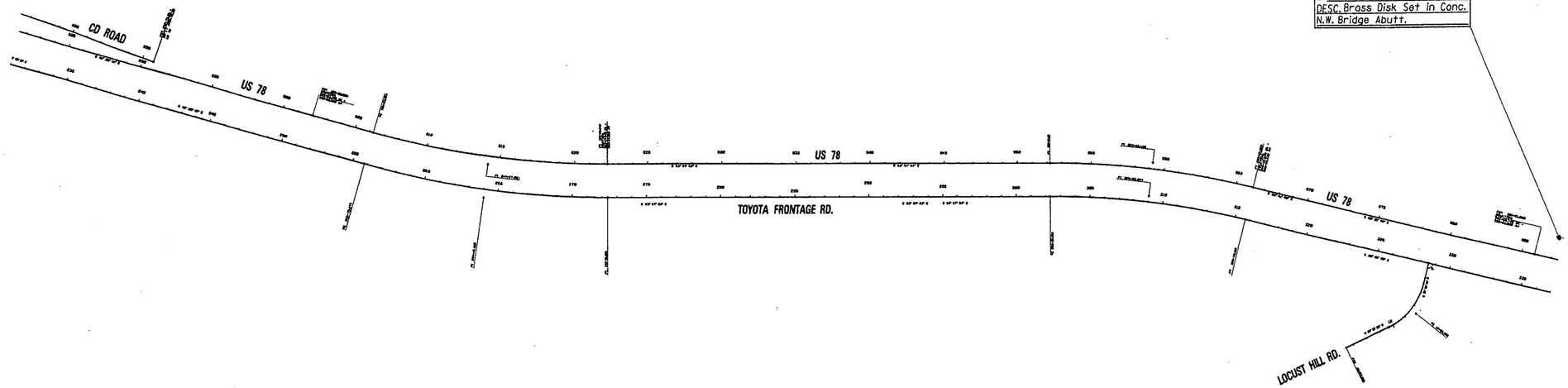
COORDINATES DERIVED FROM GPS SURVEY TIED TO:
NAD' 83 (03) MS EAST ZONE

CONTROL STATION	NORTH	EAST
APL V 5	1739053.1204	934270.7346
APL V 23	1757511.5446	933303.1686
78 V 69	1828774.1875	916997.7354

VERTICAL DATUM
NAVD 88

ALL AZIMUTHS AND DISTANCES ARE
NAD' 83/03 MS EAST ZONE GRID VALUES

CONVERSION VALUES	PROJECT AVERAGE BOP	EOP
GROUND TO GRID FACTOR	0.999933	
GRID TO GROUND CORRECTION		
GRID TO GEODETIC AZIMUTH	00°01'07.11"	



PLAN
PROJECT DEVELOPMENT DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/15/2008 11:17:02 SC-2.DGN

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SOURCE OF SURVEY CONTROL

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

REVISION	BY	DATE

FILENAME: sc-2.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

WORKING NUMBER SC-2
SHEET NUMBER 100.35

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

GPS CONTROL NOTES

COORDINATES DERIVED FROM GPS SURVEY TIED TO:
NAD' 83 (03) MS EAST ZONE

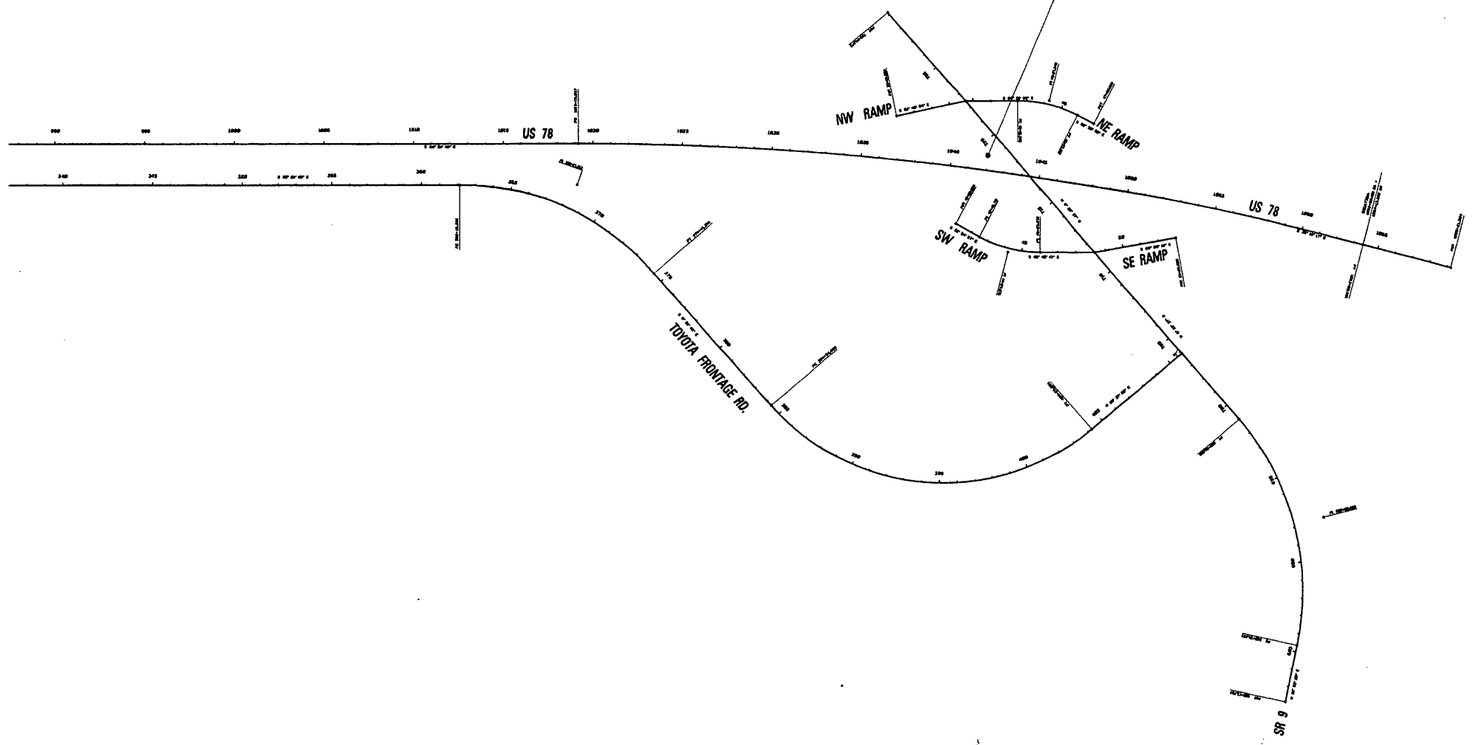
CONTROL STATION	NORTH	EAST
APL V 8	1739063.1204	934270.7346
APL V 23	1757611.5446	958306.1686
78 V 69	1825774.1878	916997.7264

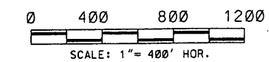
VERTICAL DATUM
NAVD 88

ALL AZIMUTHS AND DISTANCES ARE
NAD' 83/03 MS EAST ZONE GRID VALUES

CONVERSION VALUES	PROJECT AVERAGE BOP	EOP
GROUND TO GRID FACTOR	0.999933	
GRID TO GROUND CORRECTION		
GRID TO GEODETIC AZIMUTH	00°01'07.11"	

H.V.C.M. ELEV. 362.67
N. 1766131.848
E. 981817.9918
DESC. Brass Disk Set In Conc.
N.W. Bridge Abutt.





MISSISSIPPI DEPARTMENT OF TRANSPORTATION

SOURCE OF SURVEY CONTROL

PROJECT NO. SP-0006-01(087)
COUNTY : UNION /PONTOTOC

WORKING NUMBER: SC-3
SHEET NUMBER: 100.36

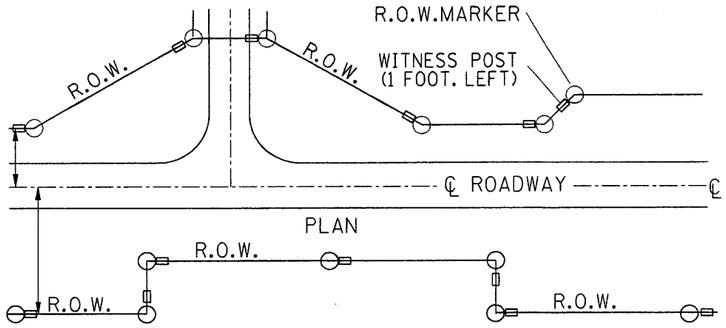
REVISION | BY | DATE

FILENAME: sc-3.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

08/12/2008 07:55:53 SC-3.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



TYPICAL PLACEMENT OF R.O.W. MARKERS

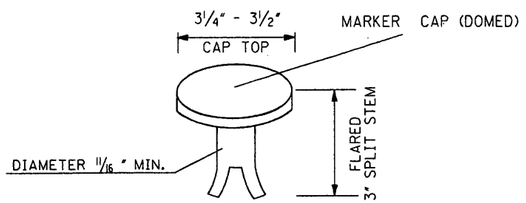
AND WITNESS POST

GENERAL NOTES

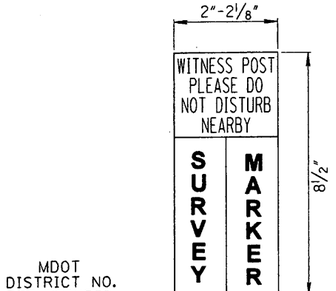
THE MARKERS SHALL BE PLACED AS INDICATED ELSEWHERE ON PLANS
COST OF WITNESS POST AND DECALS SHALL BE INCLUDED IN THE COST OF MARKER

TYPE "B" MARKER

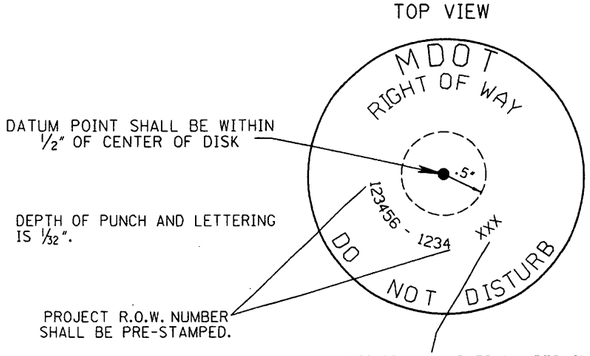
FLUSH MOUNTED MARKERS
FOR CONCRETE SURFACES



SURVEY MARKER WITNESS POST DECALS
WHITE BACKGROUND WITH BLACK PRINT, VINYL WITH ADHESIVE BACKING

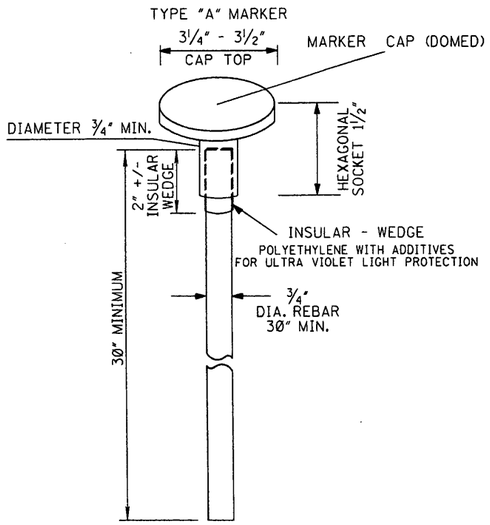


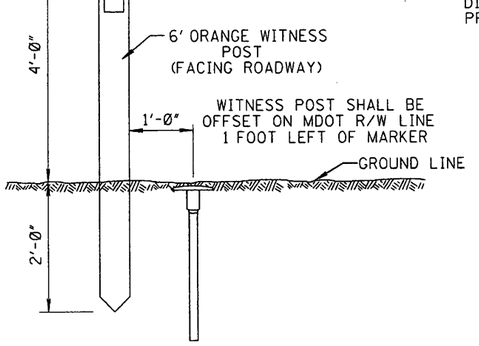
TOP VIEW



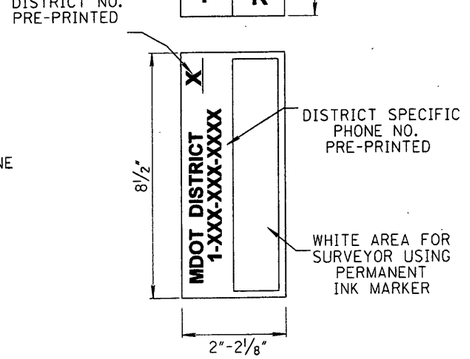
MARKER CAP SPECIFICATIONS PRINT DATA WHERE SHOWN
3.25" - 3.50" DIAMETER DOMED TOP
OUTSIDE ROW 46 SPACES "MDOT - DO NOT DISTURB" 3/16" LETTERS
MIDDLE ROW 35 SPACES "RIGHT OF WAY" 3/16" LETTERS
INSIDE ROW 35 SPACES "PROJECT R.O.W.# AND INDIVIDUAL MARKER# " 1/8" LETTERS

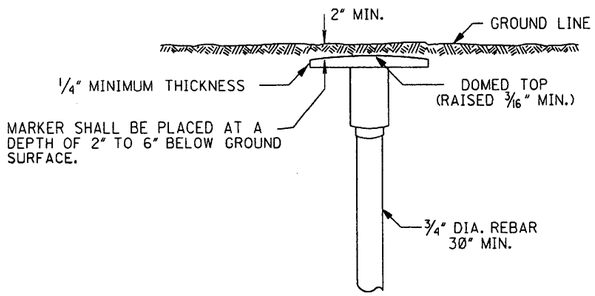
TYPE "A" MARKER





WITNESS POST &
RIGHT-OF-WAY MARKER





MISSISSIPPI DEPARTMENT OF TRANSPORTATION

RIGHT-OF-WAY MARKER DETAIL

PROJECT No. SP-0006-01(087)
COUNTY: UNION / PONTOTOC

BY	REVISION	DATE

FILENAME: rw-1.dgn
DESIGN TEAM F&H, Inc. CHECKED DATE 3-22-2005

WORKING NUMBER: RW-1
SHEET NUMBER: 100.37

PLAN
ROW DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/12/2008 07:55:52 RW-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

Barnyelo

RIGHT-OF-WAY MARKERS

STATION	LOCATION	NORTHING	EASTING
UNION COUNTY			
799+10.00 US 78	255' Lt.	1,781,383.01	963,078.36
800+75.00 US 78	255' Lt.	1,781,272.62	963,200.99
803+50.00 US 78	183.93' Lt.	1,781,035.80	963,357.82
806+45.00 US 78	184.08' Lt.	1,780,838.54	963,577.17
812+75.00 US 78	325' Lt.	1,780,521.77	964,139.68
813+85.00 US 78	270' Lt.	1,780,407.29	964,184.63
816+15.00 US 78	385' Lt.	1,780,338.88	964,432.51
821+35.00 US 78	385' Lt.	1,779,990.97	964,818.98
827+20.00 US 78	245' Lt.	1,779,495.52	965,160.08
829+50.00 US 78	370' Lt.	1,779,434.53	965,414.65
832+20.00 US 78	240' Lt.	1,779,157.27	965,528.34
838+50.00 US 78	435' Lt.	1,778,880.69	966,127.03
839+95.00 US 78	675' Lt.	1,778,962.04	966,395.37
840+00.00 US 78	560' Lt.	1,778,873.23	966,322.14
840+90.00 US 78	740' Lt.	1,778,946.79	966,509.46
841+65.00 US 78	675' Lt.	1,778,848.30	966,521.72
846+35.00 US 78	1000' Lt.	1,778,775.38	967,088.47
855+10.00 US 78	920' Lt.	1,778,130.50	967,685.25
856+10.00 US 78	960' Lt.	1,778,093.32	967,786.33
856+50.00 US 78	895' Lt.	1,778,018.25	967,772.57
859+80.00 US 78	835' Lt.	1,777,752.87	967,977.69
860+50.00 US 78	890' Lt.	1,777,746.91	968,066.51
861+30.00 US 78	765' Lt.	1,777,600.48	968,042.33
861+40.00 US 78	835' Lt.	1,777,645.82	968,096.60
867+70.00 US 78	380' Lt.	1,776,886.15	968,260.40
876+25.00 US 78	355' Lt.	1,776,295.52	968,879.11
877+80.00 US 78	440' Lt.	1,776,254.99	969,051.18
881+75.00 US 78	219.26' Lt.	1,775,826.65	969,197.06
886+30.00 US 78	220' Lt.	1,775,522.78	969,535.71
886+80.00 US 78	189.46' Lt.	1,775,466.63	969,552.44
29+50.00 SR 9 @ Blue Springs	170' Rt.	1,778,256.16	967,590.28
29+99.54 SR 9 @ Blue Springs	125.51' Lt.	1,778,490.85	967,404.01
31+51.93 SR 9 @ Blue Springs	170' Rt.	1,778,406.11	967,725.52

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2009 07:55:48 RWC.DGN

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

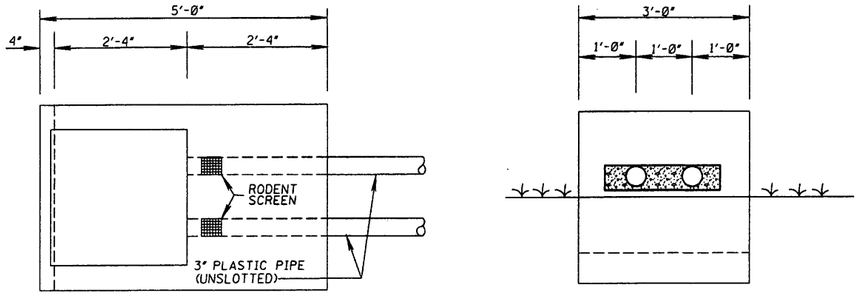
RIGHT OF WAY MARKER COORDINATES

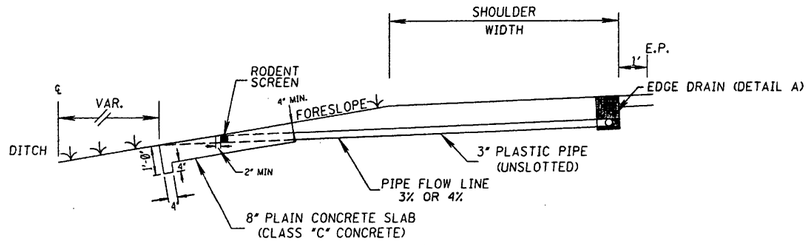
PROJECT No. SP-0006-01(087)
COUNTY: UNION / PONTOTOC

WORKING NUMBER: RWC
SHEET NUMBER: 100.38

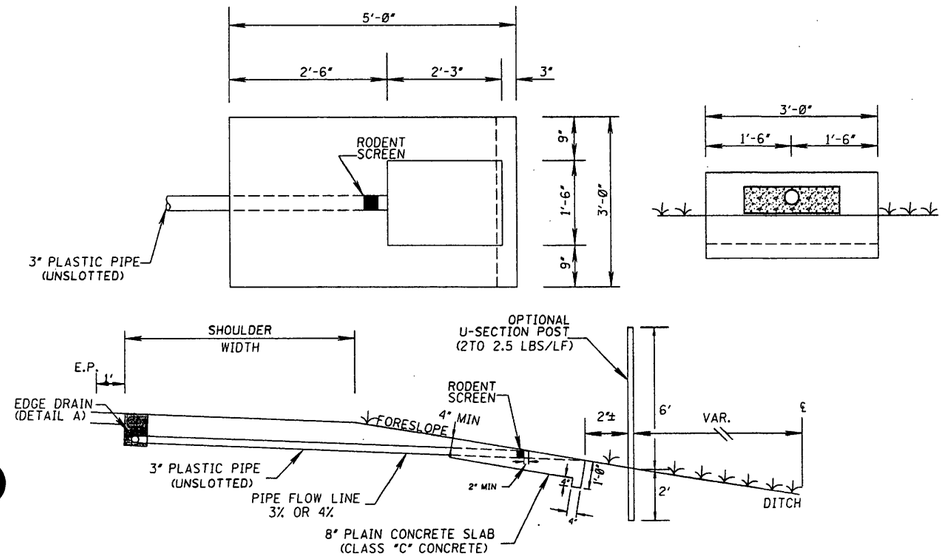
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DESIGN TEAM F&H, Inc. CHECKED DATE

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

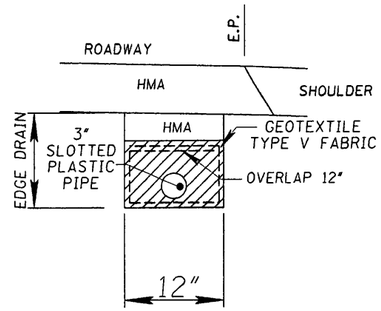




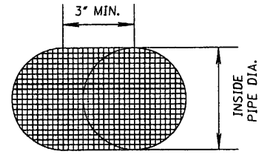
DETAIL OF DUAL EDGEDRAIN OUTLET / VENT APRON



DETAIL OF EDGEDRAIN OUTLET / VENT APRON



DETAIL "A"



DETAIL OF RODENT SCREEN

3X3 GALVANIZED HARDWARE CLOTH 0.063 WIRE OR EQUAL FORMED TO FIT SNUG TO INSIDE OF PIPE. COST OF THE RODENT SCREEN TO BE ABSORBED IN PAY ITEM 907-605-FF (EDGE DRAIN COMPLETE AND IN PLACE)

NOTES :

URBAN EDGE DRAIN OUTLETS TO TIE INTO INLETS. ALL COSTS SHALL BE COVERED UNDER OUTLET/VENT PAY ITEMS.

EDGE DRAINS SHALL BE REQUIRED ONLY ON THE LOW SIDE OF SUPERELEVATION.

.383 C.Y. CLASS "C" CONCRETE REQUIRED FOR 5' x 3' APRON.

FOR MORE DETAILS SEE SHEET ED-2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

EDGE DRAIN DETAIL CONCRETE APRON AND RODENT SCREEN

PROJECT No. SP-0006-01(087)
COUNTY: UNION / PONTOTOC

WORKING NUMBER	SHEET NUMBER
MD-1	100.39

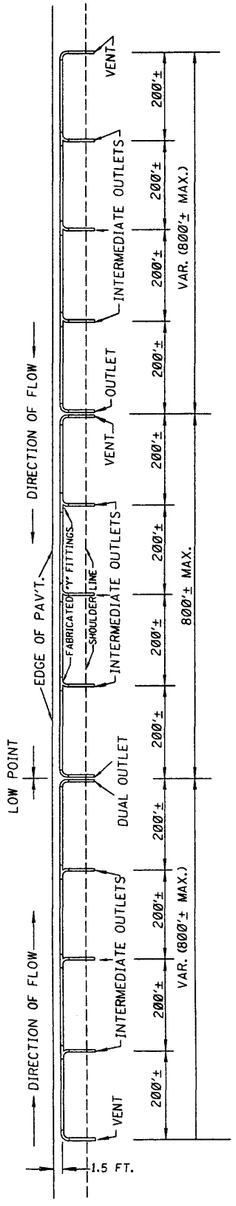
REVISION | BY | DATE

FILENAME: md-1.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

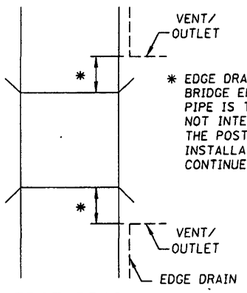
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:55:47 MD-1.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

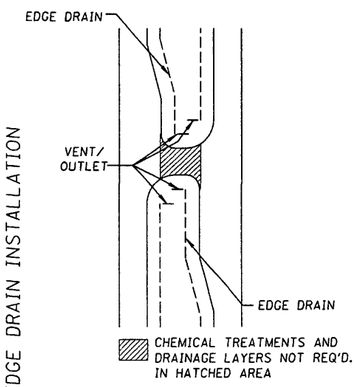


TYPICAL EDGE DRAIN INSTALLATION

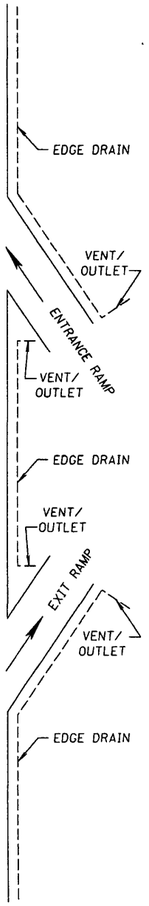


* EDGE DRAIN SHALL STOP PRIOR TO BRIDGE END PAVEMENT. OUTLET/VENT PIPE IS TO BE PLACED SO THAT IT DOES NOT INTERFERE WITH THE DRIVING OF THE POSTS FOR THE GUARDRAIL INSTALLATION. DRAINAGE LAYER IS TO CONTINUE TO THE BRIDGE ABUTMENT.

EDGE DRAIN @ BRIDGE

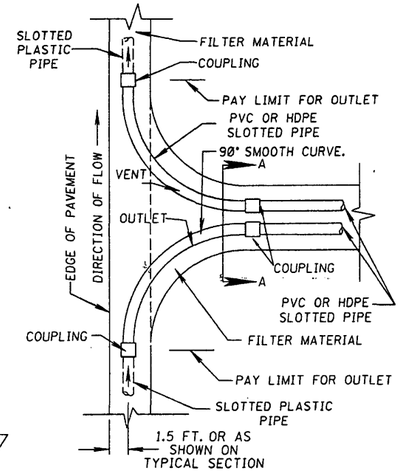


EDGE DRAIN @ X-OVER
STOP EDGE DRAIN
@ RADIUS POINT

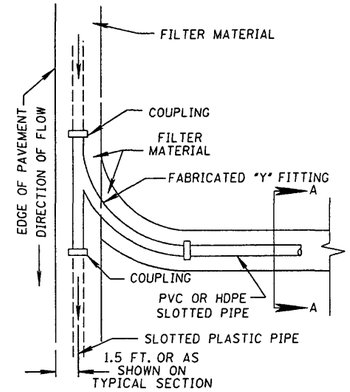


EDGE DRAIN @
ENTRANCE
AND EXIT
RAMPS

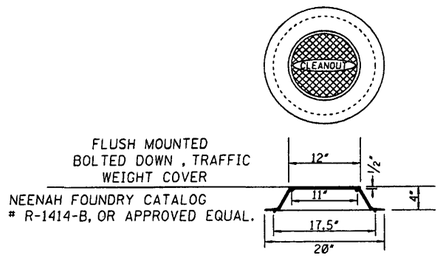
EDGE DRAIN
@ TURN-OUT W/C&G
AND DRIVEWAY



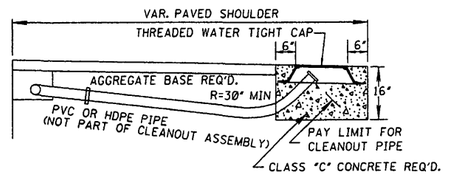
OUTLET AND VENT CONNECTION
PLAN VIEW (SEE NOTE 2)



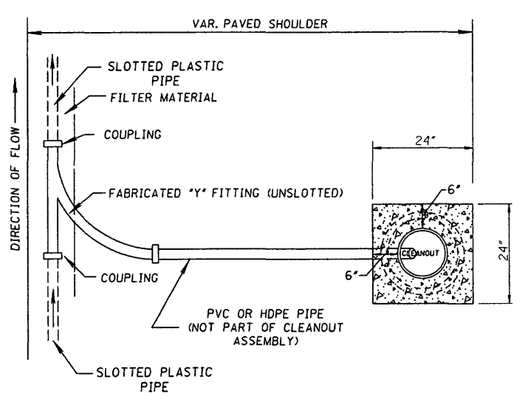
INTERMEDIATE OUTLET CONNECTION
PLAN VIEW



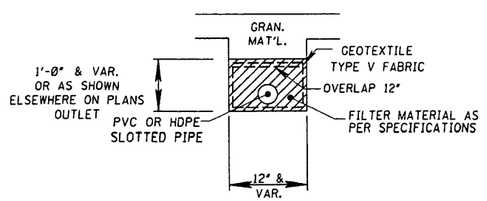
CLEANOUT ASSEMBLY DETAIL
(SEE NOTE 1)



SECTION-CLEANOUT ASSEMBLY DETAIL



PLAN-CLEANOUT ASSEMBLY DETAIL



SECTION "A-A"

NOTES

1. CLEANOUT ASSEMBLY ONLY TO BE USED WHEN CLEANOUT PROCEDURES CANNOT BE PERFORMED THROUGH NORMAL VENT & OUTLET INSTALLATIONS. MINIMUM DIMENSIONS ARE SHOWN FOR CLEANOUT ASSEMBLY. TRAFFIC WEIGHT COVER SHALL HAVE TWO SCREWS OR ONE SCREW AND RETAINING LUG. CLEANOUT ASSEMBLY TO BE INSTALLED AT THE DIRECTION OF THE ENGINEER. COST OF CASTING TO BE ABSORBED IN OTHER ITEMS
2. DETAILS SHOWN ALSO APPLY TO DUAL OUTLET OR DUAL VENTING INSTALLATIONS.
3. PVC PIPE SHALL BE EITHER SCHEDULE 40 OR SCHEDULE 80 POLYVINYL CHLORIDE PLASTIC PIPE.
4. THE CONTRACT UNIT PRICES PAID FOR EDGE DRAIN AND EDGE DRAIN OUTLETS/VENTS SHALL BE FULL COMPENSATION FOR FURNISHING ALL LABOR, MATERIALS, TOOLS, EQUIPMENT, AND INCIDENTALS AND FOR DOING ALL THE WORK INVOLVED IN CONSTRUCTING EDGE DRAINS AND EDGE DRAIN OUTLETS/VENTS COMPLETE IN PLACE, INCLUDING WIRE MESH COVERS, PIPE AND PIPE FITTINGS, COUPLINGS, UNTREATED PERMEABLE MATERIAL, GEOTEXTILE FABRIC, GRANULAR MATERIAL, BITUMINOUS PAVEMENT MIXTURE, TRENCHING, DISPOSAL OF TRENCHED MATERIALS AND OTHER MISCELLANEOUS APPURTENANCES AS SHOWN ON THE PLANS AND AS SPECIFIED IN THE STANDARD SPECIFICATIONS AND IN THIS SPECIAL PROVISION.
5. 0.20 C.Y. CLASS " C" CONCRETE REQUIRED FOR CLEANOUT ASSEMBLY. TO BE PAID FOR AS PAVED DITCH
6. SMALL ANIMAL GUARDS SHALL BE REQUIRED ON ALL EXPOSED PIPE OPENINGS BY THE END OF THE WORK DAY INSTALLED. PAYMENTS ASSOCIATED WITH TEMPORARY GUARDS SHALL BE INCLUDED IN THE CONTRACT UNIT PRICE FOR EDGE DRAIN OUTLETS/VENTS
7. AN OUTLET OR VENT SHALL BE REQUIRED AT THE BEGINNING AND AT THE END OF EACH RUN OF EDGE DRAIN.
8. FOR MORE DETAILS SEE SHEET EDD-1
9. ALL FITTINGS AND JOINTS TO BE CONSTRUCTED WITH SMOOTH INTERIOR WALLS.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

EDGE DRAIN DETAIL FOR CLEANOUTS AND OUTLETS

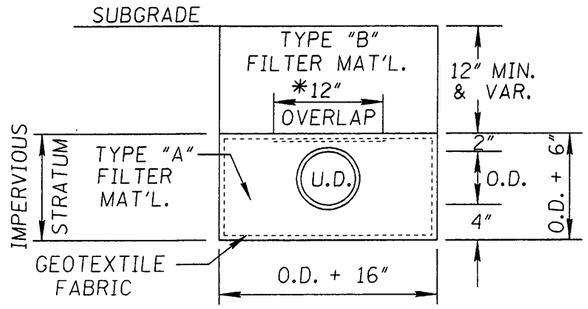
PROJECT No. SP-0006-01(087)
COUNTY: UNION / PONTOTOC

WORKING NUMBER	MD-2
SHEET NUMBER	100.40

FILENAME: md-2.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

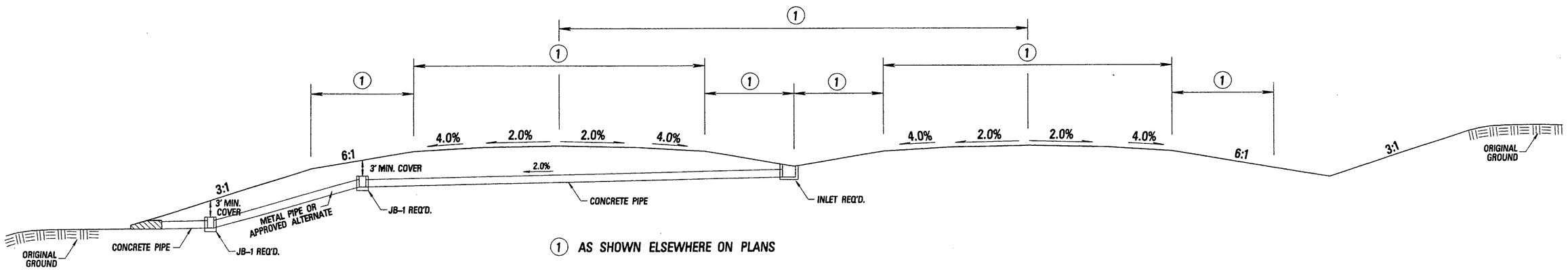
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
08/12/2005 07:55:45 MD-2.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



DETAIL OF NORMAL UNDERDRAIN TYPE I

*A 6" OVERLAP SHALL BE REQUIRED AT THE END OF GEOTEXTILE FABRIC. BOTH THE 6" AND 12" OVERLAPS SHALL BE INCLUDED FOR PAYMENT UNDER PAY ITEM NO. 605-AA GEOTEXTILE FABRIC FOR SUBSURFACE DRAINAGE PER SQ. YD.



(1) AS SHOWN ELSEWHERE ON PLANS

NOTES

MEDIAN DRAINS WITH DOWNSPOUTS TO BE UTILIZED IN LIEU OF STACKED PIPE INLET WHEN STACK PIPE EXCEEDS 20 FEET.

SEE SPECIFIC LOCATION FOR PIPE SIZE AND LENGTH.

HEIGHT OF JUNCTION BOXES TO BE ADJUSTED TO FIT VERTICAL SKEW OF PIPE.

TYPICAL SECTION FOR INSTALLATION OF MEDIAN DRAINS WITH DOWNSPOUTS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

TYPICAL SECTION UNDERDRAINS, SPECIAL DESIGN FOR INSTALLATION OF MEDIAN DRAINS WITH DOWNSPOUTS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: MD-3
SHEET NUMBER: 100.41

REVISION | BY | DATE

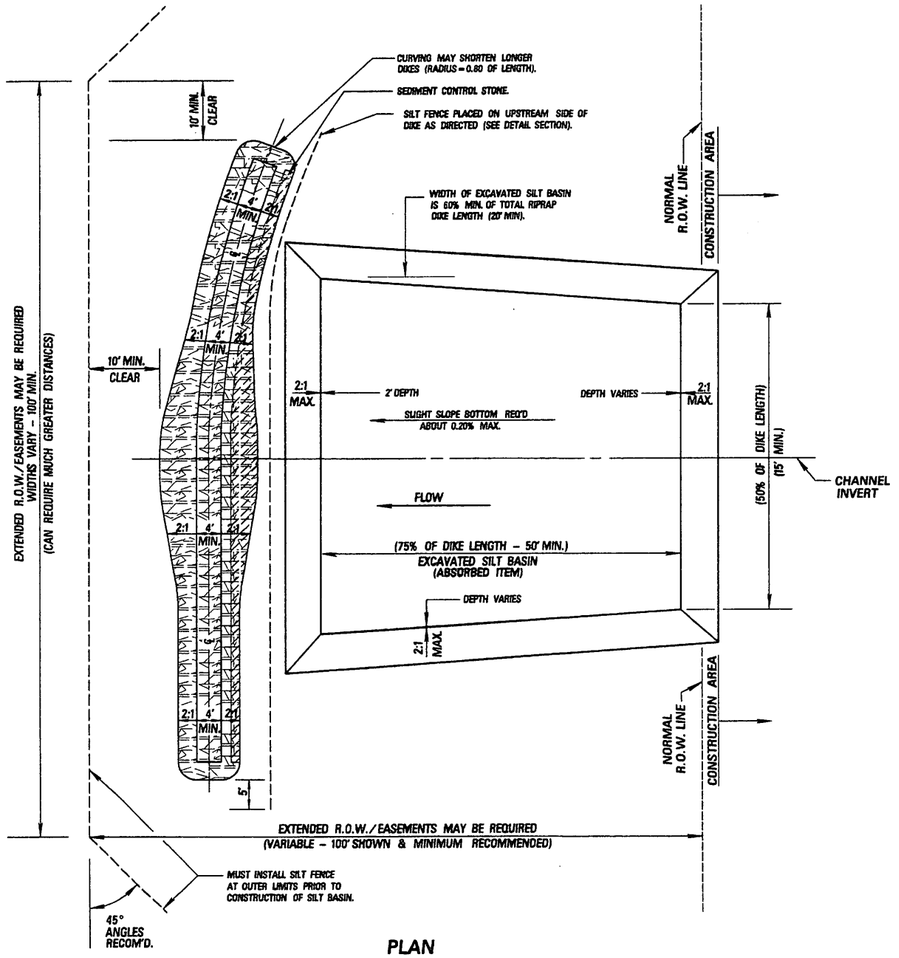
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DESIGN TEAM F&H Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

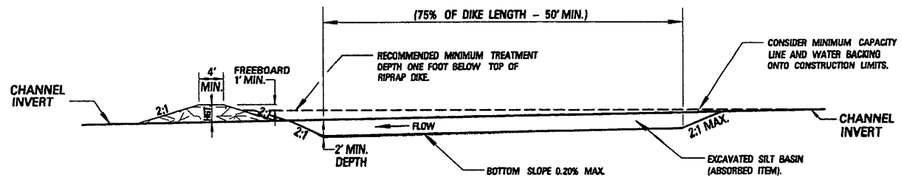
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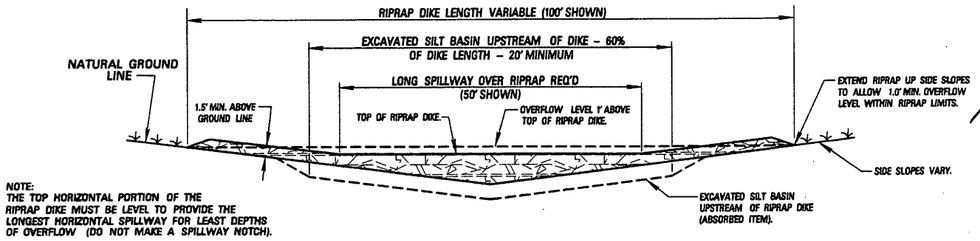
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PLAN

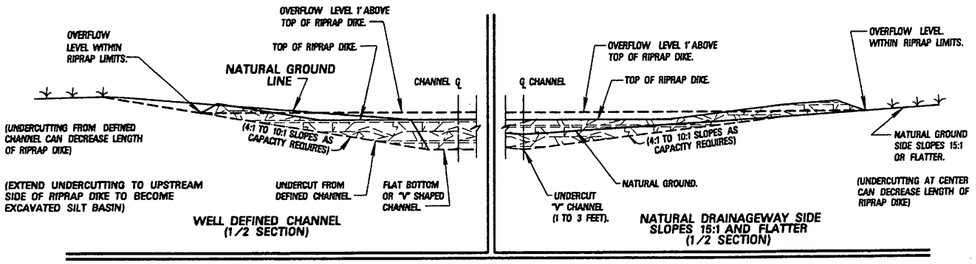


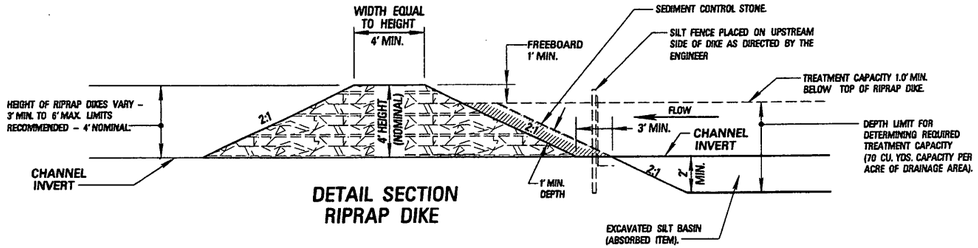
PROFILE



NOTE:
THE TOP HORIZONTAL PORTION OF THE RIPRAP DIKE MUST BE LEVEL TO PROVIDE THE LONGEST HORIZONTAL SPILLWAY FOR LEAST DEPTHS OF OVERFLOW (DO NOT MAKE A SPILLWAY NOTCH).

SECTION OF RIPRAP DIKE





DETAIL SECTION RIPRAP DIKE

NOTES

1. RIPRAP DIKE SILT BASINS ARE TO BE PLACED IN SURFACE DRAINS (INCLUDING SELECTED CROSS DRAINS HAVING CULVERT OPENINGS OF 20 SQUARE FEET OR LESS, BUT NO LIVE-STREAMS) JUST BEFORE THE WATER (RUNOFF) LEAVES THE RIGHT OF WAY AND / OR ENTERS A WATER COURSE. LOCATION AND SIZE TO BE AS DIRECTED BY THE ENGINEER WHO SHALL REVISE THE SIZES AND / OR DESIGNATE SUPPLEMENTARY SILT FENCE AS REQUIRED. ALTERNATIVE TYPES OF SILT BASINS SHALL BE AS DIRECTED BY THE ENGINEER, WHERE RIPRAP DIKE SILT BASINS MAY REPLACE SOME RISER PIPE SILT BASINS.
2. THE REQUIRED SIZE / CAPACITY OF THE RIPRAP DIKE SILT BASIN IS TO PROVIDE AT LEAST 70 CUBIC YARDS OF VOLUME / CAPACITY PER ACRE OF DRAINAGE AREA RECEIVED (ESTIMATE CAPACITY BY 40% X EFFECTIVE DEPTH X SURFACE AREA, ALLOW 15% EXCESS). LENGTH OF BASIN SHOULD BE APPROXIMATELY TWICE THE WIDTH. THE RIPRAP DIKE SILT BASIN MUST BE MAINTAINED AT ALL TIMES TO ASSURE THE INTENDED FUNCTION, REMOVING THE ACCUMULATED SILT ROUTINELY AND / OR WHEN APPROACHING A 50% MAXIMUM DECREASE FROM THE EFFECTIVE DESIGN CAPACITY, AND RESTORING THE BASIN TO ITS ORIGINAL EFFECTIVE DESIGN CAPACITY.
3. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS, PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE, AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION AS DIRECTED BY THE ENGINEER.
4. AFTER THE PURPOSE FOR THE SILT BASIN HAS BEEN SERVED, THE POSTS AND SILT FENCE SHALL BE REMOVED. THE RIP RAP AND SEDIMENT STONE SHALL BE REMOVED AND PLACED AT THE PIPE OUTLET. THE DISTURBED AREA SHALL BE SITE GRADED AND REVEGETATED AS DEEMED NECESSARY BY THE ENGINEER. ALL COSTS OF REMOVAL AND REPLACEMENT TO BE ABSORBED IN PAY ITEM FOR SILT BASIN.
5. RIPRAP FOR THE TYPE D SILT BASIN SHALL BE 300 LB RIPRAP AND SHALL BE PAID FOR - PER TON.
6. SEDIMENT CONTROL STONE SHALL BE SIZE NO. 57 STONE AND SHALL BE PAID FOR - PER TON.
7. THE TEMPORARY EROSION CONTROL MEASURES SHOWN ON THIS SHEET WILL ONLY BE MEASURED FOR SEPERATE PAYMENT WHEN APPROPRIATE PAY ITEMS ARE INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.
8. THE ACCUMULATED SILT SHALL BE REMOVED WHEN IT REACHES 1/3 TO 1/2 THE HEIGHT OF THE CONTROL FEATURE. SILT SHALL BE DISPOSED OF PROPERLY AND SHALL NOT BE DISPOSED OF IN THE VINCINITY OF THE EROSION CONTROL DEVICES.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

TYPICAL TEMPORARY EROSION CONTROL MEASURES (TYPE "D" SILT BASIN) RIP RAP DIKE SILT BASIN

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER	MD-4
SHEET NUMBER	100.42

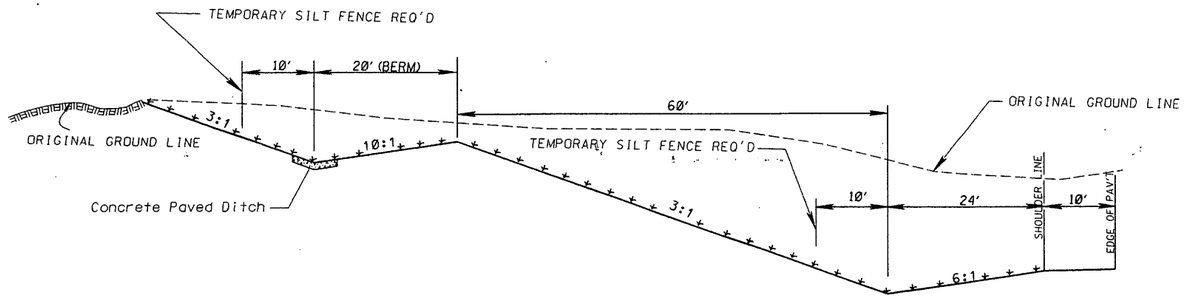
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DESIGN TEAM F&H Inc. CHECKED DATE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:55:43 MD-4.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



DETAIL OF BENCH IN A CUT SECTION
TYPICAL SECTION

SEE TYPICAL SECTIONS FOR STA TO STA LIMITS

NOT TO SCALE

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:55:41 MD-5.DGN

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

TYPICAL BENCH SECTION

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: MD-5

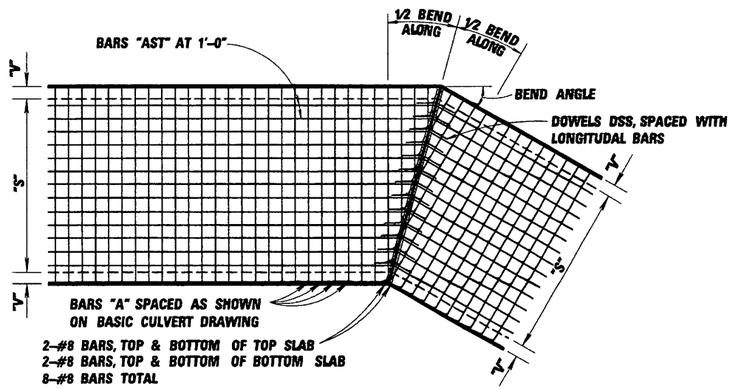
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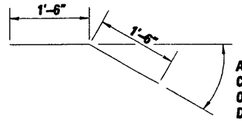
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STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PLAN OF BARREL (HORIZONTAL)

SHOWING CONCRETE DIMENSIONS AND REINFORCING IN TOP SLAB (BOTTOM SLAB IS SIMILAR)



ANGLE OF BEND IN BOX CULVERT TO BE AS SHOWN ON THE PLAN SHEET OR AS DETERMINED IN THE FIELD.

DETAILS OF DOWELS DDS-#4

HORIZONTAL FORMULA

* SINGLE CELL
NO. OF DOWELS DSS = NO. OF BARS AST + BARS ASB + BARS BS

* DOUBLE CELL
NO. OF DOWELS DSS = NO. OF BARS AST + BARS ASB + BARS BS + BARS ES

GENERAL NOTES

1. THIS DRAWING IS SUPPLEMENTARY TO THE BASIC CULVERT DRAWINGS OF THE M.S.H.D. STANDARD DRAWING SERIES IBS AND IBD.
2. THE ANGLE OF BEND IN THE BOX CULVERT SHALL BE CHECKED IN THE FIELD BEFORE ORDERING REINFORCING STEEL.
3. THIS DRAWING IS FOR A SINGLE CELL CULVERT. DOUBLE CELL STRUCTURES ARE SIMILAR.

REINFORCEMENT QUANTITIES FOR HORIZONTAL

WK. SHEET NO.	STATION	SIZE	ANGLE OF BEND	NO. OF DOWELS DSS-#4	NO. & LENGTH OF #8 BARS	EST. REINF. STEEL (LBS.)	REMARKS
5a	811+73	10'x6'	43.82°	48	8-12.25'	358	
TOTAL						358	

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

BOX CULVERT BENDING DETAIL HORIZONTAL

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: MD-6

FILENAME: md-6.dgn

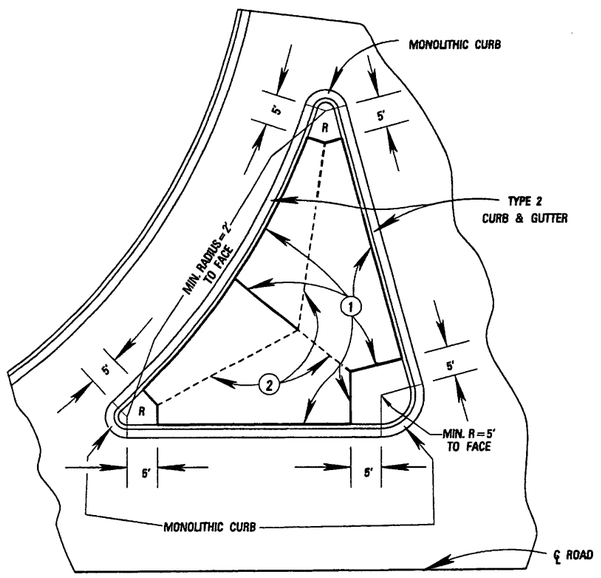
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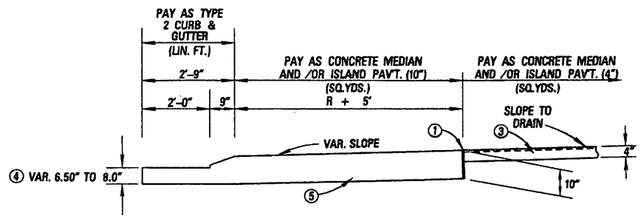
PLAN
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MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:55:40 MD-6.DGN

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MISS.	SP-0006-01(087)



PLAN VIEW OF MONOLITHIC CURB & GUTTER AT ISLAND



TYPICAL DETAIL OF MONOLITHIC CURB & GUTTER AT ISLAND

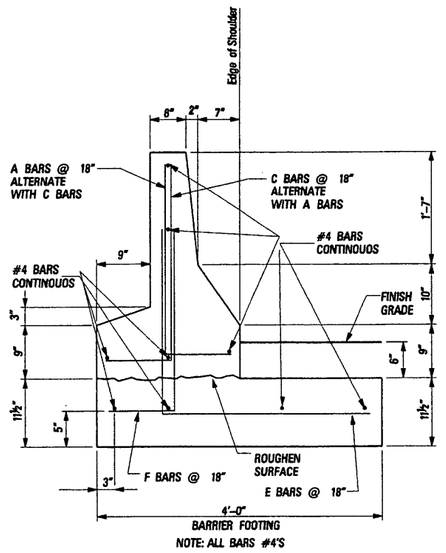
(1) 1/2" PREMOLDED EXPANSION JOINT (NOT A PAY ITEM) (SPACED AS PER STANDARD DRAWING SD-1 OR SD-2)

(2) 1/2" TOOLED CONTRACTION JOINT OR 1/2" PREMOLDED EXPANSION JOINT(NOT A PAY ITEM) (SPACED AS PER STANDARD DRAWINGS SD-1 OR SD-2) AS DIRECTED BY THE ENGINEER.

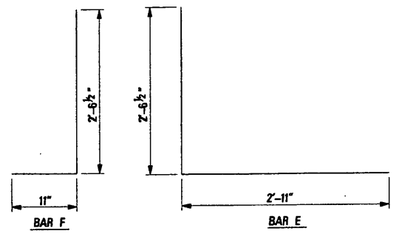
(3) 4" CLASS "C" STRUCTURAL CEMENT CONCRETE (FOR MEDIAN & ISLAND PAVT.) (PAY ITEM NO. 616-A)

(4) TOP LIFTS OF HMA AS SHOWN ON TYPICAL SECTION

(5) 10" DEPTH CLASS "C" STRUCTURAL CEMENT CONCRETE (FOR MEDIAN & ISLAND PAVEMENT) (PAY ITEM NO. 616-A)

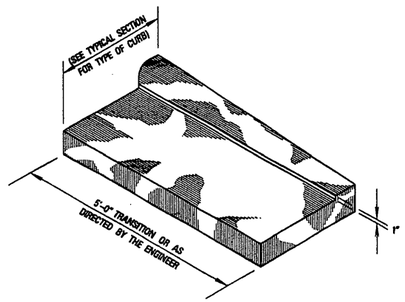


MODIFIED TYPE 4 BARRIER

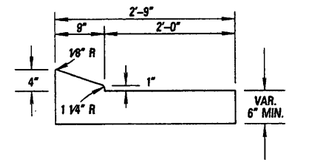


BARS A & C PER STD. MB-2, SHEET 204

BENT BAR DETAILS



DETAIL OF CURB TRANSITION



DETAIL OF COMBINATION CURB & GUTTER TYPE 2

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

MISCELLANEOUS CONSTRUCTION DETAILS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

BY	REVISION	DATE

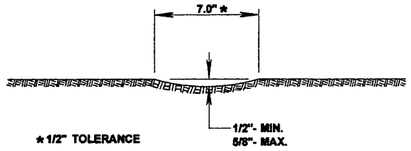
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WORKING NUMBER MD-7
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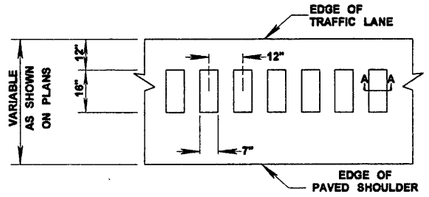
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

08/12/2008 07:55:39 MD-7.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



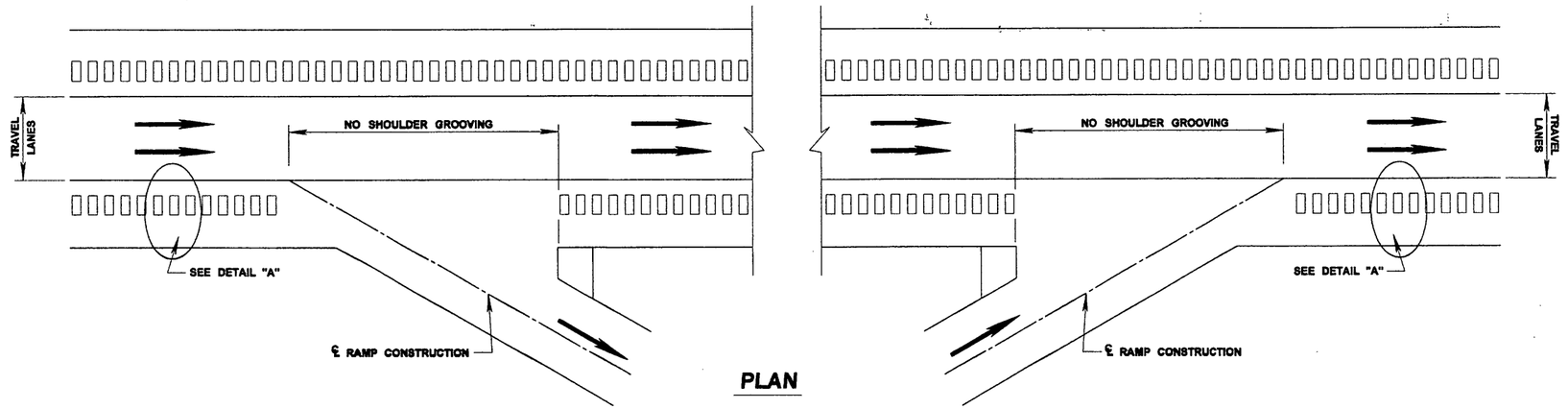
SECTION "A-A"



DETAIL "A"

RUMBLE STRIPS NOTES

1. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED ON LEFT AND RIGHT SHOULDERS OF ALL PAVED SHOULDERS ON THIS PROJECT
2. GROUND-IN RUMBLE STRIPS SHALL BE OMITTED ACROSS PRINCIPAL INTERSECTING ROADWAYS OR OTHER INTERRUPTIONS IN NORMAL SHOULDER WIDTH AS DIRECTED BY THE ENGINEER
3. COST TO BE PAID FOR IN PAY ITEM 907-423-A RUMBLE STRIPS (GROUND-IN).
4. GROUND-IN RUMBLE STRIPS SHALL BE APPLIED TO MAINLINE ONLY.



PLAN

DETAILS OF RUMBLE STRIPS (GROUND-IN)

PLAN
PRODUCT DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/12/2008 07:55:38 MD-8.DGN

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

MISCELLANEOUS DETAILS

DETAILS OF RUMBLE STRIPS (GROUND-IN)
NTS

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: MD-8
SHEET NUMBER: 100.46

FILENAME: md-8.dgn
DESIGN TEAM F&H Inc. CHECKED DATE

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STATE	PROJECT NO.
MISS.	SP-0006-01(087)

LIGHTING NOTES:

1. ALL LIGHTING ASSEMBLY LOCATIONS WILL BE STAKED IN THE FIELD BY MDOT. CONTRACTOR SHALL PLACE THE ASSEMBLIES AS STAKED UNLESS DIRECTED OTHERWISE BY THE ENGINEER.
2. ALL QUANTITIES SHOWN FOR BRANCH CIRCUIT ARE APPROXIMATE AND MAY NOT REFLECT LENGTHS REQUIRED BY THE TERRAIN IN THE FIELD.
3. EXISTING UNDERGROUND UTILITY LINES ARE SHOWN ON THE DRAWINGS BASED UPON THE BEST INFORMATION AVAILABLE TO THE ENGINEER. THE ENGINEER CANNOT AND DOES NOT WARRANT THAT THIS INFORMATION IS COMPLETE OR ACCURATE. THE CONTRACTOR MUST COORDINATE DIRECTLY WITH THE INVOLVED UTILITY OWNERS TO HAVE UNDERGROUND UTILITY LINES FIELD LOCATED IN ADVANCE OF CONSTRUCTION.
4. DISPOSAL OF EXCESS MATERIALS SHALL BE ABSORBED FOR PAYMENT IN OTHER ITEMS.
5. CONTRACTOR SHALL PROVIDE TOUCH UP GALVANIZING SUPPLIED BY POLE MANUFACTURER TO MATCH POLE FINISH.
6. METAL POLES SHALL BE SHIPPED TO SITE LOCATION ON TRUCKS AND SECURED WITH NYLON OR OTHER SUITABLE TIE DOWN MEANS TO PREVENT DAMAGE TO POLE SURFACE. UNDER NO CIRCUMSTANCES ARE CABLE OR CHAIN LASHING TO BE USED.

LIGHTING LEGEND:

HA-5 — A — SPC1-4	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 100' POLE, (8) 1000 WATT H.P.S. LUMINAIRES (TYPE 100-8-S)
HA-14 — B — SPC3-3	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 100' POLE, (6) 1000 WATT H.P.S. LUMINAIRES (TYPE 100-6-S)
HA-13 — C — SPC3-1	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 100' POLE, (4) 1000 WATT H.P.S. LUMINAIRES (TYPE 100-4-S)
HA-1 — D — SPC1-2	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 100' POLE, (4) 1000 WATT H.P.S. LUMINAIRES (TYPE 100-4-A)
HA-19 — E — SPC4-2	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 120' POLE, (4) 1000 WATT H.P.S. LUMINAIRES (TYPE 120-4-A)
HA-8 — F — SPC2-2	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 130' POLE, (8) 1000 WATT H.P.S. LUMINAIRES (TYPE 130-8-S)
HA-7 — G — SPC2-1	HIGH MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 130' POLE, (6) 1000 WATT H.P.S. LUMINAIRES (TYPE 130-6-S)
LA-1 — H — SPC1-1	LOW MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 40' POLE, (1) 400 WATT H.P.S. LUMINAIRE (TYPE 40-1-0-400)
LA-4 — J — SPC2-2	LOW MAST LIGHTING ASSEMBLY, DESIGNATION AND CIRCUIT #. 40' POLE, (1) 400 WATT H.P.S. LUMINAIRE (TYPE 40-1-8-400)
2#1, 1#10(G), 1-1/2"C	UNDERGROUND SECONDARY BRANCH CIRCUIT. NUMBER OF CONDUCTORS, SIZE OF CONDUCTORS, SIZE OF CONDUIT, SIZE OF CONDUIT AND CONDUCTORS. 'L' DENOTES EQUIPMENT GROUND.
SPC1	SECONDARY POWER CONTROLLER #1
PB	UNDERGROUND PULL BOX
	EXISTING OVERHEAD POWER LINE
PP	EXISTING UTILITY CO. POWER POLE
NPP	NEW POWER POLE PROVIDED BY CONTRACTOR
W	EXISTING UNDERGROUND WATER LINE
	EXISTING DRAINAGE STRUCTURE, DIRECTION OF FLOW
T	EXISTING TELEPHONE LINE
TP	EXISTING TELEPHONE POLE
SP	EXISTING TRAFFIC SIGNAL POLE
	EXISTING SAFETY GAURDRAIL
40'	UNDERGROUND BRANCH CIRCUIT, JACKED OR BORED, LENGTH

ABBREVIATIONS:

@	-	AT
A.W.G.	-	AMERICAN WIRE GAUGE
B.O.P.	-	BEGINNING OF PROJECT
BRCH.	-	BRANCH
C	-	CONDUIT
CKT	-	CIRCUIT
℄	-	CENTER LINE
C.Y.	-	CUBIC YARDS
EA.	-	EACH
E.O.P.	-	END OF PROJECT
EXP.	-	EXPOSED
G	-	GROUND
H.P.S.	-	HIGH PRESSURE SODIUM
I.E.S.	-	ILLUMINATING ENGINEERING SOCIETY
LA-3, HA-1	-	LIGHTING ASSEMBLY - NUMBER
L.F.	-	LINEAR FOOT
L.S.	-	LUMP SUM
LT.	-	LEFT
MDOT	-	MISSISSIPPI DEPARTMENT OF TRANSPORTATION
NE	-	NORTHEAST
NW	-	NORTHWEST
O.C.	-	ON CENTER
PAV'T	-	PAVEMENT
PVC	-	POLYVINYL CHLORIDE
RT.	-	RIGHT
SE	-	SOUTHEAST
S.F.	-	SQUARE FEET
S.P.C.	-	SECONDARY POWER CONTROLLER
SW	-	SOUTHWEST
THW	-	THERMOPLASTIC HEAT AND MOISTURE RESISTANT
UNGD.	-	UNDERGROUND

PLAN
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01/23/2009 13:15:37 E-1.DGN

DATE	ADDED SHEET REVISION	F&H BY
1/23/09		

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78

INTERCHANGE LIGHTING

LIGHTING LEGEND, ABBREVIATIONS, & LIGHTING NOTES

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

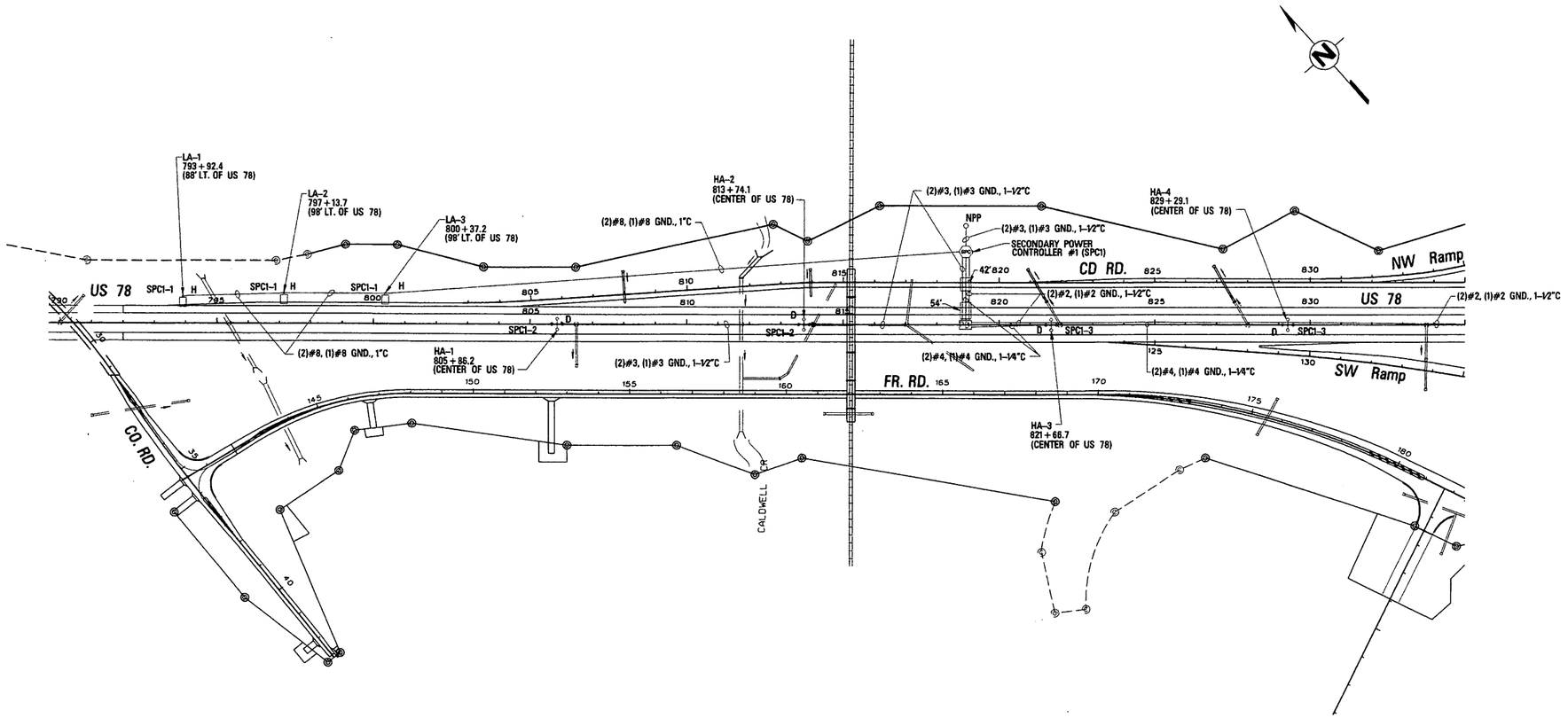
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1st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



1 / E-2 INTERCHANGE LIGHTING PLAN – PART "A"

SCALE: 1" = 200'

BY	DATE	REVISION
F&H	1/23/09	ADDED SHEET.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78
INTERCHANGE LIGHTING
BOP TO STA. 835+00

PROJECT No: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: E-2

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DESIGN TEAM HESM&A CHECKED WLT DATE

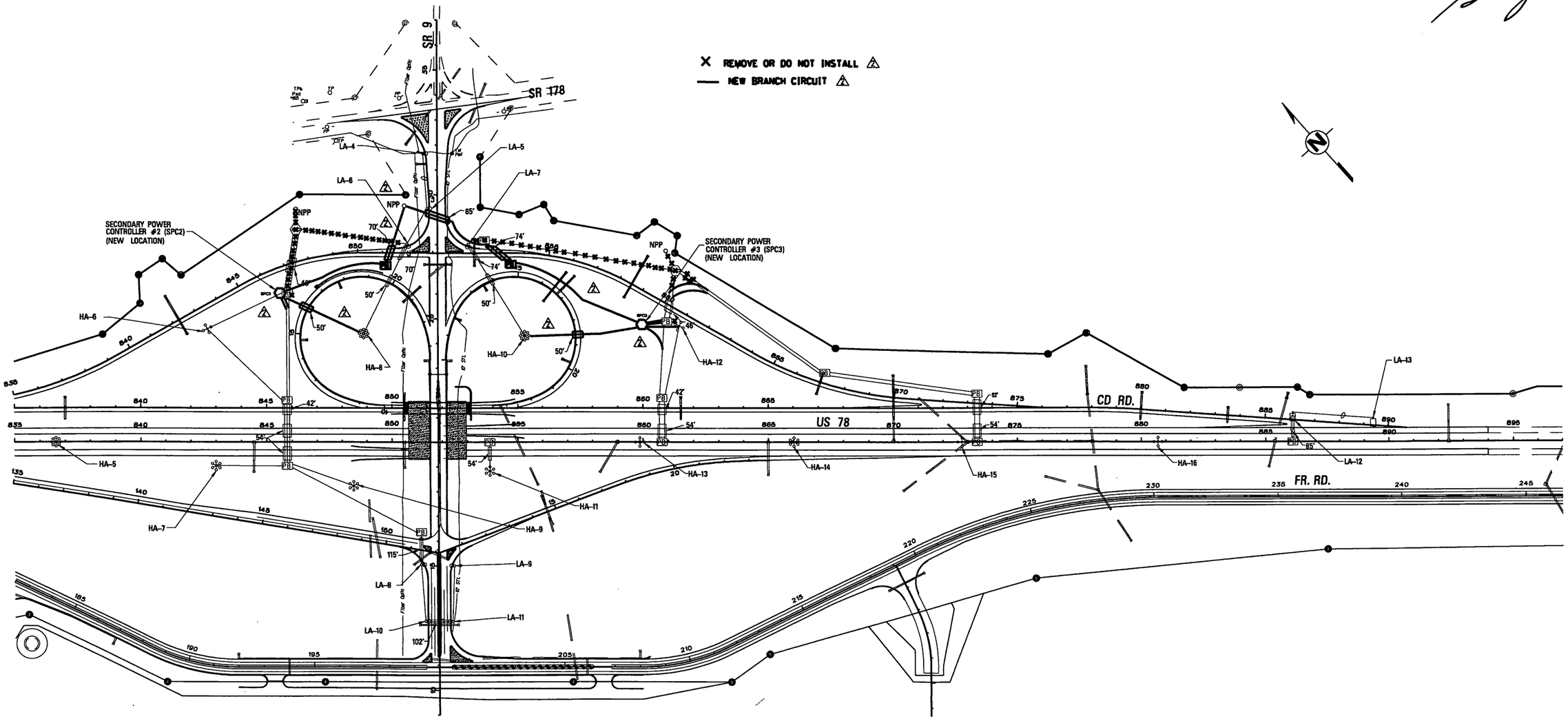
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PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:39 E-2.DGN

DESIGN TEAM: HESM & A | FILENAME: e-2.dgn | COUNTY : UNION / PONTOTOC | PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



1 / E-3 INTERCHANGE LIGHTING PLAN – PART "B"

SCALE: 1" = 200'

BY	REVISION	DATE
JES	CHANGED SPC & NPP LOC.	5/15/09
F&H	ADDED SHEET	1/23/09

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78
INTERCHANGE LIGHTING

STA 835+00 TO STA 897+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER: E-3
SHEET NUMBER: 100.49

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DESIGN TEAM HESM&A CHECKED WLT DATE

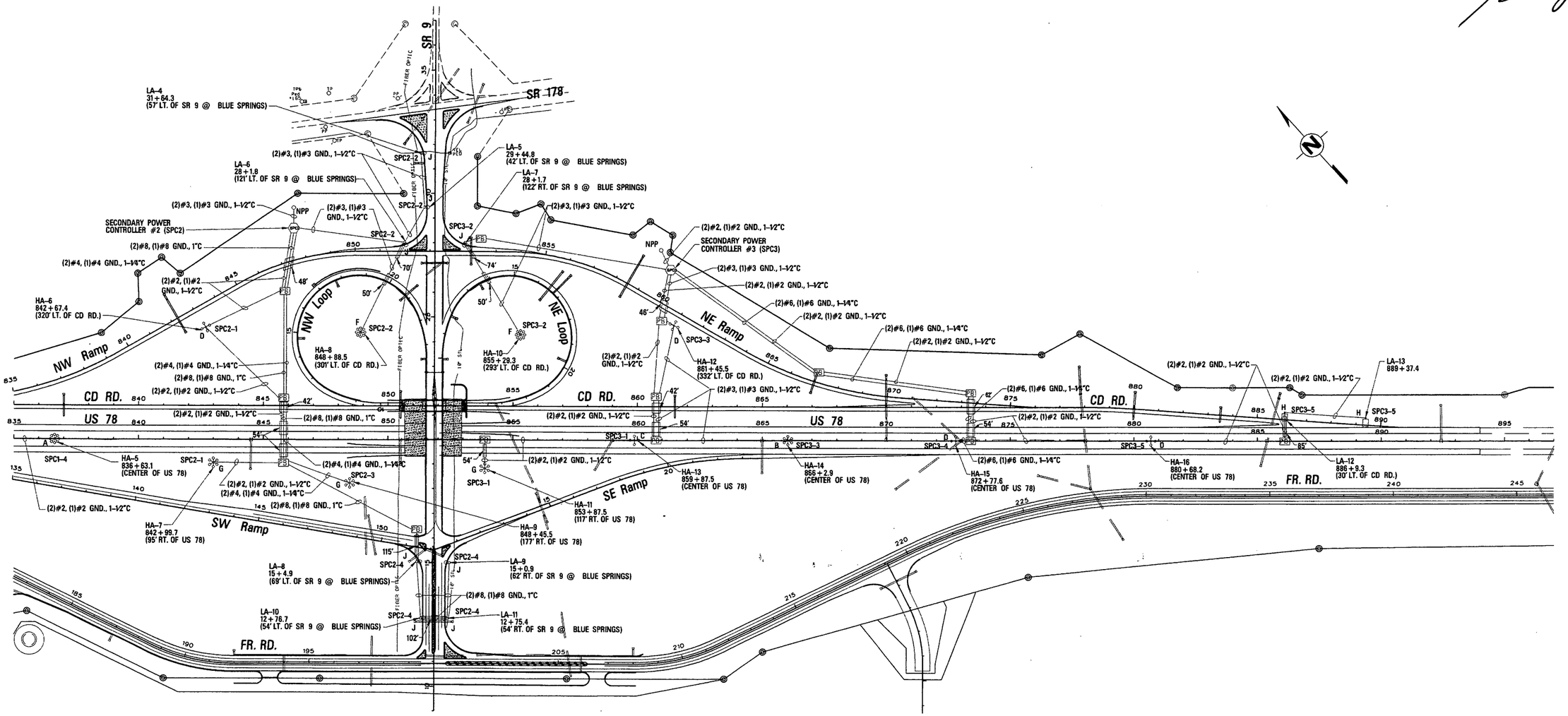
DESIGN TEAM: HESM & A | FILENAME: e-3.dgn | COUNTY : UNION / PONTOTOC | PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

5/5/2010 11:47:26 E-3 MODIFIED.DGN

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



1
E-3

INTERCHANGE LIGHTING PLAN – PART "B"

SCALE: 1" = 200'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78
INTERCHANGE LIGHTING

STA 835+00 TO STA 897+00

PROJECT NO. SP-0006-01(087)
COUNTY : UNION / PONTOTOC

WORKING NUMBER
E-3
SHEET NUMBER
100.49

DATE	ADDED SHEET. REVISION	BY
1/23/09		F&H

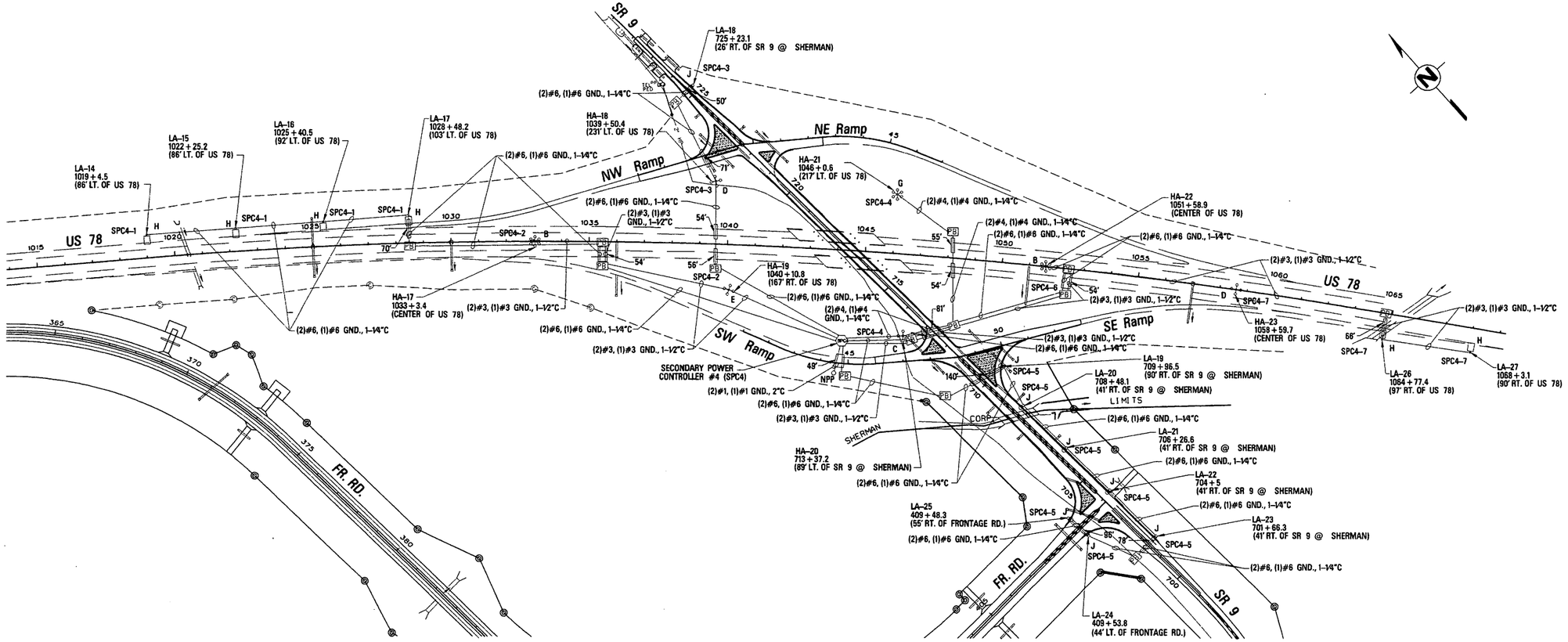
FILENAME: e-3.dgn
DESIGN TEAM HESM&A CHECKED WLT DATE

DESIGN TEAM: HESM & A | FILENAME: e-3.dgn | COUNTY : UNION / PONTOTOC | PROJECT No. SP-0006-01(087)

PLANS PREPARED BY THE ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

1st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



1 / E-4 INTERCHANGE LIGHTING PLAN AT SHERMAN

SCALE: 1" = 200'

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78 INTERCHANGE LIGHTING

US 78 LIGHTING AT THE SHERMAN INTERCHANGE

PROJECT NO. SP-0006-01(087)

COUNTY : UNION / PONTOTOC

WORKING NUMBER: E-4

SHEET NUMBER: 100.50

DATE	ADDED SHEET. REVISION	BY
1/23/09		F&H

FILENAME: e-4.dgn

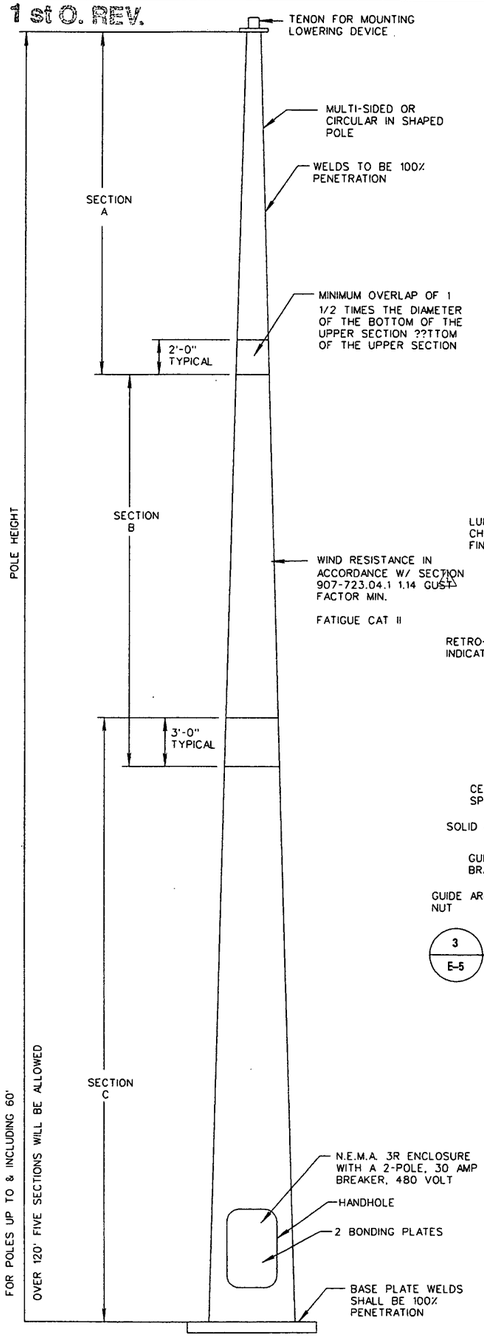
DESIGN TEAM HESM&A CHECKED WLT DATE

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:47 E-4.DGN

1st O. REV.

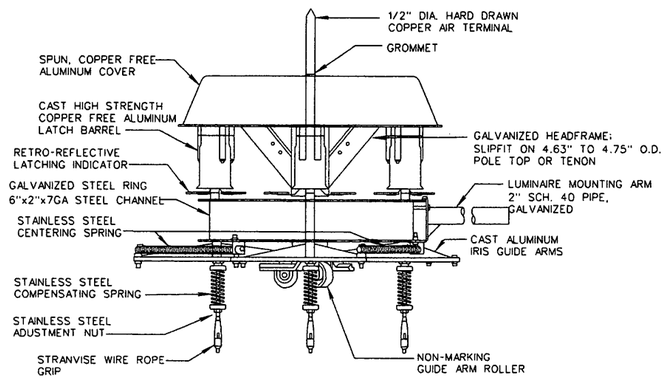
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



1 / E-5 **TYPICAL POLE DETAIL**

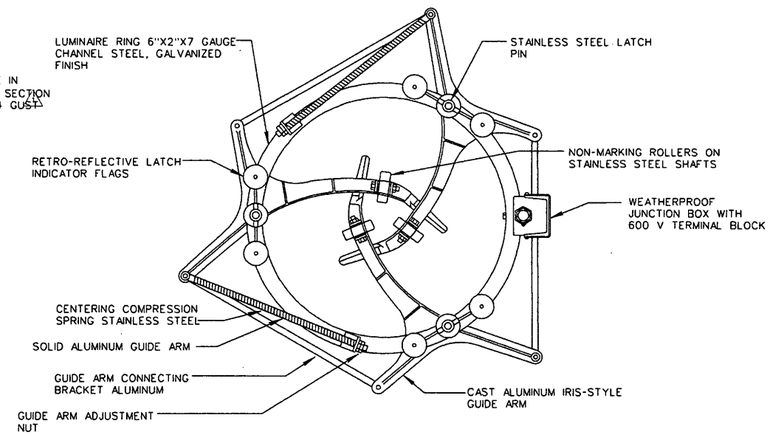
N.T.S.

MOUNT POLE WITH HANDHOLE FACING NEAREST ROADWAY.



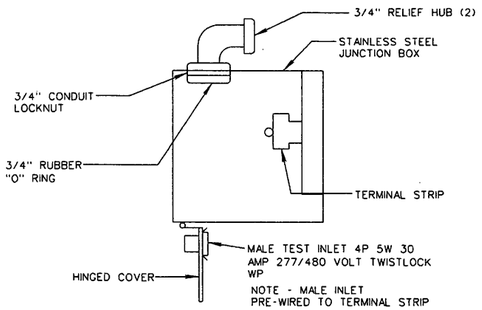
2 / E-5 **HEAD FRAME AND LUMINAIRE MOUNTING DETAIL**

N.T.S.



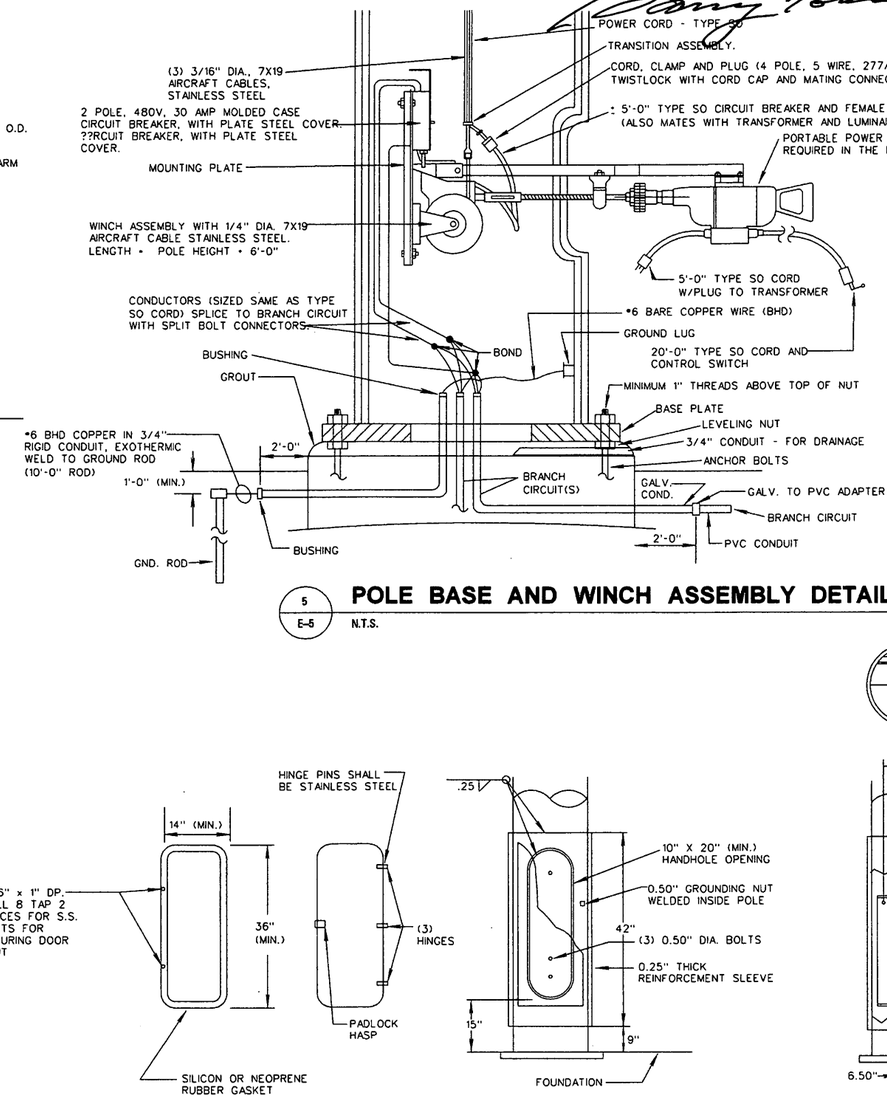
3 / E-5 **LUMINAIRE MOUNTING RING DETAIL (TOP VIEW)**

N.T.S.



4 / E-5 **RING TERMINAL BOX DETAIL**

N.T.S.



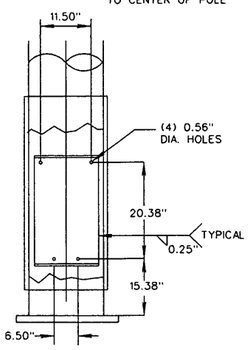
5 / E-5 **POLE BASE AND WINCH ASSEMBLY DETAIL**

N.T.S.

NOTE:
1. PROVIDE (1) DRY TYPE PORTABLE TRANSFORMER 480V 1?9 PRIMARY 120V 1F9 SECONDARY, FOR PORTABLE POWER UNIT.
2. SEE DETAIL 4/E-6 FOR ELECTRICAL SCHEMATIC.
3. SEE DETAIL 5/E-6 FOR ALIGNMENT OF POLES.
4. SEE SHEET E-8 FOR FOUNDATION DETAILS.

6 / E-5 **HANDHOLE DETAIL**

N.T.S.



7 / E-5 **WINCH PLATE DETAIL**

N.T.S.

BY	DATE	REVISION
F&H	1/23/09	ADDED SHEET.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78
INTERCHANGE LIGHTING

ELECTRICAL DETAILS

PROJECT No: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER E-5

SHEET NUMBER 100.51

FILENAME: e-5.dgn

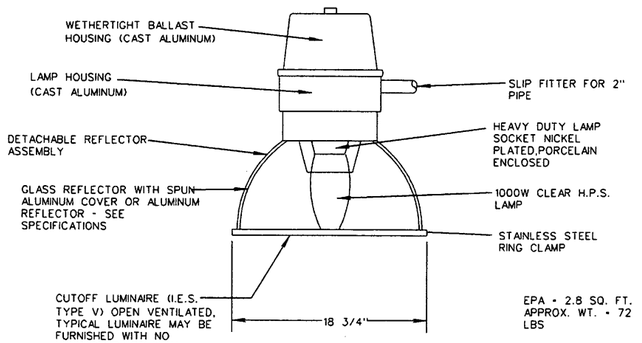
DESIGN TEAM HESM&A CHECKED WLT DATE

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:49 E-5.DGN

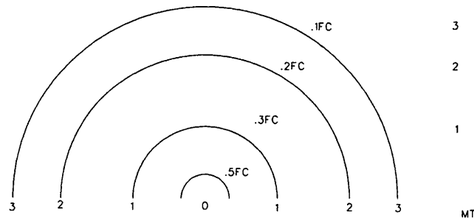
1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



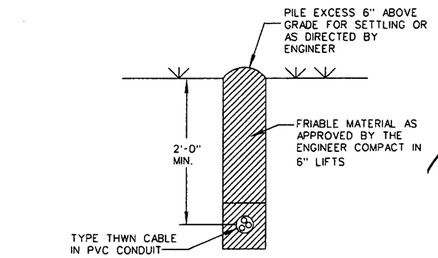
1 / E-6 **TYPICAL HIGH MAST LUMINAIRE DETAIL**

N.T.S.



3 / E-6 **LIGHT DISTRIBUTION DETAIL**

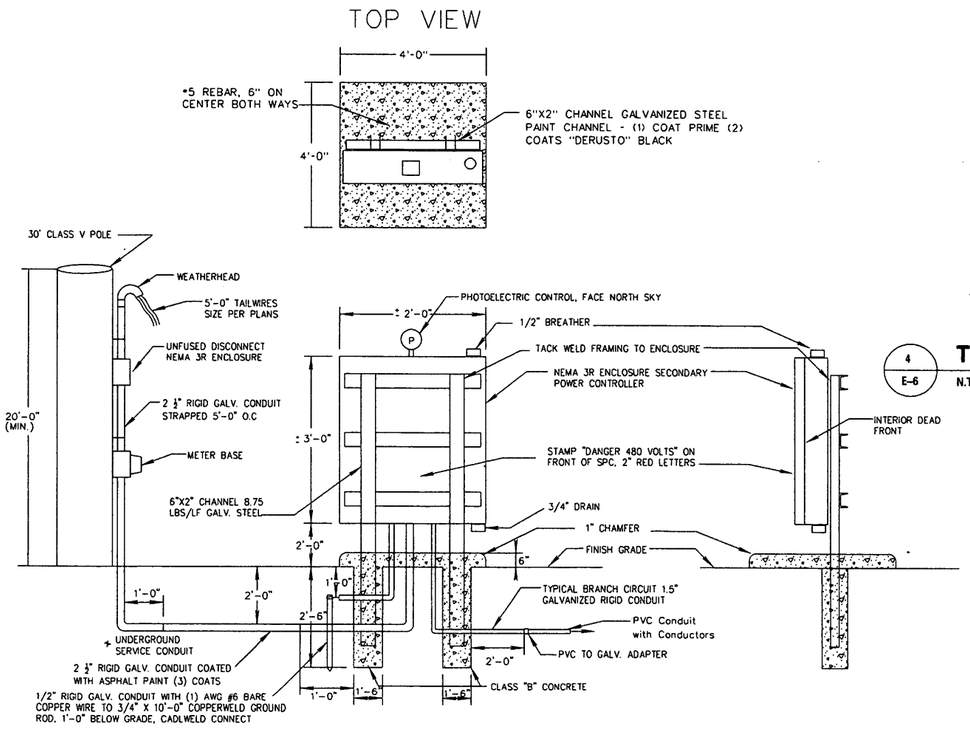
N.T.S.



6 / E-6 **CABLE TRENCHING DETAIL**

N.T.S.

NOTE: CONDUIT DEPTH TO BE 36" UNDER ROADWAYS.

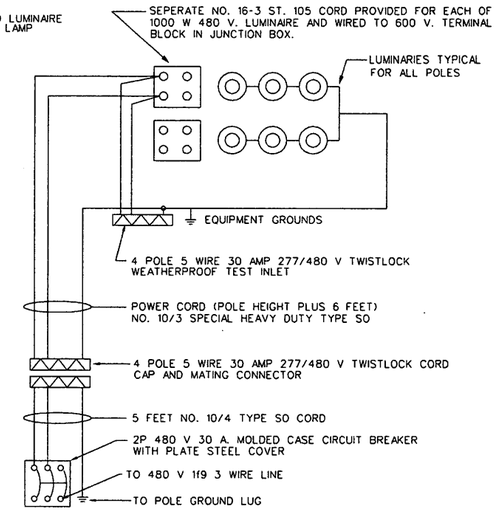


2 / E-6 **SECONDARY POWER CONTROLLER DETAIL**

N.T.S.

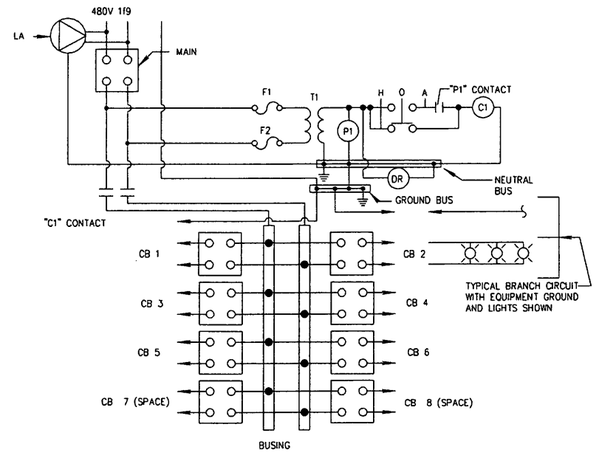
+ UNDERGROUND SERVICE CONDUIT SHALL BE PAID FOR AS UNDERGROUND BRANCH CIRCUIT

NOTE: PATTERN SHOWN IS FOR (1) LUMINAIRE MTD. AT 100' 1000W H.P.S. LAMP



4 / E-6 **TYPICAL HIGH MAST POLE SCHEMATIC DETAIL**

N.T.S.



7 / E-6 **SCHEMATIC OF LIGHTING CONTROLLER DETAIL**

N.T.S.

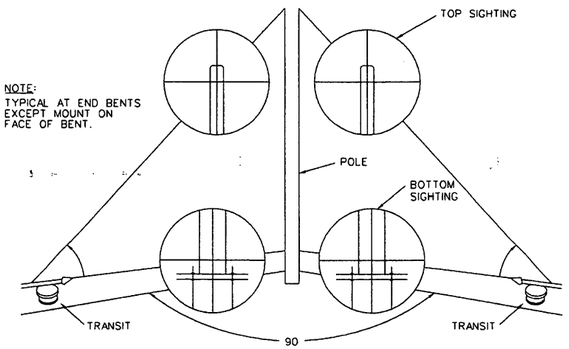
MAIN CIRCUIT BREAKER 200A 480V 2POLE
F1, F2 TRANSFORMER FUSES - 600V, 5 AMP
T1 - CONTROL TRANSFORMER - 480V PRI. 120V SEC., 1000VA
H.O.A. - HAND-OFF-AUTO. SELECTOR SWITCH
C1- CONTACTOR
CB - BRANCH CIRCUIT BREAKER (NO. AS REQ'D ON SCHEDULE)
* LA - LIGHTNING ARRESTER
DR - DUPLEX RECEPTACLE
* P1 - PHOTOELECTRIC CONTROL

NOTE

ALL COMPONENTS LOCATED INSIDE NEMA 3R EXCEPT THOSE NOTED WITH (*)

LABEL BREAKERS AS TO CIRCUIT NUMBER USE PHENOLIC ENGRAVED LABELS

NOTE: TYPICAL AT END BENTS EXCEPT MOUNT ON FACE OF BENT.



5 / E-6 **VERTICAL ALIGNMENT OF HIGH MAST POLES DETAIL**

N.T.S.

NOTE: SEE SPECIFICATIONS FOR CLAIRIFICATION ON POLE ALIGNMENT

BY	DATE	REVISION
F&H	1/23/09	ADDED SHEET

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78 INTERCHANGE LIGHTING

LIGHTING DETAILS

PROJECT No: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER E-6

FILENAME: e-6.dgn
DESIGN TEAM HESM&A CHECKED WLT DATE

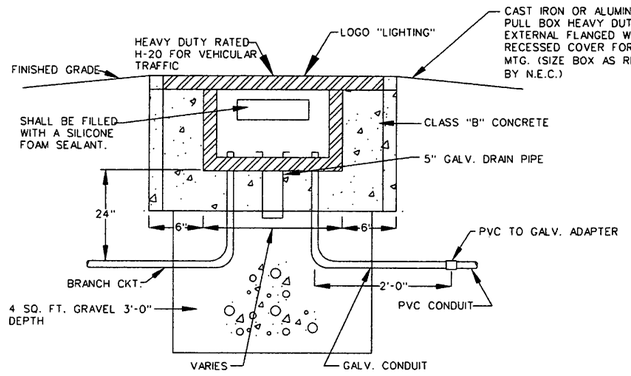
SHEET NUMBER 100.52

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:51 E-6.DGN

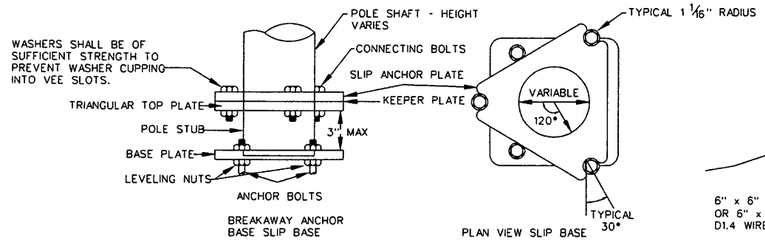
1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



1 E-7 **UNDERGROUND PULL BOX DETAIL**

N.T.S.

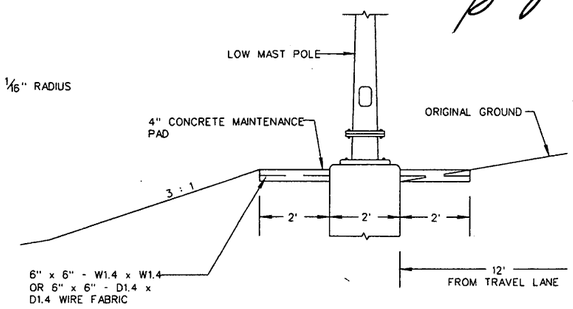


3 E-8 **BREAKAWAY - SLIP BASE TYPICAL**

N.T.S.

NOTES:

1. KEEPER PLATE IS FABRICATED FROM #28 GAUGE GALVANIZED SHEET STEEL ONE (1) FURNISHED WITH EACH POLE EQUIPPED WITH SLIP BASE
2. SLIP ANCHOR PLATE IS FABRICATED FROM STEEL PLATE COMFORMING TO ASTM A-36 WITH MINIMUM YIELD STRENGTH OF 36 KSI ONE (1) SLIP ANCHOR PLATE IS FURNISHED WITH EACH SLIP BASE EQUIPPED POLE.
3. BREAKWAY DEVICE MUST MEET THE REQUIREMENTS OF THE 2001 AASHTO STANDARD SPECIFICATIONS OF STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS, LUMINAIRES AND TRAFFIC SIGNALS, AND NCHRP REPORT 350.

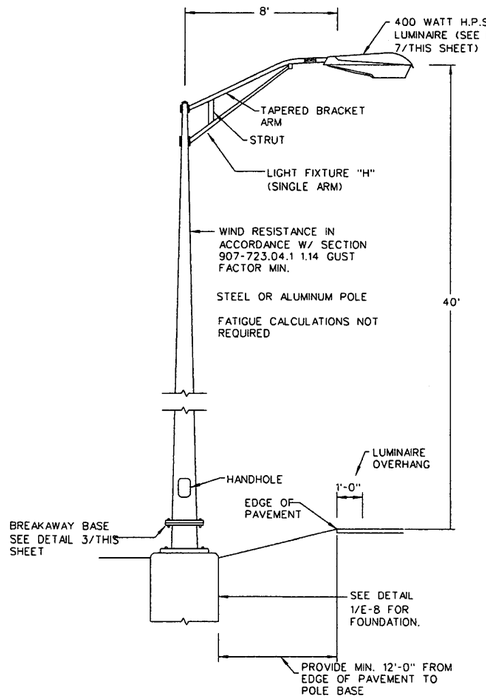


SIDE VIEW
N.T.S.

PLAN VIEW
N.T.S.

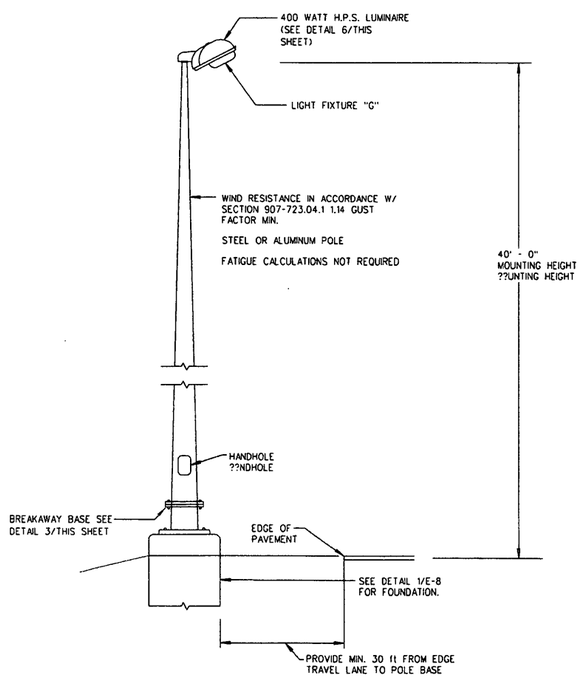
5 E-7 **TYPICAL MAINTENANCE PAD DETAIL FOR LOW MAST LIGHTS**

N.T.S.



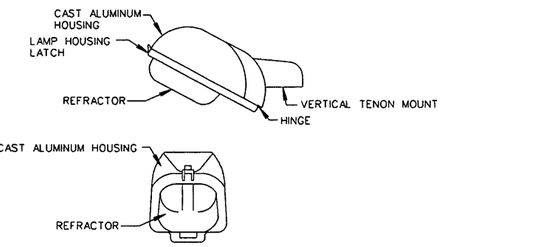
2 E-7 **TYPICAL LOWMAST LIGHTING ASSEMBLY DETAIL**

N.T.S.



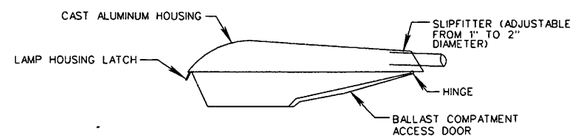
4 E-7 **TYPICAL LOWMAST LIGHTING ASSEMBLY DETAIL**

N.T.S.



6 E-7 **LUMINAIRE-LOW MAST LIGHTING ASSEMBLY**

N.T.S. LUMINAIRE REQUIREMENTS - REFER TO SPECIFICATIONS



7 E-7 **LUMINAIRE-LOWMAST LIGHTING ASSEMBLIES**

N.T.S.

BY	DATE	REVISION
F&H	1/23/09	ADDED SHEET.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78
INTERCHANGE LIGHTING

LIGHTING DETAILS

PROJECT No: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER E-7

FILENAME: e-7.dgn
DESIGN TEAM HESM&A CHECKED WLT DATE

SHEET NUMBER 100.53

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

01/23/2009 13:15:53 E-7.DGN

DESIGN TEAM: HESM & A FILENAME: e-7.dgn COUNTY : UNION / PONTOTOC PROJECT No. SP-0006-01(087)

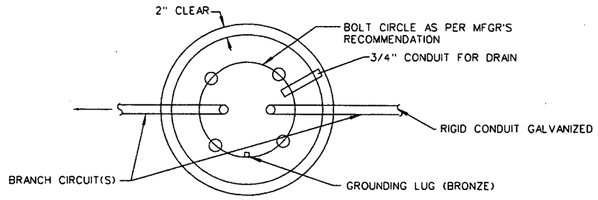
1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

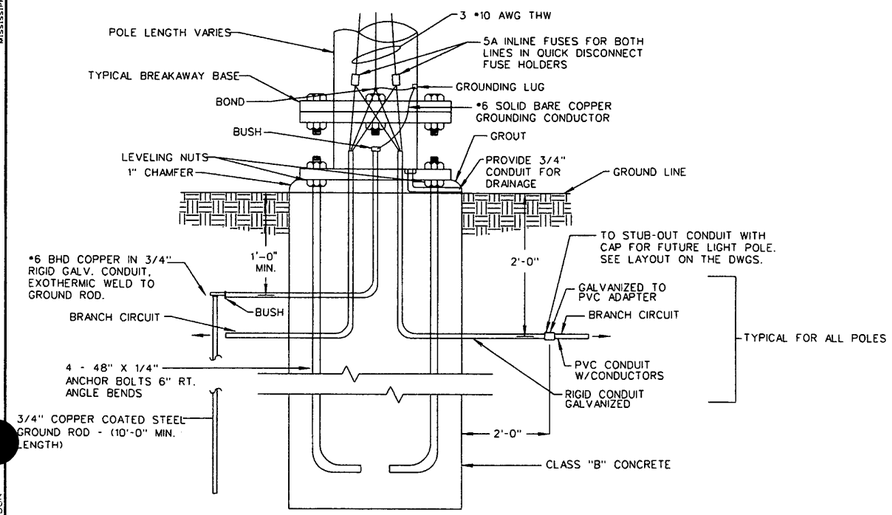
FOUNDATION SCHEDULE

POLE	TYPE ASSY.	A (FT.)	B (FT.)	C (REINFORCEMENT)	D (IN.)	CUBIC YARD
HA-5	A	24'-0"	4'-0"	12 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	11.403
HA-14,17,22	B	20'-0"	3'-0"	9 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	16.128
HA-13,20	C	20'-0"	3'-0"	9 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	10.752
HA-1,2,3,4,6,12 HA-15,16,18,23	D	20'-0"	3'-0"	9 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	53.76
HA-19	E	24'-0"	4'-0"	12 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	11.403
HA-8,10	F	26'-0"	4'-0"	12 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	24.668
HA-7,9,11,21	G	26'-0"	4'-0"	12 - #10 BARS W/ #4 TIES @ 12" ON CENTER	6"	49.336
LA-1 TO 27	H,J	10'-0"	2'-0"	6 - #8 BARS W/ #3 TIES @ 12" ON CENTER	0"	47.115

NOTE:
CASING IS A SEPARATE ITEM.

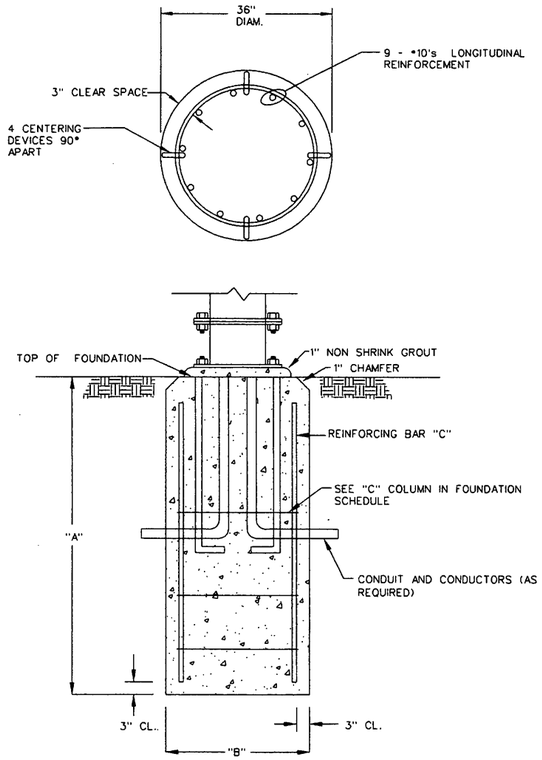


PLAN VIEW
N.T.S.

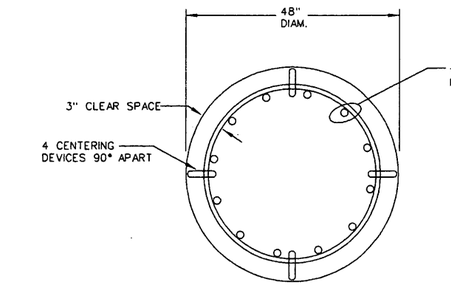


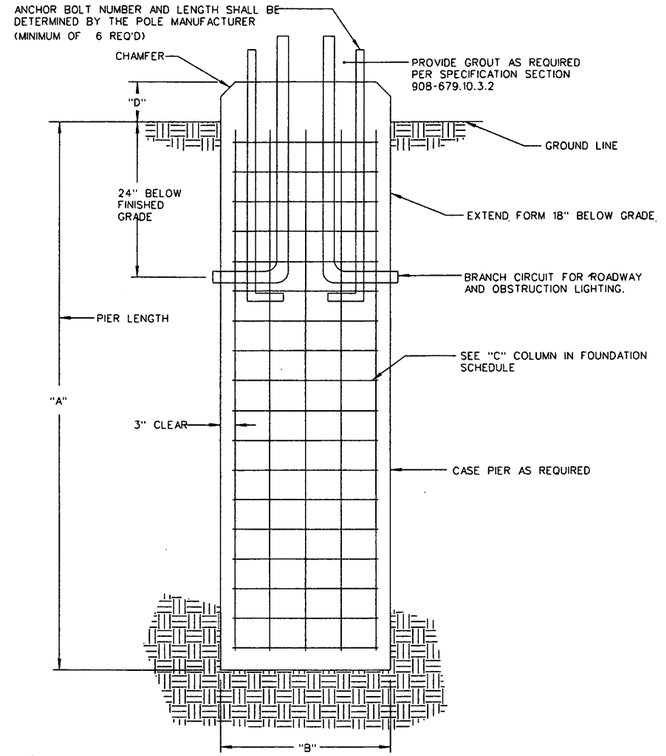
SIDE VIEW
N.T.S.

1 / E-8 **FOUNDATION DETAIL TYPE "G" & "H"**
N.T.S.



2 / E-8 **FOUNDATION DETAIL TYPES "G & H"**
N.T.S.





3 / E-8 **HIGH MAST FOUNDATION TYPE A, B, C, D, E, & F**
N.T.S.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
US 78
INTERCHANGE LIGHTING
LIGHTING DETAILS

PROJECT No: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER E-8
SHEET NUMBER 100.54

DATE	REVISION	BY
1/21/09	ADDED SHEET.	F&H

FILENAME: e-8.dgn
DESIGN TEAM: HESM&A CHECKED: W.L.T DATE:

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:15:55 E-8.DGN

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

SECONDARY POWER CONTROLLER #1 (SPC1)

STATION: 818+91.6 99' LT. OF CD RD.
BUSS : 100 AMP 100 AMP MAIN BREAKER

480 VOLTS 1 PHASE 3 WIRE
SURFACE MOUNTED FEEDER #3 / PHASE
NEMA 3R #3 / NEUTRAL
COPPER BUSSING FEEDER ENTERS: BOTTOM
GROUND BUSS

BRANCH CKT. NO.	AMPERES BREAKER	POLE	AIC	SERVES
1	15A	2	14000	LA-1,2,&3
2	25A	2	14000	HA-1&2
3	25A	2	14000	HA-3&4
4	25A	2	14000	HA-5
5	SPACE	2	14000	SPACE
6	SPACE	2	14000	SPACE
7	SPACE	2	14000	SPACE

NOTES:

1. REFER TO SPECIFICATIONS. POWER CONTROLLER AND ASSOCIATED WORK ALONG WITH NEW POWER POLE IS INCLUDED AS A LUMP SUM PAY ITEM. UNDER-GROUND SERVICE CONDUIT WILL BE A SEPARATE PAY ITEM.

SECONDARY POWER CONTROLLER #2 (SPC2)

STATION: 28+58.4-566' LT. OF SR 9 @ BLUE SPRINGS
BUSS : 100 AMP 100 AMP MAIN BREAKER

480 VOLTS 1 PHASE 3 WIRE
SURFACE MOUNTED FEEDER #3 / PHASE
NEMA 3R #3 / NEUTRAL
COPPER BUSSING FEEDER ENTERS: BOTTOM
GROUND BUSS

BRANCH CKT. NO.	AMPERES BREAKER	POLE	AIC	SERVES
1	30A	2	14000	HA-6&7
2	30A	2	14000	HA-8; LA-4,5,&6
3	20A	2	14000	HA-9
4	15A	2	14000	LA-8,9,10,&11
5	SPACE	2	14000	SPACE
6	SPACE	2	14000	SPACE
7	SPACE	2	14000	SPACE

NOTES:

1. REFER TO SPECIFICATIONS. POWER CONTROLLER AND ASSOCIATED WORK ALONG WITH NEW POWER POLE IS INCLUDED AS A LUMP SUM PAY ITEM. UNDER-GROUND SERVICE CONDUIT WILL BE A SEPARATE PAY ITEM.

SECONDARY POWER CONTROLLER #3 (SPC3)

STATION: 859+72.9-134' LT. OF NE RAMP @ BLUE SPRINGS
BUSS : 125 AMP 125 AMP MAIN BREAKER

480 VOLTS 1 PHASE 3 WIRE
SURFACE MOUNTED FEEDER #2 / PHASE
NEMA 3R #2 / NEUTRAL
COPPER BUSSING FEEDER ENTERS: BOTTOM
GROUND BUSS

BRANCH CKT. NO.	AMPERES BREAKER	POLE	AIC	SERVES
1	30A	2	14000	HA-11&13
2	25A	2	14000	HA-10; LA-7
3	30A	2	14000	HA-12&14
4	15A	2	14000	HA-15
5	15A	2	14000	HA-16; LA-12&13
6	SPACE	2	14000	SPACE
7	SPACE	2	14000	SPACE

NOTES:

1. REFER TO SPECIFICATIONS. POWER CONTROLLER AND ASSOCIATED WORK ALONG WITH NEW POWER POLE IS INCLUDED AS A LUMP SUM PAY ITEM. UNDER-GROUND SERVICE CONDUIT WILL BE A SEPARATE PAY ITEM.

SECONDARY POWER CONTROLLER #4 (SPC4)

STATION: 44+68.8 83' LT. OF SW RAMP @ SHERMAN
BUSS : 125 AMP 125 AMP MAIN BREAKER

480 VOLTS 1 PHASE 3 WIRE
SURFACE MOUNTED FEEDER #1 / PHASE
NEMA 3R #1 / NEUTRAL
COPPER BUSSING FEEDER ENTERS: BOTTOM
GROUND BUSS

BRANCH CKT. NO.	AMPERES BREAKER	POLE	AIC	SERVES
1	15A	2	14000	LA-14,15,16,&17
2	30A	2	14000	HA-17&19
3	15A	2	14000	HA-18; LA-18
4	30A	2	14000	HA-20&21
5	15A	2	14000	LA-19,20,21,22,23,24,&25
6	20A	2	14000	HA-22
7	15A	2	14000	HA-23; LA-26&27
8	SPACE	2	14000	SPACE
9	SPACE	2	14000	SPACE
10	SPACE	2	14000	SPACE

NOTES:

1. REFER TO SPECIFICATIONS. POWER CONTROLLER AND ASSOCIATED WORK ALONG WITH NEW POWER POLE IS INCLUDED AS A LUMP SUM PAY ITEM. UNDER-GROUND SERVICE CONDUIT WILL BE A SEPARATE PAY ITEM.

PLAN
REVIEW FOR STATE DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

01/23/2009 13:31:41 E-9.DGN

BY	REVISION	SHEET.	ADDED	DATE
F&H				1/23/09

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

US 78
INTERCHANGE LIGHTING

LIGHTING DETAILS AND SCHEDULES

PROJECT No: SP-0006-01(087)
COUNTY: UNION /PONTOTOC

WORKING NUMBER: E-9
SHEET NUMBER: 100.55

FILENAME: e-9.dgn
DESIGN TEAM HESM&A CHECKED WLT DATE

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

PAY LIMITS FOR TYPE "I" BRIDGE END SECTION

STANDARD "W" BEAM GUARDRAIL INSTALLATION ⚠1 (SEE SHEET GR-1)

12" X 21" THRIE-BEAM TERMINAL CONNECTOR PLATE. 5/8" THICK.

1'-6 3/4" | 1'-6 3/4" | 1'-6 3/4" | 1'-6 3/4" | 1'-6 3/4" | 1'-6 3/4" | 3'-1 1/2" | 3'-1 1/2" | 3'-1 1/2" | 6'-3"

7 1/4" | 11 1/2"

BRIDGE END PAV'T RAIL ⚠4

SECURE RUB RAIL TO POST WITH 5/8" DIA LAG SCREW

OUTER THRIE-BEAM

INNER THRIE-BEAM

GUARDRAIL BOLT "B" WITH WASHER ON BACK SIDE

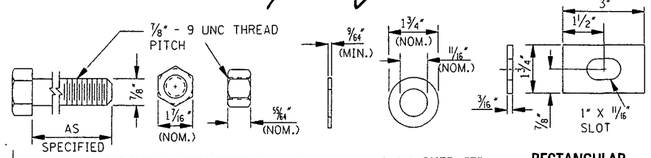
FACE OF GUARDRAIL

DIAGONAL RUB RAIL 6.25' WITH WOOD POST ⚠2

CURB LINE

NESTED THRIE-BEAM SECTION (TWO SECTIONS OF THRIE-BEAM, ONE SET INSIDE THE OTHER)

PLAN



FASTENER DETAILS

HSS HEX NUT AND BOLT "C" 10" LONG, FIVE (5) REQUIRED.

BRIDGE END PAV'T RAIL ⚠4

"L" BRACKET SHALL BE ANCHORED USING THREE 5/8" X 6" ANCHOR BOLT WITH WASHER

GUARDRAIL BOLT "E" WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT FOR POSTS 1 THRU 9.

"W" THRIE-BEAM TRANSITION SECTION (SEE SHEET GR-1C).

GUARDRAIL BOLT "C" WITH RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER NUT FOR POST 9.

SEE GUARDRAIL SPLICE DETAIL ON THIS SHEET.

SEE GUARDRAIL SPLICE DETAIL ON SHEET GR-1.

THRIE-BEAM TERMINAL CONNECTOR

TWELVE (12) EACH, GUARDRAIL BOLTS "A" AND RECESSED NUTS, REQUIRED TO CONNECT NESTED THRIE-BEAM SECTIONS TO TERMINAL CONNECTOR PLATE.

"L" BRACKET ATTACHED TO LONGITUDINAL RUB RAIL WITH 5/8" x 1 1/2" HEX HEAD BOLT WITH WASHER ON BACK SIDE.

4"

LONGITUDINAL RUB RAIL ⚠2

6" X 4 1/2" X 3/16" STEEL RUB RAIL CONNECTOR SEE GR-RR FOR DETAILS ATTACH RUBRAIL & RUBRAIL CONNECTOR WITH 5/8" X 1 1/2" HEX HEAD BOLT

SPLICE

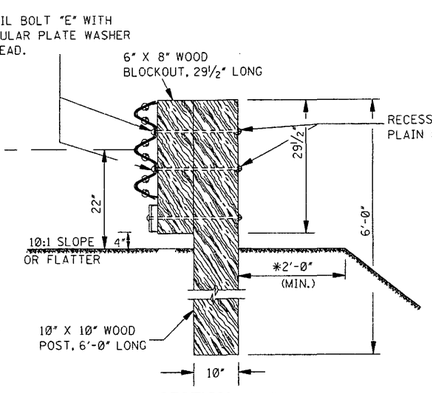
8" X 8" WOOD POST, 6'-0" LONG, WITH 6" X 8" WOOD BLOCKOUT, 26 1/2" LONG, FOR POSTS 9. SEE SHT GR-RR

POST 1 | POST 2 | POST 3 | POST 4 | POST 5 | POST 6 | POST 7 | POST 8 | POST 9 | POST 10

10" X 10" WOOD POST, 6'-0" LONG, WITH 6" X 8" WOOD BLOCKOUT, 29 1/2" LONG, FOR POSTS 1 THRU 8

ELEVATION FROM ℄ ROADWAY

GUARDRAIL BOLT "E" WITH RECTANGULAR PLATE WASHER UNDER HEAD.



SECTION A–A

*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.

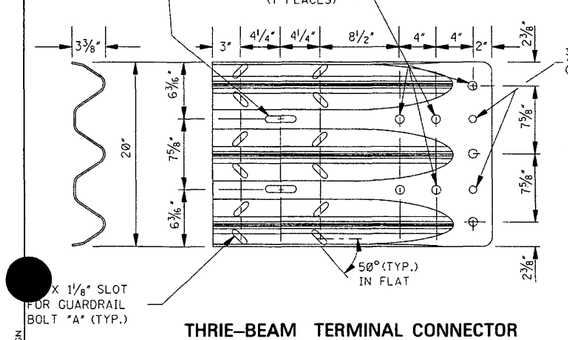
GENERAL NOTES:

1. THIS GUARDRAIL TRANSITION IS APPROPRIATE FOR A CONNECTION TO A VERTICAL CONCRETE SHAPE AND SHOULD NOT BE CONNECTED DIRECTLY TO A CONCRETE SAFETY SHAPE. CONCRETE SAFETY SHAPE BARRIERS SHOULD BE TRANSITIONED TO A VERTICAL SHAPE AT THE GUARDRAIL CONNECTION. BRIDGE RAIL ENDS AND BRIDGE PARAPETS MUST BE OF ADEQUATE STRENGTH TO ACCEPT FULL IMPACT LOADING.

GENERAL NOTES (CONTINUED):

2. SEE RAILING DETAILS IN BRIDGE DRAWINGS FOR OTHER DETAILS.
3. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
4. THE TYPE "I" TRANSITION IS USED ON BOTH LEFT AND RIGHT SIDES OF EACH BRIDGE APPROACH WITH 2-WAY TRAFFIC AND THE GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF THE APPROACHING TRAFFIC.
5. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
6. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1.
7. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" AND THRIE-BEAM SECTIONS NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEETS GR-1 AND GR-1A, RESPECTIVELY.
8. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

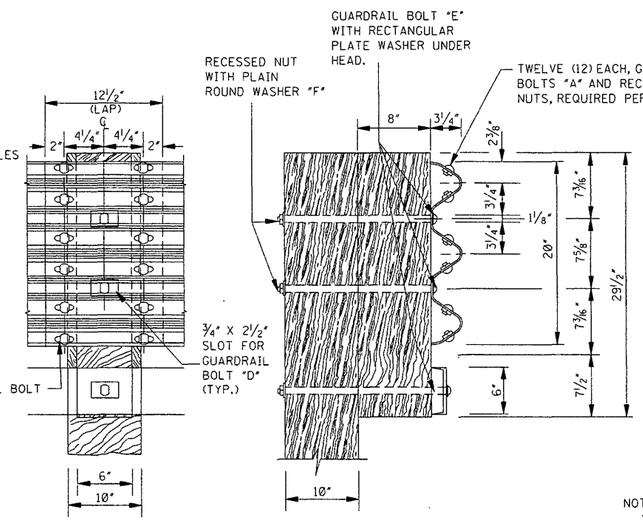
OPTIONAL: 3/4" x 2 1/2" GUARDRAIL BOLT SLOT (TYP.). HOLES USED ONLY WHERE SPECIFIED ON PLANS.



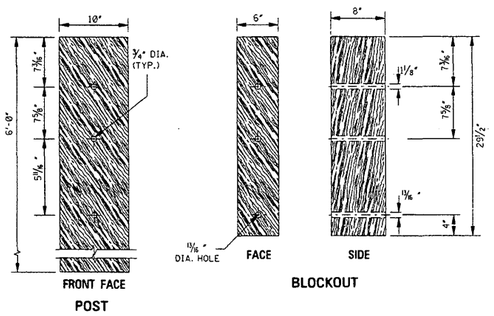
THRIE-BEAM TERMINAL CONNECTOR

NOTES:

1. THE THRIE-BEAM TERMINAL CONNECTOR IS TO BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE I.
2. ALTERNATIVELY, THE SPLICE SLOTS CAN BE ORIENTED PARALLEL TO THE LONGITUDINAL AXIS OF THE TERMINAL CONNECTOR. HOWEVER, THE 50° SLOT VERSION IS EASIER TO INSTALL WHERE SEVERAL GUARDRAIL SECTIONS ARE NESTED TOGETHER.



GUARDRAIL SPLICE DETAIL (POST 7)



DETAILS OF THRIE-BEAM POST AND BLOCKOUT (POST 1 THRU POST 8)

NOTES:

1. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
2. WOOD POSTS AND BLOCKOUTS ARE FABRICATED FROM TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
3. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.

DATE	REVISION	BY
12-01-99	STANDARD "W" BEAM	S.W.R.
04-01-07	ADDED RUB RAIL AND BR. END PAV'T RAIL	S.W.R. ⚠3
1-23-09	REVISE SHEET NUMBER	F&H ⚠4

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GUARDRAIL: BRIDGE END SECTION TYPE "I" (WOOD POSTS)

WORKING NUMBER SDGR-2F

SHEET NUMBER ⚠3 100.56

FILENAME:

DESIGN TEAM spell CHECKED reeves DATE 4-04-07

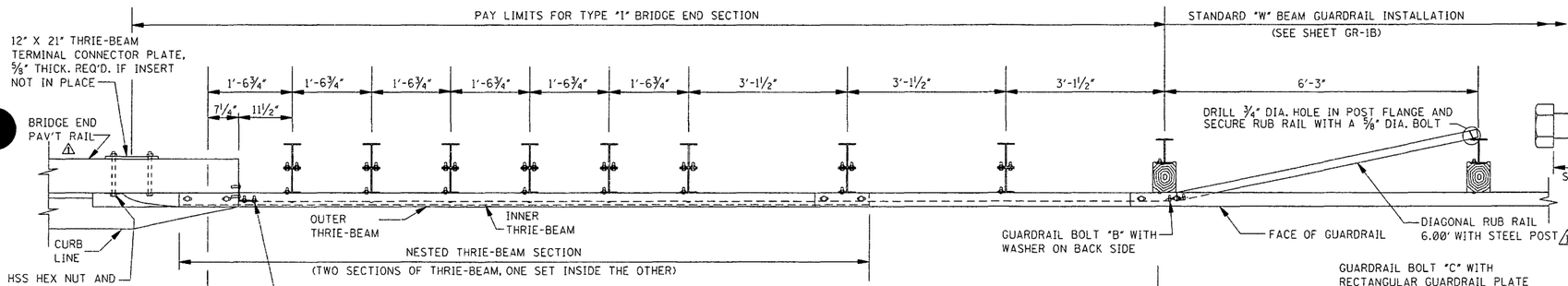
PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

rub roll sheets\gr-2f.rub\gn

2/3/2009 9:59 AM TYPE I.DGN

1 OF 0 REV.

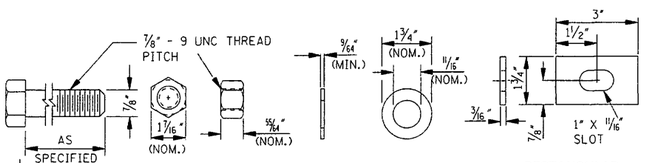
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



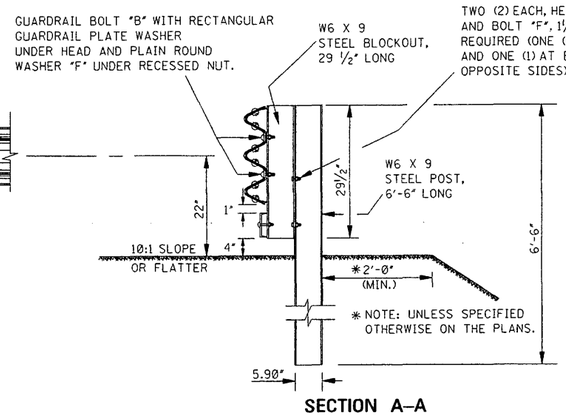
PLAN

ELEVATION FROM ℄ ROADWAY

NOTE: BACKUP PLATES ARE NOT USED IN THIS TRANSITION.



FASTENER DETAILS



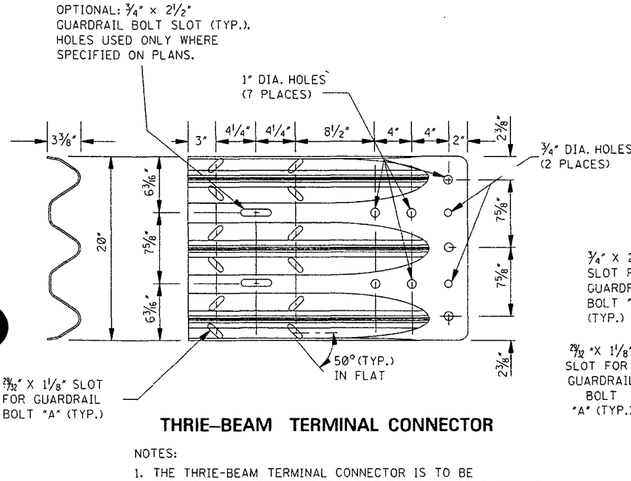
SECTION A–A

GENERAL NOTES:

1. THIS GUARDRAIL TRANSITION IS APPROPRIATE FOR CONNECTION TO A MODIFIED RECEIVER CAST INTO A SAFETY SHAPE AND SHOULD NOT BE CONNECTED DIRECTLY TO A CONCRETE SAFETY SHAPE.
2. SEE RAILING DETAILS IN BRIDGE DRAWINGS FOR OTHER DETAILS.

GENERAL NOTES (CONTINUED):

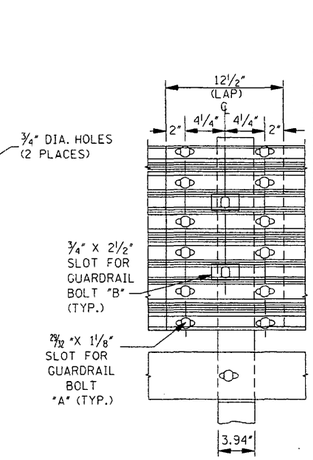
3. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
4. THE TYPE "I" TRANSITION IS USED ON BOTH LEFT AND RIGHT SIDES OF EACH BRIDGE APPROACH WITH 2-WAY TRAFFIC AND THE GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF THE APPROACHING TRAFFIC.
5. POSTS AND BLOCKOUTS SHALL CONFORM TO AASHTO M 270/M 270M (ASTM A 709/A 709M) GRADE 250 STEEL UNLESS CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE GRADE 50W STEEL SHALL BE USED. THE STRUCTURAL W6 X 9 DIMENSIONS ARE DEFINED IN AASHTO M 160M (ASTM A 6M). THE SECTION SHOULD BE ZINC-COATED PER AASHTO M 111 (ASTM A 123) AFTER CUTTING, DRILLING AND PUNCHING. CORROSION RESISTANT STEEL SHOULD NOT BE ZINC-COATED PAINTED OR OTHERWISE TREATED. GUARDRAIL IS EXEMPT FROM THE FRACTURE-CRITICAL TOUGHNESS IN AASHTO M 270/A 270 M.
6. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1B.
7. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" AND THRIE-BEAM SECTIONS NOT SPECIFICALLY MODIFIED ON THIS SHEET WILL BE FOUND ON SHEETS GR-1B AND GR-1C, RESPECTIVELY.
8. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FPRCE NO. 13, TITLED "A GUIDE "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION
9. STEEL BLOCKOUT SHOWN, WOOD BLOCKOUT PERMISSABLE. BOLT LENGTH FOR WOOD BLOCKOUT WILL BE SIMILAR TO THOSE SHOWN ON GR-2F



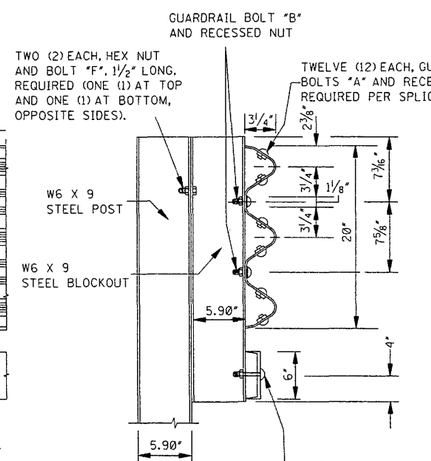
THRIE–BEAM TERMINAL CONNECTOR

NOTES:

1. THE THRIE-BEAM TERMINAL CONNECTOR IS TO BE AASHTO M 180 CORRUGATED SHEET STEEL, CLASS B, TYPE I.
2. ALTERNATIVELY, THE SPLICE SLOTS CAN BE ORIENTED PARALLEL TO THE LONGITUDINAL AXIS OF THE TERMINAL CONNECTOR. HOWEVER, THE 50° SLOT VERSION IS EASIER TO INSTALL WHERE SEVERAL GUARDRAIL SECTIONS ARE NESTED TOGETHER.

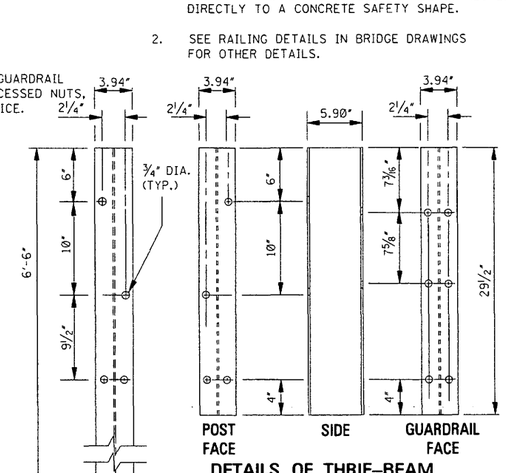


ELEVATION



SECTION

GUARDRAIL SPLICE DETAIL
(POST 7)



DETAILS OF THRIE–BEAM POST AND BLOCKOUT
(POST 1 THRU POST 8)

NOTES:

1. HOLE DETAILS ARE REQUIRED FOR POSTS AND BLOCKOUTS 1 THRU 8.
2. STEEL POSTS AND BLOCKOUTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
3. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE 3/4" IN DIAMETER.

DATE	REVISION	BY
1-23-09	REVISE SHEET NUMBER	F&H
4-01-07	ADDED RUB RAIL AND BR. END PAV'T RAIL	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GUARDRAIL:
BRIDGE END SECTION
TYPE "I"
(STEEL POSTS)

WORKING NUMBER: SDGR-2G

FILENAME:

DESIGN TEAM spell CHECKED reeves DATE 4-04-07

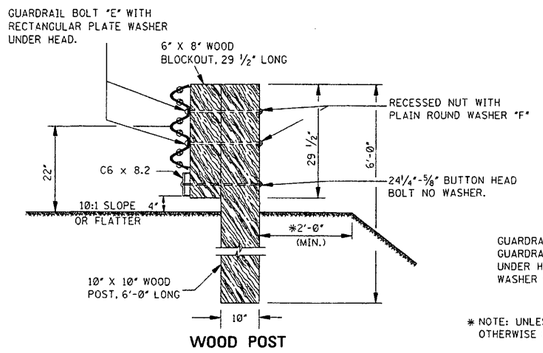
SHEET NUMBER: 2 100.57

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

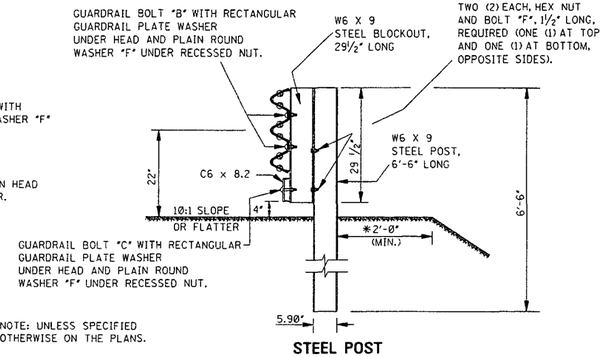
projects\rdl rollsheets\LRB.dgn
2/3/2009 9:58 AM TYPE I.DGN

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



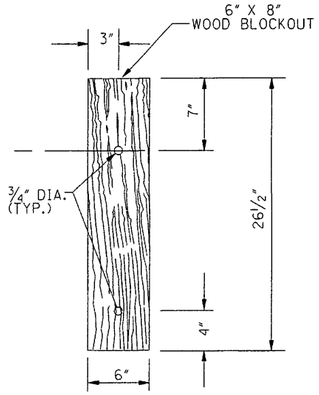
WOOD POST



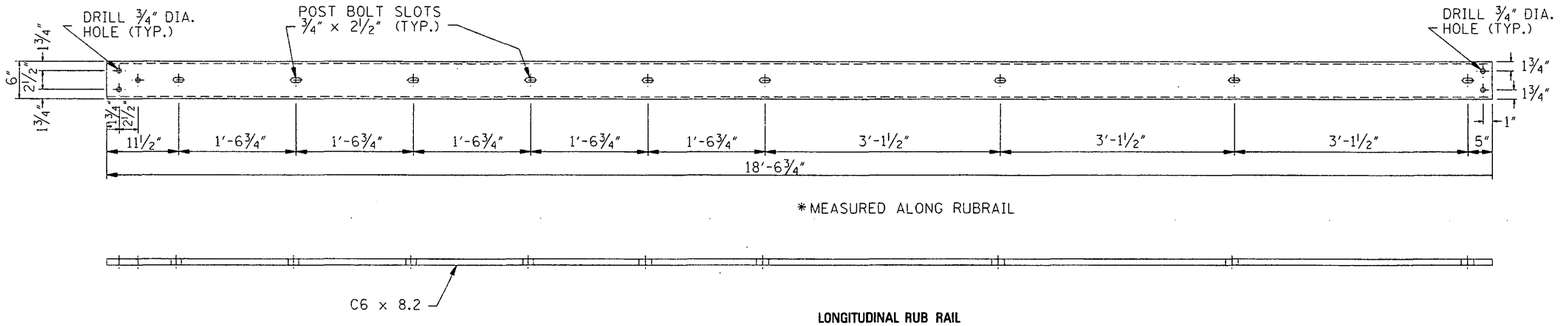
STEEL POST

* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.

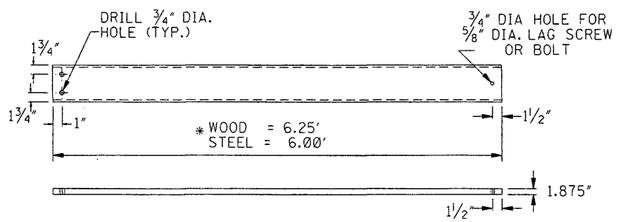
PROFILE VIEW OF POSTS



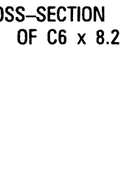
BLOCKOUT FOR POST 9 OF TYPE "I" BRIDGE END SECTION



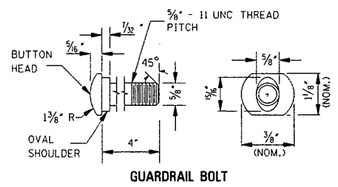
LONGITUDINAL RUB RAIL



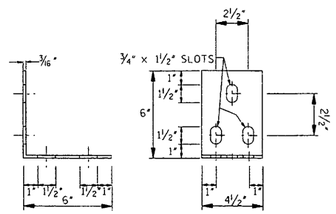
DIAGONAL RUB RAIL



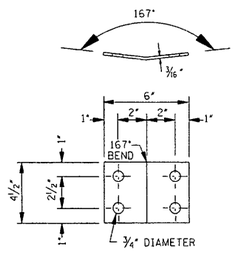
CROSS–SECTION VIEW OF C6 x 8.2



GUARDRAIL BOLT



"L" BRACKET



RUB RAIL CONNECTOR BRACKET

POSTS 1 THROUGH 9 REQUIRE AN ADDITIONAL HOLE TO ATTACH LOWER BLOCKOUTS. STEEL POST REQUIRE 2 HOLES ON EITHER SIDE OF THE POST.

RUBRAIL BLOCKOUTS ARE TO BE SECURED WITH ⅝" BUTTONHEAD BOLT FOR STEEL POST AND 20" BOLT FOR WOOD POST. (SEE PROFILE VIEW FOR LENGTHS)

RUBRAIL & LONG BLOCKOUT (POST 9) ARE NOT REQUIRED IN CURB & GUTTER SECTIONS OF ROADWAY.

DATE	REVISION	SHEET NUMBER	BY
1-23-09	REVISE SHEET NUMBER		F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GUARDRAIL: RUB RAIL HARDWARE SHEET

WORKING NUMBER: SDGR-RR

SHEET NUMBER: 100.58

FILENAME:

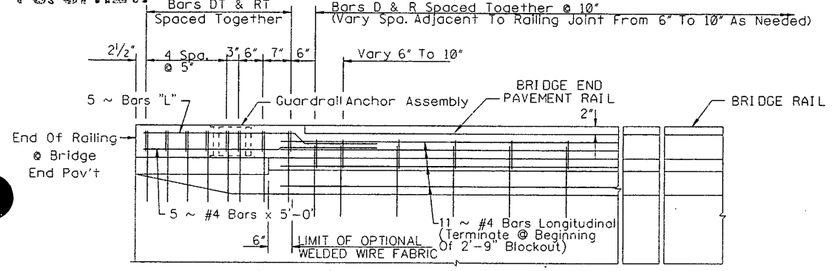
DESIGN TEAM spell CHECKED reeves DATE 4-04-07

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

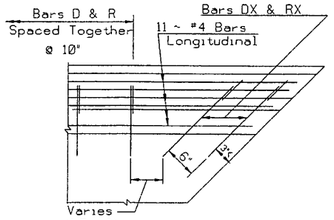
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2/3/2009 9:57 AM TYPE I.DGN

1st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

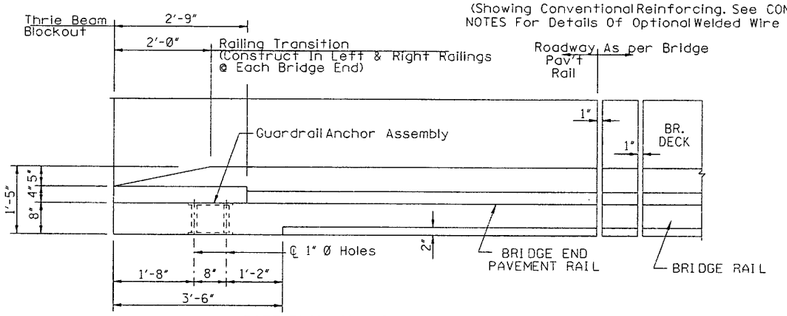


PART PLAN OF LEFT RAILING



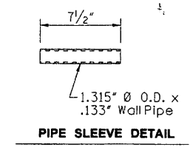
SKEWED PART PLAN OF LEFT RAILING AT BRIDGE END WALL

(Showing Conventional Reinforcing. See CONSTRUCTION NOTES For Details Of Optional Welded Wire Fabric.)



PART PLAN OF RIGHT RAILING

(Showing Concrete Dimensions)



PIPE SLEEVE DETAIL

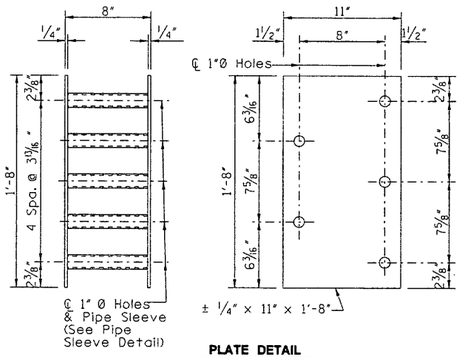
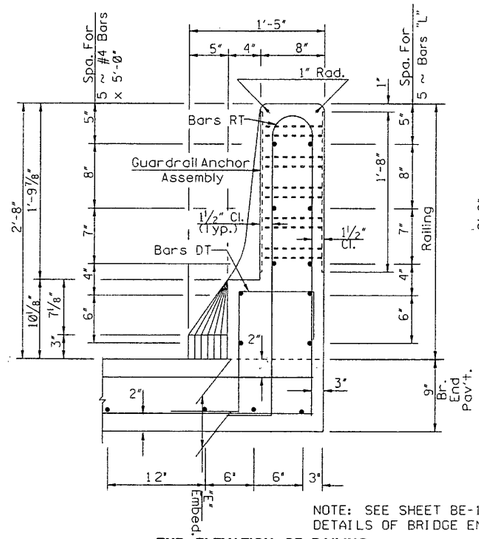


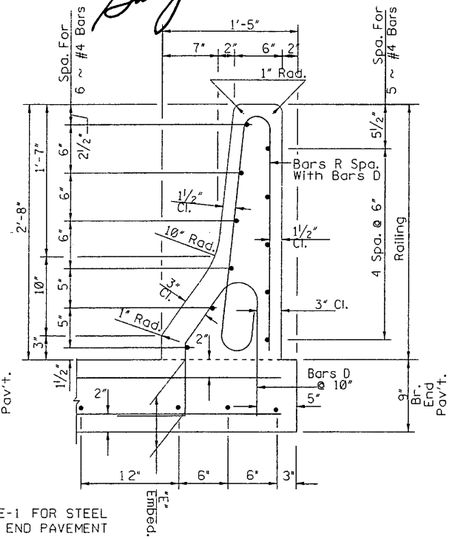
PLATE DETAIL

GUARDRAIL ANCHOR ASSEMBLY



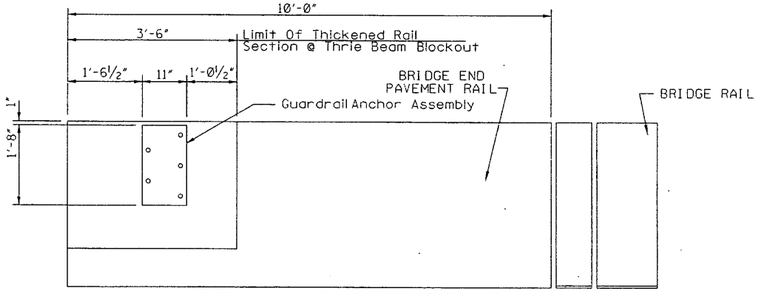
END ELEVATION OF RAILING

NOTE: SEE SHEET BE-1 FOR STEEL DETAILS OF BRIDGE END PAVEMENT

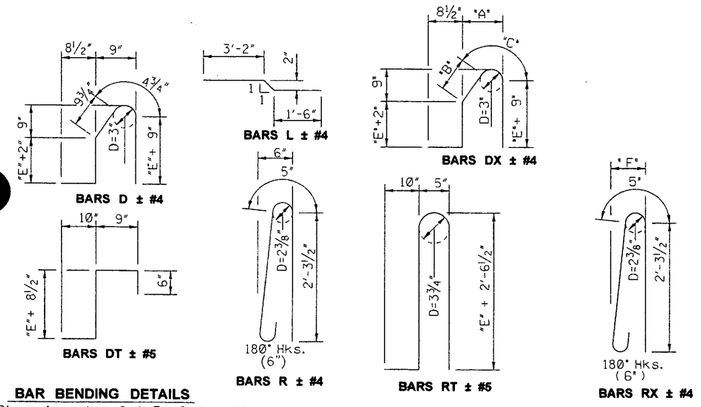


TYPICAL SECTION OF RAILING

NOTE: "E" = Slab Thickness (In.) - 1 Inch.



PART ELEVATION OF OUTSIDE FACE OF RAILING

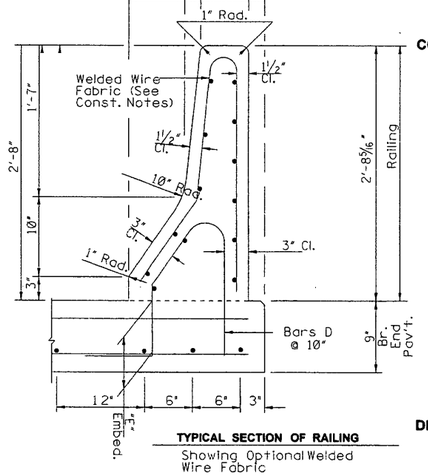


BAR BENDING DETAILS

Dimensions Are Out To Out NOTE:
"E" = Slab Thickness (In.) - 1 Inch.

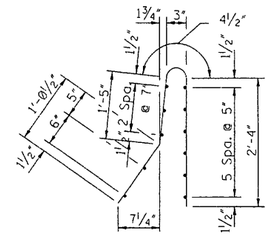
SKEW (DEG)	BARS DX ~ #4			BARS RX ~ #4
	"A"	"B"	"C"	"F"
0	9"	9¾"	5"	6"
5	9"	9¾"	5"	6"
10	9"	9¾"	5"	6"
15	9¼"	10"	5"	6¼"
20	9½"	10"	5"	6¼"
25	10"	10½"	5"	6½"
30	10¼"	10½"	5"	7"
35	11"	11¼"	4¾"	7¼"
40	11¾"	11¾"	4¾"	7¾"
45	1'-0¼"	1'-0¾"	4½"	8½"
50	1'-2"	1'-1¾"	4½"	9¼"
55	1'-3¾"	1'-2½"	4½"	10½"

2



TYPICAL SECTION OF RAILING

Showing Optional Welded Wire Fabric



WELDED WIRE FABRIC

(Optional - See CONSTRUCTION NOTES)

CONSTRUCTION NOTES:

Fabricate Guardrail Anchor Assemblies By Tack Welding Each End Of Pipe Sleeves To Plates. Plates Shall Be ASTM A 36 Steel. Pipes Shall Be ASTM A 120. Galvanize Complete Assemblies After Fabrication Per ASTM A 153.

Attach Assemblies Securely To Forms Prior To Pouring Railing Concrete To Assure That Exposed Surfaces Of The Assemblies Will Be Flush With Concrete Surfaces.

GUARDRAIL ANCHOR ASSEMBLIES SHALL BE INSTALLED IN BOTH LEFT AND RIGHT RAILINGS AT EACH END OF ALL BRIDGES.

Welded Wire Fabric Meeting The Requirements Of ASTM A 497 And Details Shown On This Sheet May Be Used As An Option To Conventional Railing Reinforcing. Longitudinal Wires Shall Be D8 Spaced As Shown In The BAR BENDING DETAILS And Vertical Wires Shall Be D8 Spaced At 4".

Welded Wire Fabric Shall Not Be Used In The 2'-9" Thrie Beam Blockout Reinforcement For The 2'-9" Thrie Beam Blockout Shall Consist Of Conventional Reinforcing As Shown In Details On This Sheet. The Longitudinal Bars Of The Conventional Reinforcing Shall Extend Beyond The 2'-9" Thrie Beam Blockout Into The Welded Wire Fabric A Minimum Distance Of 1'-6".

Bridge End Pavement Rail Shall Be Constructed And Paid For In Accordance With Section 813 Of The Standard Specifications.

4" DIAMETER WEEP HOLE TO BE PLACED IN BRIDGE END PAVEMENT RAIL WHERE REQUIRED TO REDUCE PONDING.

DESIGN DATA

Specifications.....A.A.S.H.T.O. 1992 & Int. Thru 1995
Concrete.....Class "AA"(4,000 psi)
Reinforcing.....ASTM A 615 Grade 60 (Fy = 60 ksi)

1-23-98	REVISE SHEET NUMBER	F&H	BY
8-19-07	REV. CHART	SWR	
4-01-07	NEW SHEET	SWR	
DATE	REVISION	BY	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

32" BRIDGE END PAVEMENT RAIL

WORKING NUMBER BEPR-32

FILENAME: br end pave rail32.dgn

DESIGN TEAM spell CHECKED reeves DATE 4-01-07

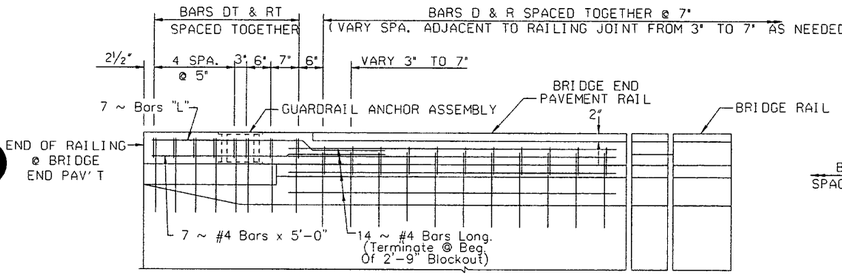
SHEET NUMBER 2 100.59

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

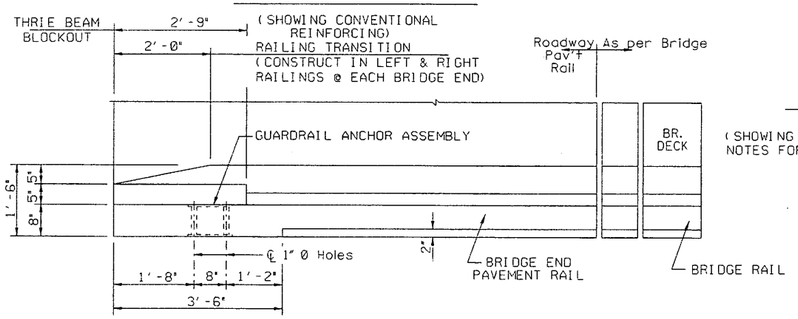
2/3/2009 9:55 AM TYPE I.DGN

1 st O. REV.

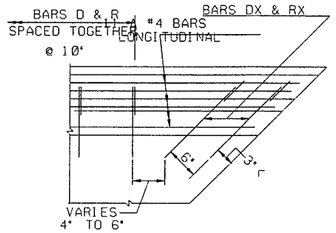
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PART PLAN OF LEFT RAILING

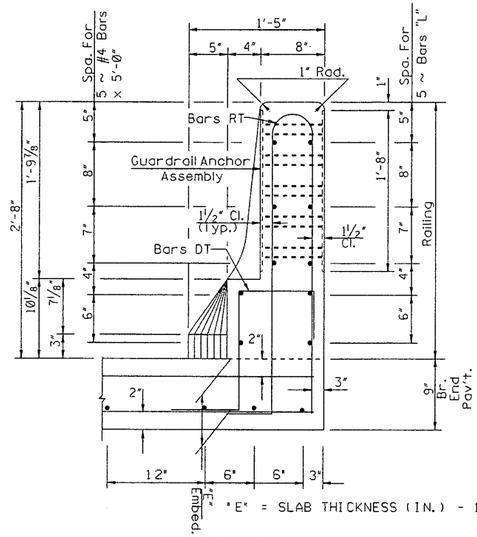


PART PLAN OF RIGHT RAILING
(SHOWING CONCRETE DIMENSIONS)

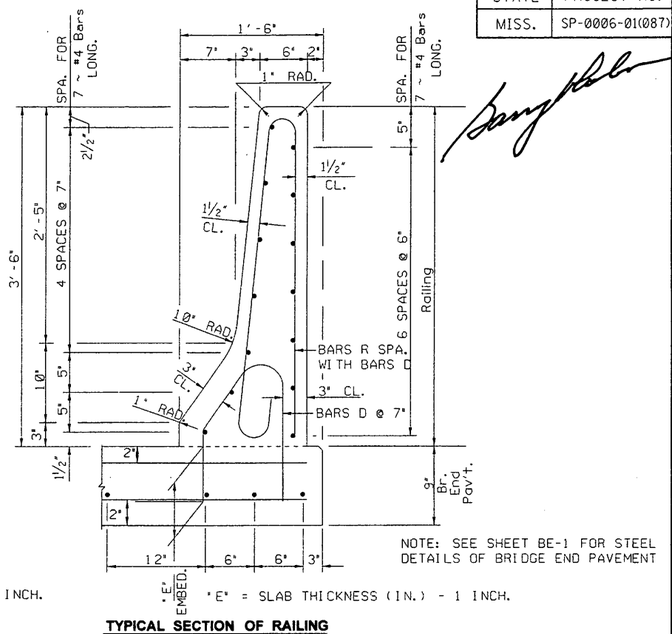


SKEWED PART PLAN OF LEFT RAILING AT BRIDGE END WALL

(SHOWING CONVENTIONAL REINFORCING. SEE CONSTRUCTION NOTES FOR DETAILS OF OPTIONAL WELDED WIRE FABRIC.)

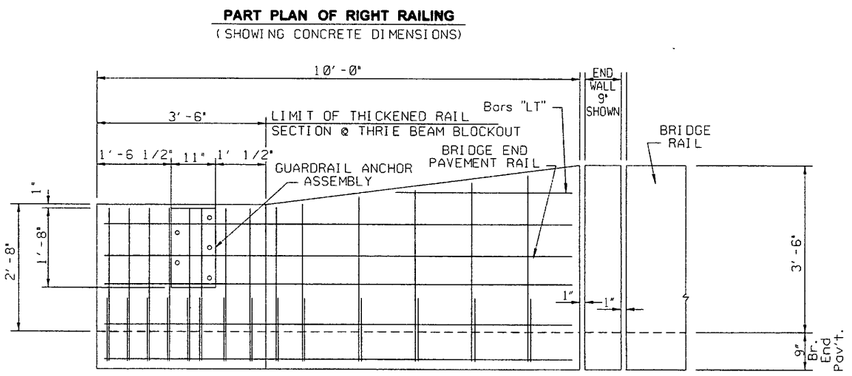


END ELEVATION OF RAILING



TYPICAL SECTION OF RAILING

NOTE: SEE SHEET BE-1 FOR STEEL DETAILS OF BRIDGE END PAVEMENT



PART ELEVATION OF OUTSIDE FACE OF RAILING

NOTE:
"E" = SLAB THICKNESS (IN.) - 1 INCH.

BAR BENDING DETAILS
Dimensions Are Out To Out

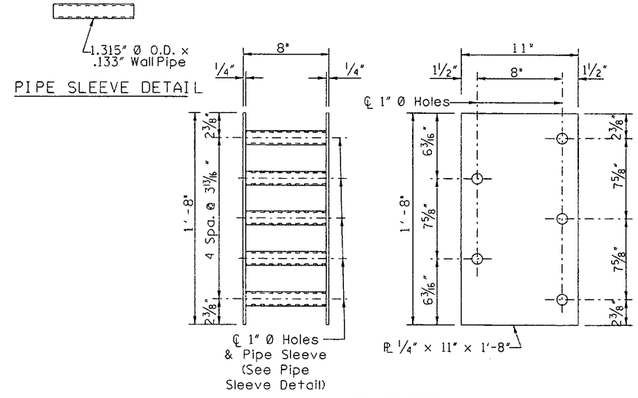


PLATE DETAIL
GUARDRAIL ANCHOR ASSEMBLY

SKEW (DEG)	BARS DX ~ #5			BARS RX ~ #5
	"A"	"B"	"C"	"F"
0	10"	10½"	5⅜"	7"
5	10"	10½"	5⅜"	7"
10	10"	10½"	5⅜"	7"
15	10¼"	10½"	5¼"	7¼"
20	10½"	10¾"	5¼"	7½"
25	11"	11¼"	5⅜"	7¾"
30	11½"	11½"	5⅛"	8"
35	1'-0¼"	1'-0¼"	5"	8½" 2
40	1'-1"	1'-0¾"	4⅞"	9"
45	1'-2"	1'-1¾"	4⅞"	9¾"
50	1'-3½"	1'- 3"	4⅝"	10¾"
55	1'-5½"	1'-4¾"	4½"	1-0¼"

CONSTRUCTION NOTES:

FABRICATE GUARDRAIL ANCHOR ASSEMBLIES BY TACK WELDING EACH END OF PIPE SLEEVES TO PLATES. PLATES SHALL BE ASTM A 36 STEEL. PIPES SHALL BE ASTM A 120. GALVANIZE COMPLETE ASSEMBLIES AFTER FABRICATION PER ASTM A153.

ATTACH ASSEMBLIES SECURELY TO FORMS PRIOR TO POURING RAILING CONCRETE TO ASSURE THAT EXPOSED SURFACES OF THE ASSEMBLIES WILL BE FLUSH WITH CONCRETE SURFACES.

GUARDRAIL ANCHOR ASSEMBLIES SHALL BE INSTALLED IN BOTH LEFT AND RIGHT RAILINGS AT EACH END OF ALL BRIDGES.

BRIDGE END PAVEMENT RAIL SHALL BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH SECTION 813 OF THE STANDARD SPECIFICATIONS.

4" DIAMETER WEEP HOLE TO BE PLACED IN BRIDGE END PAVEMENT RAIL WHERE REQUIRED TO REDUCE PONDING.

DESIGN DATA

SPECIFICATIONS.....A.A.S.H.T.O. 1992 & INT. THRU 1995
CONCRETE.....CLASS "AA" (4,000 PSI)
REINFORCING.....ASTM A 615 GRADE 60 (FY = 60 KSI)

DATE	REVISION	BY
1-23-09	REVISE SHEET NUMBER	SMR
9-19-07	REV. CHART AND ADDED BARS	SMR
4-01-07	NEW SHEET	F&H

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

42" BRIDGE END PAVEMENT RAIL

WORKING NUMBER BEPR-42

FILENAME: br end pave rail42.dgn

DESIGN TEAM spell CHECKED reeves DATE 4-1-07

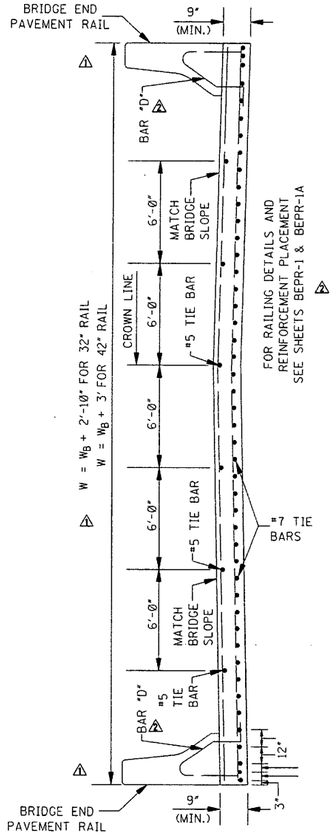
SHEET NUMBER 3 100.60

PLAN ROADWAY DESIGN DIVISION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

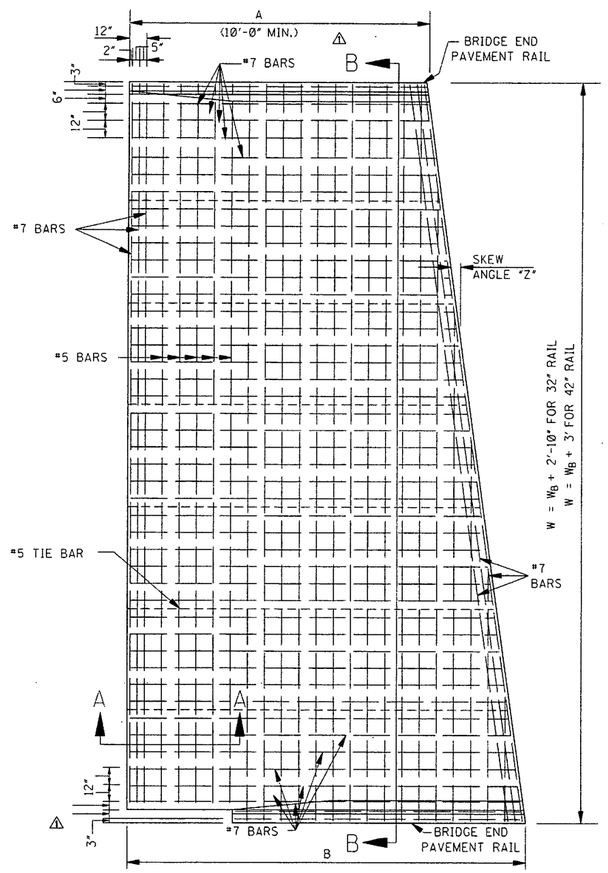
2/3/2009 9:54 AM TYPE 1.DGN

1 3 0. REV.

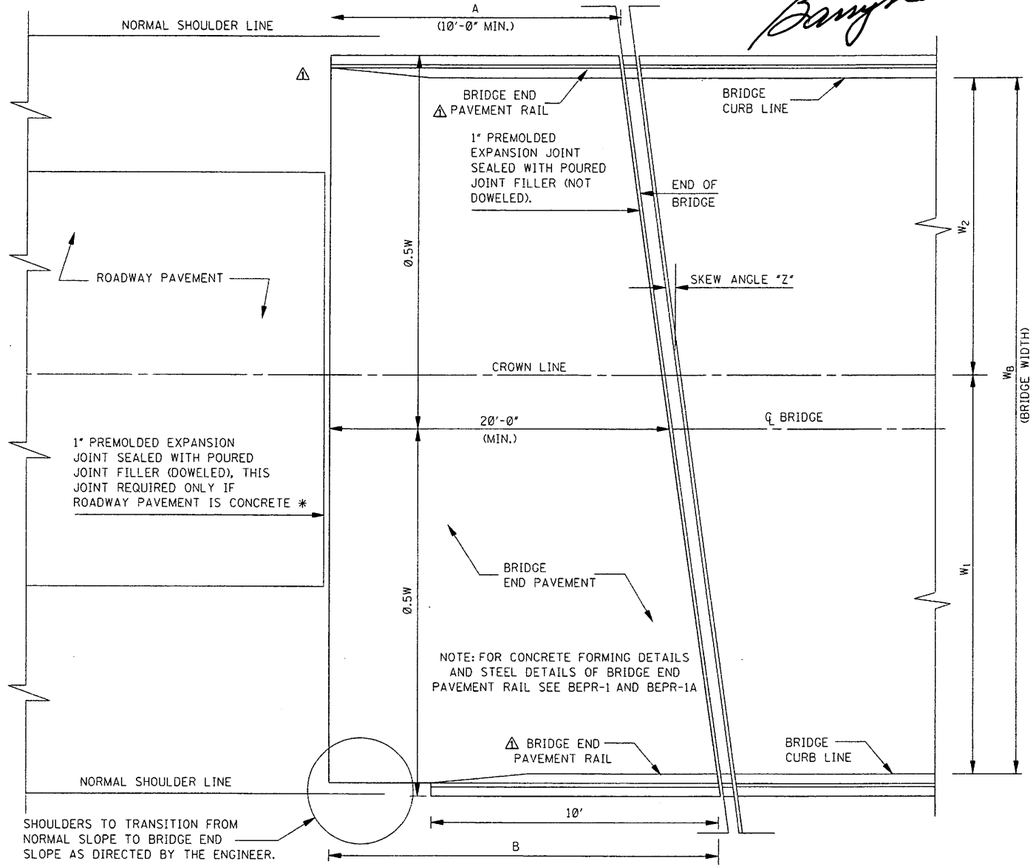
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



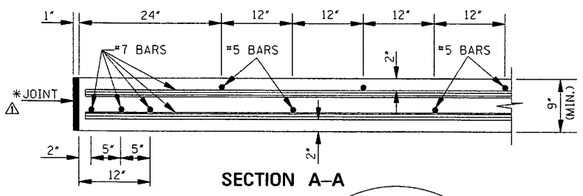
SECTION B–B ⚠



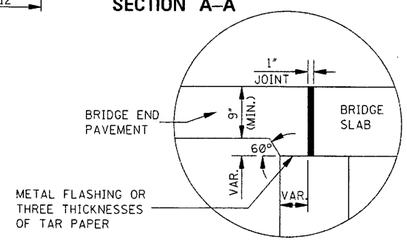
PLAN ⚠



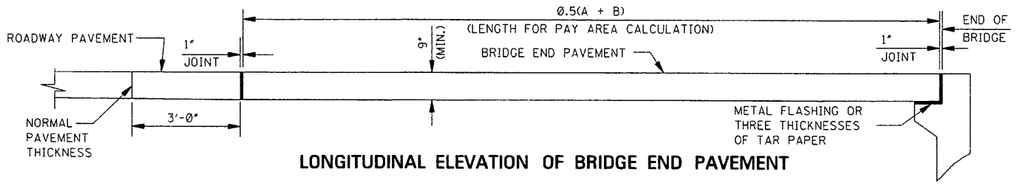
PLAN AT BRIDGE END



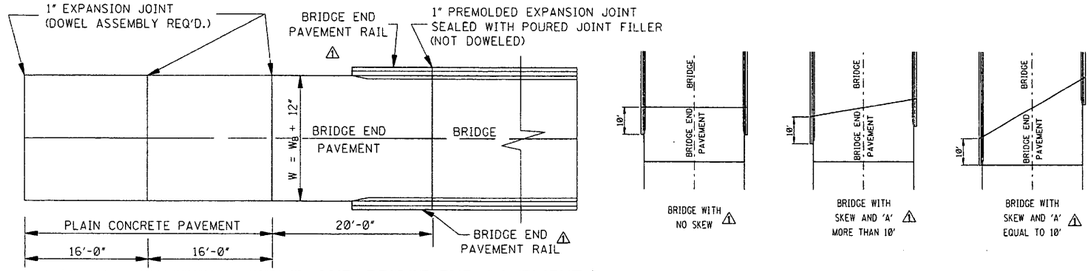
SECTION A–A



DETAIL SHOWING METHOD OF SEATING BRIDGE END PAVEMENT ON BRIDGES WITH NO PAVING BRACKET



LONGITUDINAL ELEVATION OF BRIDGE END PAVEMENT



PLAN OF EXPANSION JOINTS AND BRIDGE END PAVEMENT ⚠

GENERAL NOTES:

1. IF BRIDGE END PAVEMENT IS CONSTRUCTED IN MORE THAN ONE SECTION, LONGITUDINAL CONSTRUCTION JOINTS WITH TIE BARS WILL BE USED. TIE BARS WILL BE #5 BARS, 30" LONG AND SPACED 30" O.C. SUCH CONSTRUCTION WILL BE USED WHERE INDICATED ON PLANS.
2. DIMENSIONS "A" & "B" ARE BASED ON A MID-LENGTH OF 20'-0". EXCEPT IN NO CASE SHALL "A" BE LESS THAN 10'-0".
3. SEE QUANTITY SECTION OF PLANS FOR DIMENSIONS "W", "W_1", "W_2", "A", "B", SKEW ANGLE "Z" AND QUANTITIES.
4. SPACING OF OUTER LONGITUDINAL EDGE BARS AND TIE BARS MAY BE ADJUSTED TO MEET VARIOUS WIDTHS ("W") OF BRIDGE END PAVEMENT. SPACINGS SHOWN ARE FOR A BRIDGE WIDTH OF 40'-0".
5. REINFORCEMENT (DEFORMED) MAY BE FURNISHED FULL LENGTH OR MAY BE LAPPED. IF BARS ARE LAPPED THEY SHALL BE LAPPED NOT LESS THAN 30 DIAMETERS.

BY	REVISION
F&H	1-23-09 REVISE SHEET NUMBER
SWR	11-1-07 ADDED REINF. BARS TO VIEW
SWR	4-1-07 ADDED R&B RAIL AND BR END PAVT RAIL

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BRIDGE END PAVEMENT WITH RAIL

WORKING NUMBER BE-1A

SHEET NUMBER 3 100.61

DATE 4-04-07

FILENAME: brend pavement.dgn

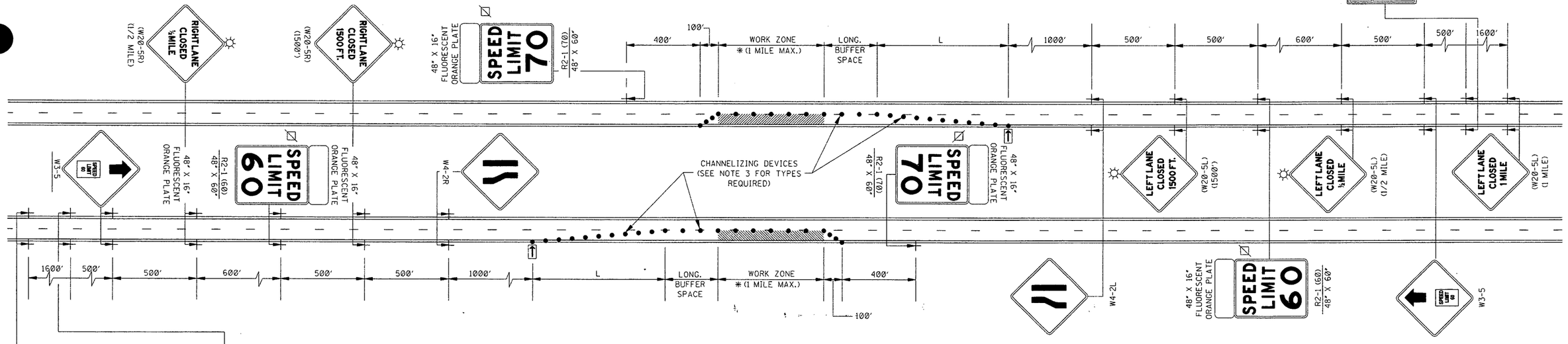
DESIGN TEAM spell CHECKED reeves DATE 4-04-07

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

2/3/2009 9:52 AM TYPE I.DGN

1 st O. REV.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER † RATES
	TAPER	ALONG BUFFER SPACE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
L = $WS^2/60$ FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. FLASHING ARROW PANEL SHALL BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.

3. CHANNELIZING DEVICES:
   A. ALL CHANNELIZING DEVICES SHALL BE REFLECTORIZED FREE STANDING PLASTIC DRUMS.
   B. FOR NIGHTTIME USE, ALL CHANNELIZING DEVICES SHALL BE RETROREFLECTIVE.
   C. RETROREFLECTORIZATION SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF THE M.U.T.C.D.

4. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

5. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".

6. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER WHILE THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON FACE OF SIGN.

7. ADDITIONAL REDUCED SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. A MINIMUM OF TWO (2) WILL BE REQUIRED FOR EACH RAMP. LOCATION AND NUMBER REQUIRED WILL BE DETERMINED BY THE ENGINEER.

8. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.

9. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.

10. A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS REQUIRED FOR LANE CLOSURE.

LEGEND

* OR AS SHOWN ELSEWHERE OF THE PLANS.
FLASHING ARROW PANEL (TYPE "C")
BLACK LEGEND AND BORDER ON WHITE BACKGROUND
TYPE "B" WARNING LIGHTS
REFLECTORIZED FREE-STANDING PLASTIC DRUMS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT OF 65 OR 70 MPH

(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS) (MEDIAN LANE OR OUTSIDE LANE CLOSURE) (EXTENDED PERIOD)

PROJ. NO.: SP-0006-01(087)
CO.: UNION / PONTOTOC

WORKING NUMBER: SDTCP-4

FILENAME: OVERNIGHTCLOSR\SDTCP-4

DESIGN TEAM _____ CHECKED _____ DATE _____

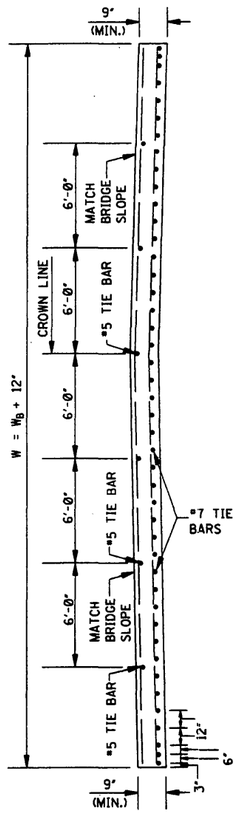
SHEET NUMBER: 100.62

BY	REVISE SHEET NUMBER REVISION	DATE
F&H		1/23/09

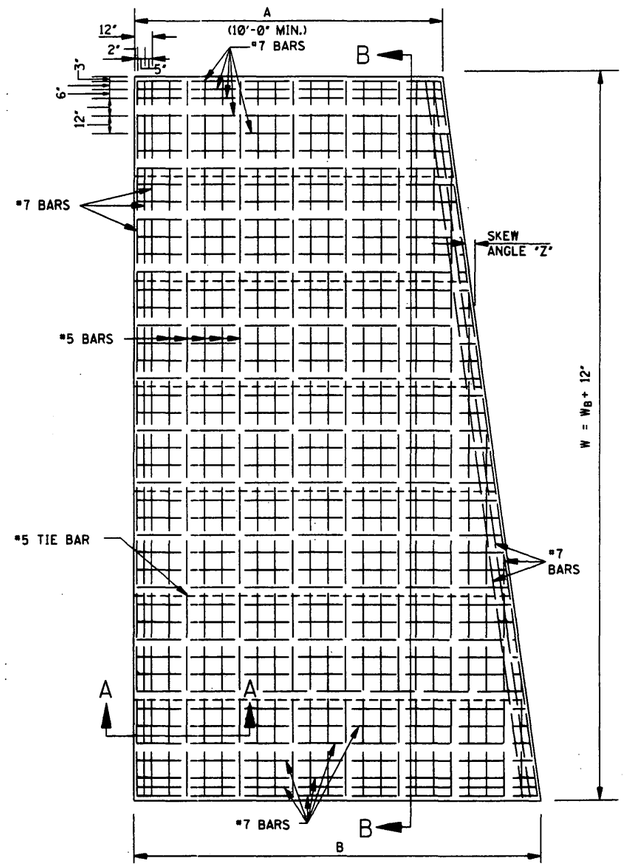
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

2/3/2009 9:41 AM SDTCP-4.DGN

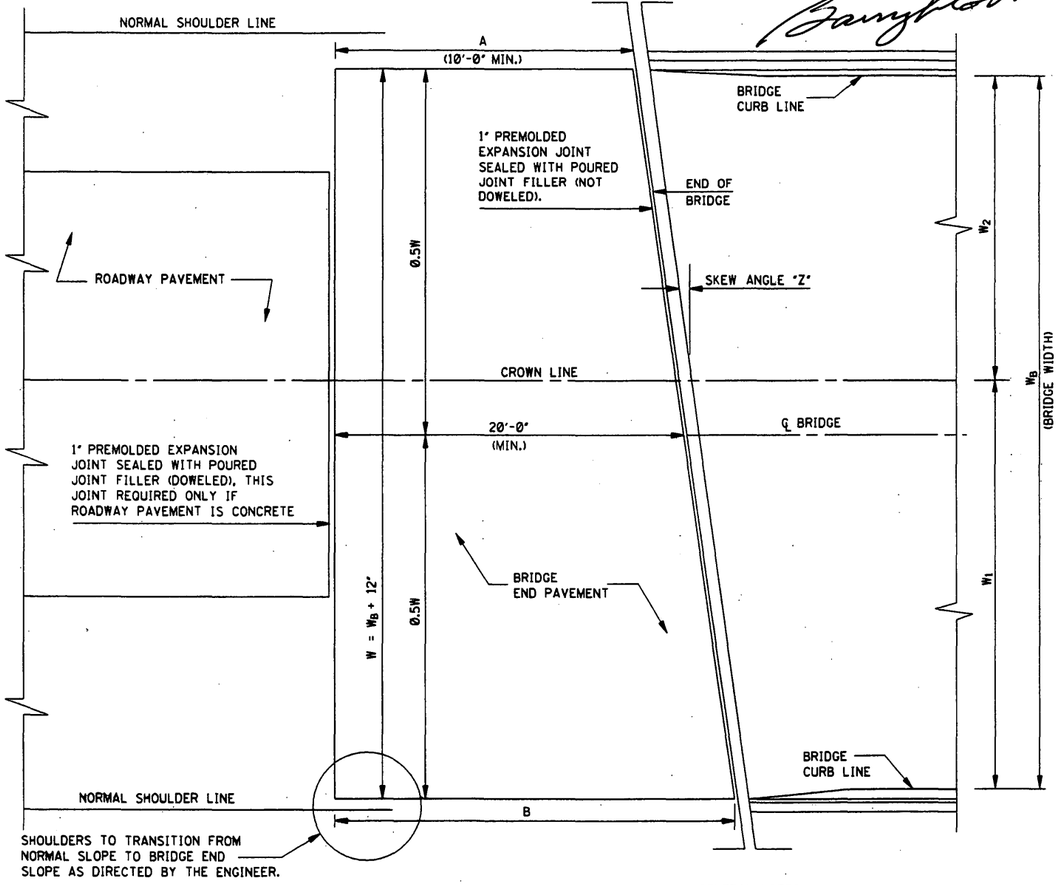
STATE	PROJECT NO.
MISS.	



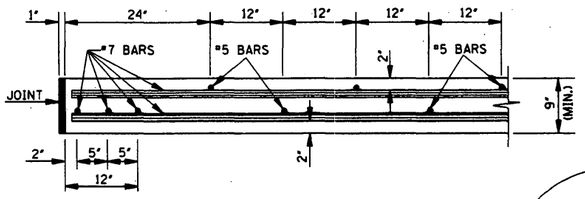
SECTION B–B



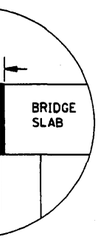
PLAN



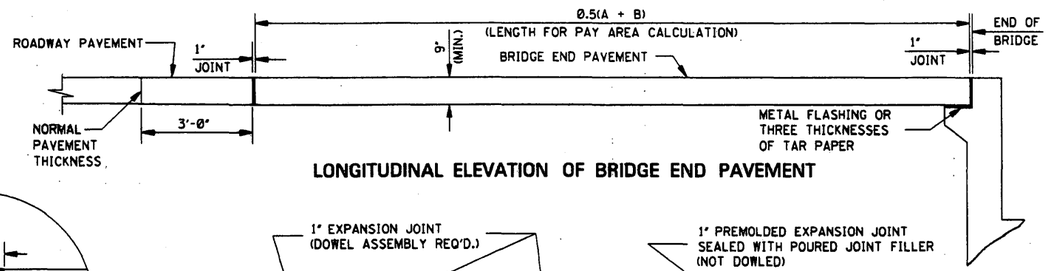
PLAN AT BRIDGE END



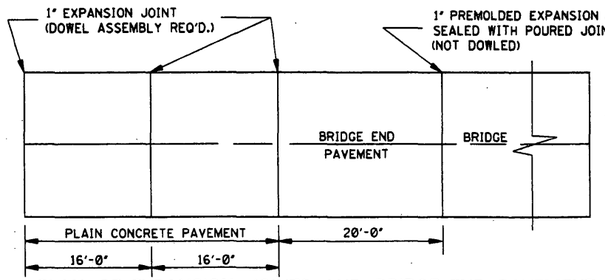
SECTION A–A



DETAIL SHOWING METHOD OF SEATING BRIDGE END PAVEMENT ON BRIDGES WITH NO PAVING BRACKET



LONGITUDINAL ELEVATION OF BRIDGE END PAVEMENT



PLAN OF EXPANSION JOINTS AND BRIDGE END PAVEMENT

GENERAL NOTES:

1. IF BRIDGE END PAVEMENT IS CONSTRUCTED IN MORE THAN ONE SECTION, LONGITUDINAL CONSTRUCTION JOINTS WITH TIE BARS WILL BE USED. TIE BARS WILL BE #5 BARS, 30" LONG AND SPACED 30" O.C. SUCH CONSTRUCTION WILL BE USED WHERE INDICATED ON PLANS.
2. DIMENSIONS "A" & "B" ARE BASED ON A MID-LENGTH OF 20'-0". EXCEPT IN NO CASE SHALL "A" BE LESS THAN 10'-0".
3. SEE QUANTITY SECTION OF PLANS FOR DIMENSIONS "W", "W_1", "W_2", "A", "B", SKEW ANGLE "Z" AND QUANTITIES.
4. SPACING OF OUTER LONGITUDINAL EDGE BARS AND TIE BARS MAY BE ADJUSTED TO MEET VARIOUS WIDTHS ("W") OF BRIDGE END PAVEMENT. SPACINGS SHOWN ARE FOR A BRIDGE WIDTH OF 40'-0".
5. REINFORCEMENT (DEFORMED) MAY BE FURNISHED FULL LENGTH OR MAY BE LAPPED. IF BARS ARE LAPPED THEY SHALL BE LAPPED NOT LESS THAN 30 DIAMETERS.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BRIDGE END PAVEMENT

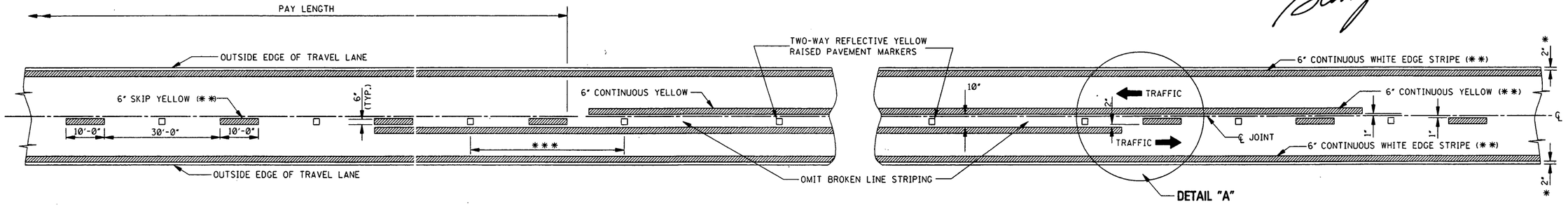
ENGLISH

WORKING NUMBER
BE-1

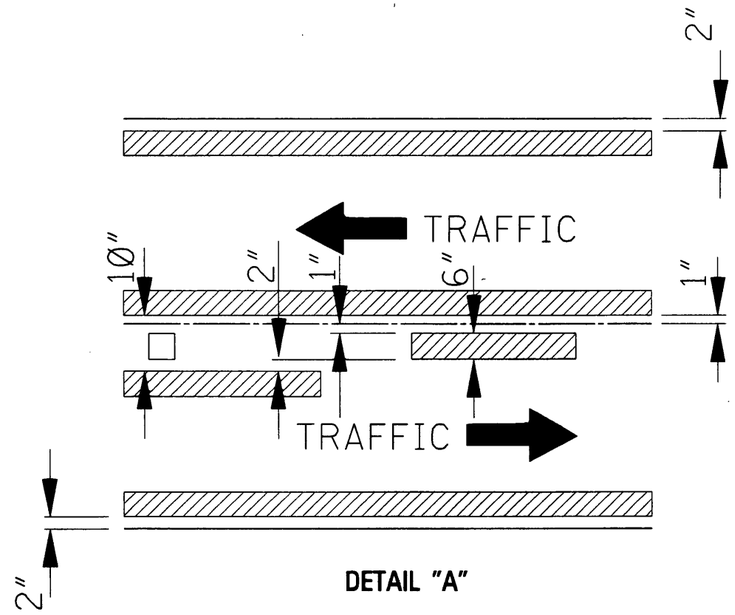
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
107

STATE	PROJECT NO.
MISS.	



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)





GENERAL NOTES:

* 1. 2" UNLESS SHOWN ELSEWHERE ON THE PLANS.

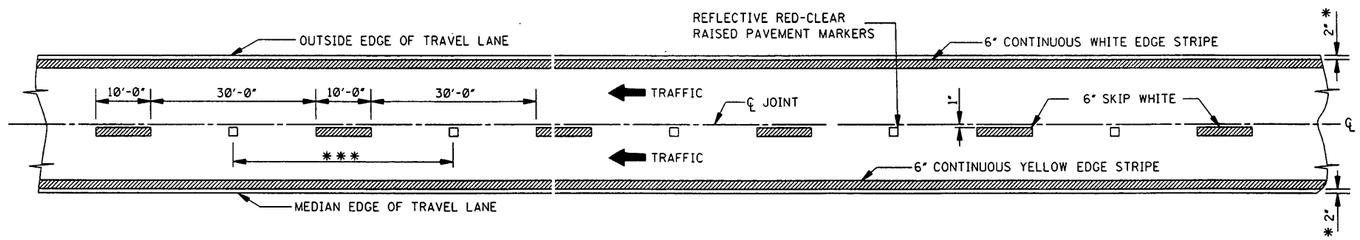
** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR PLASTIC AS INDICATED IN PAY ITEMS).

*** 3. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

	URBAN AREA (ft-in)	RURAL AREA (ft-in)
TANGENT SECTIONS	40'-0"	80'-0"
HORIZONTAL CURVES	40'-0"	40'-0"
INTERCHANGE LIMITS	40'-0"	† 40'-0"

† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."



4-LANE WITH ONE-WAY TRAFFIC

BY	REVISION	DATE
S.M.R.	REVISE STRIPE WIDTH	12-1-99

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING DETAILS FOR 2-LANE AND 4-LANE DIVIDED HIGHWAYS

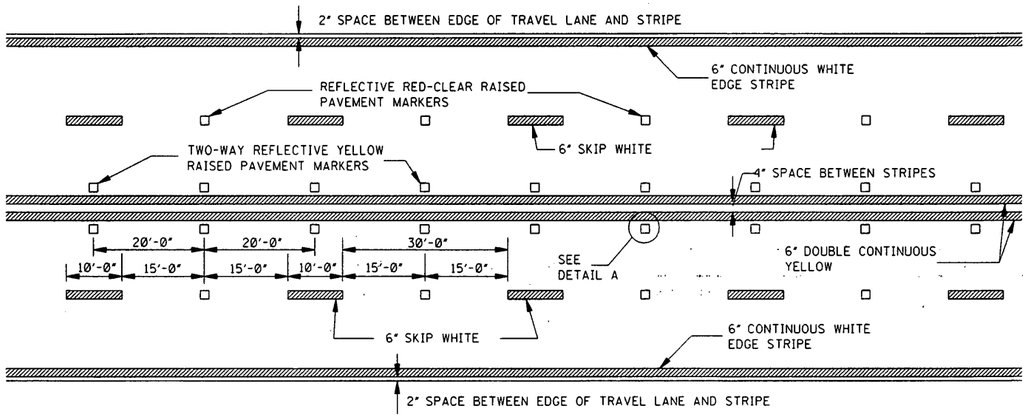
ENGLISH

WORKING NUMBER PM-1

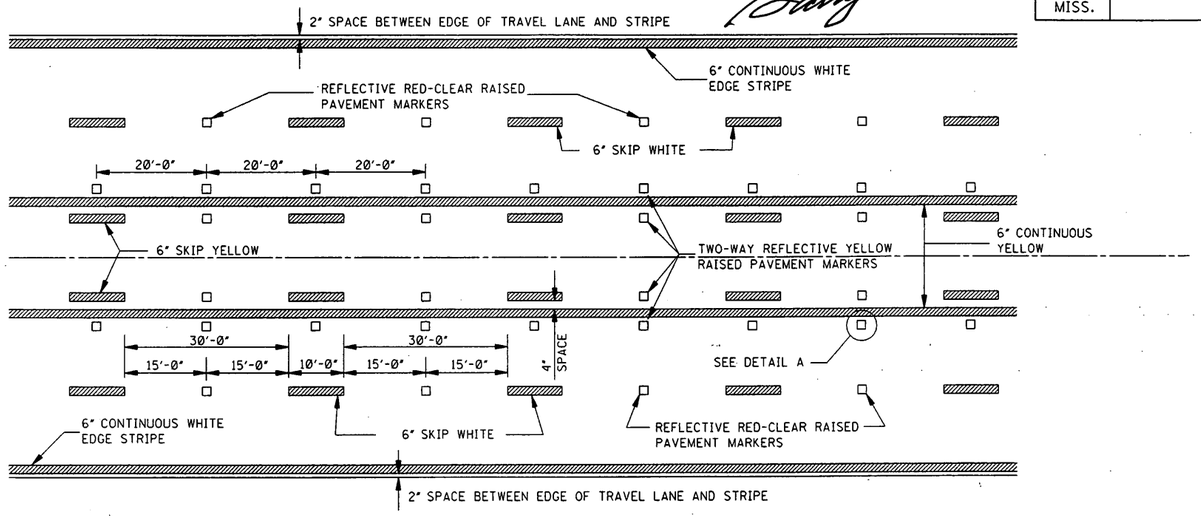
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ISSUE DATE: OCTOBER 1, 1998

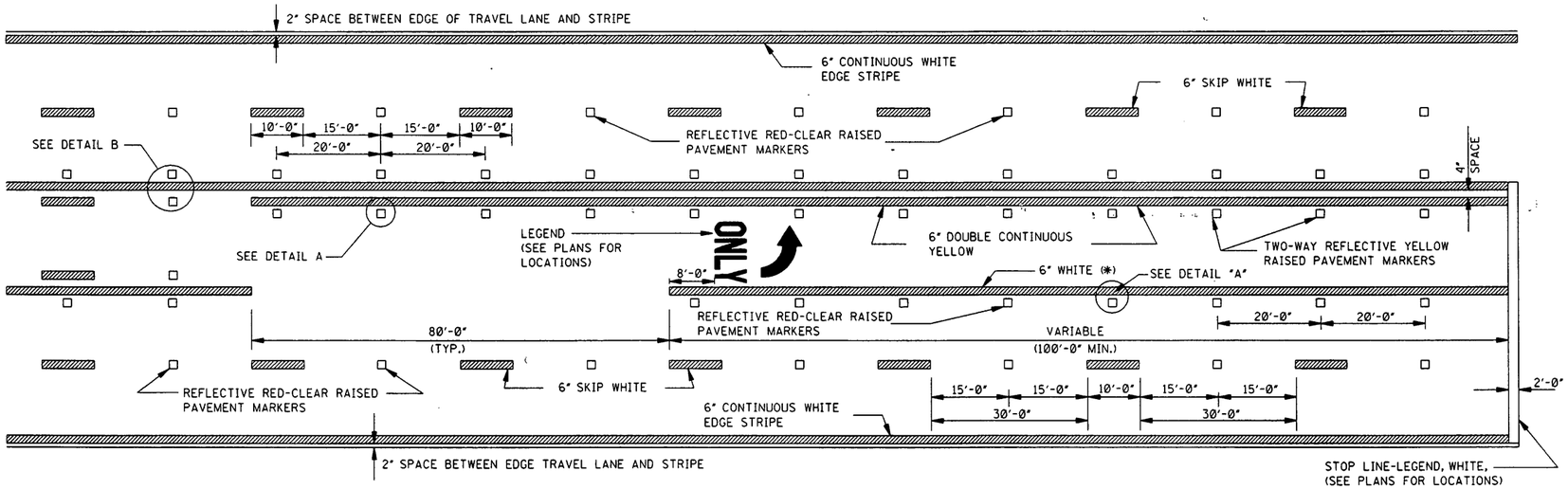
STATE	PROJECT NO.
MISS.	



TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 4–LANE SECTION

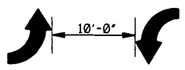


TYPICAL STRIPING AND RAISED PAVEMENT MARKERS FOR 5–LANE SECTION



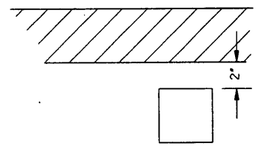
TYPICAL STRIPING AND RAISED PAVEMENT MARKERS AT LEFT TURN LANES

*NOTE: USE DETAIL STRIPING IF LENGTH ≤ 150' AT THIS LOCATION, OTHERWISE USE CONTINUOUS STRIPING.

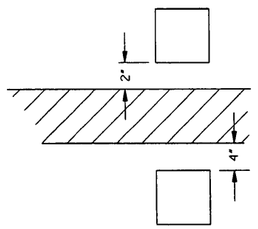


TYPICAL TWO–WAY ARROW INSTALLATION

NOTES: 1. CONSIDER EACH SEGMENT OF CONTINUOUS TWO-WAY LEFT TURN LANE SEPARATELY.
2. IF SEGMENT IS LESS THAN 350', PLACE ONE SET OF ARROWS IN CENTER OF SEGMENT.
3. IF SEGMENT IS GREATER THAN 350', PLACE FIRST SET OF ARROWS 50' TO 100'. FROM BEGINNING AND/OR END OF SEGMENT AND SPACE ADDITIONAL SETS OF ARROWS (250' O.C.).



DETAIL A
LATERAL PLACEMENT OF PAVEMENT MARKERS



DETAIL B
LATERAL PLACEMENT OF PAVEMENT MARKERS

GENERAL NOTE:

1. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS".

DATE	BY	REVISION
12-1-99	S.W.R.	REVISE STRIPE WIDTH

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

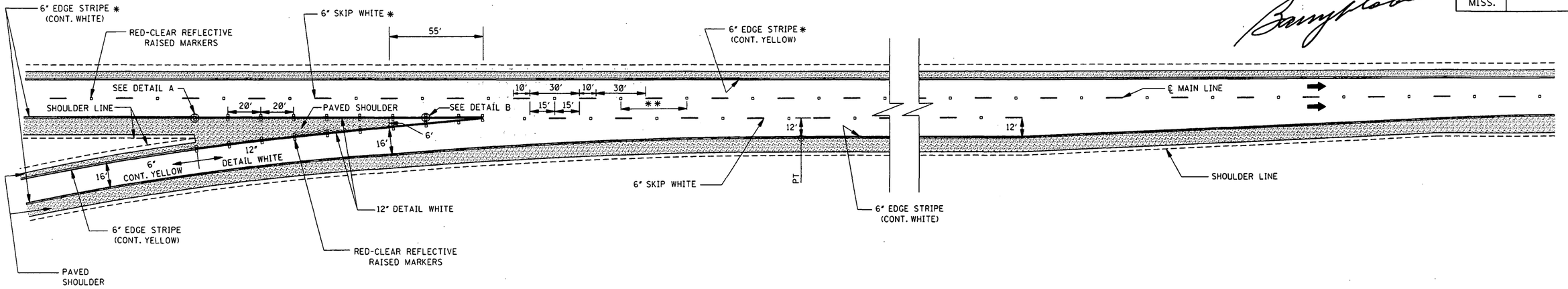
PAVEMENT MARKING DETAILS FOR 4–LANE AND 5–LANE UNDIVIDED ROADWAYS

ISSUE DATE: OCTOBER 1, 1998

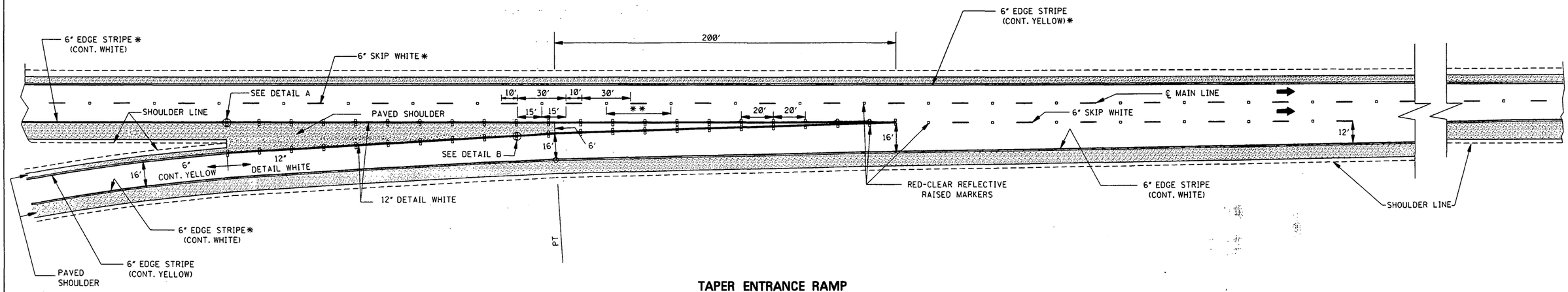
WORKING NUMBER PM-2

SHEET NUMBER 121

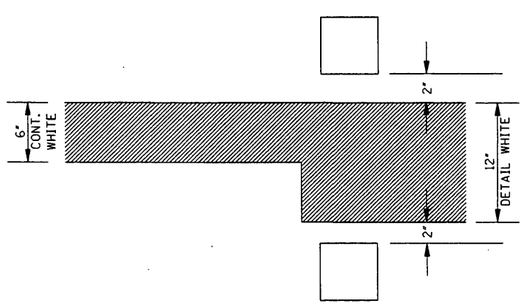
STATE	PROJECT NO.
MISS.	



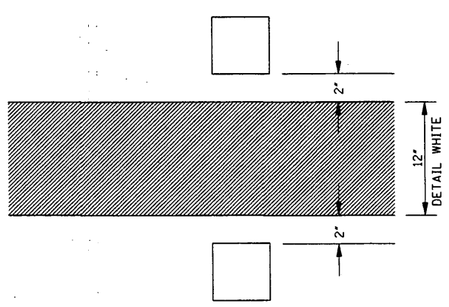
PARALLEL ENTRANCE RAMP



TAPER ENTRANCE RAMP



DETAIL A



DETAIL B

GENERAL NOTES:

* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.

** 2. ON THE MAIN FACILITY, PLACE REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS AT A 40' SPACING ON ALL LANE-LINE(S) THROUGHOUT THE INTERCHANGE AREA BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."

BY	REVISION	DATE
S.W.R.	REVISE STRIPE WIDTH	12-1-99

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING DETAILS FOR INTERCHANGE ENTRANCE RAMPS (PARALLEL AND TAPER)

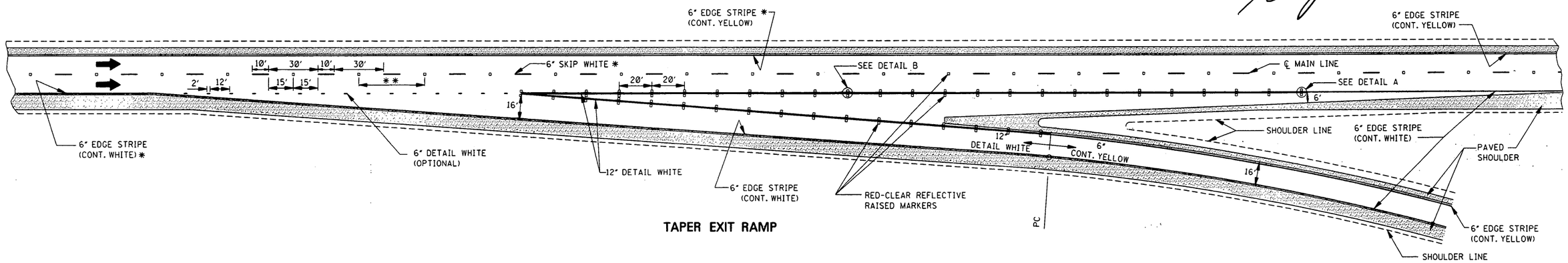
ENGLISH

WORKING NUMBER PM-3

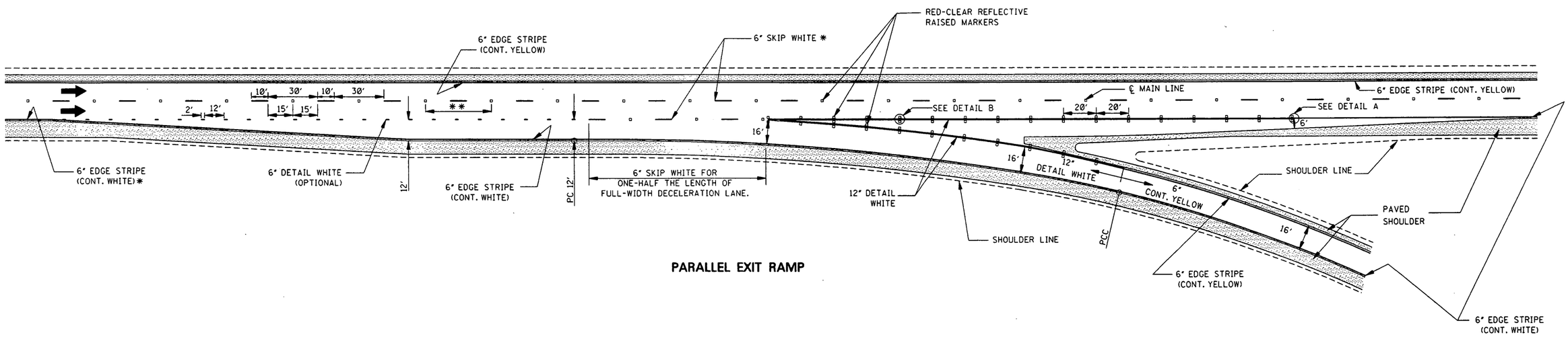
ISSUE DATE: OCTOBER 1, 1998

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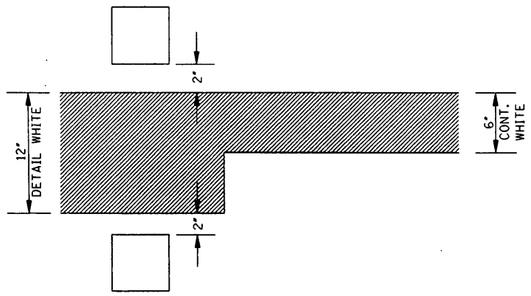
STATE	PROJECT NO.
MISS.	



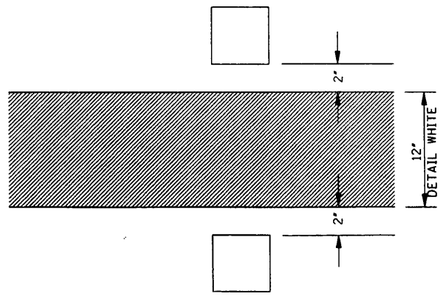
TAPER EXIT RAMP



PARALLEL EXIT RAMP



DETAIL A



DETAIL B

GENERAL NOTES:

* 1. SEE SHEET PM-1 FOR THE PLACEMENT OF LANE-LINE STRIPE WITH RESPECT TO THE PAVEMENT JOINT AND FOR THE PLACEMENT OF THE EDGE LINE WITH RESPECT TO THE OUTSIDE EDGE OF THE TRAVELED WAY.

** 2. ON THE MAIN FACILITY, PLACE REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS AT A 40' SPACING ON ALL LANE-LINE(S) THROUGHOUT THE INTERCHANGE AREA BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

3. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."

DATE	REVISE STRIPE WIDTH REVISION	BY
12-1-99		S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING DETAILS FOR INTERCHANGE EXIT RAMPS (PARALLEL AND TAPER)

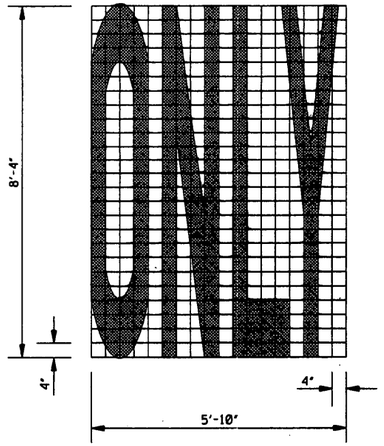
ENGLISH

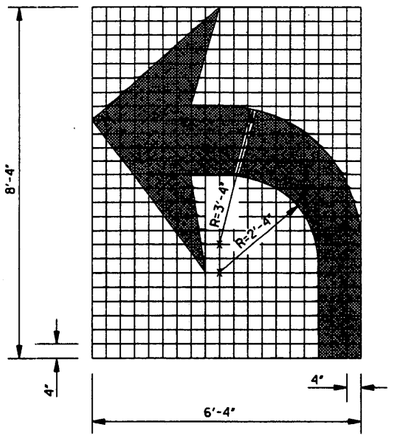
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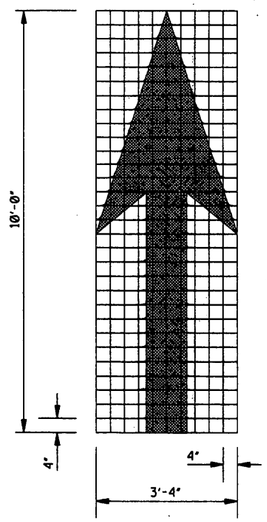
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

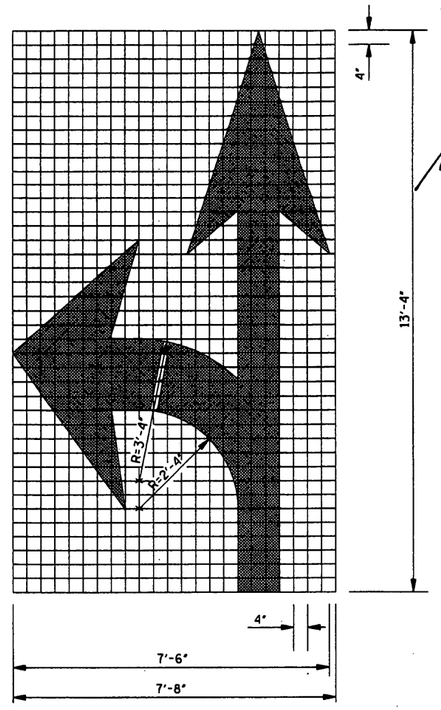




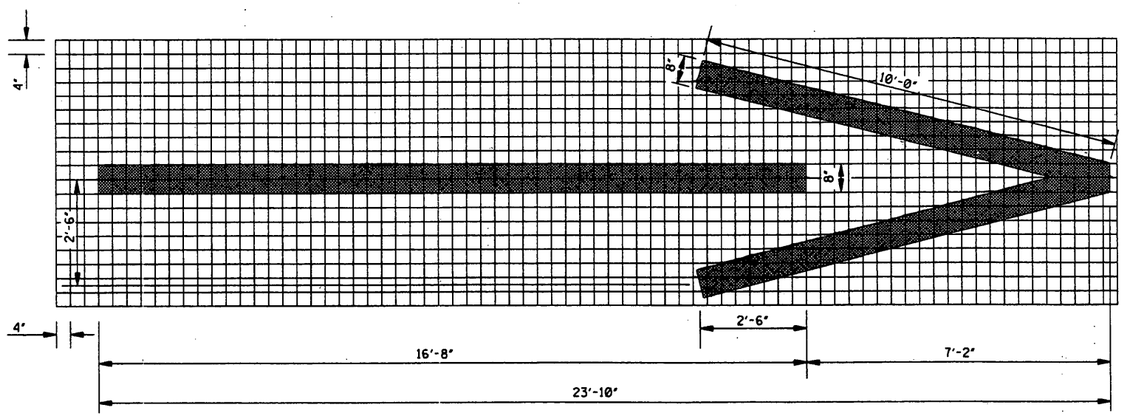
TURN ARROW



THRU ARROW



COMBINATION ARROW



1-WAY ARROW

GENERAL NOTES:

1. UNLESS OTHERWISE SHOWN ON THE PLANS, ALL PAVEMENT MARKING LEGENDS, INCLUDING TURN ARROWS, SHALL BE APPLIED USING HIGH PERFORMANCE MATERIALS.
2. TWO HORIZONTAL GAPS (CAUSED BY TEMPLATE CONNECTORS) OF 1½" OR LESS AND EXTENDING THE FULL WIDTH ARE PERMITTED IN EACH LETTER.
3. FOR OTHER DETAILS, SEE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.
4. PAY QUANTITIES FOR PAVEMENT MARKING LEGENDS ARE AS FOLLOWS:

PAY QUANTITIES	
LEGEND/SYMBOL	AREA (ft^2)
ONLY	22.0
TURN ARROW	16.4
THRU ARROW	12.3
COMB. ARROW	27.5
1-WAY ARROW	24.3

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVEMENT MARKING LEGEND DETAILS

ENGLISH

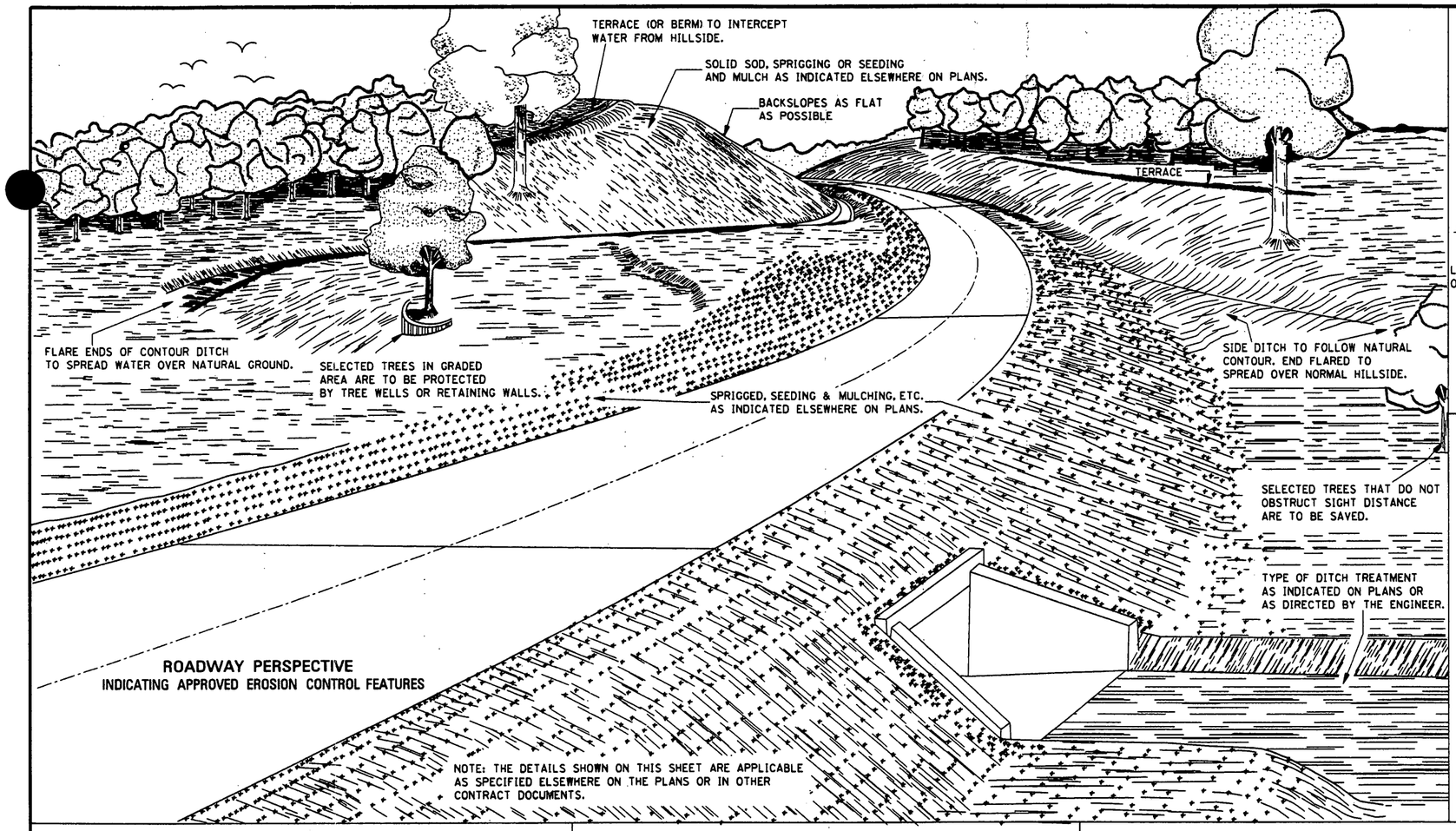
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SHEET NUMBER 125

REVISION | BY | DATE

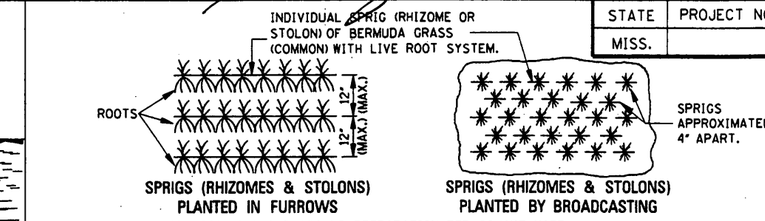
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



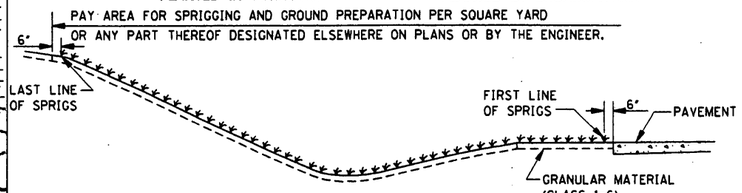
ROADWAY PERSPECTIVE
INDICATING APPROVED EROSION CONTROL FEATURES

NOTE: THE DETAILS SHOWN ON THIS SHEET ARE APPLICABLE AS SPECIFIED ELSEWHERE ON THE PLANS OR IN OTHER CONTRACT DOCUMENTS.

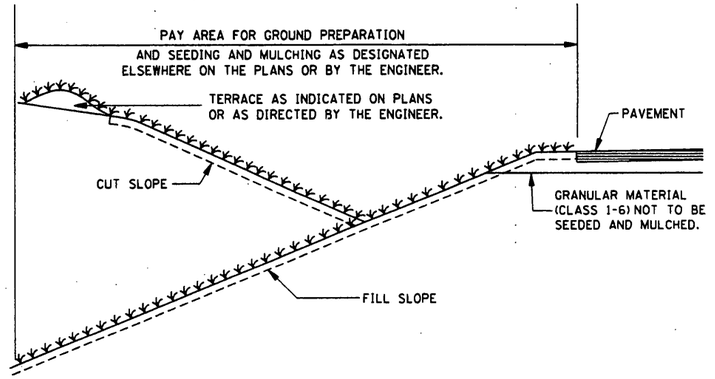


SPRIGS (RHIZOMES & STOLONS) PLANTED IN FURROWS

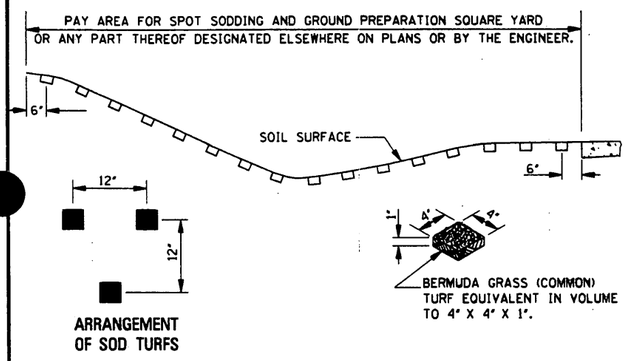
SPRIGS (RHIZOMES & STOLONS) PLANTED BY BROADCASTING



SPRIGGING

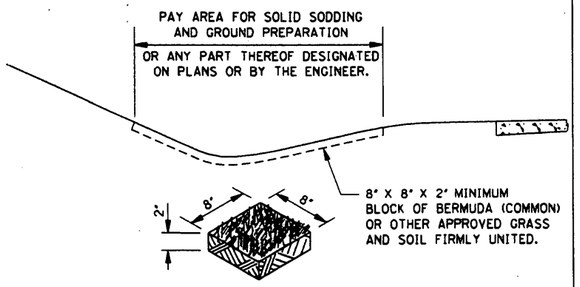


SEEDING AND MULCHING

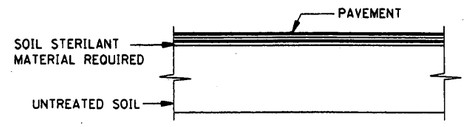


ARRANGEMENT OF SOD TURFS

SPOT SODDING



SOLID SODDING



SOIL STERILIZATION UNDER PAVED AREAS
(ISLANDS, MEDIANS OR SLOPE PAVEMENT)

GENERAL NOTE:

1. LONGITUDINAL AND TRANSVERSE MEASUREMENTS FOR THE PAY AREA SHALL BE TAKEN ALONG THE SLOPES.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

EROSION CONTROL

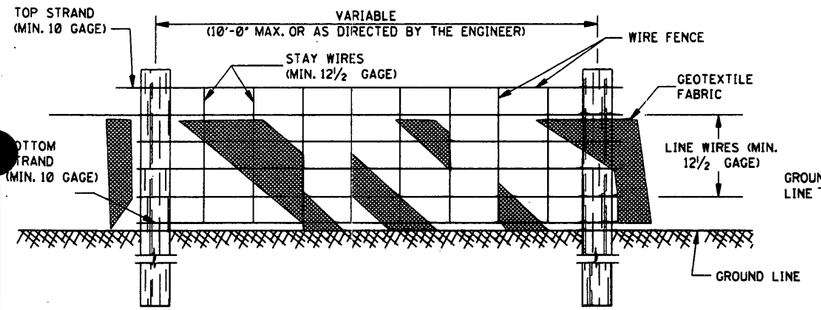
ENGLISH

WORKING NUMBER EC-1

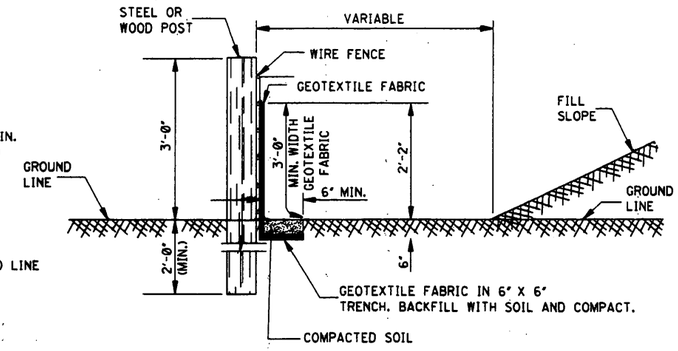
SHEET NUMBER 140

ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
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FRONT ELEVATION

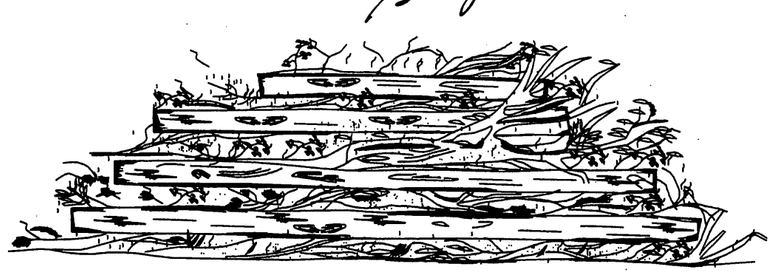


SIDE ELEVATION

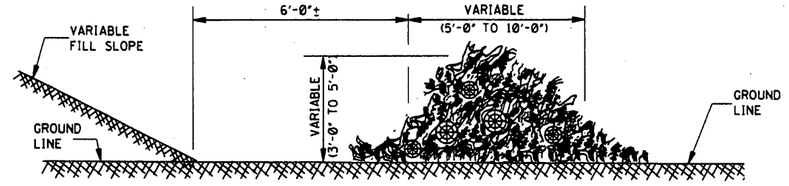
TEMPORARY SILT FENCE

NOTES:

1. WIRE SHALL BE MINIMUM OF 32" IN WIDTH AND SHALL HAVE A MINIMUM OF 6 LINE WIRES WITH 12" STAY SPACING.
2. GEOTEXTILE FABRIC SHALL BE A MINIMUM OF 36" IN WIDTH AND SHALL BE FASTENED ADEQUATELY TO THE WIRE AS DIRECTED BY THE ENGINEER.
3. STEEL POST SHALL BE 5'-0" IN HEIGHT AND OF THE SELF-FASTENER ANGLE STEEL TYPE. WOOD POST SHALL BE A MINIMUM OF 5'-0" IN HEIGHT AND 3" OR MORE IN DIAMETER. WIRE FENCE SHALL BE FASTENED TO WOODEN POST WITH NOT LESS THAN 9 GAGE WIRE STAPLES 1" LONG.
4. GEOTEXTILE FABRIC MEETING THE TYPE II MATERIAL REQUIREMENTS AND INSTALLED ACCORDING TO SPECIFICATIONS MAY BE USED WITHOUT WIRE FENCE.



FRONT ELEVATION

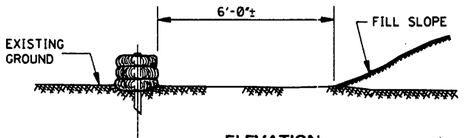


SIDE ELEVATION

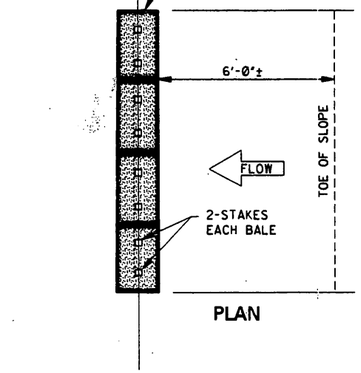
TEMPORARY BRUSH BARRIER

NOTES:

1. BRUSH BARRIER TO BE USED WHERE NATURAL GROUND IS LEVEL OR SLOPING AWAY FROM PROJECT.
2. PLACE BRUSH, LOG AND TREE LAPS APPROXIMATELY PARALLEL TO TOE OF FILL SLOPE WITH SOME OF THE HEAVIER MATERIALS BEING PLACED ON TOP TO PROPERLY SECURE THE BARRIER AS DETAILED AT LOCATIONS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.
3. TO ALLOW WATER TO FLOW THROUGH BRUSH BARRIER, INTERMINGLE THE BRUSH, LOG AND TREE LAPS SO AS NOT TO FORM A SOLID DAM.

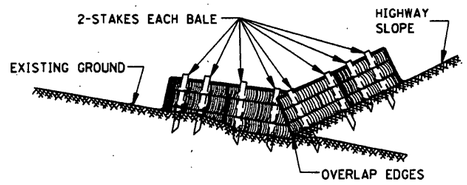


ELEVATION



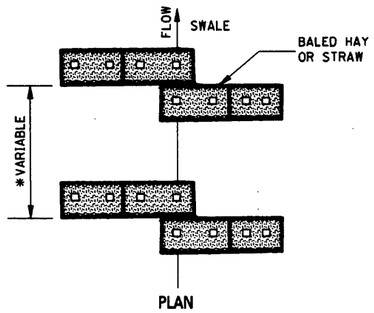
PLAN

FALL OF DITCH (%)	DISTANCE* (ft)
0 - 1	100'
1 - 2	50'
>2	25'

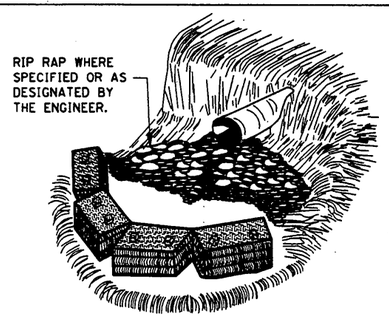


ELEVATION

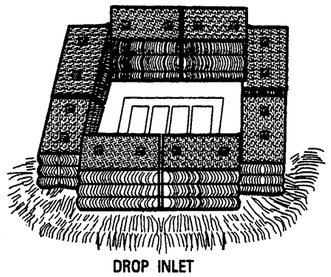
NOTE: SIMILAR TREATMENT TO BE USED IN DITCHES.



PLAN



CULVERT



DROP INLET

TEMPORARY EROSION CHECKS USING HAY OR STRAW BALES

NOTE: EMBED ALL BALES 3" MINIMUM INTO GROUND AND STAKE (2" X 2" X 36") SECURELY.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION.
2. TEMPORARY BRUSH BARRIERS SHALL BE USED AS REQUIRED BUT WILL NOT BE MEASURED FOR SEPARATE PAYMENT.
3. THE USE OF TEMPORARY EROSION CONTROL MEASURES OTHER THAN TEMPORARY BRUSH BARRIERS WILL ONLY BE REQUIRED AND MEASURED FOR SEPARATE PAYMENT WHEN APPROPRIATE PAY ITEM(S) IS INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.

BY
REVISION
DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL TEMPORARY EROSION CONTROL MEASURES
(SILT FENCE, HAY BALES & BRUSH BARRIER)

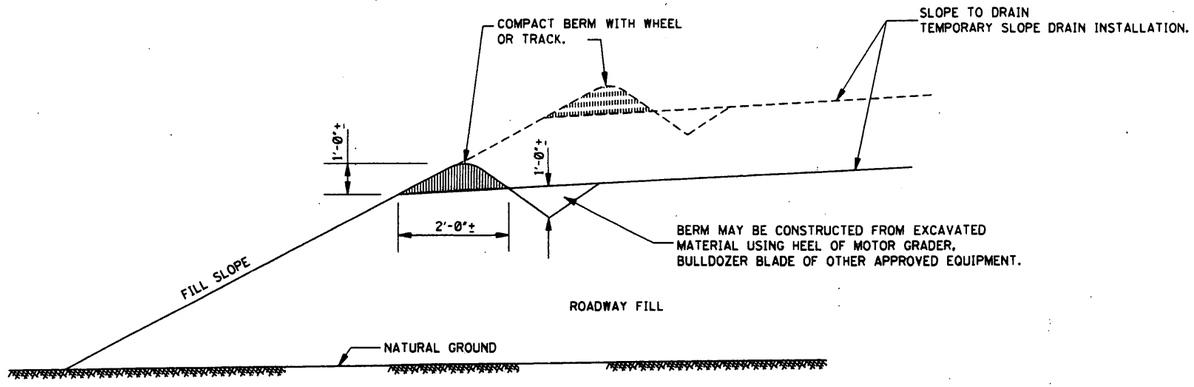
ENGLISH

WORKING NUMBER
TEC-1

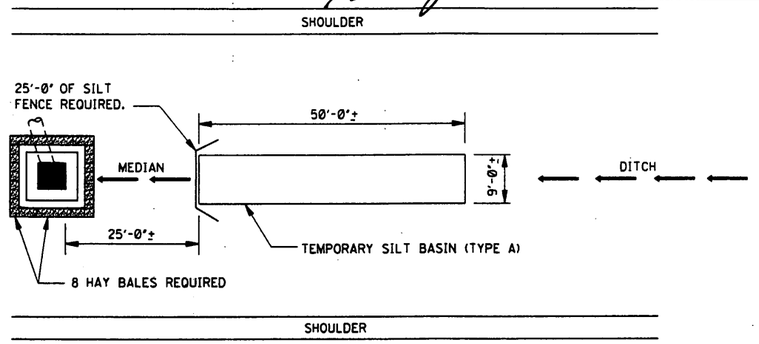
ISSUE DATE: OCTOBER 1, 1998

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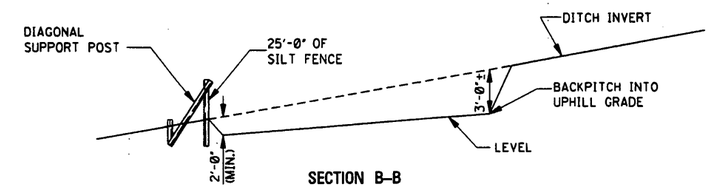
STATE	PROJECT NO.
MISS.	



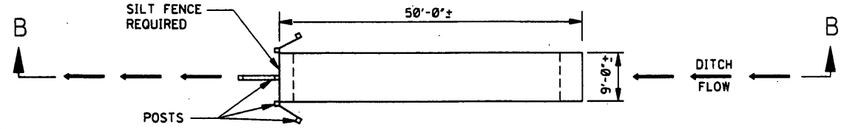
TEMPORARY SHOULDER BERM



TEMPORARY MEDIAN SILT BASIN (TYPE A)



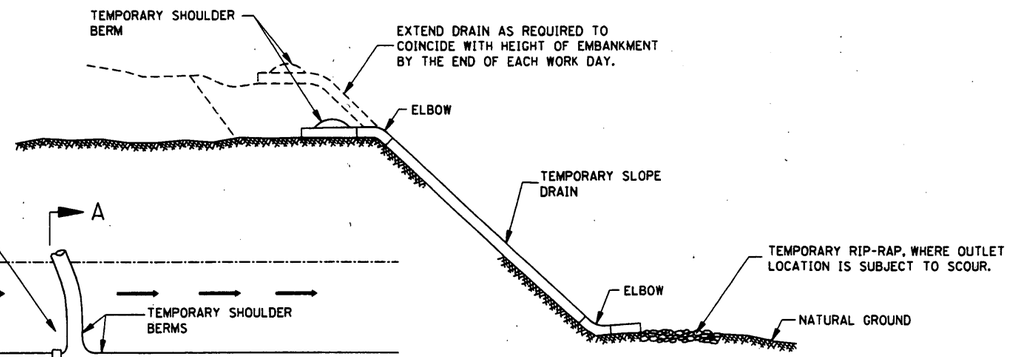
SECTION B–B



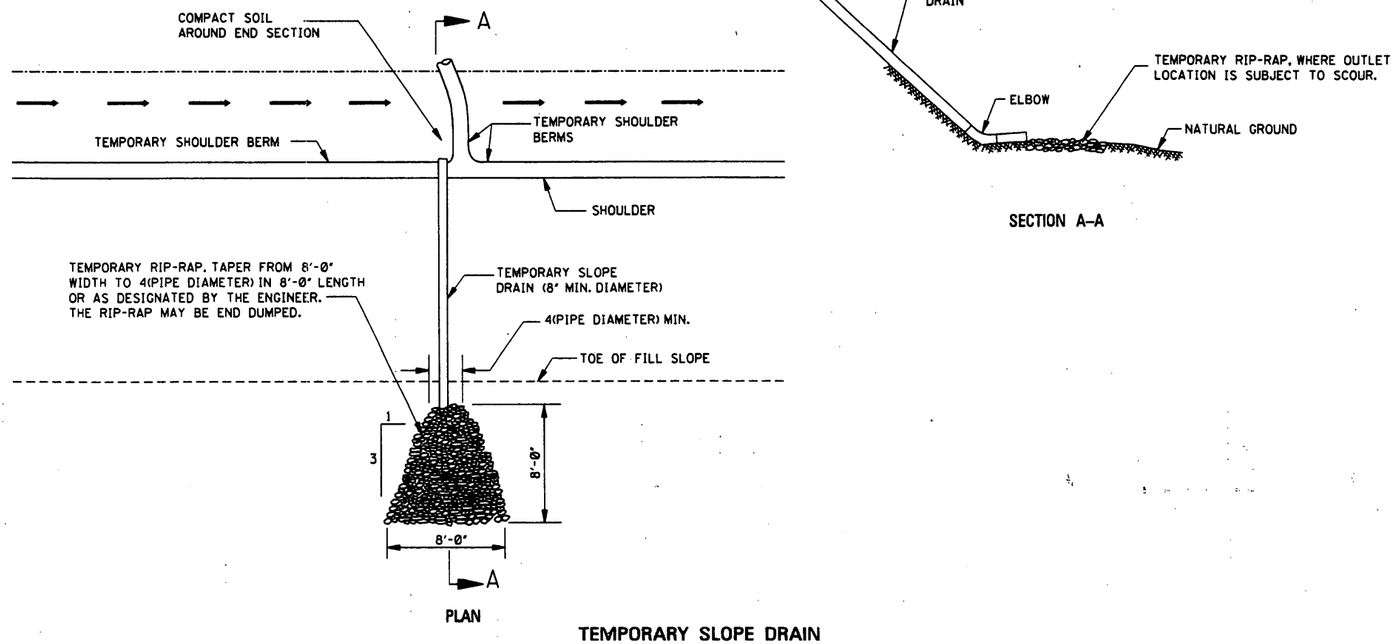
PLAN

TEMPORARY SILT BASIN (TYPE A)

NOTE: TEMPORARY SILT BASIN (TYPE A) TO BE PLACED IN SURFACE DRAIN DITCHES AND SIDE DITCHES AT THE END OF CUT SECTIONS IMMEDIATELY PRECEEDING DITCH INLETS AND JUST BEFORE THE WATER (RUNOFF) LEAVES THE RIGHT-OF-WAY OR ENTERS A WATER COURSE. LOCATION AND SIZE (OTHER THAN AS SHOWN) MAY BE REQUIRED AS DIRECTED BY THE ENGINEER.



SECTION A–A



PLAN

TEMPORARY SLOPE DRAIN

NOTE: TEMPORARY SLOPE DRAINS TO BE PLACED AT LOW POINT OF ALL SAG VERTICAL CURVES. INTERMEDIATE LOCATIONS TO BE PLACED AS DESIGNATED OR DEEMED APPROPRIATE BY THE CONTRACTOR AND APPROVED BY THE ENGINEER.

GENERAL NOTES:

1. THE CONTRACTOR SHALL BE REQUIRED TO FURNISH ALL MATERIALS AND PERFORM ALL WORK FOR THE PROPER INSTALLATION, MAINTENANCE AND REMOVAL OF TEMPORARY EROSION CONTROL MEASURES NECESSARY TO CONTROL SILTATION.

2. THE USE OF TEMPORARY EROSION CONTROL MEASURES SHOWN ON THIS SHEET WILL ONLY BE REQUIRED AND MEASURED FOR SEPARATE PAYMENT WHEN AN APPROPRIATE PAY ITEM IS INCLUDED IN THE BID SCHEDULE OF THE PROPOSAL.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL TEMPORARY EROSION CONTROL MEASURES
(SLOPE DRAIN AND TYPE A SILT BASIN)

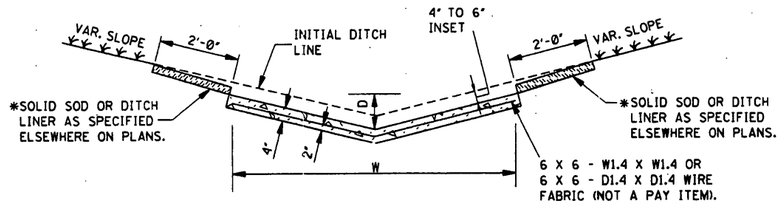
ENGLISH

WORKING NUMBER: TEC-2

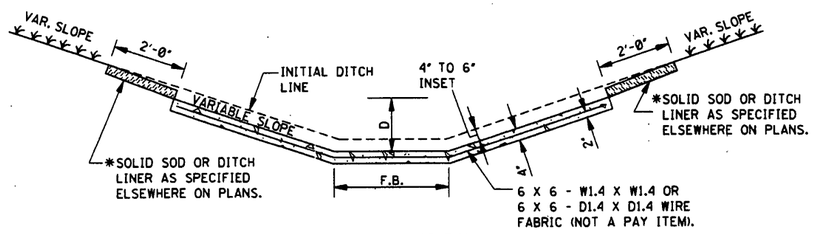
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER: 143

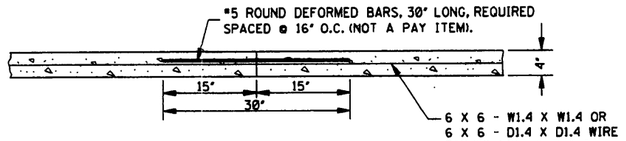
STATE	PROJECT NO.
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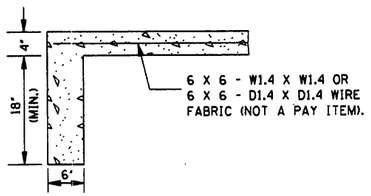
"V" TYPE SECTION



FLAT BOTTOM SECTION



DETAIL OF CONSTRUCTION JOINT



DETAIL OF TOE WALL

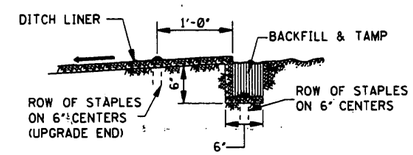
NOTE: TOE WALL REQUIRED UPSTREAM AND DOWNSTREAM.

CONCRETE PAVED DITCH

NOTES:

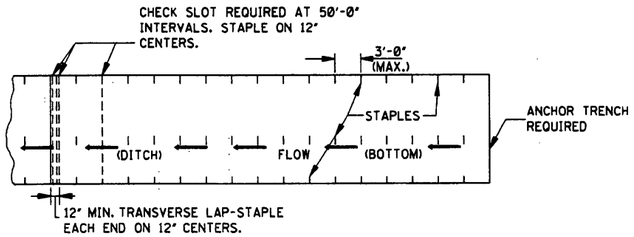
1. CONCRETE PAVED DITCHES SHALL BE GROOVED AT 20'-0" INTERVALS. THE GROOVES SHALL BE CUT TO A DEPTH OF NOT LESS THAN 1".
2. DIMENSIONS D & W ARE AS FOLLOWS:
   D(MINIMUM) = 6"
   D(NOMINAL) = 9"
   W(MINIMUM) = 24"
3. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.

*4. CENTER ROW OF STAPLES MAY BE OMITTED ON DITCH LINER.

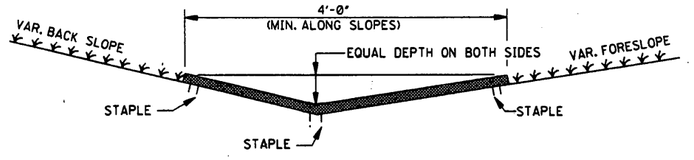


ANCHOR TRENCH DETAIL

NOTE: ANCHOR TRENCH REQUIRED AT THE BEGINNING AND ENDING OF EACH AREA TO BE COVERED, EXCEPT DOWNSTREAM END ADJOINING A STRUCTURE.



PLAN

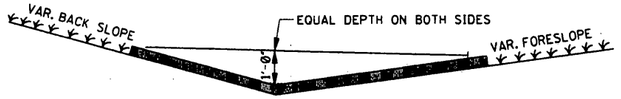


SECTION

DITCH LINER TREATMENT

(EXCELSIOR BLANKET, JUTE MESH OR EROSION CONTROL FABRIC)

NOTE: DITCHES TREATED WITH DITCH LINER WILL BE VEGETATED PRIOR TO TREATMENT, UNLESS OTHERWISE INDICATED.

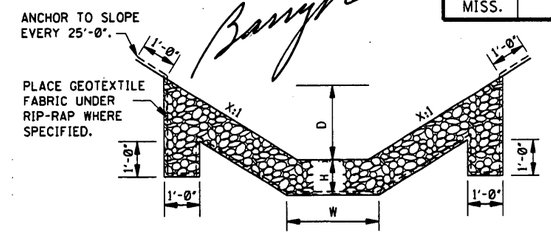


SECTION

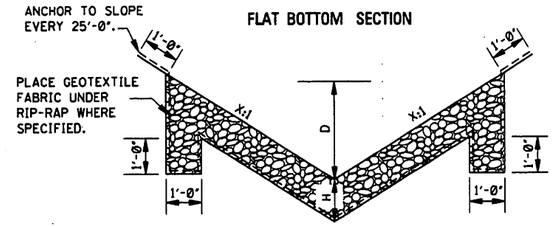
SLOT DETAIL

BITUMINOUS TREATED ROVING

NOTE: UPGRADE AND DOWNGRADE ENDS OF THE BITUMINOUS TREATED ROVING SHALL BE BURIED IN A 6" MINIMUM VERTICAL SLOT AND THE SOIL TAMPED FIRMLY AGAINST IT.



FLAT BOTTOM SECTION



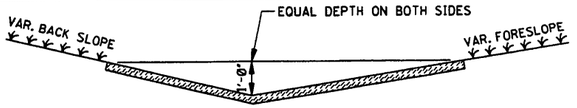
"V" TYPE SECTION

RIP-RAP TREATMENT

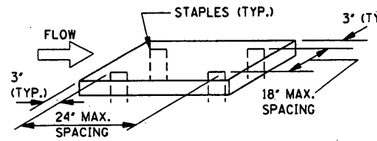
NOTES:

1. DIMENSIONS D, W AND X ARE VARIABLE AND ARE SHOWN ELSEWHERE ON THE PLANS.
2. THE RIP-RAP SIZE AND MINIMUM DEPTH "H" FOR RIP-RAP TREATMENT ARE AS FOLLOWS.

RIP-RAP SIZE & MINIMUM DEPTH "H"	
H (In)	RIP-RAP SIZE (lbs)
12"	100
18"	300



SOLID SOD TREATMENT



NOTE: SOLID SOD (STRIPS OR BLOCKS) ARE TO BE STAPLED, PINNED, PEGGED OR STAKED AT THE FOUR CORNERS OR AT THE MAXIMUM SPECIFIED SPACING.

GENERAL NOTE:

1. FOR LOCATION OF APPROPRIATE DITCH TREATMENTS, SEE PLAN SHEETS AS DENOTED BY THE FOLLOWING LEGEND OR AS DIRECTED BY THE ENGINEER:

- DITCH LINER
- BITUMINOUS TREATED ROVING
- SOLID SOD
- CONCRETE PAVED DITCH
- RIP-RAP

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF TYPICAL DITCH TREATMENTS

ENGLISH

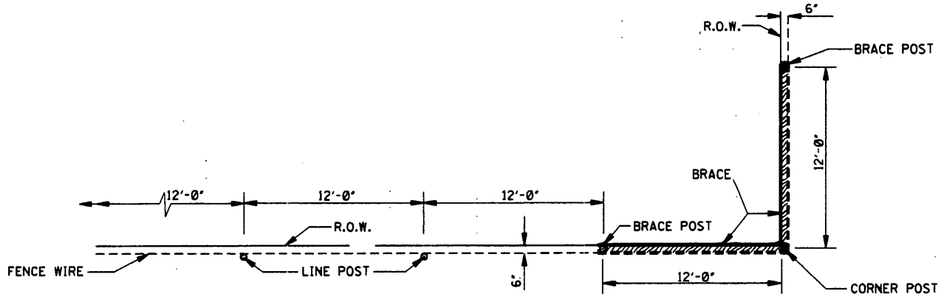
WORKING NUMBER DT-1

SHEET NUMBER 145

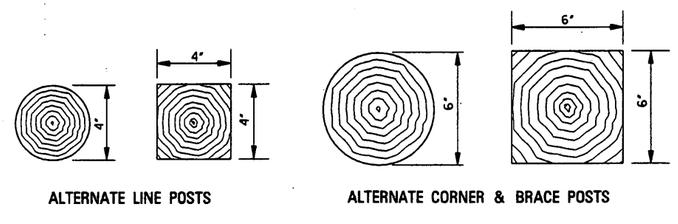
ISSUE DATE: OCTOBER 1, 1998

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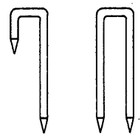
PLAN SHOWING PLACEMENT OF FENCE ALONG RIGHT OF WAY



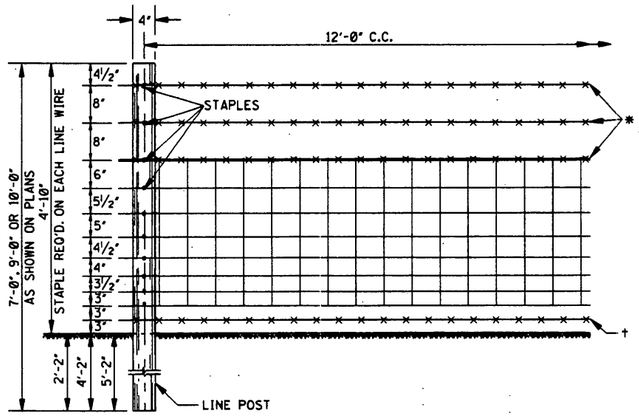
ALTERNATE LINE POSTS

ALTERNATE CORNER & BRACE POSTS

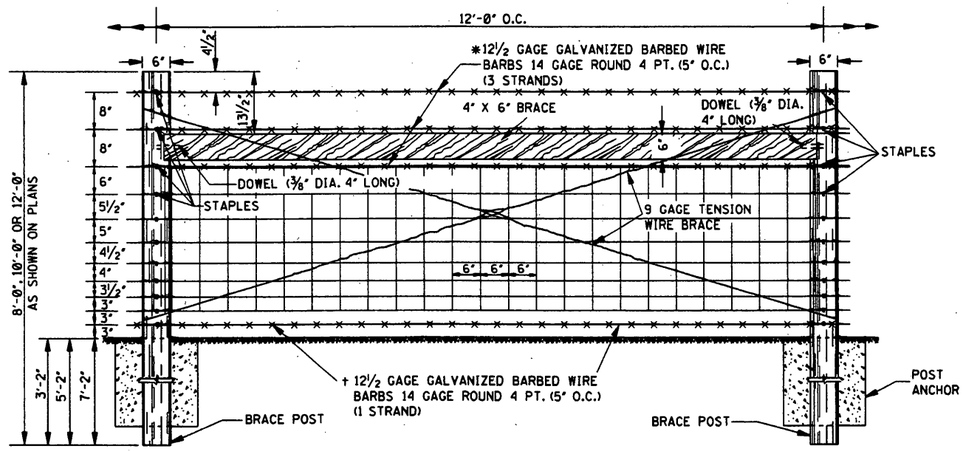
SECTIONS OF TIMBER POSTS



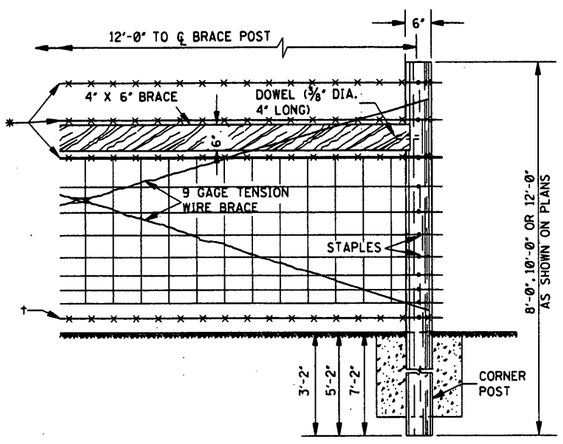
ALTERNATE TYPES OF STAPLES
NOTE: MIN. LENGTH - 1½".



DETAILS OF LINE FENCE AND LINE POSTS



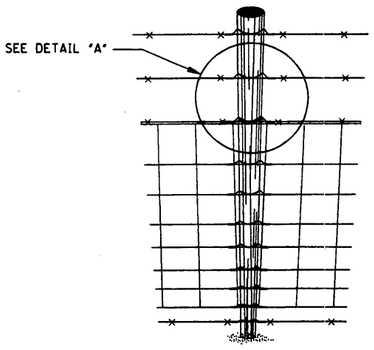
DETAIL OF BRACE BAY



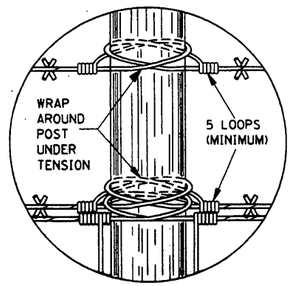
DETAIL OF CORNER BRACE

GENERAL NOTES:

1. LINE POST & BRACE POST DIMENSIONS ARE NOMINAL.
2. AT EACH END, CORNER OR GATE POST, EACH STRAND OF LINE WIRE SHALL BE WRAPPED AROUND THE POST AND SECURELY FASTENED BY WINDING THE END AROUND THE WIRE NEAR THE POST.
3. BRACE BAYS TO BE SPACED 500' APART ON TANGENTS AND 250' APART ON CURVES OR AS DIRECTED BY THE ENGINEER.
4. TENSION WIRES TO BE DOUBLED AND LOOPED, TIGHTENED TO DESIRED TENSION.
5. TENSION WIRES ARE NOT A PAY ITEM. COST TO BE ABSORBED IN UNIT PRICES OF OTHER ITEMS. FENCE WIRE AND TENSION WIRE TO BE STAPLED AT POINTS SHOWN.
6. WOVEN WIRE TO BE DESIGN NUMBER 832-6-11 (ASTM A 116).

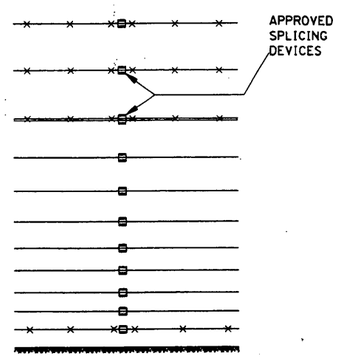


BIRDS-EYE VIEW



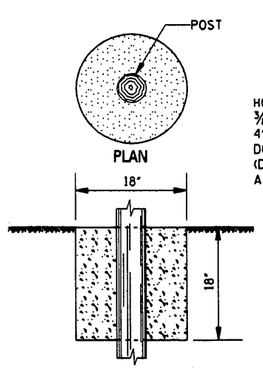
DETAIL "A"

SPLICING DETAILS AT POSTS



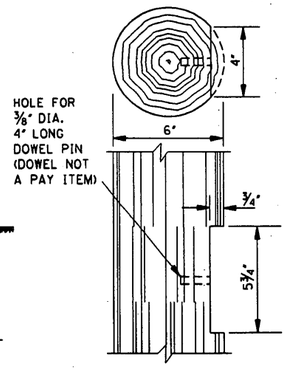
SPLICING DETAILS BETWEEN POSTS

NOTE: APPROVED SPLICING DEVICES FOR BARBED WIRE MAY IN ADDITION, BE PERMITTED AT OTHER LOCATIONS.



POST ANCHOR DETAILS

NOTE: TO BE USED AT BRACE AND CORNER POSTS AND ELSEWHERE OR AS DIRECTED BY THE ENGINEER.



DETAILS OF BRACE JOINT

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FENCE: WOVEN WIRE TIMBER POSTS

BY
REVISION
DATE

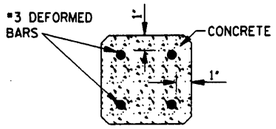
ENGLISH

WORKING NUMBER
WW-1

SHEET NUMBER
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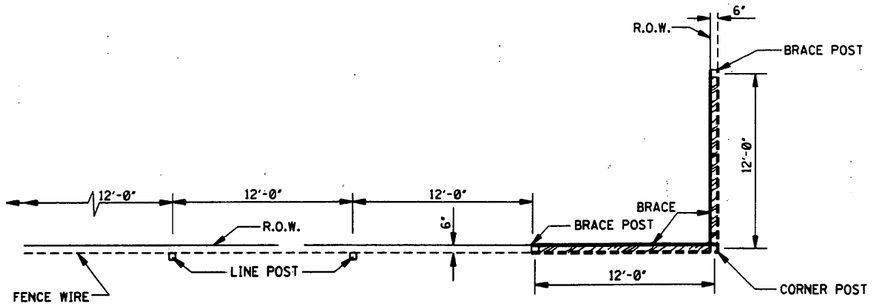
ISSUE DATE: OCTOBER 1, 1998

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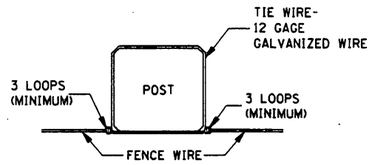


CROSS SECTION OF POSTS

NOTE: LINE POSTS TO BE 4" SQUARE; BRACE AND CORNER POSTS TO BE 6" SQUARE. LINE POSTS REINFORCED WITH 4- #3 DEFORMED BARS 6'-8", 8'-8" OR 9'-8" LONG. BRACE & CORNER POSTS REINFORCED WITH #3 DEFORMED BARS 7'-8", 9'-8" OR 11'-8" LONG. ALL POSTS TO BE CHAMFERED ½".

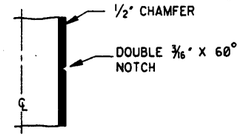


PLAN SHOWING PLACEMENT OF FENCE ALONG RIGHT OF WAY

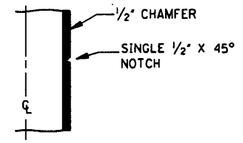


METHOD OF TYING FENCE WIRE TO POSTS

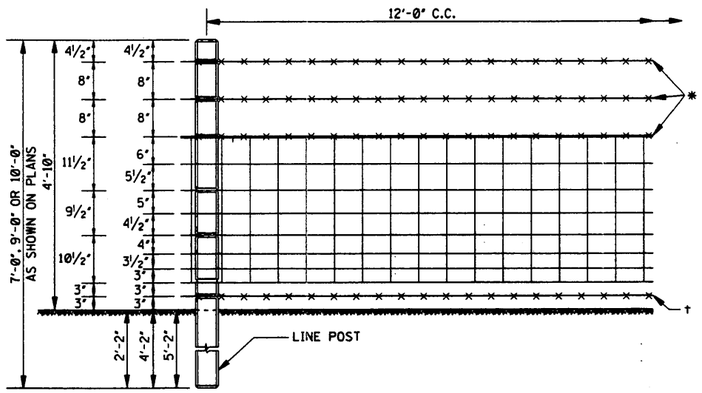
NOTE: TIE WIRE IS NOT A PAY ITEM. COST TO BE ABSORBED IN UNIT PRICES OF OTHER ITEMS. FENCE WIRE TO BE TIED AT ALL TIE NOTCHES.



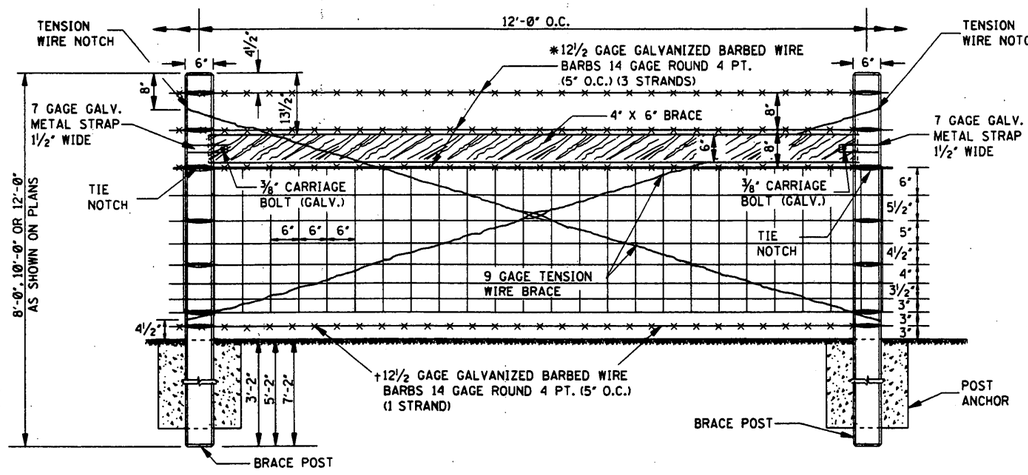
DETAIL OF TIE NOTCH (ALL POSTS)



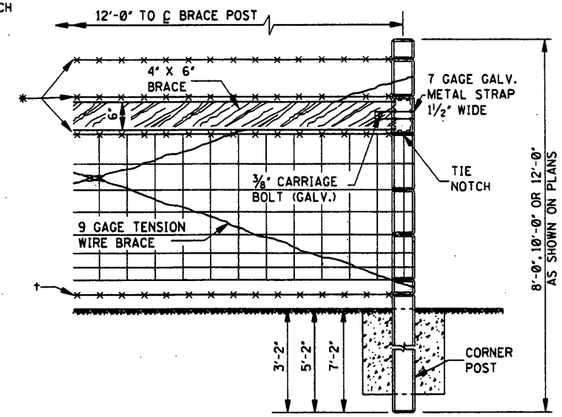
DETAIL OF TENSION WIRE NOTCH (BRACE POSTS AND CORNER POSTS ONLY)



DETAILS OF LINE FENCE AND LINE POSTS



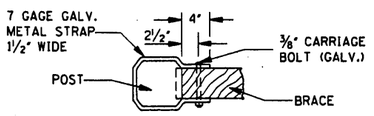
DETAIL OF BRACE BAY



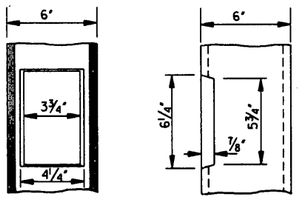
DETAIL OF CORNER BRACE

GENERAL NOTES:

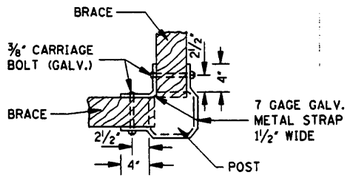
1. THE NOTCHES ON CORNER POSTS TO BE ON ALL FOUR SIDES.
2. BRACE BAYS TO BE SPACED 500' APART ON TANGENTS AND 250' APART ON CURVES OR AS DIRECTED BY THE ENGINEER.
3. TENSION WIRES TO BE DOUBLED AND LOOPED, TIGHTENED TO DESIRED TENSION. TIE NOTCHES ON BRACE POSTS TO BE ON FRONT AND BACK. TENSION WIRE NOTCHES TO BE ON ONE SIDE. TENSION WIRES ARE NOT A PAY ITEM. COST TO BE ABSORBED IN UNIT PRICES OF OTHER ITEMS.
4. WOVEN WIRE TO BE DESIGN NUMBER 832-6-11 (ASTM A 116).
5. BRACE TIMBER DIMENSIONS ARE NOMINAL.



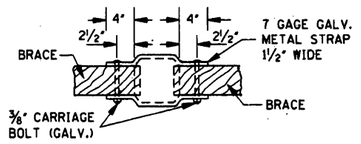
DETAIL OF FASTENER BRACE & END POST



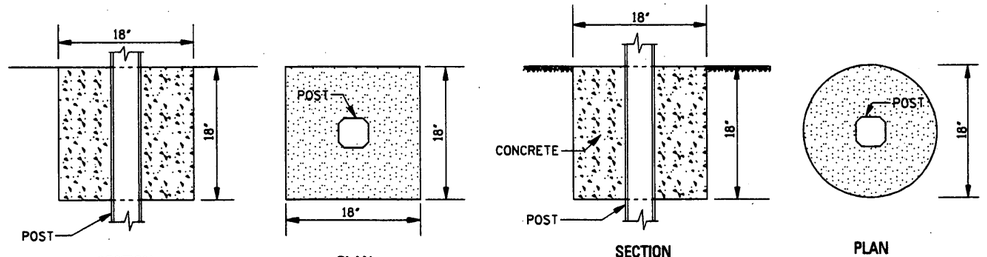
DETAIL OF BRACE JOINT



DETAIL OF FASTENER BRACE TO BRACE AT CORNER



DETAIL OF FASTENER BRACE TO BRACE ON LINE



DETAIL OF POST ANCHOR

NOTE: TO BE USED AT BRACE AND CORNER POSTS AND ELSEWHERE OR AS DIRECTED BY THE ENGINEER.

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

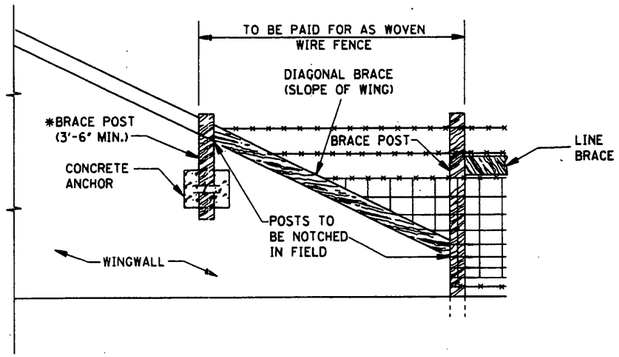
FENCE: WOVEN WIRE CONCRETE POSTS

WORKING NUMBER: WW-2

ISSUE DATE: OCTOBER 1, 1998

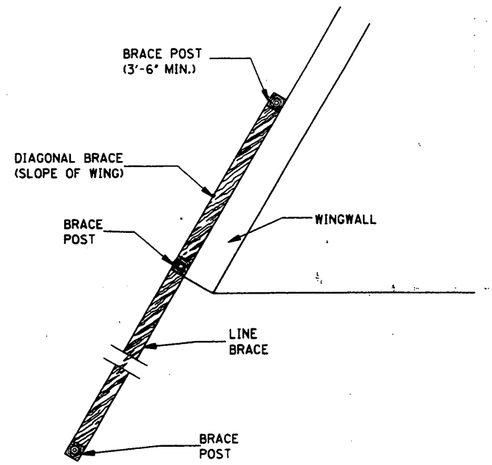
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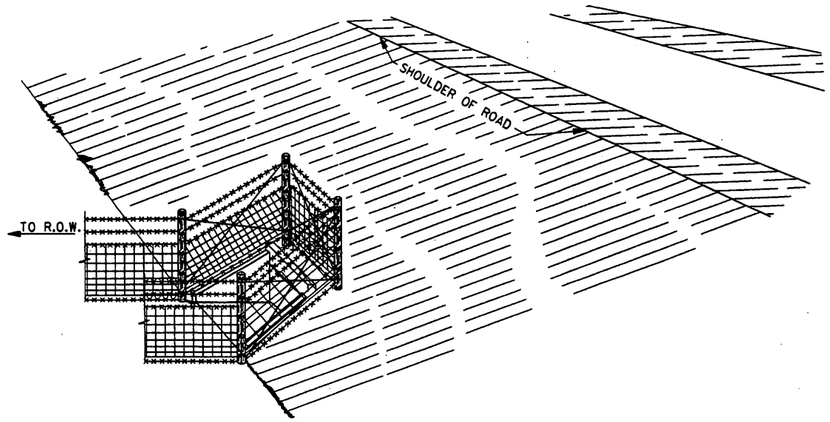


ELEVATION

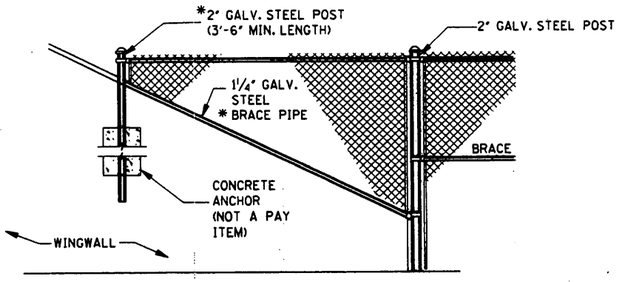
* NOTE: TO BE PAID FOR AS ONE (1) 8'-0" LENGTH BRACE POST AND ONE (1) CONCRETE ANCHOR.



PLAN

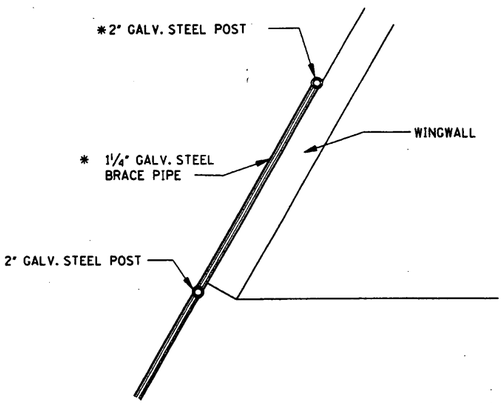


PERSPECTIVE OF FENCE UP AND OVER DRAINAGE STRUCTURE

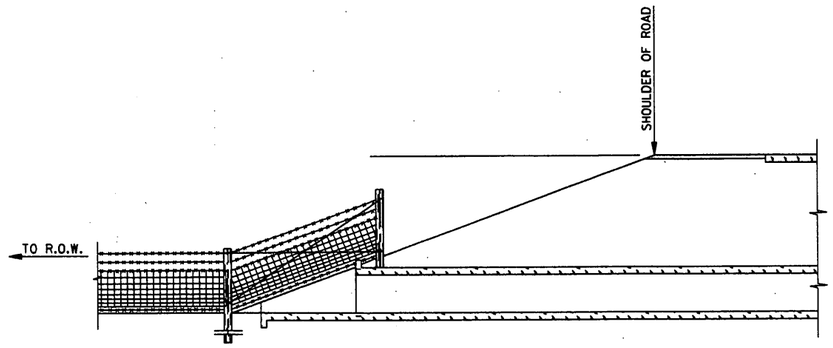


ELEVATION

*NOTES: 1. TO BE PAID FOR AS ONE 7'-0" LENGTH BRACE POST.
2. FOR USE WHEN DRAINAGE STRUCTURE HEIGHT IS 5'-0" OR GREATER AND WHEN IT IS NOT FEASIBLE TO GO UP AND OVER THE DRAINAGE STRUCTURE AS SHOWN ON THIS SHEET.



PLAN



SECTIONAL ELEVATION OF FENCE UP AND OVER DRAINAGE STRUCTURE

NOTE: FOR USE WHEN THE ELEVATION OF THE FENCE POST TOP IS LOWER THAN THE ROADWAY SHOULDER AND WHEN THE NEAREST PORTION OF THE FENCE IS OUTSIDE THE CLEAR ZONE

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FENCE: TYPICAL INSTALLATION AT DRAINAGE STRUCTURES

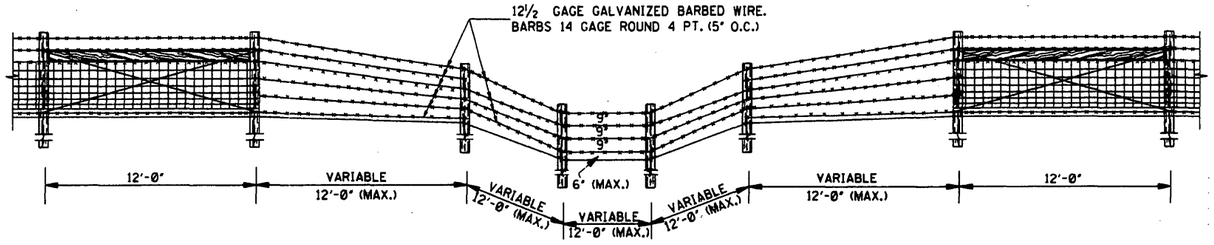
ENGLISH

WORKING NUMBER: FI-2

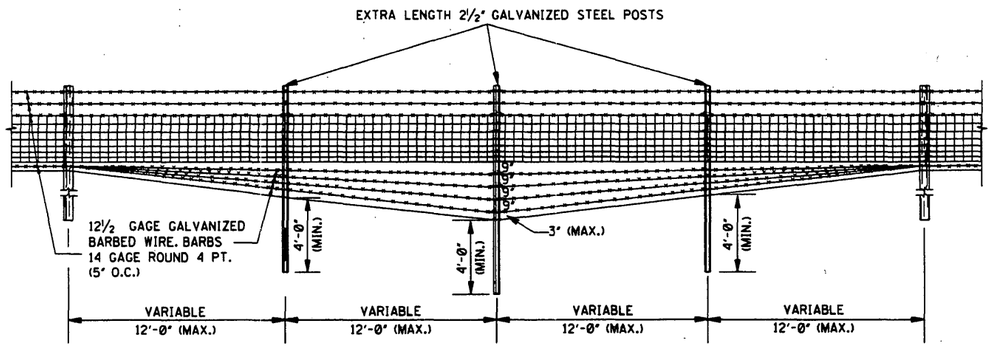
SHEET NUMBER: 165

ISSUE DATE: OCTOBER 1, 1998

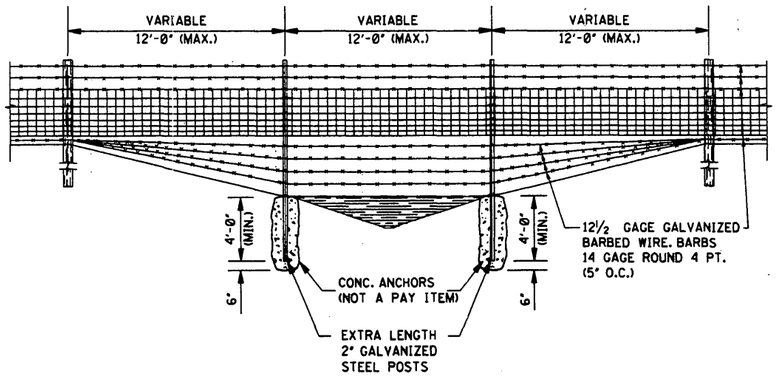
STATE	PROJECT NO.
MISS.	



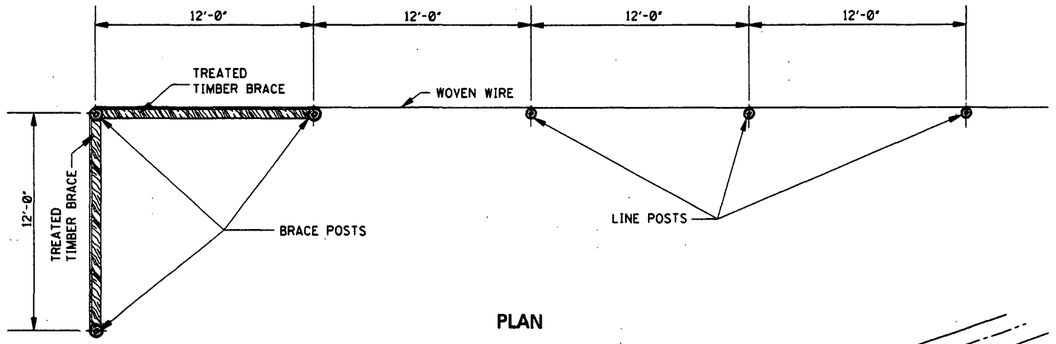
CROSSING TYPE I



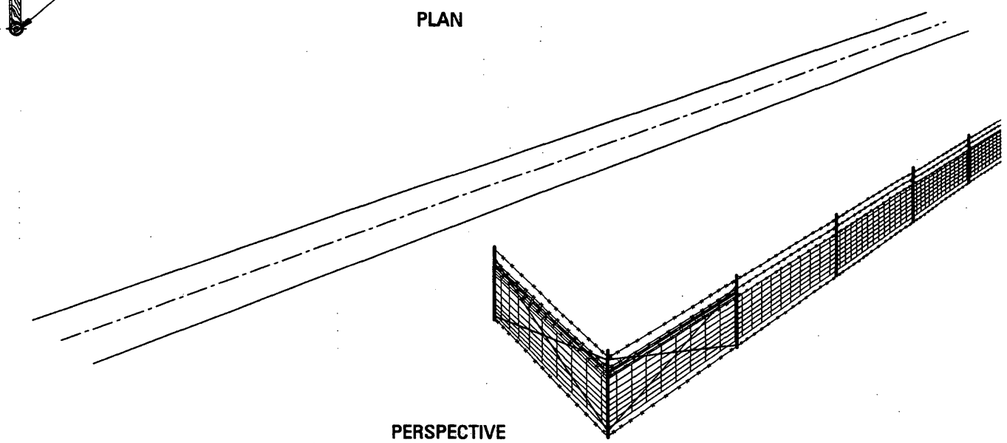
CROSSING TYPE II



CROSSING TYPE III



PLAN



PERSPECTIVE

GENERAL NOTES:

1. THE FENCE SHALL BE TURNED IN AT THE POINT OF "NO ACCESS" AS SHOWN IF THE R.O.W. IS MORE THAN 12'-0" OUTSIDE THE CLEAR ZONE
2. IF THE R.O.W. IS LESS THAN 12'-0" OUTSIDE THE CLEAR ZONE, THE FENCE WILL BE ENDED AT THE POINT OF "NO ACCESS" WITHOUT TURNING IN.
3. THE ILLUSTRATIONS ARE SHOWN FOR WOVEN WIRE FENCE BUT ARE ALSO APPLICABLE TO CHAIN LINK FENCE.
4. THESE INSTALLATION CONDITIONS ARE TYPICAL AND ARE NOT TO BE CONSTRUED AS REPRESENTATIVE OF ALL CONDITIONS WHICH WILL BE ENCOUNTERED. CONSTRUCTION WILL BE VARIED AS REQUIRED OR DIRECTED TO MEET FIELD CONDITIONS.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FENCE: TYPICAL INSTALLATION AT DITCH CROSSINGS AND FENCE ENDINGS

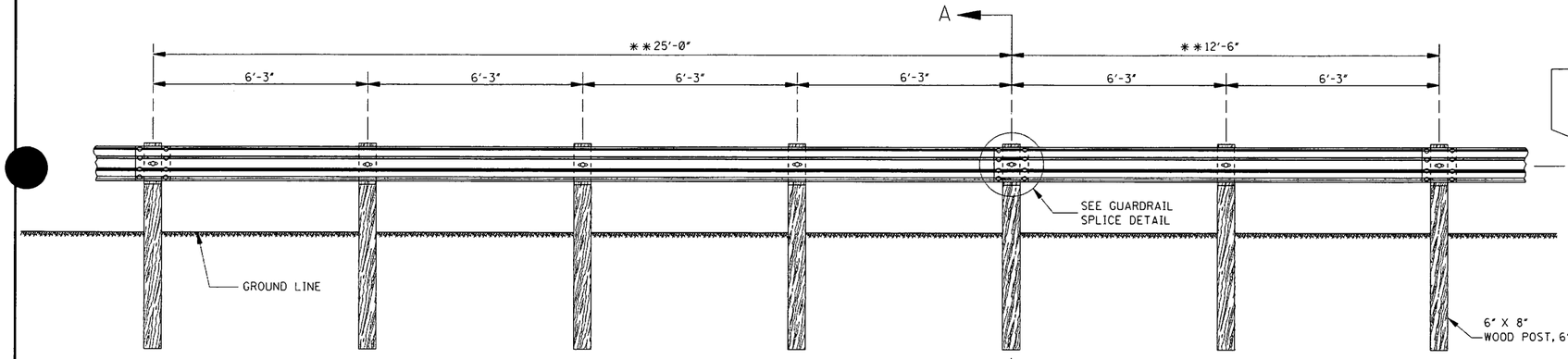
ENGLISH

WORKING NUMBER
FI-3

ISSUE DATE: OCTOBER 1, 1998

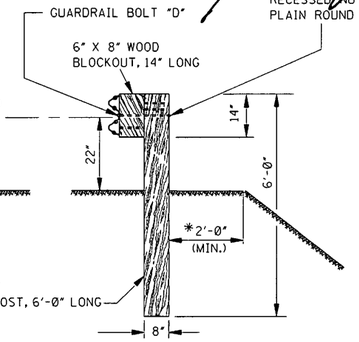
SHEET NUMBER
166

STATE	PROJECT NO.
MISS.	

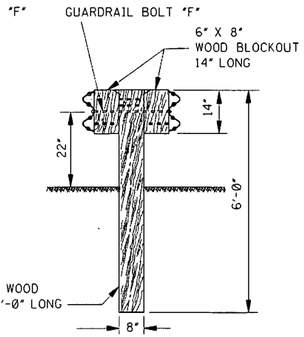


ELEVATION FROM ℄ ROADWAY

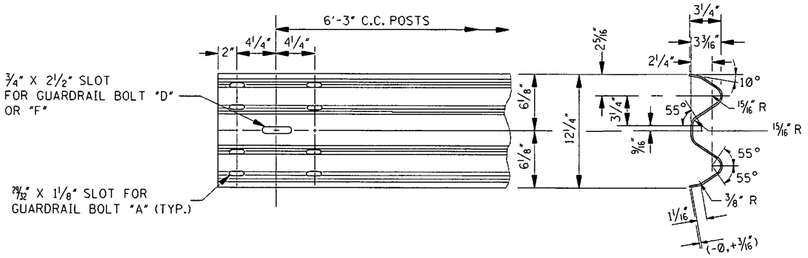
** NOTE: OPTIONAL BEAM LENGTHS.



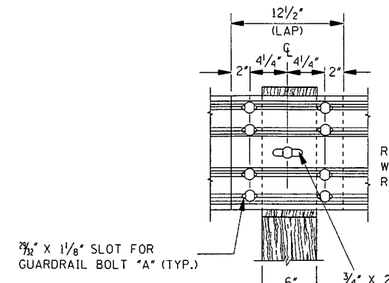
SINGLE-FACED BARRIER



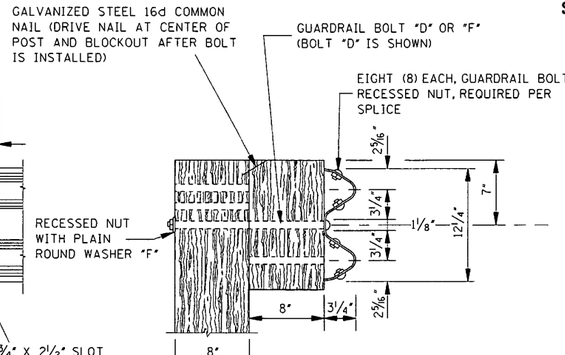
DOUBLE-FACED BARRIER



TYPICAL GUARDRAIL SECTION



ELEVATION



SECTION

GUARDRAIL SPLICE DETAIL

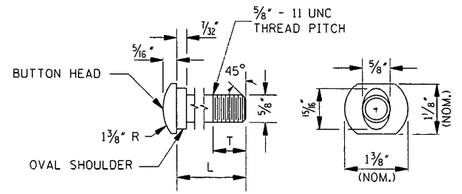
SECTION A–A

* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.

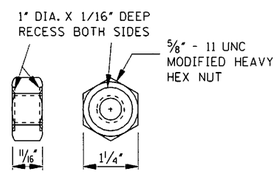
GENERAL NOTES:

1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
5. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

△ 6. OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.



GUARDRAIL BOLT



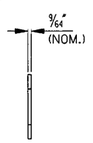
RECESSED NUT

GUARDRAIL BOLTS		
BOLT	L	T (MIN.)
"A"	1¼"	1"
"D"	18"	4"
* "E"	20"	4"
"F"	25"	4"

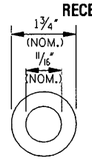
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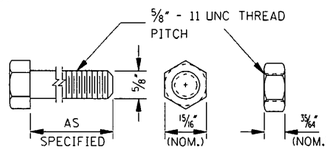
1. ALL GUARDRAIL BOLTS ARE ⅝" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN ¼" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.

* 3. GUARDRAIL BOLT "E" IS USED FOR SINGLE-FACED BARRIER WITH 10" X 10" WOOD POST AND 6" X 8" WOOD BLOCKOUT.



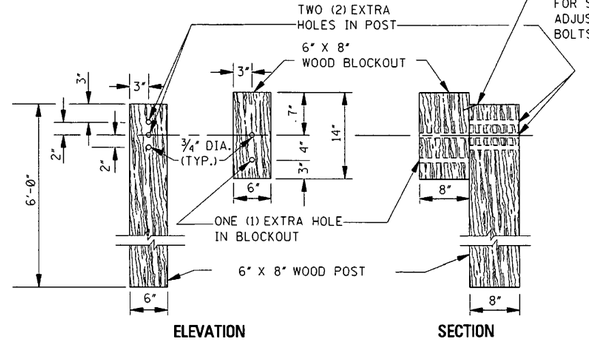
PLAIN ROUND WASHER "F"





HEX NUT AND BOLT "F"

FASTENER DETAILS



ELEVATION **SECTION**

DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY

NOTES:

1. ON INITIAL INSTALLATION, THE BLOCKOUT SHALL BE ATTACHED TO THE BOTTOM HOLE IN THE POST. OTHER HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENT WHEN THE ROADWAY IS RESURFACED.
2. FOR THE SECOND HEIGHT ADJUSTMENT, ONE (1) HEX NUT AND BOLT "F", 18" LONG FOR SINGLE-FACED BARRIER OR 25" LONG FOR DOUBLE-FACED BARRIER, WITH TWO (2) PLAIN ROUND WASHERS "F", ONE (1) UNDER HEAD AND ONE (1) UNDER NUT, ARE REQUIRED PER POST IN ADDITION TO THE STANDARD GUARDRAIL BOLT AND RECESSED NUT.
3. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
4. WOOD POSTS AND BLOCKOUTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
5. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾" IN DIAMETER.

△

DATE	REVISION	BY
5-01-02	ADDED NOTE	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

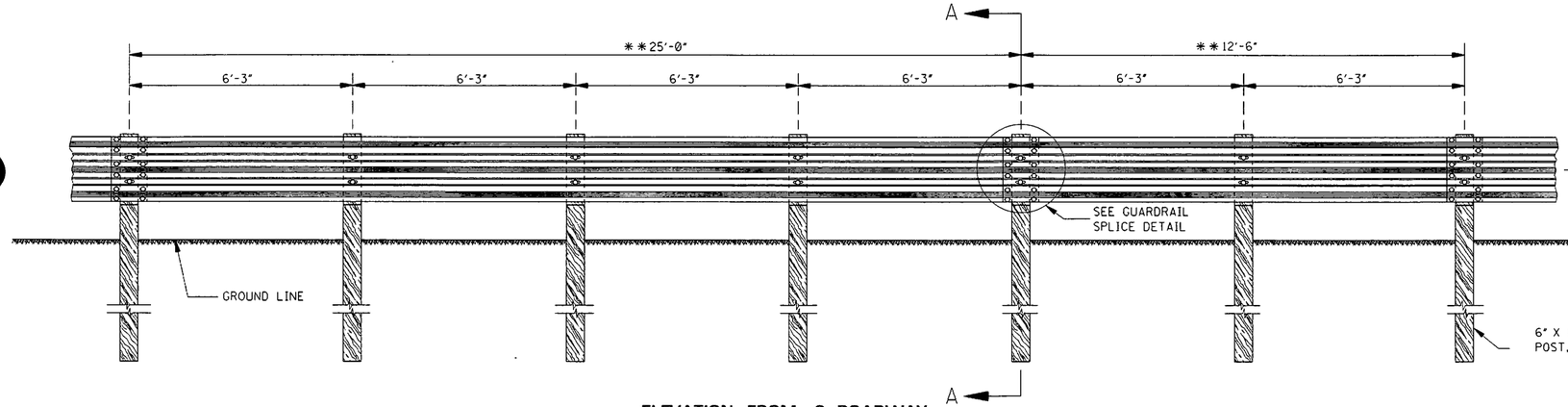
GUARDRAIL: "W" BEAM (WOOD POSTS)

WORKING NUMBER GR-1

SHEET NUMBER 180

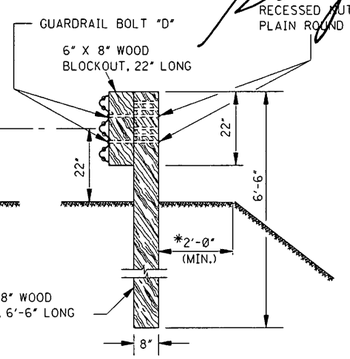
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

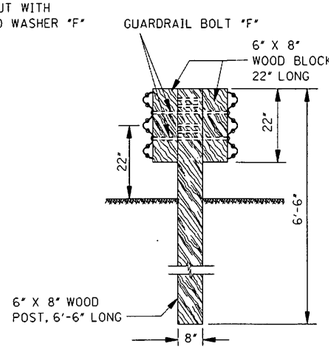


ELEVATION FROM ℄ ROADWAY

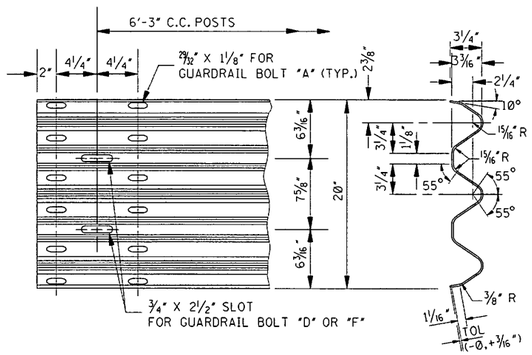
** NOTE: OPTIONAL BEAM LENGTHS.



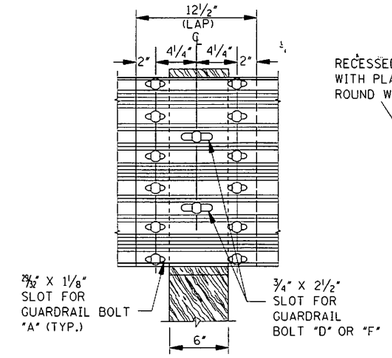
SINGLE-FACED BARRIER



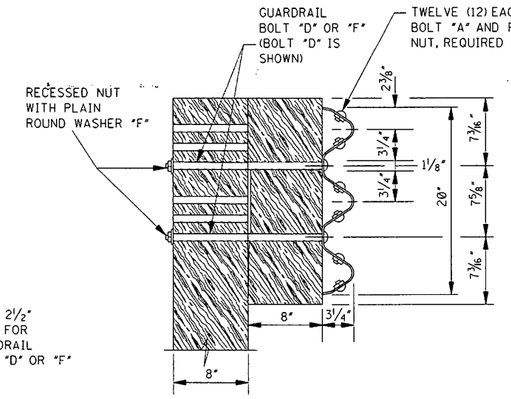
DOUBLE-FACED BARRIER



TYPICAL GUARDRAIL SECTION

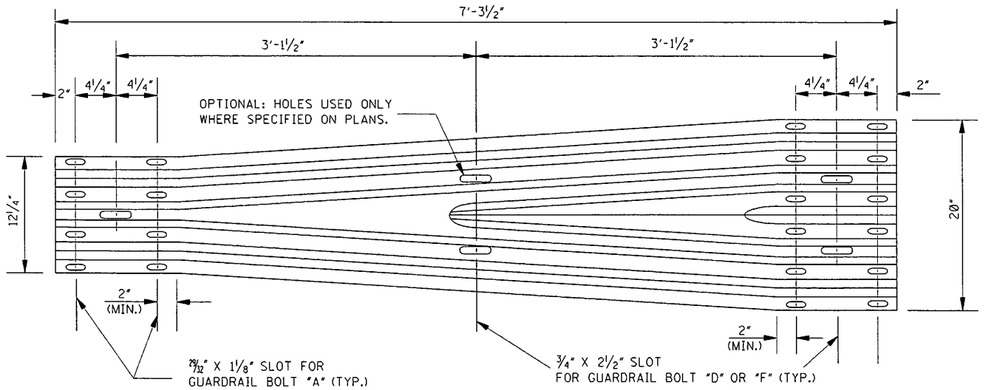


ELEVATION



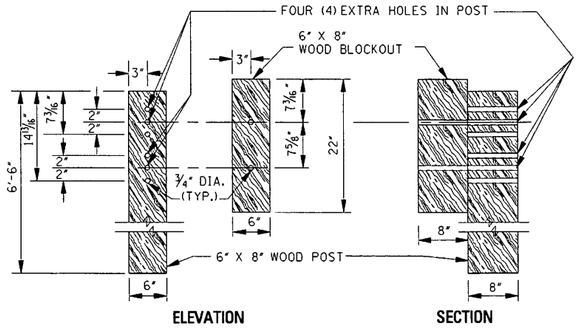
SECTION

GUARDRAIL SPLICE DETAIL



"W" THRIE-BEAM TRANSITION SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THE "W" AND THRIE BEAM ENDS OF THE TRANSITION SECTION ARE THE SAME AS THEIR RESPECTIVE TYPICAL GUARDRAIL SECTIONS.



ELEVATION **SECTION**

DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY

NOTES:

1. ON INITIAL INSTALLATION, THE TOP OF THE BLOCKOUT SHALL BE FLUSH WITH THE TOP OF THE POST. THE ADDITIONAL HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. HOLE DETAILS ARE REQUIRED ON ALL WOOD POSTS AND BLOCKOUTS.
3. WOOD POSTS AND BLOCKOUTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
4. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾" IN DIAMETER.

SECTION A–A

* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.

GENERAL NOTES:

1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
5. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

⚠ 7. OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.

	DATE	REVISION	BY
⚠	3-01-02	ADDED NOTE	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUARDRAIL: THRIE BEAM (WOOD POSTS)

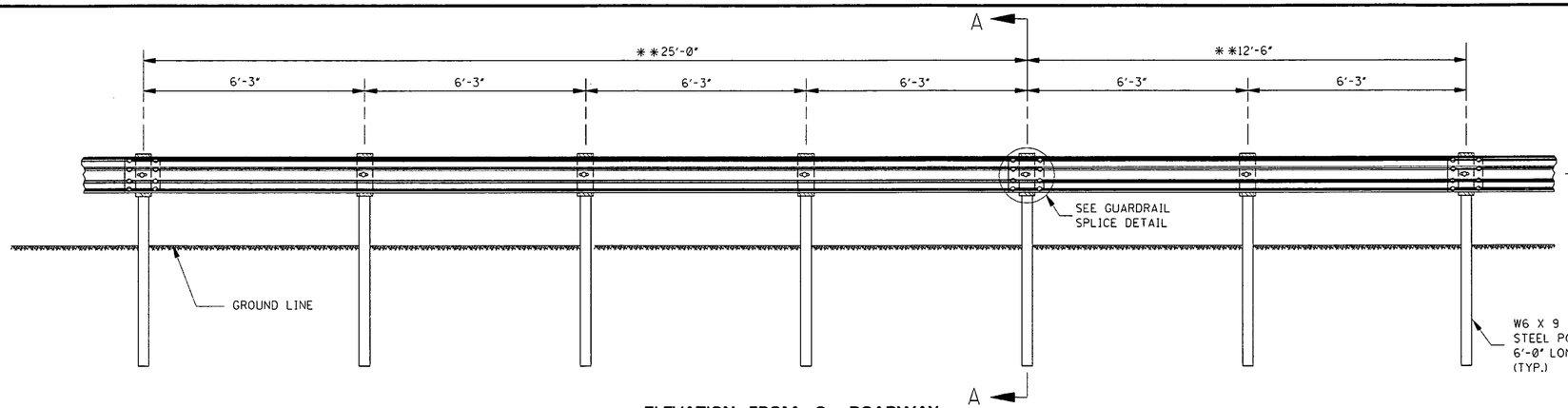
ENGLISH

WORKING NUMBER GR-1A

SHEET NUMBER 181

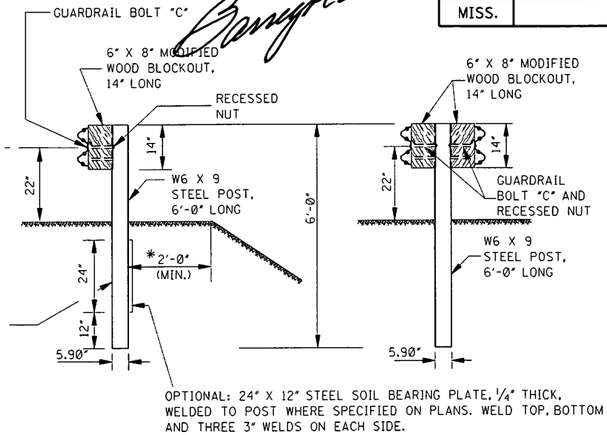
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



ELEVATION FROM ℄ ROADWAY

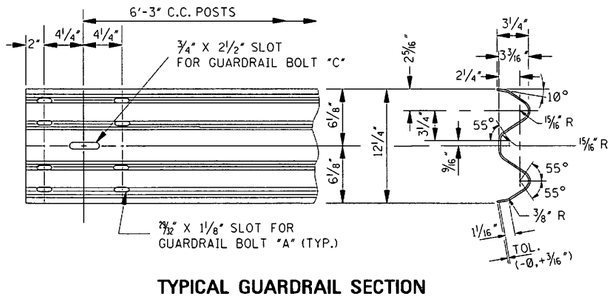
** NOTE: OPTIONAL BEAM LENGTHS.



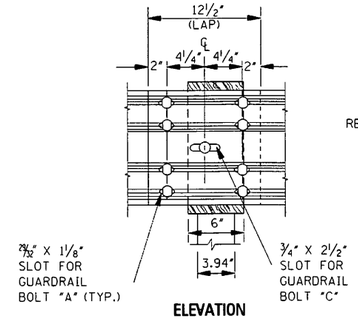
SINGLE-FACED BARRIER **DOUBLE-FACED BARRIER**

SECTION A-A

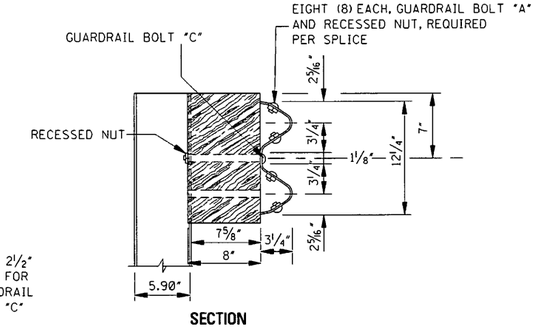
* NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.



TYPICAL GUARDRAIL SECTION

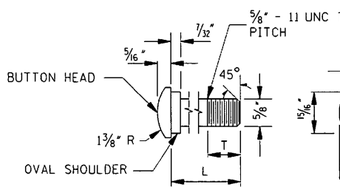


ELEVATION

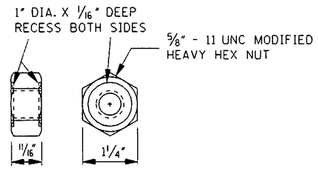


SECTION

GUARDRAIL SPLICE DETAIL

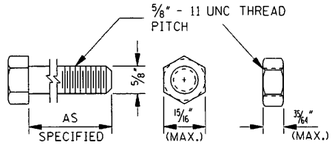


GUARDRAIL BOLT



RECESSED NUT

GUARDRAIL BOLTS		
BOLT	L	T (MIN.)
"A"	1 1/4"	1"
"B"	2"	1 3/4"
"C"	10"	4"

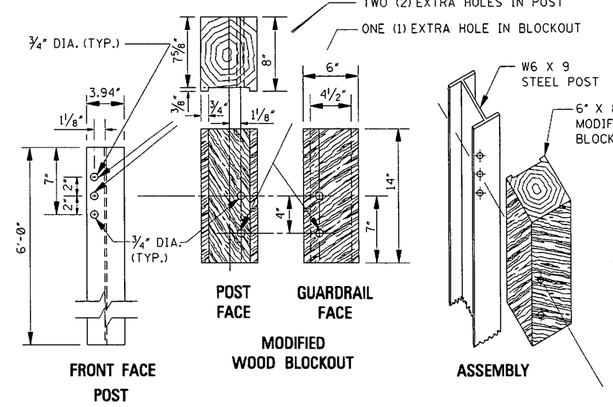


HEX NUT AND BOLT "F"

NOTES:

1. ALL GUARDRAIL BOLTS ARE 5/8" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN 1/4" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.

FASTENER DETAILS



DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY

NOTES:

1. ON INITIAL INSTALLATION, THE MODIFIED WOOD BLOCKOUT SHALL BE FASTENED TO THE BOTTOM HOLE IN THE STEEL POST. OTHER HOLES IN THE STEEL POST AND THE MODIFIED WOOD BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. AN ADDITIONAL GUARDRAIL BOLT "C" AND RECESSED NUT IS REQUIRED FOR THE SECOND HEIGHT ADJUSTMENT.
3. HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND MODIFIED WOOD BLOCKOUTS.
4. STEEL POSTS ARE FABRICATED FROM W6 X 9 STRUCTURAL STEEL SHAPES.
5. MODIFIED WOOD BLOCKOUTS ARE FABRICATED FROM 6" X 8" TREATED TIMBER UNLESS SPECIFIED OTHERWISE ON THE PLANS.
6. ALL HOLES IN BOTH STEEL POSTS AND MODIFIED WOOD BLOCKOUTS ARE 3/4" IN DIAMETER.

GENERAL NOTES:

1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. STEEL POSTS SHALL CONFORM TO AASHTO M 183/M 183M OR ASTM A 769/A 769M (EXCEPT ULTRASONIC TESTING). THEY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 EXCEPT WHEN CORROSION RESISTANT STEEL IS REQUIRED IN WHICH CASE POSTS SHALL CONFORM TO AASHTO M 222/M 222M AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING, DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
5. ALL MODIFIED WOOD BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

△7. OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.

△			
		S.W.R.	BY
3-01-02	ADDED NOTE		REVISION
DATE			

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUARDRAIL: "W" BEAM (STEEL POSTS)

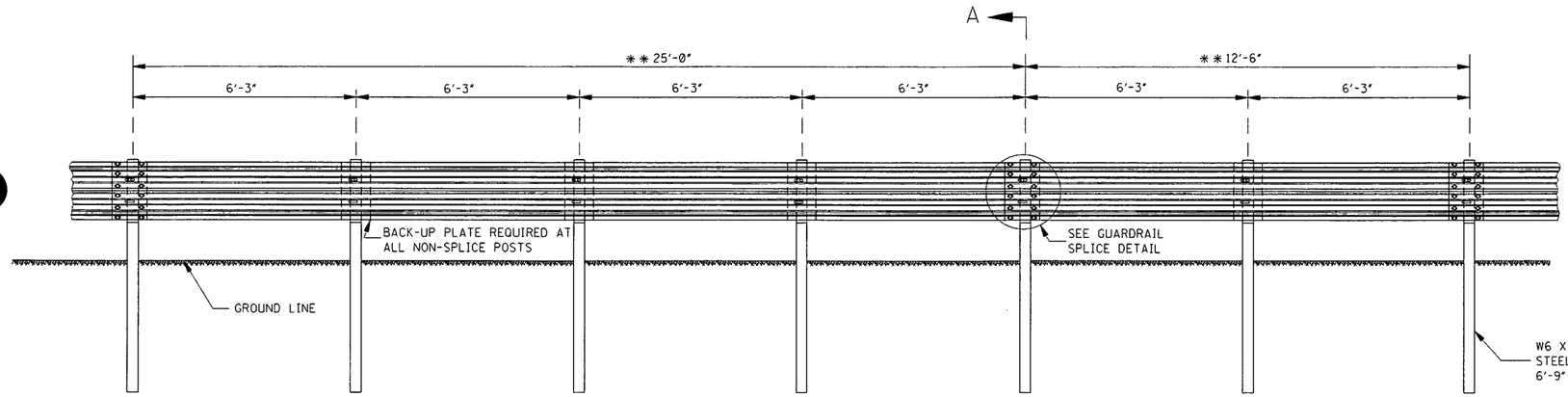
DEPARTMENT OF TRANSPORTATION ENGLISH MISSISSIPPI

WORKING NUMBER GR-1B

SHEET NUMBER 182

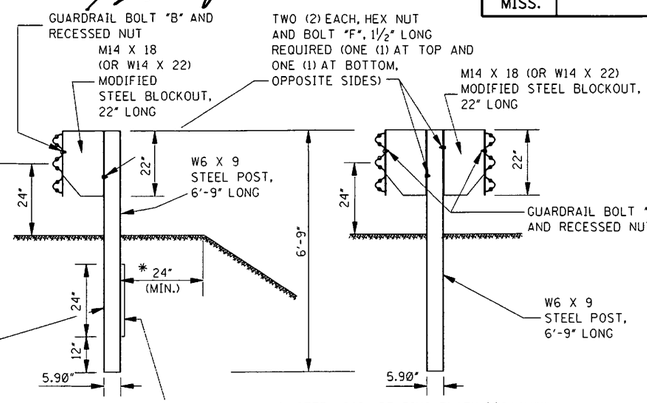
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



ELEVATION FROM ℄ ROADWAY

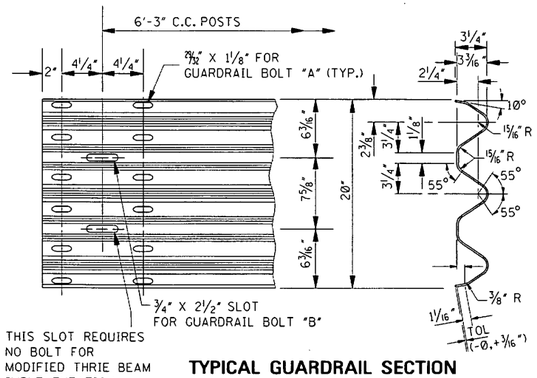
** NOTE: OPTIONAL BEAM LENGTHS.



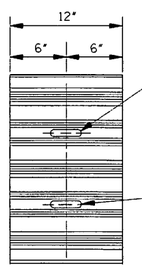
SINGLE-FACED BARRIER **DOUBLE-FACED BARRIER**

SECTION A-A

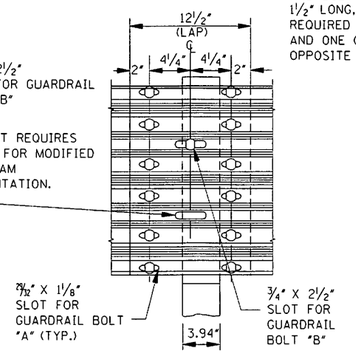
*NOTE: UNLESS SPECIFIED OTHERWISE ON THE PLANS.



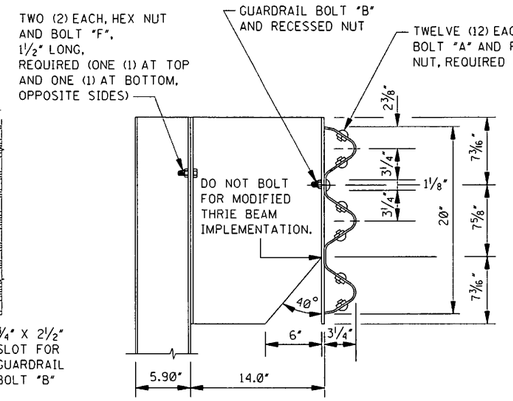
TYPICAL GUARDRAIL SECTION



BACK-UP PLATE

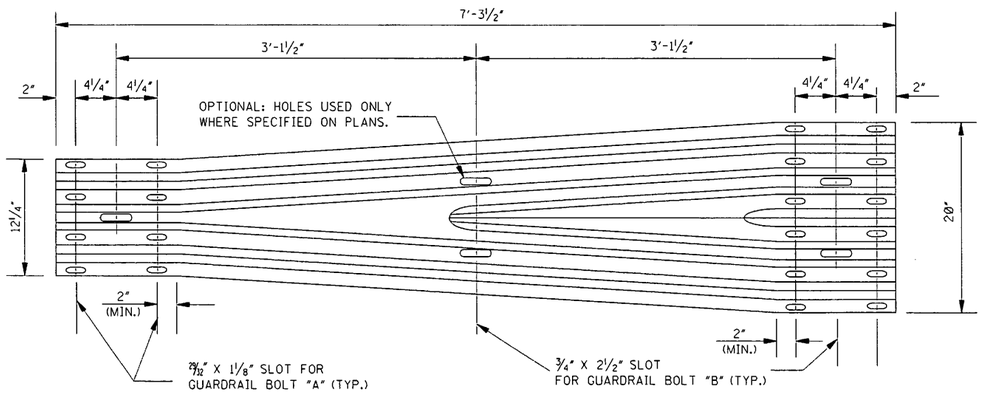


ELEVATION



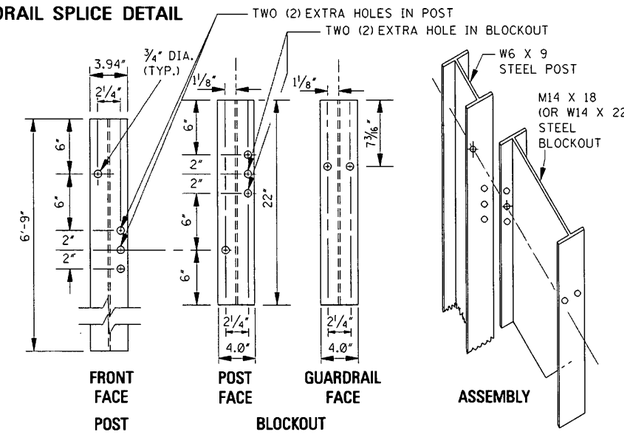
SECTION

GUARDRAIL SPLICE DETAIL



"W" THRIE-BEAM TRANSITION SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THE "W" AND THRIE BEAM ENDS OF THE TRANSITION SECTION ARE THE SAME AS THEIR RESPECTIVE TYPICAL GUARDRAIL SECTIONS.



DETAILS OF ADJUSTABLE HEIGHT BLOCKOUT ASSEMBLY

NOTES:

1. ON INITIAL INSTALLATION, THE TOP HOLE IN THE BLOCKOUT SHALL BE FASTENED TO THE TOP HOLE IN THE POST. OTHER HOLES IN THE POST AND BLOCKOUT ARE FOR FUTURE 2" HEIGHT ADJUSTMENTS WHEN THE ROADWAY IS RESURFACED.
2. HOLE DETAILS ARE REQUIRED ON ALL STEEL POSTS AND BLOCKOUTS.
3. STEEL POSTS AND BLOCKOUTS ARE FABRICATED FROM W6 X 9 AND M14 X 18 (OR W14 X 22) STRUCTURAL STEEL SHAPES, RESPECTIVELY.
4. ALL HOLES IN BOTH POSTS AND BLOCKOUTS ARE ¾" IN DIAMETER.

GENERAL NOTES:

1. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
2. GUARDRAIL SHALL BE SINGLE FACED UNLESS OTHERWISE DESIGNATED.
3. GUARDRAIL SECTIONS SHALL BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW FOR THE LANE NEAREST THE GUARDRAIL. THE ONLY EXCEPTION NOTED IS THAT GUARDRAIL IS TO BE LAPPED FOR APPROACHING TRAFFIC ON A BRIDGE WITH 2-WAY TRAFFIC.
4. POSTS AND BLOCKOUTS SHALL CONFORM TO AASHTO M 183M/M 183 OR ASTM A 769/A 769M (EXCEPT ULTRASONIC TESTING). THEY SHALL BE GALVANIZED IN ACCORDANCE WITH AASHTO M 111 EXCEPT WHEN CORROSION RESISTANT STEEL POSTS ARE REQUIRED IN WHICH CASE BOTH POSTS AND BLOCKOUTS SHALL CONFORM TO AASHTO M 222/M 222M AND SHALL NOT BE PAINTED OR GALVANIZED. NO PUNCHING DRILLING OR CUTTING WILL BE PERMITTED AFTER GALVANIZING EXCEPT FOR HOLES TO MOUNT GUARDRAIL DELINEATORS.
5. BACK-UP PLATE REQUIRED AT ALL NON-SPLICE POSTS.
6. FOR FASTENER DETAILS NOT FOUND ON THIS SHEET, SEE SHEET GR-1B.
7. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS & RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FORCE NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

⚠8. OTHER POSTS AND/OR BLOCKOUTS THAT HAVE MET THE REQUIREMENTS OF THE LATEST INDUSTRY GUIDELINES AND HAVE RECEIVED LETTERS OF APPROVAL FROM THE FEDERAL HIGHWAY ADMINISTRATION AND MISSISSIPPI DEPARTMENT OF TRANSPORTATION MAY BE USED IN LIEU OF THE POST AND BLOCKOUT SHOWN ON THIS STANDARD.

DATE	REVISION	BY
3-01-02	ADDED NOTE 8	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUARDRAIL: MODIFIED THRIE BEAM (STEEL POSTS)

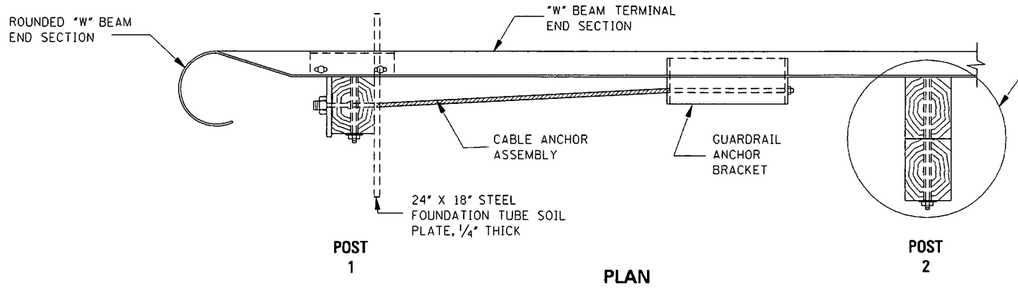
ENGLISH

WORKING NUMBER: GR-1C

SHEET NUMBER: 183

ISSUE DATE: OCTOBER 1, 1998

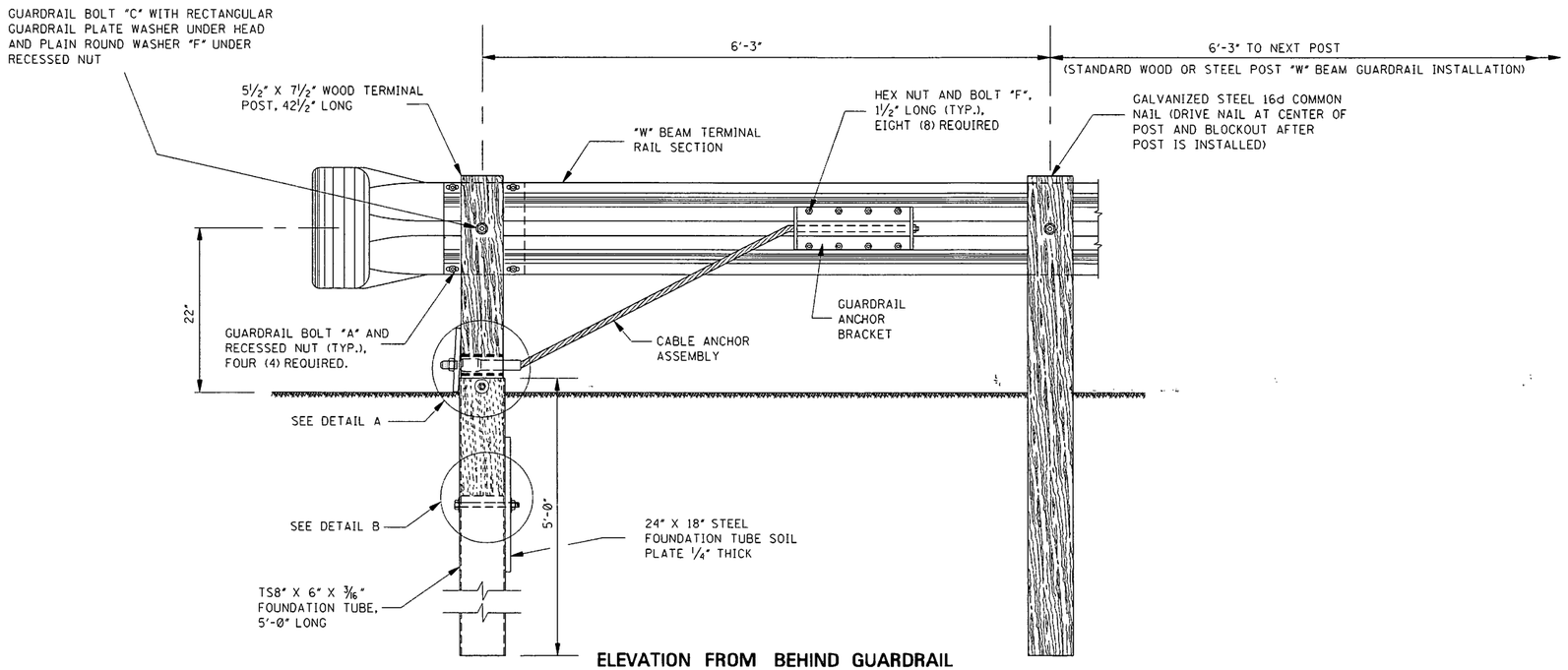
STATE	PROJECT NO.
MISS.	



PLAN

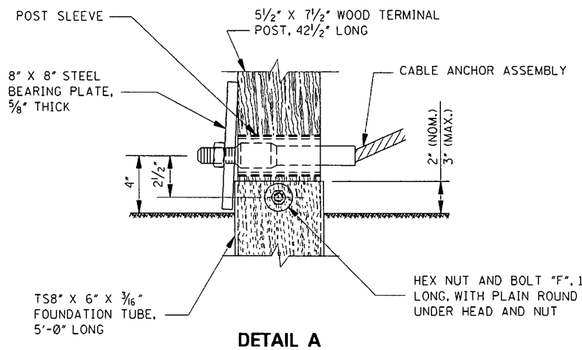
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:

1. WOOD POST INSTALLATION (SHOWN)
   "W" BEAM TERMINAL RAIL SECTION, 6" X 8" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 5'-4" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
2. STEEL POST INSTALLATION
   "W" BEAM TERMINAL RAIL SECTION, 6" X 8" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.

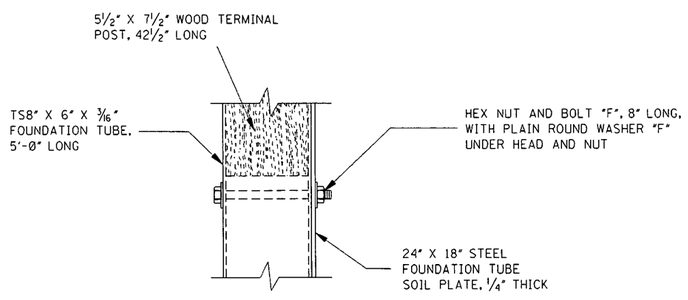


ELEVATION FROM BEHIND GUARDRAIL

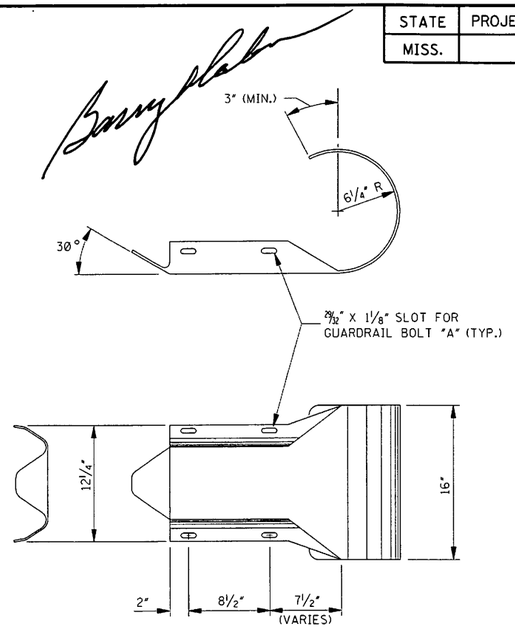
NOTE: ANCHOR CABLE SHALL BE TAUT.



DETAIL A



DETAIL B



ROUNDED "W" BEAM END SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.

GENERAL NOTES:

1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
2. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
3. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
4. FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW. ⚠
5. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
6. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

BY	REVISION NOTE	DATE
S.W.R.	REVISE NOTE	3-01-02

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUARDRAIL: TYPE 1 CABLE ANCHORAGE (FOUNDATION TUBE)

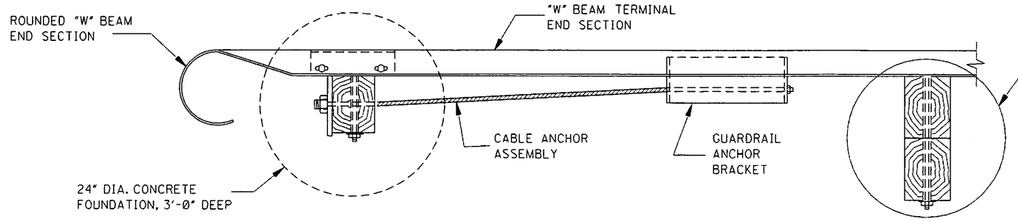
ENGLISH

WORKING NUMBER GR-3

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 192

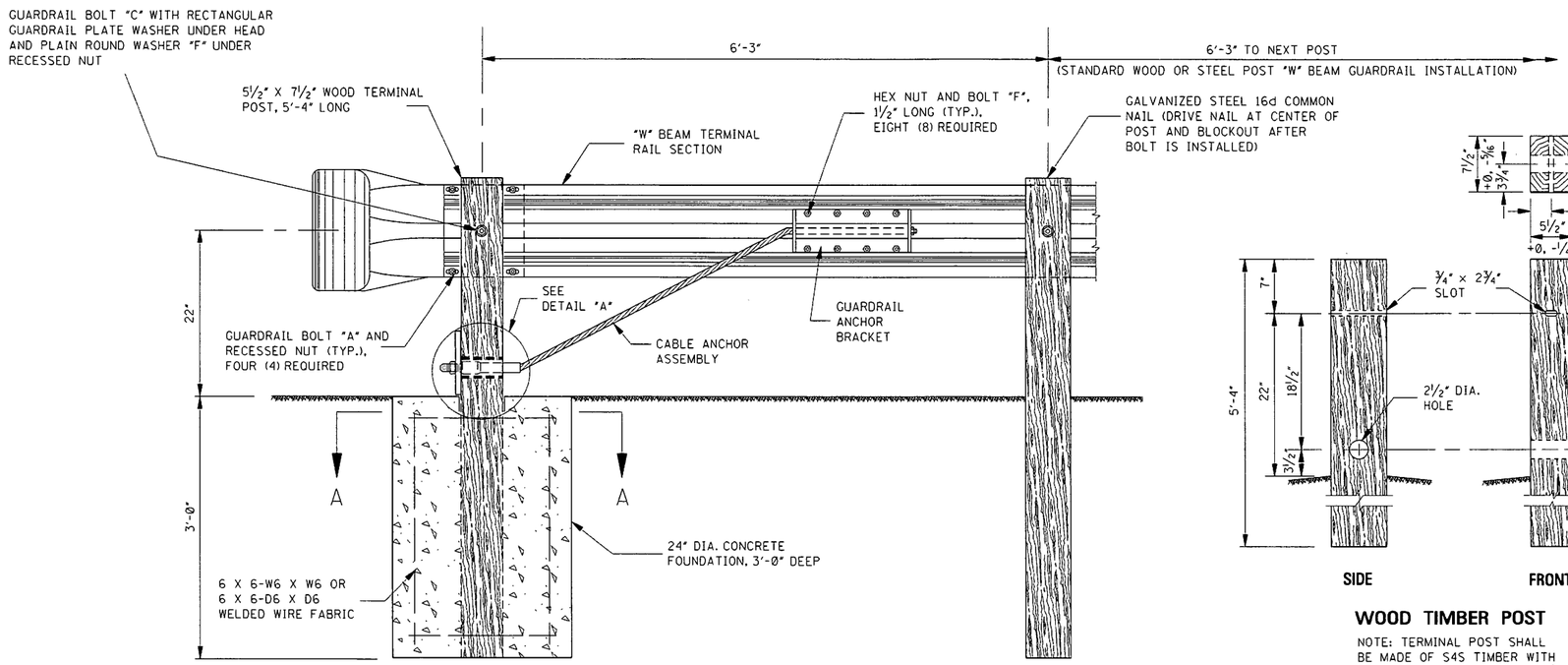
STATE	PROJECT NO.
MISS.	



PLAN

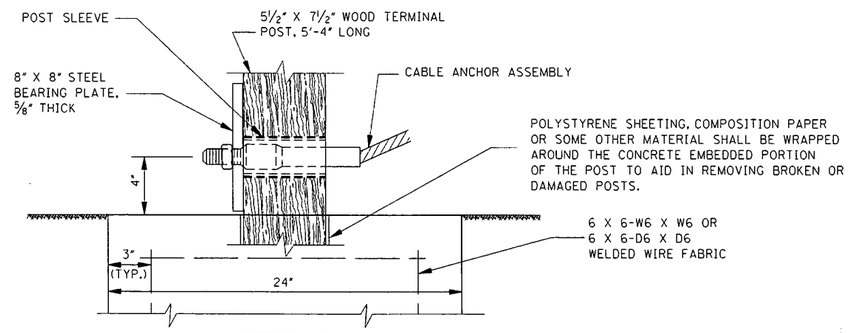
NOTE: THE "POST 2" ASSEMBLY DEPENDS ON WHETHER THE TRAILING END TERMINAL IS ATTACHED TO THE STANDARD WOOD OR STEEL POST "W" BEAM GUARDRAIL INSTALLATION AS FOLLOWS:

1. WOOD POST INSTALLATION (SHOWN)
   "W" BEAM TERMINAL RAIL SECTION, 6" X 8" WOOD BLOCKOUT, 14" LONG, AND 6" X 8" WOOD POST, 5'-4" LONG, ATTACHED WITH GUARDRAIL BOLT "D" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER HEAD AND PLAIN ROUND WASHER "F" UNDER RECESSED NUT.
2. STEEL POST INSTALLATION
   "W" BEAM TERMINAL RAIL SECTION, 6" X 8" MODIFIED WOOD BLOCKOUT, 14" LONG, AND W6 X 9 STEEL POST, 6'-0" LONG, ATTACHED WITH GUARDRAIL BOLT "C" AND RECESSED NUT. INSTALL RECTANGULAR GUARDRAIL PLATE WASHER UNDER GUARDRAIL BOLT HEAD.



ELEVATION FROM BEHIND GUARDRAIL

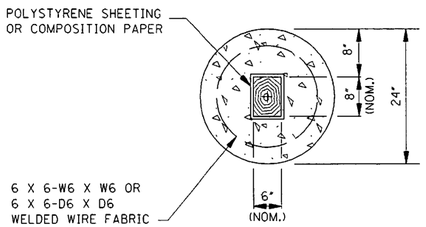
NOTE: ANCHOR CABLE SHALL BE TAUT.



DETAIL A

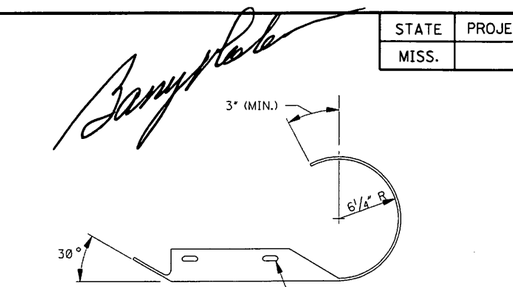
WOOD TIMBER POST

NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lb/in².



SECTION A–A

NOTE: FORM A NOMINAL 6" X 8" SOCKET IN THE FOUNDATION TO RECEIVE THE 5½" X 7½" TIMBER POST. FORM HOLE WITH ½" THICK POLYSTYRENE FOAM SHEETING OR WRAP THE TIMBER POST IN A DOUBLE LAYER OF COMPOSITION PAPER. THE LAYER OF SHEETING OR PAPER WILL AID IN REMOVING A DAMAGED POST.



ROUNDED "W" BEAM END SECTION

NOTE: THE CROSS-SECTIONAL DIMENSIONS FOR THIS PART ARE TO FIT OVER THE STANDARD "W" BEAM SECTION.

GENERAL NOTES:

1. THIS ANCHORAGE MAY ONLY BE USED ON THE TRAILING END OF A BARRIER WHICH IS NOT EXPOSED TO VEHICULAR IMPACT.
2. GUARDRAIL SHALL MEET THE REQUIREMENTS OF AASHTO M 180, CLASS A, TYPE 1 UNLESS OTHERWISE DESIGNATED.
3. ALL WOOD POSTS AND BLOCKOUTS SHALL BE TREATED TIMBER IN ACCORDANCE WITH MISSISSIPPI DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS.
4. CONCRETE FOR THE CONCRETE FOUNDATION MAY BE EITHER CLASS "B" STRUCTURAL CONCRETE OR AN APPROVED COMMERCIAL PRE-MIXED BAG CONCRETE. THE WELDED WIRE FABRIC FOR THE CONCRETE FOUNDATION SHALL CONFORM TO AASHTO M 221/M 221M AND AASHTO M 55M/M 55.
5. FOR DETAILS OF HARDWARE AND COMPONENTS NOT FOUND ON THIS SHEET, SEE SHEET GR-HW. ⚠
6. DETAILS PERTINENT TO THE STANDARD INSTALLATION OF "W" BEAM SECTIONS WILL BE FOUND ON SHEET GR-1, FOR WOOD POSTS, AND GR-1B, FOR STEEL POSTS.
7. FOR OTHER DETAILS OF POSTS, POST ACCESSORIES, FASTENERS AND RAIL ELEMENTS, SEE AASHTO-AGC-ARTBA JOINT TASK FOR NO. 13, TITLED "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE," LATEST EDITION.

DATE	REVISION NOTE	BY
3-01-02	REVISE NOTE	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUARDRAIL: TYPE 1 CABLE ANCHORAGE (CONCRETE FOOTING)

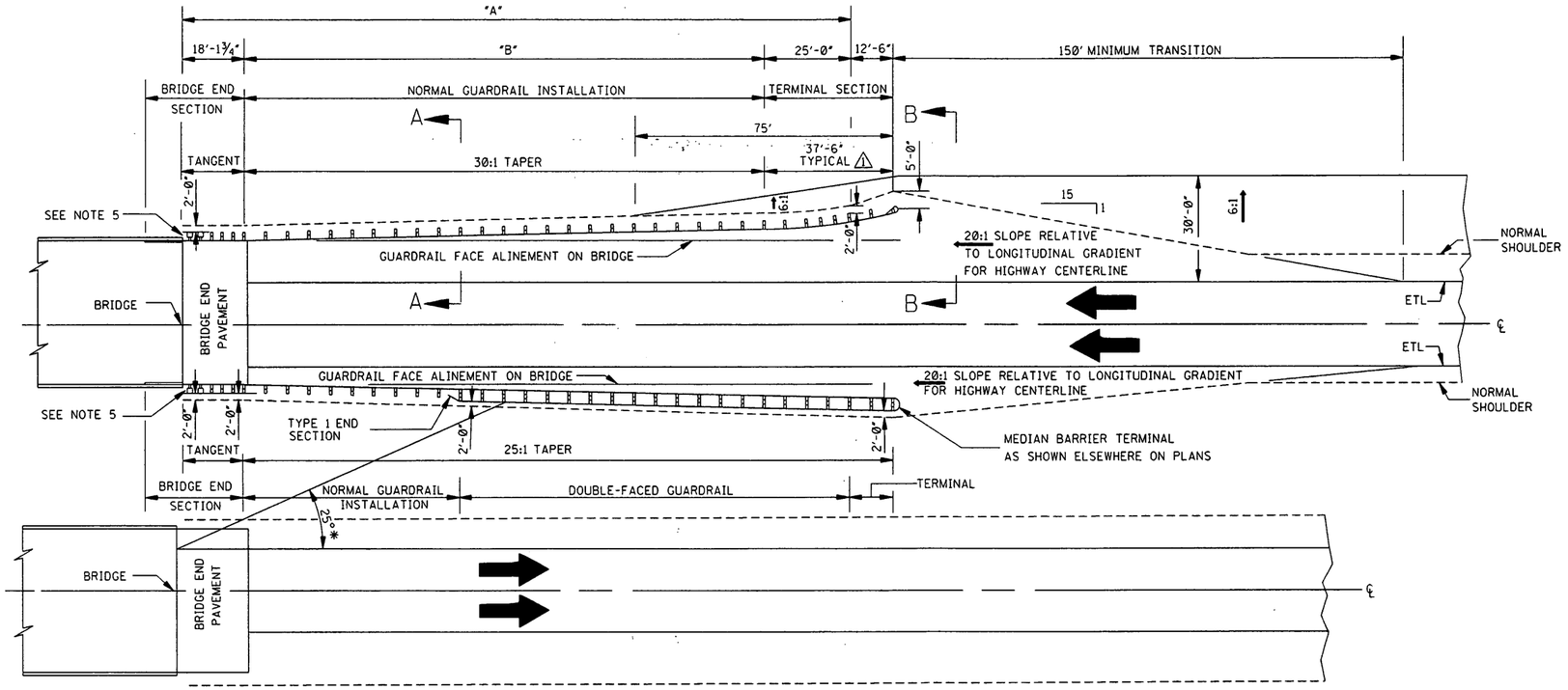
ENGLISH

WORKING NUMBER GR-3A

ISSUE DATE: OCTOBER 1, 1998

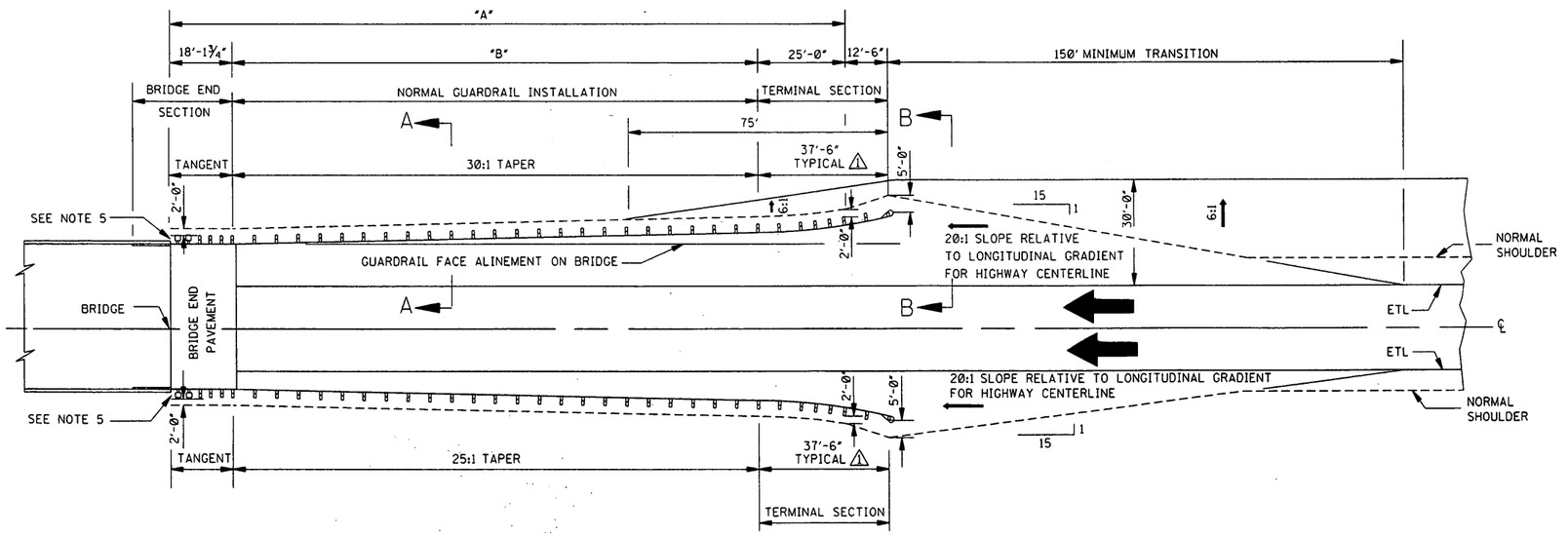
SHEET NUMBER 193

STATE	PROJECT NO.
MISS.	

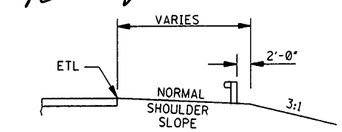


DIVIDED HIGHWAY WITH BARRIER INSIDE CLEAR ZONE OF OPPOSING TRAFFIC

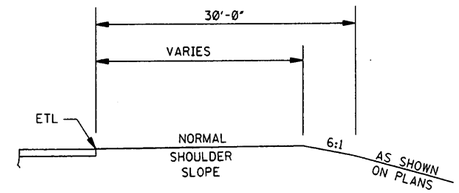
*NOTE: THE 25° LINE IS USED TO DETERMINE THE LIMITS OF MEDIAN BARRIER AS SHOWN.



DIVIDED HIGHWAY WITH BARRIER OUTSIDE CLEAR ZONE OF OPPOSING TRAFFIC



SECTION A–A



SECTION B–B

GENERAL NOTES:

1. VALUES FOR "A" AND "B" WILL BE SHOWN ELSEWHERE ON THE PLANS.
2. ⚠ FOR DETAILS PERTINENT TO INSTALLATION OF THE TERMINAL SECTION, SEE MANUFACTURER'S SPECIFICATIONS AND DRAWINGS OR ELSEWHERE ON PLANS
3. GUARDRAIL SECTIONS ARE TO BE LAPPED IN THE DIRECTION OF TRAFFIC FLOW NEAREST THE GUARDRAIL FACE.
4. THE OVERALL LENGTH OF GUARDRAIL IS MEASURED FROM THE CONNECTING END ON THE BRIDGE.
5. THE SHOULDER WIDTH AT THE BRIDGE END SHALL BE SUFFICIENTLY WIDE TO PROVIDE A MINIMUM OF 2'-0" BEHIND THE BACK OF POST BEFORE THE SLOPE BREAK (HINGEPOINT).
6. TYPE, DETAILS AND LIMITS OF GUARDRAIL BRIDGE END SECTION WILL BE SHOWN ELSEWHERE ON THE PLANS.

DATE	REVISED NOTE	BY
12-1-98	REVISION	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

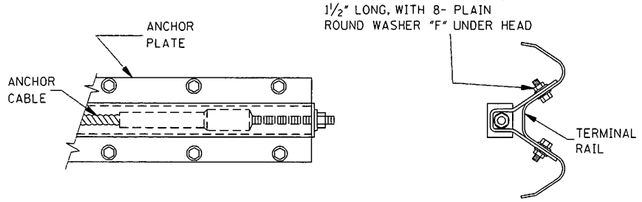
GUARDRAIL: TYPICAL INSTALLATION AT BRIDGE APPROACHES FOR DIVIDED HIGHWAYS

WORKING NUMBER GR-4

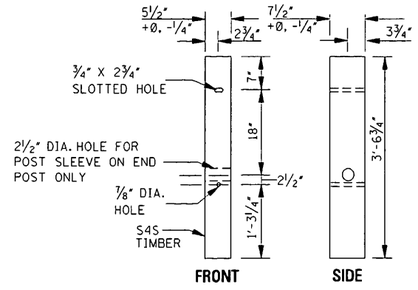
SHEET NUMBER 194

ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

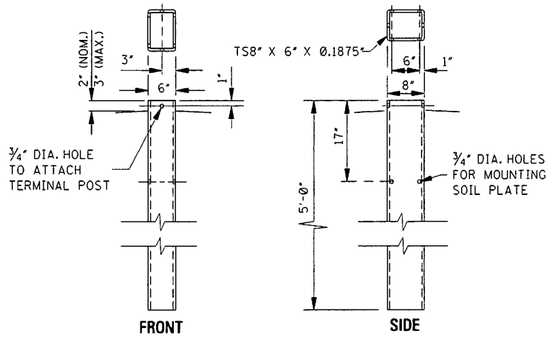


ANCHOR PLATE ASSEMBLY DETAILS



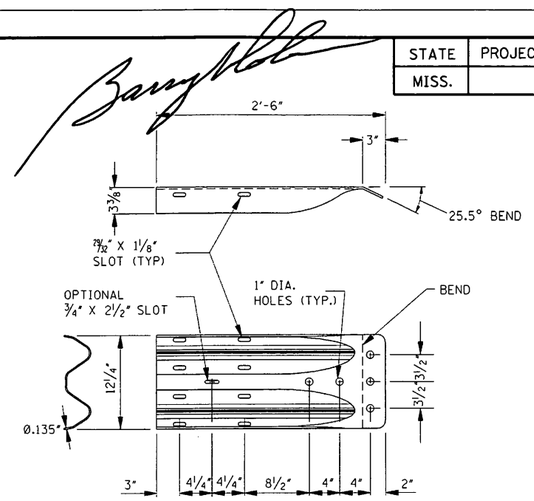
TERMINAL POST

NOTE: TERMINAL POST SHALL BE MADE OF S4S TIMBER WITH STRESS GRADE OF 1200 lbs/in^2.



STEEL TUBE ANCHOR

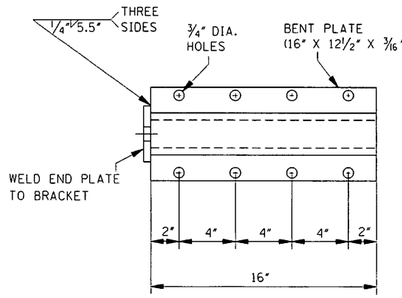
NOTE: TERMINAL POST SHOULD BE ABLE TO SLIDE INTO THE TOP OF THIS SECTION SO THE ACTUAL INSIDE DIMENSIONS OF THIS GALVANIZED TUBE CANNOT BE LESS THAN 7½" X 5½".



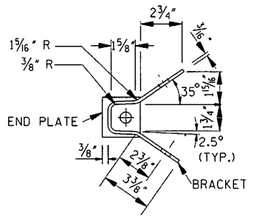
"W" BEAM TERMINAL CONNECTOR PLATE

NOTES:

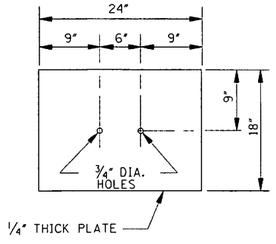
1. THE "W" BEAM TERMINAL CONNECTOR IS TO BE AASHTO M 180 CORRUGATED SHEET STEEL. CLASS B, TYPE 1.
2. SPLICE-BOLT SLOTS MAY ALSO BE ORIENTED AT 50° (ON THE FLAT) INSTEAD OF 0° AS SHOWN.



ANCHOR PLATE

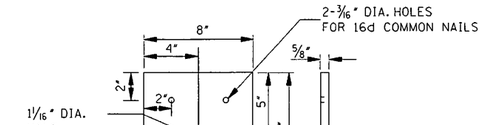


BRACKET

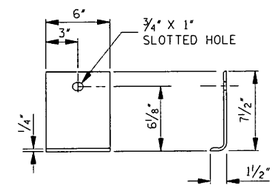


SOIL PLATE

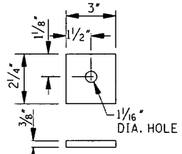
NOTE: 2 REQUIRED



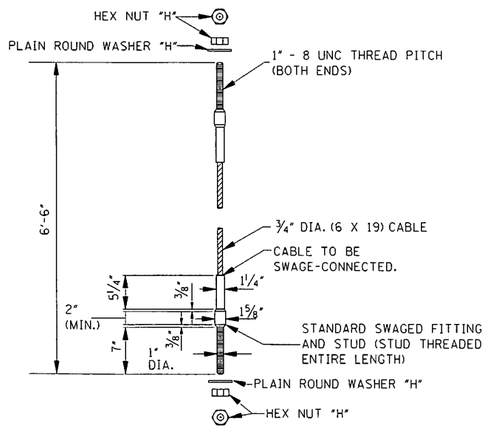
BEARING PLATE



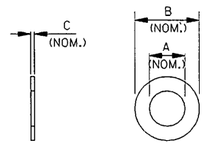
SHELF ANGLE BRACKET



END PLATE

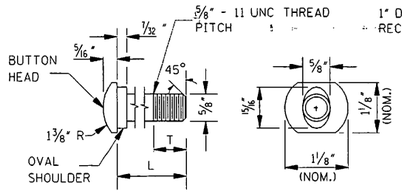


CABLE ANCHOR ASSEMBLY

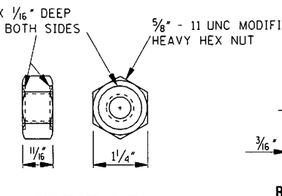


PLAIN ROUND WASHER

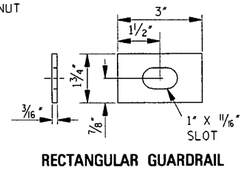
PLAIN ROUND WASHERS			
WASHER	A (NOM.)	B (NOM.)	C (NOM.)
"F"	11/16"	1¾"	5/64"
"H"	1 1/16"	2"	5/64"



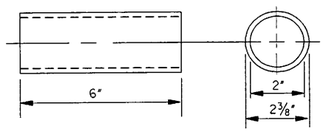
GUARDRAIL BOLT



RECESSED NUT



RECTANGULAR GUARDRAIL PLATE WASHER

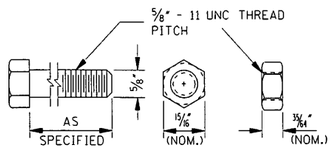


BREAKAWAY TERMINAL POST SLEEVE

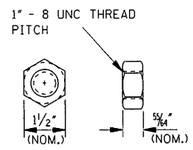
GUARDRAIL BOLTS		
BOLT	L	T (MIN.)
"A"	1¼"	1"
"B"	2"	1¾"
"C"	10"	4"
"D"	18"	4"

NOTES:

1. ALL GUARDRAIL BOLTS ARE ⅝" - 11 UNC THREAD PITCH.
2. IF ANY BOLT EXTENDS MORE THAN ¼" FROM THE NUT, THE BOLT SHOULD BE TRIMMED BACK.



HEX NUT AND BOLT "F"



HEX NUT "H"

FASTENER DETAILS

				S.W.R.	BY
3-01-02	REVISE SHEET TITLE				
DATE	REVISION				

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

⚠ GUARDRAIL: MISCELLANEOUS HARDWARE

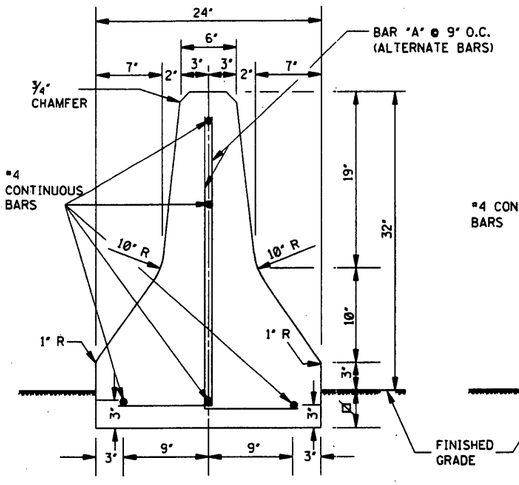
ENGLISH

WORKING NUMBER GR-HW

ISSUE DATE: OCTOBER 1, 1998

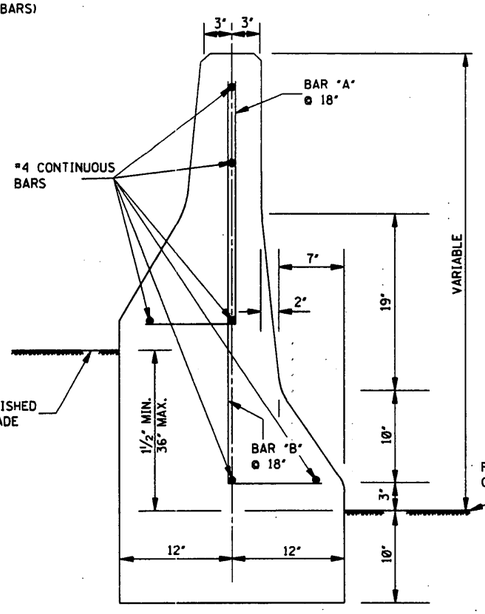
SHEET NUMBER 202

STATE	PROJECT NO.
MISS.	

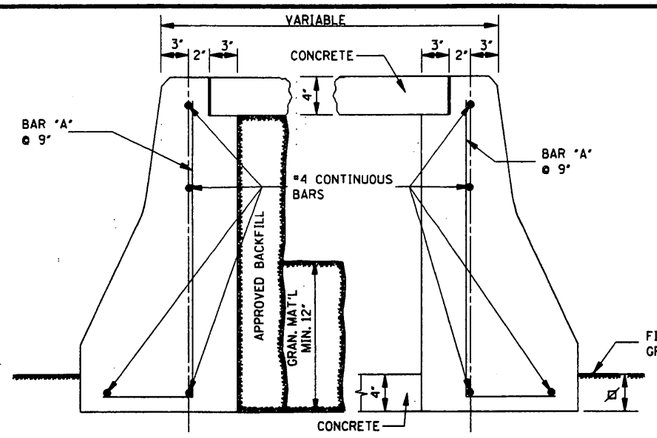


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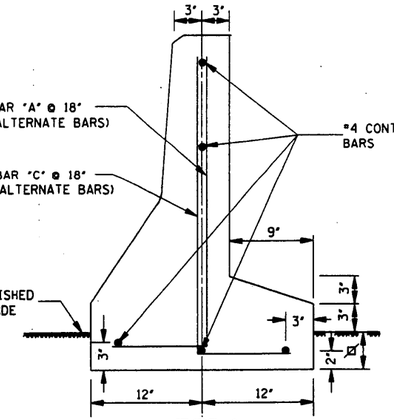
NOTE: ☒ DESIGNATES 4" MIN. OR AS SHOWN ELSEWHERE ON PLANS.



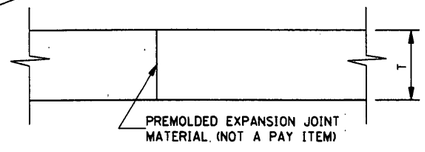
TYPE 2



TYPE 3

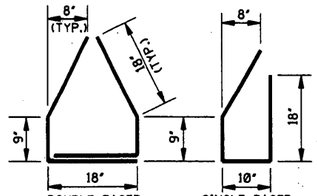


TYPE 4



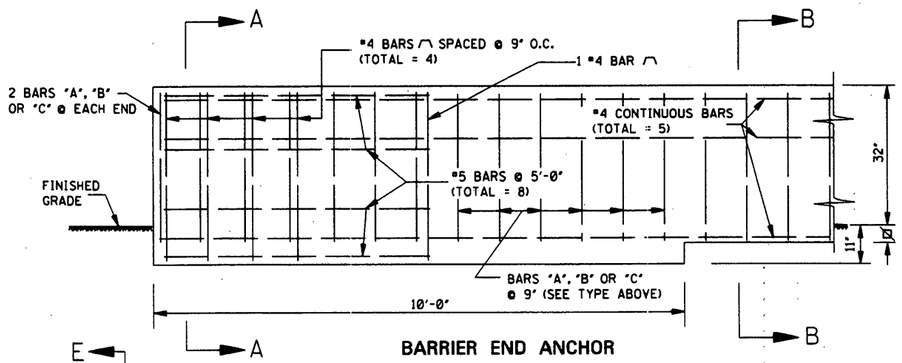
TYPICAL VERTICAL EXPANSION JOINT

NOTE: T = THICKNESS OF WALL AT TOP. EXPANSION JOINT TO BE PLACED IN BASE AND BARRIER.

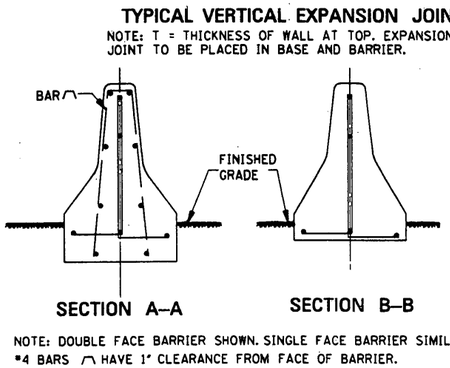


BAR "G" DETAIL

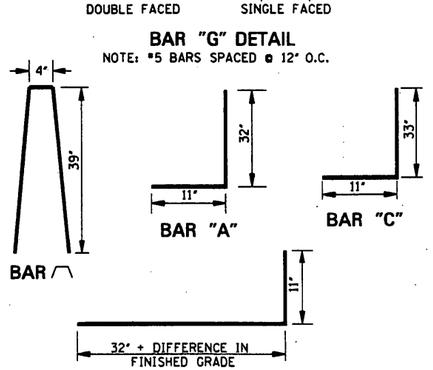
NOTE: #5 BARS SPACED @ 12" O.C.



BARRIER END ANCHOR

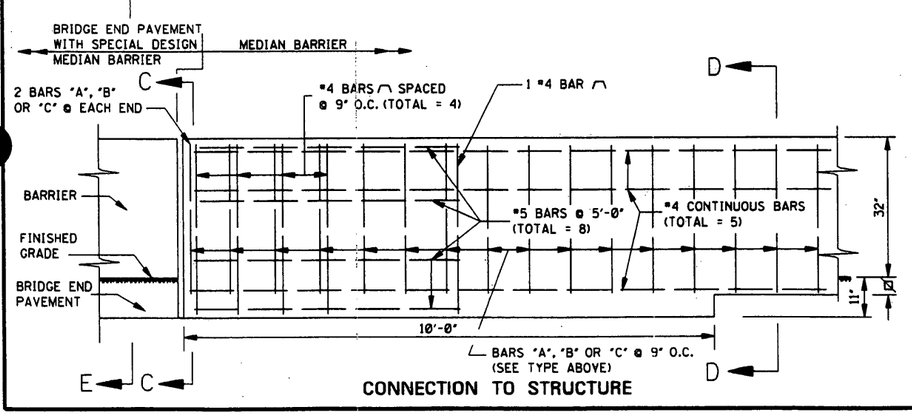


NOTE: DOUBLE FACE BARRIER SHOWN. SINGLE FACE BARRIER SIMILAR. #4 BARS ⌒ HAVE 1" CLEARANCE FROM FACE OF BARRIER.

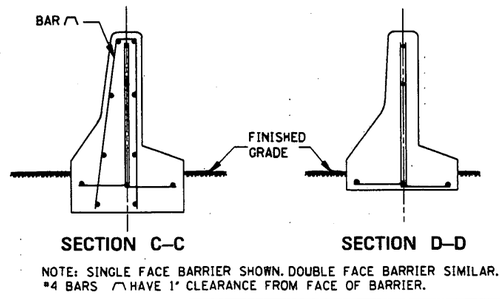


BAR "B"

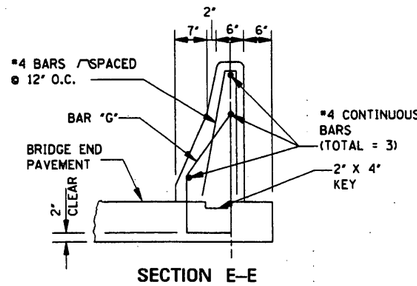
NOTE: BARS "A", "B" & "C" ARE #4 BARS SPACED AT 9" O.C.



CONNECTION TO STRUCTURE



NOTE: SINGLE FACE BARRIER SHOWN. DOUBLE FACE BARRIER SIMILAR. #4 BARS ⌒ HAVE 1" CLEARANCE FROM FACE OF BARRIER.



SECTION E–E

GENERAL NOTES:

1. CONCRETE SHALL BE CLASS "B".
2. REINFORCING STEEL SHALL EXTEND THROUGH CONSTRUCTION JOINTS.
3. DIMENSIONS ON THIS DRAWING ARE NOT DUPLICATED WHERE ALREADY SHOWN.
4. TYPE 3 BARRIER:
   A. MATERIALS REQUIRED FOR SUPPORT BETWEEN BARRIER WALLS SHALL BE SPECIFIED ON THE PLANS OR AS DIRECTED. THESE MATERIALS MAY BE:
      (1) 4" CLASS "C" CONCRETE AT THE BASE BETWEEN WALLS.
      (2) 12" GRANULAR MATERIAL AT THE BASE BETWEEN WALLS.
      (3) APPROVED BACKFILL FROM BASE TO BOTTOM OF CAP.
   B. REINFORCEMENT AND DETAILS OF 4" CONCRETE CAP SHALL BE SHOWN ON PLANS OR AS DIRECTED.
   C. PROVISIONS FOR DRAINAGE SHALL BE SHOWN ON THE PLANS OR AS DIRECTED.
   D. HEIGHT OF BARRIER ON THE LOW SIDE OF OFFSET OR SUPERELEVATED ROADWAYS SHOULD BE ADJUSTED TO PROVIDE LEVEL GRADE ACROSS THE TOP.
5. JOINTS:
   A. CONTRACTION JOINTS REQUIRED AT 20'-0" O.C.
      1. ¾" CHAMFER REQUIRED FROM THE BASE TO TOP OF WALL. CHAMFER MAY BE FORMED OR SCORED.
      2. LONGITUDINAL REINFORCEMENT SHALL CONTINUE AT CONTRACTION JOINTS.
   B. EXPANSION JOINTS REQUIRED AT 60'-0" O.C.
      1. ¾" CHAMFER REQUIRED FROM THE BASE TO TOP OF WALL. CHAMFER MAY BE FORMED OR SCORED.
      2. 1" X 24" SMOOTH DOWELS SPACED WITH EACH HORIZONTAL BAR IN WALL. PROVIDE 1" X 14" PAPER TUBING ON EACH DOWEL, ON ONE SIDE ONLY.
      3. WHERE A CONCRETE BASE OR FOOTING IS REQUIRED WITH BARRIER, THE EXPANSION JOINTS WILL BE REQUIRED FROM THE TOP OF WALL TO THE BOTTOM OF THE BASE OR FOOTING.
6. IN LIEU OF THE REINFORCEMENT SHOWN ON THESE PLANS THE CONTRACTOR MAY SUBMIT DIFFERENT REINFORCING DETAILS FOR REVIEW, HOWEVER, PRIOR APPROVAL MUST BE OBTAINED FROM THE DEPARTMENT.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

MEDIAN BARRIER: CONCRETE (CAST IN PLACE)

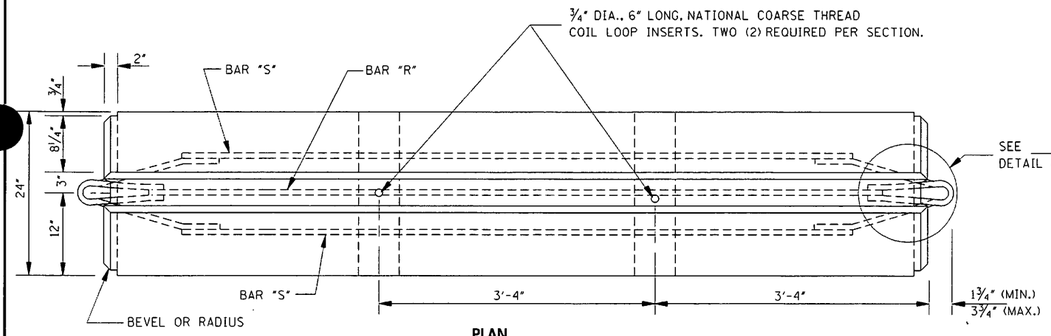
ENGLISH

WORKING NUMBER: MB-2

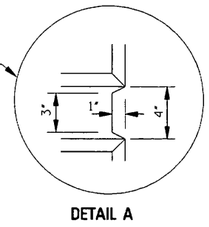
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER: 204

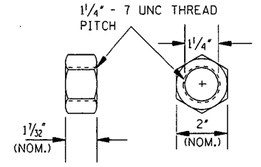
STATE	PROJECT NO.
MISS.	



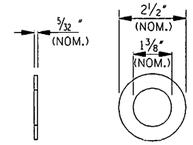
PLAN



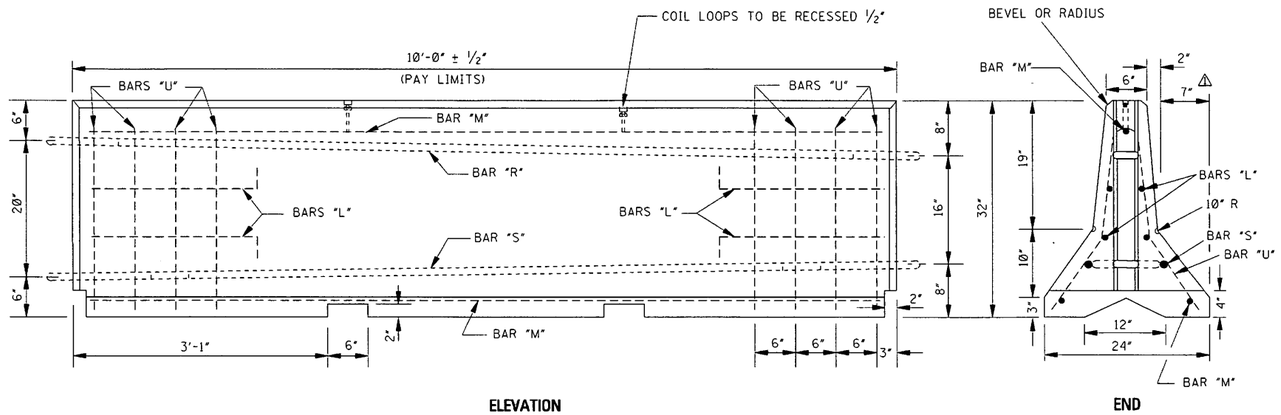
DETAIL A



HIGH-STRENGTH STRUCTURAL HEX NUT "F"



HARDENED ROUND WASHER "H"

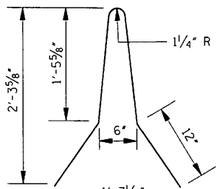


ELEVATION

END

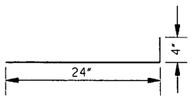
PRECAST CONCRETE MEDIAN BARRIER

BARS "M", "R" & "S"



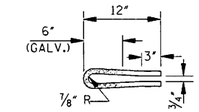
8 #4 BARS, 5'-1" LONG

BARS "U"



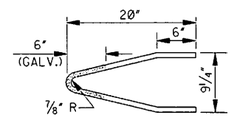
8 #4 BARS, 2'-4" LONG

BARS "L"



2 3/4"-STEEL RODS, 25" LONG

TOP CONNECTOR

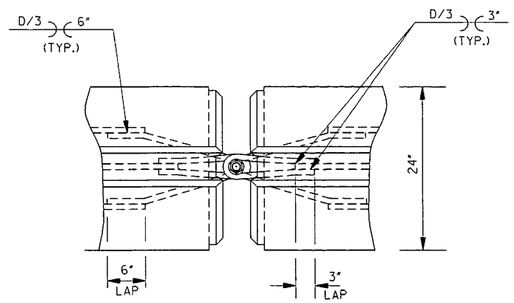


2 3/4"-STEEL RODS, 3'-6" LONG

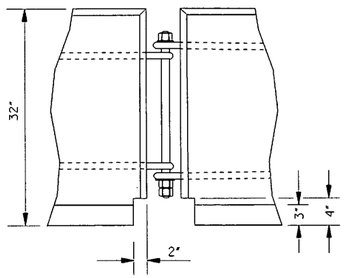
BOTTOM CONNECTOR

BAR AND ROD DETAILS

NOTE: WHERE STEEL ROD GALVANIZATION IS SHOWN ABOVE, GALVANIZE AFTER BENDING.

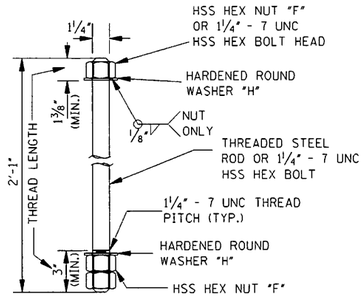


PLAN



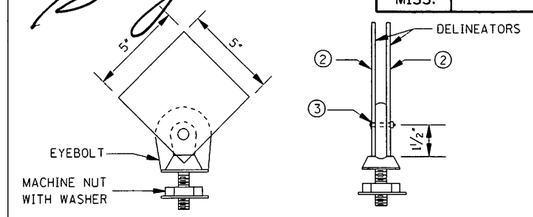
ELEVATION

BARRIER CONNECTION DETAIL



ANCHOR STUD CONNECTOR DETAILS

NOTE: ALTERNATE METHODS OF CONNECTING PRECAST BARRIERS, SUCH AS J-HOOKS, MAY BE SUBSTITUTED IF APPROVED BY THE ENGINEER.



DELINEATOR, CONCRETE PRECAST MEDIAN BARRIER, TYPE 1

(1) DELINEATORS SHALL BE REQUIRED UNLESS INDICATED OTHERWISE ON THE PLANS. THIS ITEM WILL NOT BE MEASURED SEPARATELY, BUT WILL BE INCLUDED UNDER PAYMENT FOR PRECAST CONCRETE BARRIER.

(2) DELINEATORS SHALL BE ENCAPSULATED LENS REFLECTIVE SHEETING ON ALUMINUM SHEET, 0.080" THICK, OR SHEET STEEL, 14 GAGE, WHICH IS GALVANIZED.

(3) ALUMINUM OR STAINLESS STEEL SLOTTED ROUND HEAD MACHINE SCREW, NO. 10, 1 1/2" LONG, 2-WASHERS AND 1-HEX HEAD NUT (COMMERCIAL QUALITY)

(4) THE DELINEATORS SHALL BE INSTALLED FACING TRAFFIC WITH YELLOW ON THE LEFT AND WHITE ON THE RIGHT, UNLESS OTHERWISE SPECIFIED.

(5) SPACINGS OF DELINEATORS: TANGENT SECTION - 20'-0". CURVED SECTION - 10'-0".

(6) OPTIONAL DELINEATORS, WHICH ARE ON THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION "LIST OF APPROVED MATERIALS", WILL BE ACCEPTED.

GENERAL NOTES:

1. LIFTING DEVICES AND ATTACHMENTS TO BARRIER SECTIONS SHALL BE AS APPROVED BY THE ENGINEER.
2. PLACE ALL STEEL REINFORCEMENT 2" MINIMUM FROM OUTSIDE FACE OF WALL, EXCEPT AS OTHERWISE SHOWN.
3. THE ANCHOR STUD CONNECTOR SHALL CONFORM TO AASHTO M 314, GRADE 55. THE HSS HEX NUTS AND THE HARDENED ROUND WASHERS SHALL MEET THE REQUIREMENTS OF ASTM A 325.
4. CONCRETE SHALL BE CLASS "B" (CLASS 1 FINISH). REINFORCING STEEL SHALL MEET THE REQUIREMENTS OF AASHTO M 31.
5. STEEL RODS SHALL MEET THE REQUIREMENTS OF ASTM A 36.
6. CONNECTOR RODS, CONNECTOR PINS, NUTS AND WASHERS SHALL BE GALVANIZED MEETING THE REQUIREMENTS OF AASHTO M 111.

APPROXIMATE QUANTITIES FOR 10' BARRIER			
WEIGHT (lbs.)	REINF. STEEL (lbs.)	STEEL RODS (lbs.)	CONCRETE (yd^3)
3875	104	18	0.931

BY	DATE	REVISION
S.W.R.	3-01-02	REVISED DIMENSION

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

MEDIAN BARRIER: CONCRETE (PRECAST)

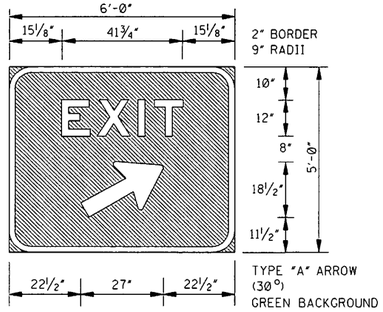
WORKING NUMBER MB-2A

SHEET NUMBER 205

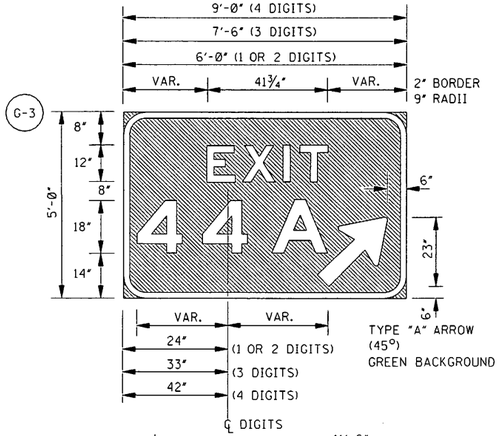
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

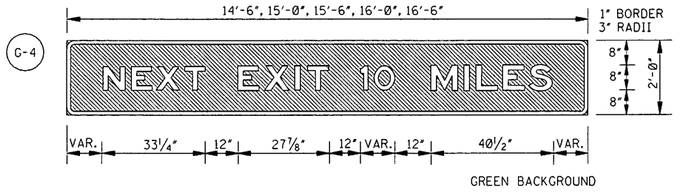
G-2



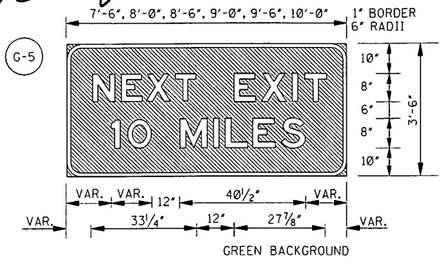
G-3



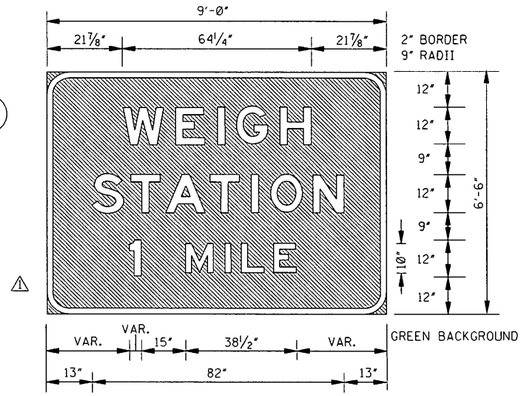
G-4



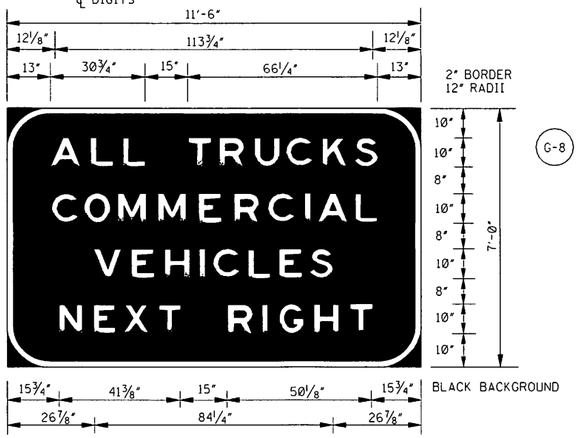
G-5



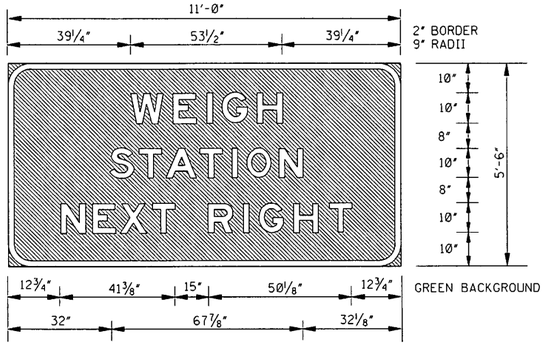
G-6 ⚠



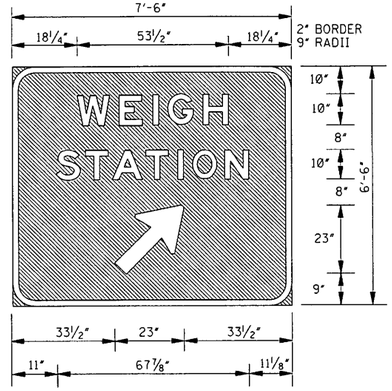
G-7



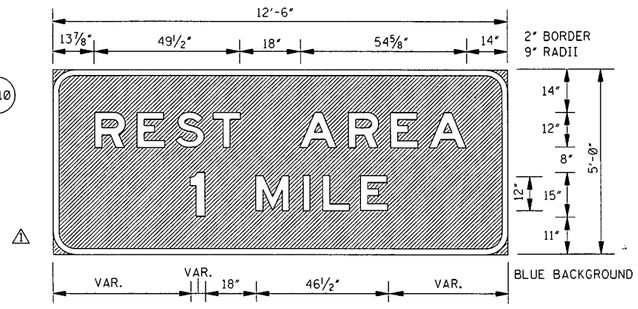
G-8



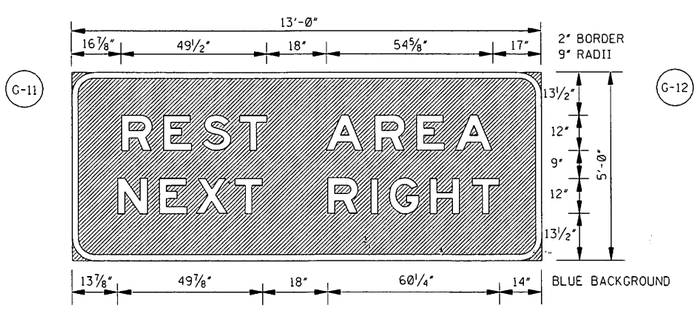
G-9



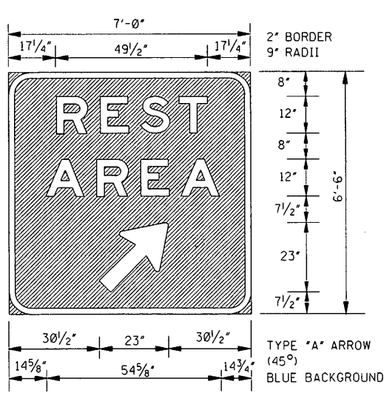
G-10 ⚠



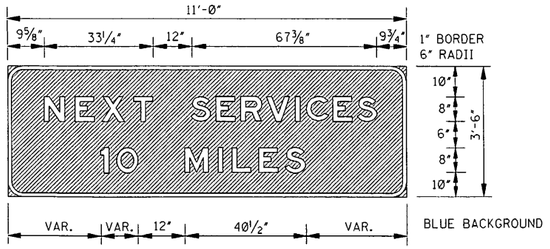
G-11



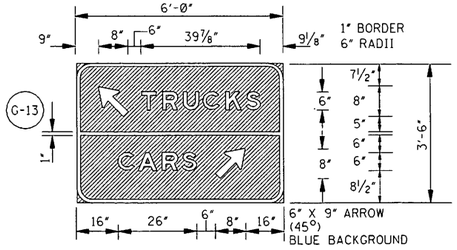
G-12



G-16



G-13



GENERAL NOTE:

1. THE HORIZONTAL SPACING SHOWN ON THESE DRAWINGS IS FOR REMOVABLE COPY TYPE B (SEE SPECIFICATIONS). THIS SPACING MAY VARY SOMEWHAT WHEN REMOVABLE COPY TYPE A IS USED. THE VERTICAL SPACING WILL REMAIN THE SAME REGARDLESS OF WHICH TYPE IS USED. ANY CHANGE IN HORIZONTAL SPACING WILL BE SUBJECT TO APPROVAL BY THE ROADWAY DESIGN ENGINEER.

DATE	REVISION	BY
3-01-02	REVISE SIGN MESSAGE	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD DIRECTIONAL (GUIDE) SIGNS

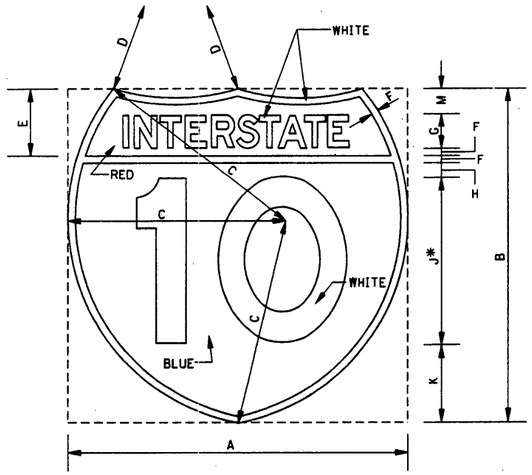
ENGLISH

WORKING NUMBER
SN-1

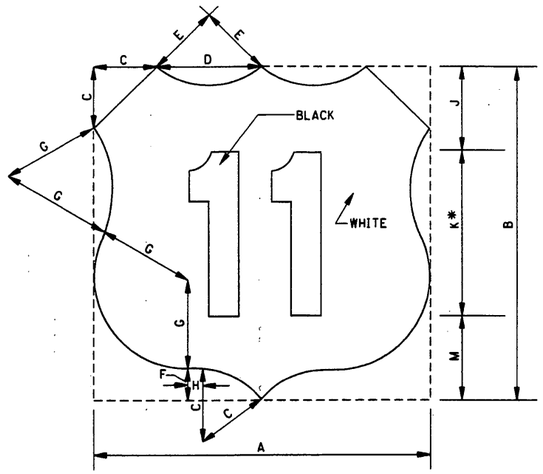
SHEET NUMBER
220

ISSUE DATE: OCTOBER 1, 1998

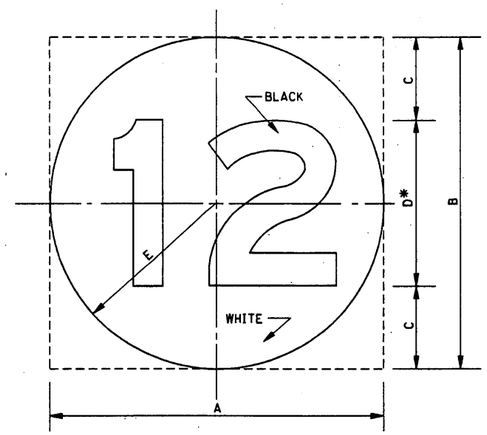
STATE	PROJECT NO.
MISS.	



	12" NUMERALS		18" NUMERALS		24" NUMERALS	
	2 DIGITS	3 DIGITS	2 DIGITS	3 DIGITS	2 DIGITS	3 DIGITS
A	24"	30"	36"	45"	48"	60"
B	24"	24"	36"	36"	48"	48"
C	15"	17"	22½"	25½"	30"	34"
D	15"	24"	22½"	36"	30"	48"
E	5"	5"	7½"	7½"	10"	10"
F	½"	½"	¾"	¾"	1"	1"
G	2.5C	2.5D	3.75C	3.75D	5C	5D
H	1"	1"	1½"	1½"	2"	2"
*J	12"	12"	18"	18"	24"	24"
K	5½"	5½"	8¼"	8¼"	11"	11"
M	2"	2"	3"	3"	4"	4"



	12" NUMERALS		18" NUMERALS		24" NUMERALS	
	2 DIGITS	3 DIGITS	2 DIGITS	3 DIGITS	2 DIGITS	3 DIGITS
A	24"	30"	36"	45"	48"	60"
B	24"	24"	36"	36"	48"	48"
C	5"	5"	7½"	7½"	10"	10"
D	7"	10"	10½"	15"	14"	20"
E	5"	9"	7½"	13½"	10"	18"
F	2"	2"	3"	3"	4"	4"
G	7"	7"	10½"	10½"	14"	14"
H	1"	4"	1½"	5½"	2"	8"
J	5½"	5½"	8½"	8½"	11"	11"
*K	12"	12"	18"	18"	24"	24"
M	6½"	6½"	9¾"	9¾"	13"	13"

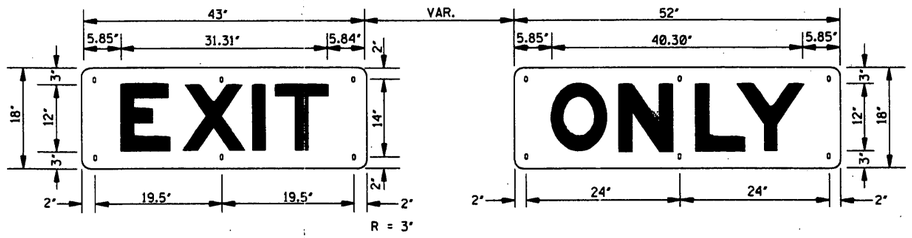


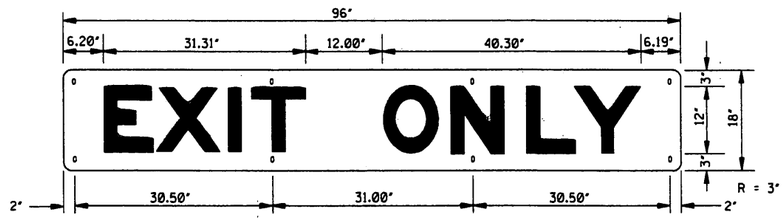
	DIMENSIONS (INCHES)				
	A	B	C	D*	E
1,2-DIGIT(S)	24"	24"	6"	12"	12"
1,2-DIGIT(S)	36"	36"	9"	18"	18"
1,2-DIGIT(S)	48"	48"	12"	24"	24"
3-DIGITS	30"	24"	6"	12"	VAR.
3-DIGITS	45"	36"	9"	18"	VAR.
3-DIGITS	60"	48"	12"	24"	VAR.

GENERAL NOTES:

1. U.S. AND MISSISSIPPI SHIELDS DO NOT HAVE AN OUTSIDE BORDER.
2. INTERSTATE, U.S. AND MISSISSIPPI SHIELDS SHOWN ON THIS DRAWING ARE TO BE USED ONLY ON GUIDE SIGNS. SEE OTHER DRAWINGS FOR SHIELDS TO BE USED INDEPENDENTLY AS ROUTE MARKERS.
3. ON INTERSTATE SHIELDS, THE LEGEND AND BACKGROUND SHALL BE REFLECTORIZED.
4. ON U.S. AND MISSISSIPPI SHIELDS, THE BACKGROUND SHALL BE REFLECTORIZED.

*5. IN SOME CASES, NUMERALS CANNOT BE ACCOMMODATED WITHIN THE SPACE AVAILABLE. FOR THESE SITUATIONS, THE STANDARD SERIES "D" NUMERALS MAY BE REDUCED TO SERIES "C" NUMERALS OR AS A SECOND CHOICE TO THE NEXT SMALLER HEIGHT COMMONLY AVAILABLE.





GENERAL NOTES:

1. THESE ARE "OVERLAY" SIGNS FABRICATED ON 0.080" THICK ALUMINUM (6061-T6) AND ARE TO BE RIVETED TO DIRECTIONAL SIGNS DESIGNATED ON PLANS. THESE SIGNS WILL NOT BE PAID FOR AS SEPARATE SIGNS BUT SHALL BE CONSIDERED AS PART OF THE MAJOR SIGNS TO WHICH THEY ARE AFFIXED.
2. LETTER SIZE: 12" SERIES "D"
   COLOR: LEGEND - BLACK; BACKGROUND - HI-INTENSITY YELLOW

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

ROUTE SHIELDS AND "EXIT ONLY" PANELS

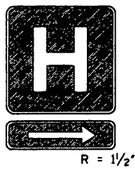
ENGLISH

WORKING NUMBER
SN-2

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
221

STATE	PROJECT NO.
MISS.	

SIGN NUMBER	D9-2R / D9-2L	ARROW	D10-1	D10-2	D10-3	M1-1	M1-101	M1-4	M1-6	M2-1	M2-1A	M3-3 *	M3-3A *	M3-103A *
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"		0.080"	0.080"	0.080"	0.080"	0.125"	0.080"	0.080"	0.080"		0.080"		0.080"
LEGEND	 R = 1½"		 R = 1½"	 R = 1½"	 R = 1½"			 R = 1½"	 R = 1½" e = 11" (24" X 24") e = VAR. (30" X 24")	 R = 1½"		 R = 1½"		 R = 1½"
LETTER & NUMERAL SERIES	16" SERIES "E"		4" SERIES "C" 10" SERIES "C"	4" SERIES "C" 10" SERIES "C"	4" SERIES "C" 10" SERIES "C"	(SEE NOTE BELOW)		(SEE NOTE BELOW)	12" SERIES "D" (SEE NOTE BELOW)	9" SERIES "C"		8" SERIES "C" 6" SERIES "C"		10" SERIES "C" 8" SERIES "C"
WIDTH OF BORDER INSIDE / OUTSIDE	½" WHITE		½" WHITE	½" WHITE	½" WHITE	½" WHITE	¾" WHITE	BLACK OUTSIDE BORDER	BLACK OUTSIDE BORDER	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	½" WHITE
SIZE (WIDTH X HEIGHT)	24" X 24"	24" X 6"	12" X 24"	12" X 36"	12" X 48"	24" X 24" (1 OR 2 DIGITS) 30" X 24" (3 DIGITS)	36" X 36" (1 OR 2 DIGITS) 45" X 36" (3 DIGITS)	24" X 24" (1 OR 2 DIGITS) 30" X 24" (3 DIGITS)	24" X 24" (1 OR 2 DIGITS) 30" X 24" (3 DIGITS)	21" X 15"		24" X 12"		30" X 15"
COLORS COPY / BACKGROUND	WHITE / BLUE		WHITE / GREEN	WHITE / GREEN	WHITE / GREEN	WHITE / TOP-RED; BOTTOM-BLUE		BLACK / WHITE	BLACK / WHITE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	WHITE / BLUE
REFLECTORIZATION	ALL		ALL	ALL	ALL	ALL		BACKGROUND	BACKGROUND	B'GROUND	ALL	B'GROUND	ALL	ALL
NUMBER OF POSTS FOR MOUNTING	1		1	1	1	1		1	1	1		1		1
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2	2	2	2	3	2	4	2 (VERT. PUNCHING)	2 (HORIZ. PUNCHING)	2 (VERT. PUNCHING)	2 (HORIZ. PUNCHING)	2		2
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	12" (VERT. CENTER)		6" (VERT. CENTER)	6" (VERT. CENTER)	6" (VERT. CENTER)	VERT. CENTER	5" FROM VERT. CENTER	VERT. CENTER	5" FROM VERT. CENTER	VERT. CENTER		12" (V. PUNCH) 7" (H.PUNCH)	12"	10"
PUNCHING DISTANCE FROM TOP EDGE	3"; 21"	1"; 5"	2"; 22"	2"; 34"	2"; 21"; 46"	2"; 22"	3";30"	3"; 21"	12"	3"; 21"	12"	1½"; 13½"	1½"; 10½" (V.P.) 6" (H.PUNCH)	1½"; 10½"	7½"

SIGN NUMBER	M4-5	M4-5A	M5-1L	M5-1LA	M5-1R	M5-1RA	M5-2L	M5-2LA	M5-2R	M5-2RA	M6-1L	M6-1LA	M6-1R	M6-1RA	M6-2L	M6-2LA	M6-2R	M6-2RA	M6-3	M6-3A	M6-4	M6-4A	M6-6L	M6-6LA	M6-6R	M6-6RA
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"		0.080"	
LEGEND	 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"		 R = 1½"	
LETTER & NUMERAL SERIES	6" SERIES "E"																									
WIDTH OF BORDER INSIDE / OUTSIDE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE	⅝" BLACK ⅜" WHITE	½" WHITE
SIZE (WIDTH X HEIGHT)	24" X 12"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"		21" X 15"	
COLORS COPY / BACKGROUND	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE	BLACK / WHITE	WHITE / BLUE
REFLECTORIZATION	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL	B'GROUND	ALL
NUMBER OF POSTS FOR MOUNTING	1		1		1		1		1		1		1		1		1		1		1		1		1	
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2		2		2		2		2		2		2		2		2		2		2		2		2	
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	12" (VERT. CENTER)		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER		VERT. CENTER	
PUNCHING DISTANCE FROM TOP EDGE	1½"; 10½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"		1½"; 13½"	

GENERAL NOTES:

1. THE DIMENSIONS FOR THE INTERSTATE AND U.S. SHIELDS SHALL CONFORM WITH THOSE SHOWN IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.
2. ROUTE MARKERS AND SHIELDS SHOWN ON THIS SHEET ARE FOR USE INDEPENDENTLY OF INTERSTATE DIRECTIONAL (GUIDE) SIGNS. SEE OTHER DRAWINGS FOR SHIELDS TO BE USED ON INTERSTATE DIRECTIONAL (GUIDE) SIGNS.
3. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
4. M1-6: IN SOME CASES NUMERALS CANNOT BE ACCOMMODATED WITHIN THE SPACE AVAILABLE. FOR THESE SITUATIONS, THE STANDARD SERIES "D" NUMERAL SHALL BE REDUCED TO SERIES "C".

*

NORTH	EAST	SOUTH	WEST
M3-1	M3-2	M3-3	M3-4
M3-1A	M3-2A	M3-3A	M3-4A
M3-101A	M3-102A	M3-103A	M3-104A

BY / REVISION / DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

DEPARTMENT OF TRANSPORTATION STATE OF MISSISSIPPI ENGLISH

WORKING NUMBER SN-3

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 222

STATE	PROJECT NO.
MISS.	

SIGN NUMBER	R1-1	R1-101	R1-2	R1-102	R2-1	R2-101	R2-102	R2-104	R3-1	R3-2	R3-3	R3-4	R3-5	R4-103
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"	0.125"	0.125"	0.125"	0.080"	0.125"	0.125"	0.125"	0.080"	0.080"	0.080"	0.080"	0.080"	0.125"
LEGEND	STOP		YIELD R=2" R=4"		SPEED LIMIT 70 R=1½" R=3"		TRUCKS 60 R=3"	MINIMUM SPEED 40 R=3"	R=1⅞"	R=1⅞"	NO TURNS R=1½"	R=1⅞"	ONLY R=1⅞"	SLOWER TRAFFIC KEEP RIGHT R=3"
LETTER & NUMERAL SERIES	12" SERIES "C"	16" SERIES "C"	3" SERIES "C"	5" SERIES "C"	4" SERIES "E" 4" SERIES "E" 10" SERIES "E"	8" SERIES "E" 8" SERIES "E" 16" SERIES "E"	8" SERIES "D" 16" SERIES "E"	8" SERIES "C" 8" SERIES "C" 16" SERIES "D"			6" SERIES "D" 5" SERIES "D"		6" SERIES "D"	8" SERIES "D"
WIDTH OF BORDER INSIDE	⅞" WHITE	1¼" WHITE	5" RED	8" RED	⅝" BLACK	1¼" BLACK	1¼" BLACK	⅞" BLACK	¾" BLACK	¾" BLACK	⅝" BLACK	¾" BLACK	¾" BLACK	1¼" BLACK
WIDTH OF BORDER OUTSIDE			¾" WHITE	1½" WHITE	⅜" WHITE	¾" WHITE	¾" WHITE	¾" WHITE	½" WHITE	½" WHITE	⅜" WHITE	½" WHITE	½" WHITE	¾" WHITE
SIZE (WIDTH X HEIGHT)	36" OCTAGON	48" OCTAGON	36" EQUIL. TRIANGLE	60" EQUIL. TRIANGLE	24" X 30"	48" X 60"	48" X 48"	48" X 48"	30" X 30"	30" X 30"	24" X 24"	30" X 30"	30" X 36"	48" X 60"
COLORS COPY	WHITE	WHITE	RED	RED	BLACK	BLACK	BLACK	BLACK	BLACK & RED	BLACK & RED	BLACK	BLACK & RED	BLACK	BLACK
COLORS BACKGROUND	RED	RED	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE	WHITE
REFLECTORIZATION	ALL	ALL	ALL	ALL	B'GROUND	B'GROUND	BACKGROUND	BACKGROUND	BACKGROUND, CIRCLE, & DIAGONAL	BACKGROUND, CIRCLE, & DIAGONAL	BACKGROUND	BACKGROUND, CIRCLE, & DIAGONAL	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	---	---	1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2	4	2	4	2	6	4	4	2	2	2	2	2	6
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	18" (VERT. CENTER)	10"	18" (VERT. CENTER)	20"	12" (VERT. CENTER)	10"	10"	10"	15" (VERT. CENTER)	15" (VERT. CENTER)	12" (VERT. CENTER)	15" (VERT. CENTER)	15" (VERT. CENTER)	10"
PUNCHING DISTANCE FROM TOP EDGE	3"; 33"	10"; 38"	2"; 26"	3"; 27"	3"; 27"	4"; 30"; 56"	4"; 44"	4"; 44"	3"; 27"	3"; 27"	3"; 21"	3"; 27"	3"; 33"	4"; 30"; 56"

SIGN NUMBER	R4-7	R4-107	R4-8	R5-1	R5-101	R5-1a	R6-1L, R6-1R	R6-2L, R6-2R	R8-104	R11-101	
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.080"	0.125"	0.080"	0.080"	0.125"	0.125"	0.125"	0.080"	0.125"	0.125"	
LEGEND	R=1½" R=2¼"		R=1½"	DO NOT ENTER R=1⅞" R=3"		WRONG WAY R=2¼"	ONE WAY R=1½"	ONE WAY R=1½"	EMERGENCY PARKING ONLY R=2¼"	KEEP OFF MEDIAN R=3"	
LETTER & NUMERAL SERIES				4" SERIES "D"	6" SERIES "D"	8" SERIES "D"	4" SERIES "D"	5" SERIES "D"	6" SERIES "D"	10" SERIES "C"	
WIDTH OF BORDER INSIDE	⅝" BLACK	⅛" BLACK	⅝" BLACK	WHITE OUT-	WHITE OUT-	1" WHITE		⅝" BLACK	⅞" BLACK	1¼" BLACK	
WIDTH OF BORDER OUTSIDE	⅜" WHITE	⅝" WHITE	⅜" WHITE	SIDE BORDER	SIDE BORDER		½" WHITE	⅜" WHITE	⅝" WHITE	¾" WHITE	
SIZE (WIDTH X HEIGHT)	24" X 30"	36" X 48"	24" X 30"	30" X 30"	42" X 42"	42" X 36"	36" X 12"	18" X 24"	48" X 36"	48" X 60"	
COLORS COPY	BLACK	BLACK	BLACK	WHITE	WHITE	WHITE	BLACK (WHITE ARROW)	BLACK	BLACK	BLACK	
COLORS BACKGROUND	WHITE	WHITE	WHITE	RED	RED	RED	BLACK	WHITE	WHITE	WHITE	
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	ALL	ALL	ALL	ARROW & BORDER	BACKGROUND	BACKGROUND	BACKGROUND	
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	1	1	1	1	2	1	
NUMBER OF HOLES TO BE PUNCHED (⅜" DIA.)	2	4	2	2	4	4	2	2	4	6	
PUNCHING DISTANCE FROM EACH VERTICAL EDGE	12" (VERT. CENTER)	5"	12" (VERT. CENTER)	15" (VERT. CENTER)	8"	8"	18" (VERT. CENTER)	9" (VERT. CENTER)	10"	10"	
PUNCHING DISTANCE FROM TOP EDGE	3"; 27"	4"; 44"	3"; 27"	3"; 27"	4"; 38"	3"; 33"	1½"; 10½"	3"; 21"	6"; 30"	4"; 30"; 56"	

GENERAL NOTES:

1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.

2. THE SPEED LIMITS REQUIRED ON SIGNS R2-1 AND R2-101 WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

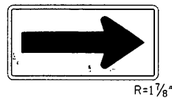
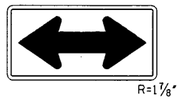
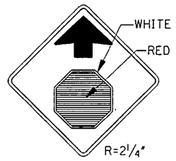
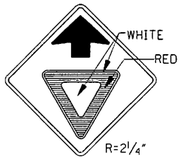
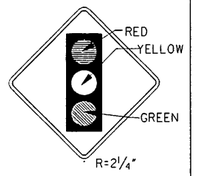
ENGLISH

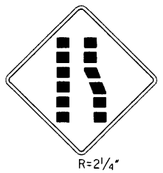
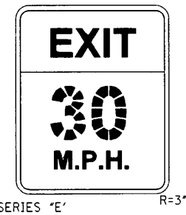
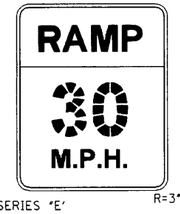
WORKING NUMBER SN-3A

SHEET NUMBER 223

ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

SIGN NUMBER	W1-1L W1-1R	W1-2L W1-2R	W1-3L W1-3R	W1-4L W1-4R	W1-6L W1-6R	W1-7	W3-1a	W3-2a	W3-3	W4-1L W4-1R	W4-101L W4-101R
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"	0.125"
LEGEND											
LETTER & NUMERAL SERIES											
WIDTH OF BORDER INSIDE OUTSIDE	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	3/4" BLACK 1/2" YELLOW	7/8" BLACK 5/8" YELLOW	7/8" BLACK 5/8" YELLOW	7/8" BLACK 5/8" YELLOW	3/4" BLACK 1/2" YELLOW	1 1/4" BLACK 3/4" YELLOW
SIZE (WIDTH X HEIGHT)	30" X 30"	30" X 30"	30" X 30"	30" X 30"	48" X 24"	48" X 24"	36" X 36"	36" X 36"	36" X 36"	30" X 30"	48" X 48"
COLORS COPY BACKGROUND	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND & SYMBOL	BACKGROUND & SYMBOL	BACKGROUND & "LIGHTS"	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	2	2	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (3/8" DIA.)	2	2	2	2	4	4	2	2	2	2	4
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	6"	6"	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	14 1/2" FROM VERT. CENTER
PUNCHING DISTANCE FROM TOP EDGE	15" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3"; 21"	3"; 21"	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	14 1/2" FROM HORIZ. CENTER

SIGN NUMBER	W4-2	W5-1	W6-1	W6-2	W6-3	W13-1	W13-2	W13-3	W10-1	W10-101
ALUMINUM (6061-T6) SIGN BLANK THICKNESS	0.125"	0.125"	0.125"	0.125"	0.125"	0.080"	0.125"	0.125"	0.125"	0.125"
LEGEND	NOTE: SEE PLAN SHEETS FOR IDEOGRAM REQUIRED ON INDIVIDUAL SIGNS. 									
LETTER & NUMERAL SERIES	6" SERIES "D"					8" SERIES "E" 3" SERIES "E"	8" SERIES "E" 16" SERIES "E" 6" SERIES "E" (SEE NOTE)	8" SERIES "E" 16" SERIES "E" 6" SERIES "E" (SEE NOTE)	8" SERIES "E"	10" SERIES "E"
WIDTH OF BORDER INSIDE OUTSIDE	7/8" BLACK 5/8" YELLOW	7/8" BLACK 5/8" YELLOW	7/8" BLACK 5/8" YELLOW	7/8" BLACK 5/8" YELLOW	3/4" BLACK 1/2" YELLOW	5/8" BLACK 3/8" YELLOW	1 1/4" BLACK 3/4" YELLOW	1 1/4" BLACK 3/4" YELLOW	3/4" BLACK 1/2" YELLOW	1 1/4" BLACK 3/4" YELLOW
SIZE (WIDTH X HEIGHT)	36" X 36"	36" X 36"	36" X 36"	36" X 36"	30" X 30"	18" X 18"	48" X 60"	48" X 60"	36" DIAMETER	48" DIAMETER
COLORS COPY BACKGROUND	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW	BLACK YELLOW
REFLECTORIZATION	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND	BACKGROUND
NUMBER OF POSTS FOR MOUNTING	1	1	1	1	△1	1	1	1	1	1
NUMBER OF HOLES TO BE PUNCHED (3/8" DIA.)	2	2	2	2	2	2	6	6	2	4
PUNCHING DISTANCE FROM EACH VERT. EDGE	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	VERT. CENTER	9" (VERT. CENTER)	10"	10"	15"	15" (VERT. CENTER)
PUNCHING DISTANCE FROM TOP EDGE	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	18" FROM HORIZ. CENTER	15" FROM HORIZ. CENTER	3"; 15"	4"; 30"; 56"	4"; 30"; 56"	3"; 33"	5"; 43"

GENERAL NOTES:

1. THE QUANTITIES LISTED ON THE SUMMARY OF QUANTITIES SHEET FOR THE SIGNS SHOWN ON THIS SHEET WILL BE USED AS THE BASIS FOR FINAL PAYMENT, EXCEPT WHERE SIGNS ARE MODIFIED FROM THAT SHOWN.
2. SIGNS W13-2 AND W13-3- THE STROKE WIDTH OF THE LETTER AND NUMERALS SHALL BE WIDENED TO 20% OF THE LETTER OR NUMERAL HEIGHT.
3. THE SPEEDS REQUIRED ON SIGNS W13-1, W13-2 AND W13-3 WILL BE SHOWN ON INDIVIDUAL PLAN SHEETS.

△

BY	DATE	REVISION
S.W.R.	3-01-02	REVISED NO. OF POSTS

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGNS

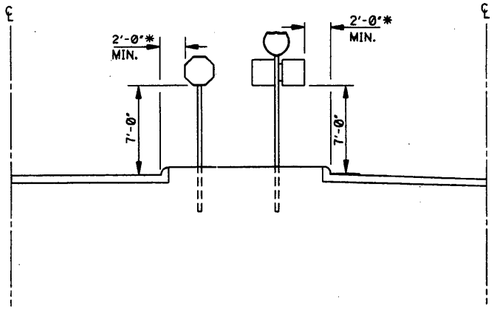
ENGLISH

WORKING NUMBER
SN-3B

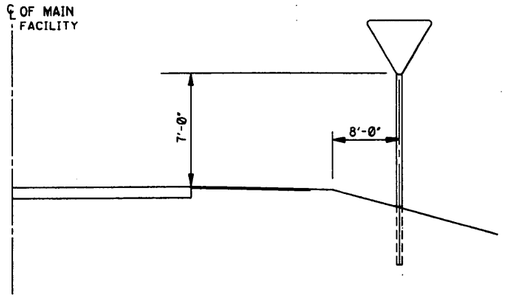
SHEET NUMBER
224

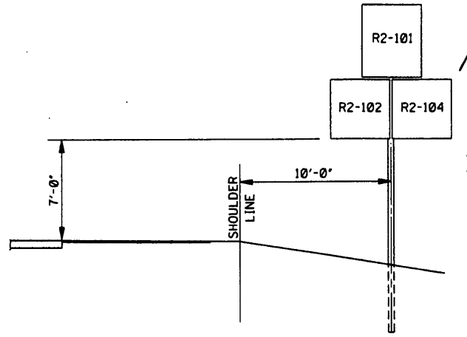
ISSUE DATE: OCTOBER 1, 1998

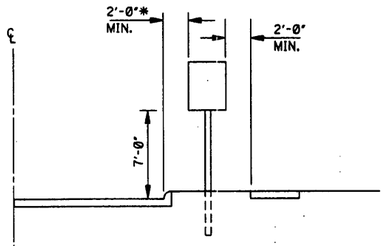
STATE	PROJECT NO.
MISS.	



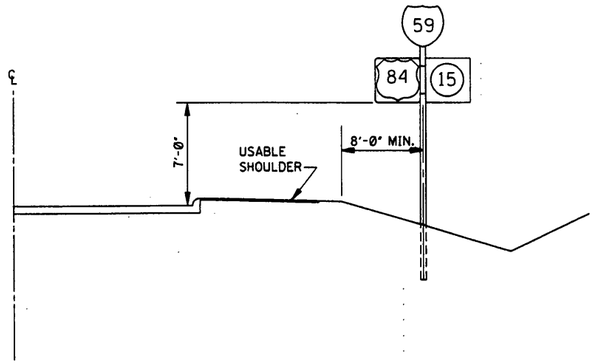
TYPICAL INSTALLATION IN ISLANDS OFF
OF (OR ADJACENT TO) INTERSTATE MAIN FACILITY







TYPICAL INSTALLATION ALONG FRONTAGE ROAD, RAMP
OR STREET WHERE THERE IS NOT A USABLE SHOULDER



TYPICAL INSTALLATION ALONG THE INTERSTATE MAIN
FACILITY AND ALONG RAMPS, FRONTAGE ROADS AND
HIGHWAYS

* NOTE: THE 2'-0" MINIMUM OFFSET APPLIES ONLY TO STANDARD SIGNS MOUNTED ON U-SECTION POSTS. ALL STANDARD SIGNS MOUNTED ON PIPE WILL BE OFFSET A MINIMUM OF 4'-0". RAMP DESTINATION SIGNS WILL BE OFFSET 4'-0" FROM SHOULDERS.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION

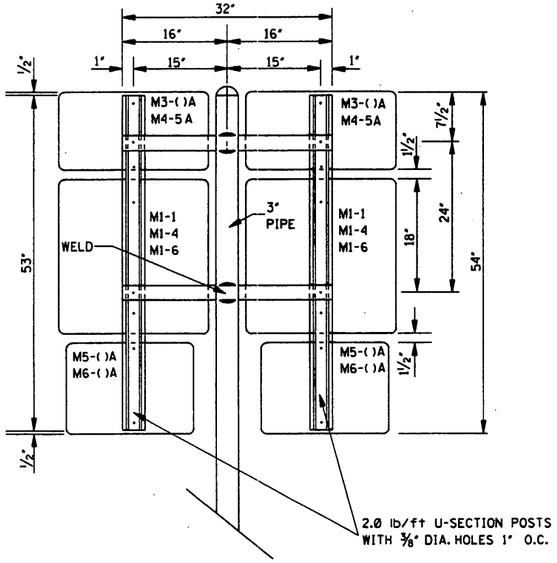
ENGLISH

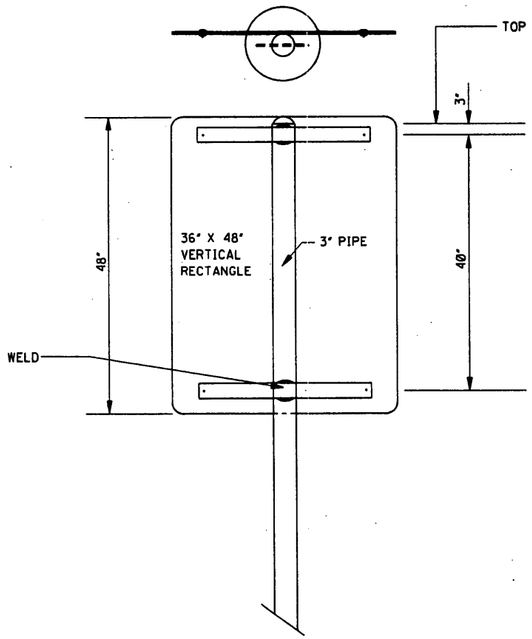
WORKING NUMBER
SN-4

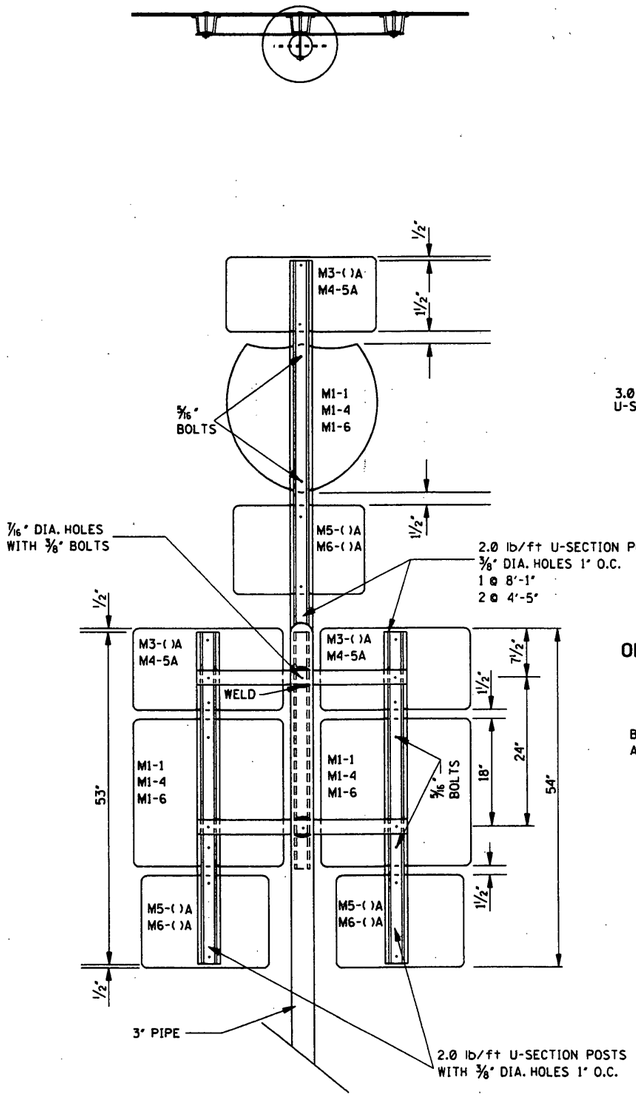
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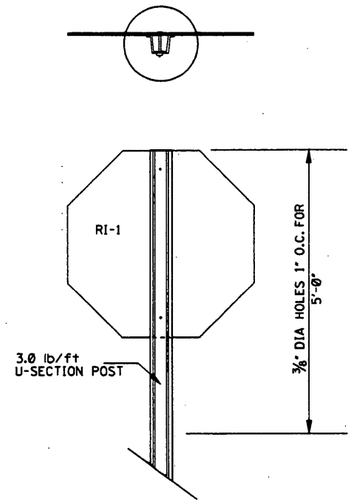
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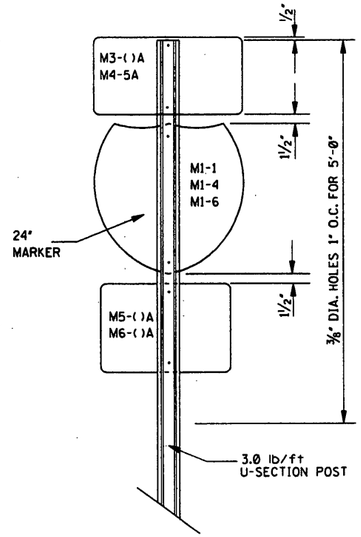
STATE	PROJECT NO.
MISS.	

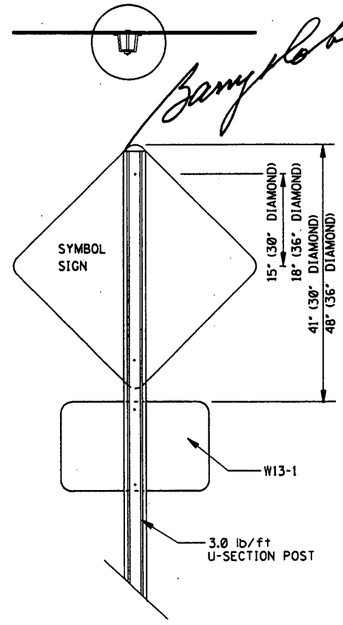




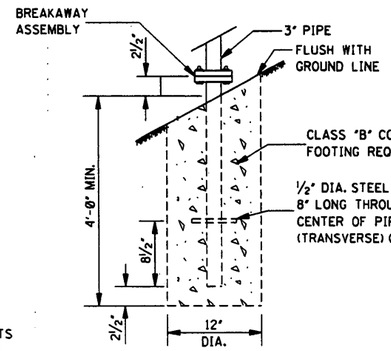




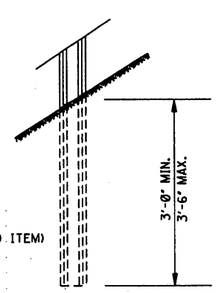




TYPICAL ASSEMBLY OF "FLAT TOPPED" REGULATORY OR WARNING SIGN MOUNTED ON A SINGLE U-SECTION POST



FOOTING DETAIL FOR 3" PIPE



FOOTING DETAIL FOR U-SECTION POSTS

GENERAL NOTES:

1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 7/16" X 2½" X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION IS COMPLETE, POST SHALL BE GALVANIZED AS PER SECTION 630 OF THE STANDARD SPECIFICATION.
2. HOLES IN FLAT BARS ARE ⅜" DIAMETER.
3. SIGNS ARE FASTENED TO FLAT BARS AND U-SECTION POST WITH ⅝" BOLTS, WITH FLAT WASHER AND LOCK-NUTS.
4. GROUND PLATE NOT REQUIRED ON U-SECTION POST.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION

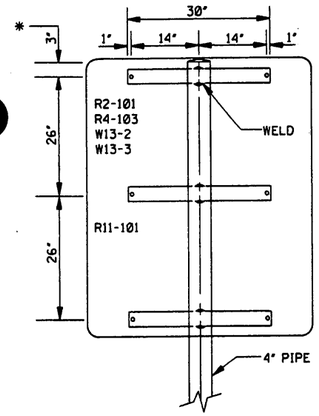
ENGLISH

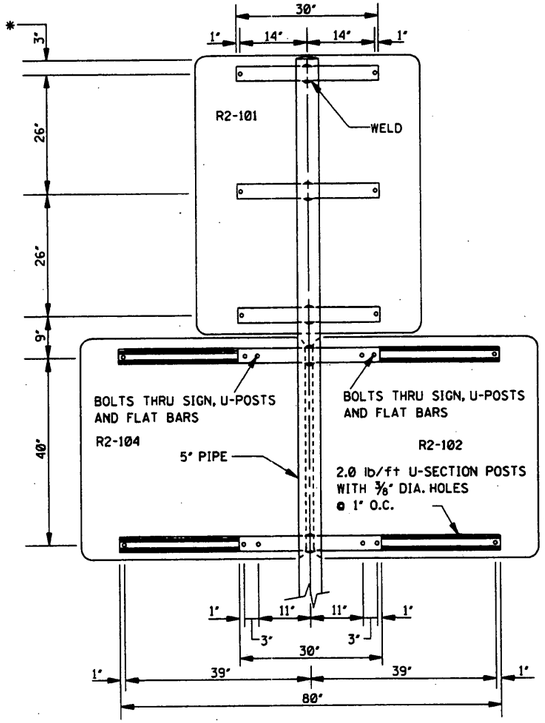
WORKING NUMBER
SN-4A

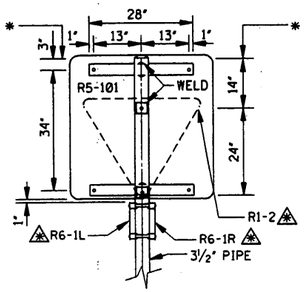
SHEET NUMBER
226

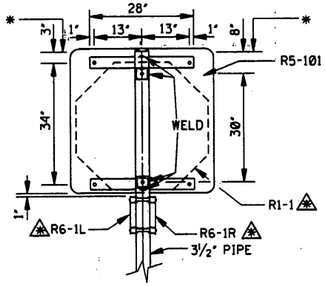
ISSUE DATE: OCTOBER 1, 1998

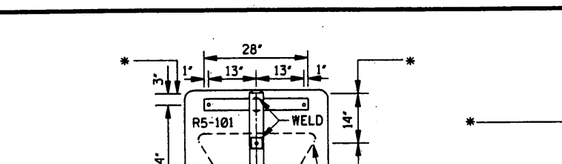
STATE	PROJECT NO.
MISS.	



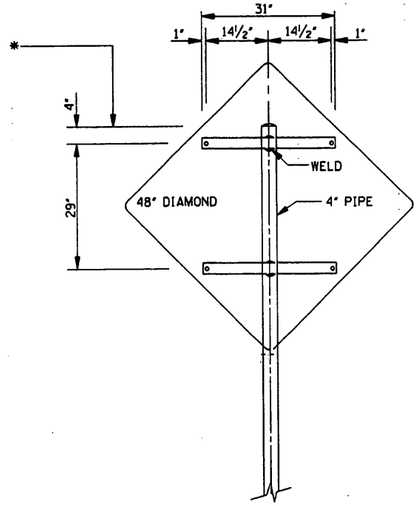




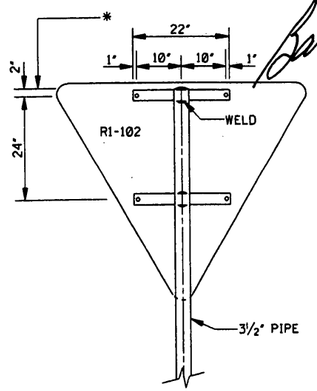


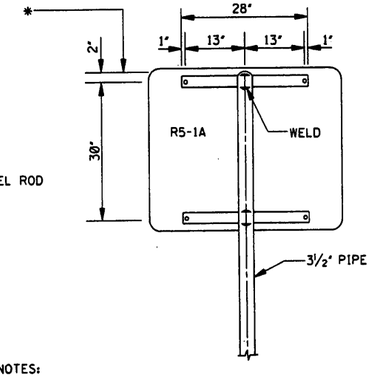


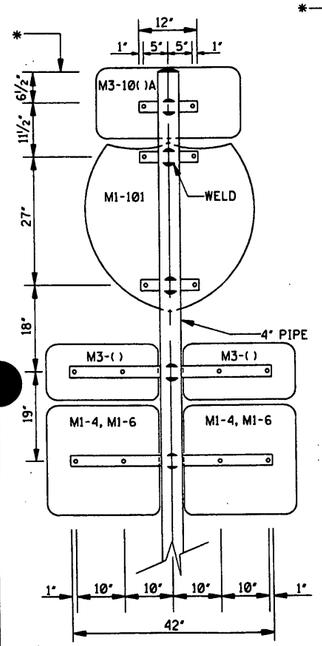
PLAN VIEW OF DOUBLE MOUNTING OF SIGNS

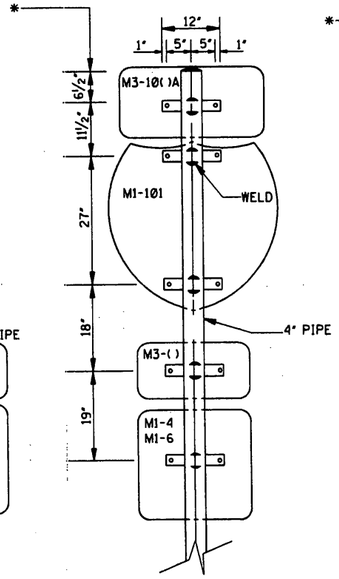


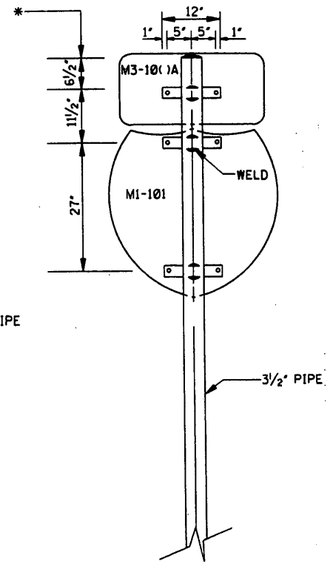
TYPICAL PLAN VIEW

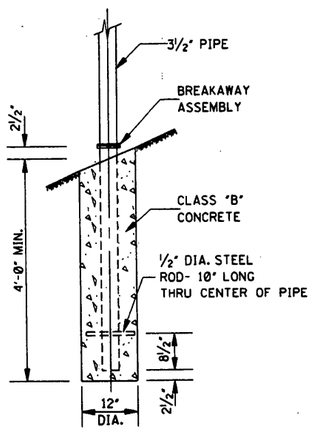


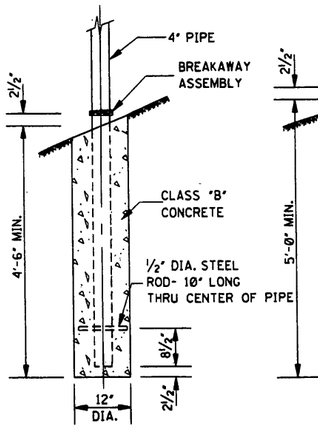


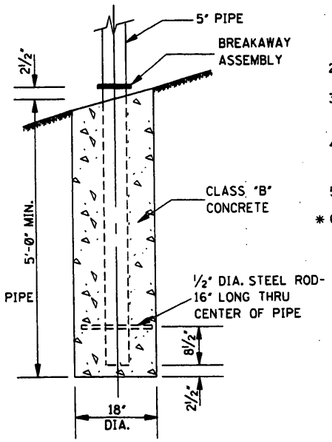












FOOTING DETAILS

GENERAL NOTES:

1. UNLESS OTHERWISE SPECIFIED, HORIZONTAL BRACES ARE 7/16" X 2½" X VARIABLE LENGTH FLAT STEEL BARS. BARS ARE WELDED TO PIPE AS SHOWN. WHEN FABRICATION IS COMPLETE, POSTS SHALL BE GALVANIZED AS PER SECTION 630 OF THE STANDARD SPECIFICATION.
2. HOLES IN FLAT BARS ARE 3/8" DIAMETER.
3. SIGNS ARE FASTENED TO THE FLAT BARS AND U-SECTION POSTS WITH M8 BOLTS WITH FLAT WASHERS AND LOCK NUTS.
4. WHERE REQUIRED, SIGNS R6-1L AND R6-1R ARE TO BE MOUNTED ON PIPES WITH CLAMPS OR BUCKLE BRACKETS (NOT A PAY ITEM).
5. ALL WELDS SHALL BE 3/16" FILLET.

* 6. TOP OF POST

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STANDARD ROADSIDE SIGN ASSEMBLY AND INSTALLATION

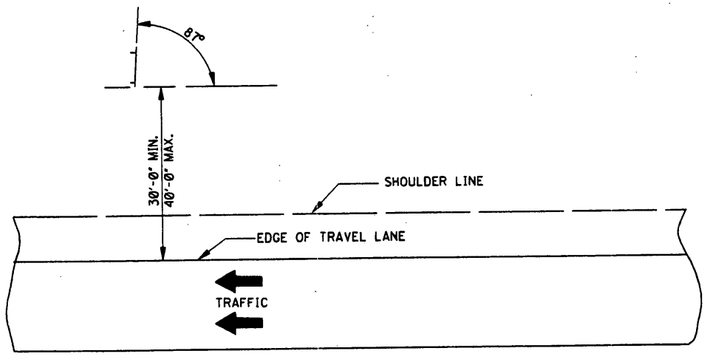
ENGLISH

WORKING NUMBER
SN-4B

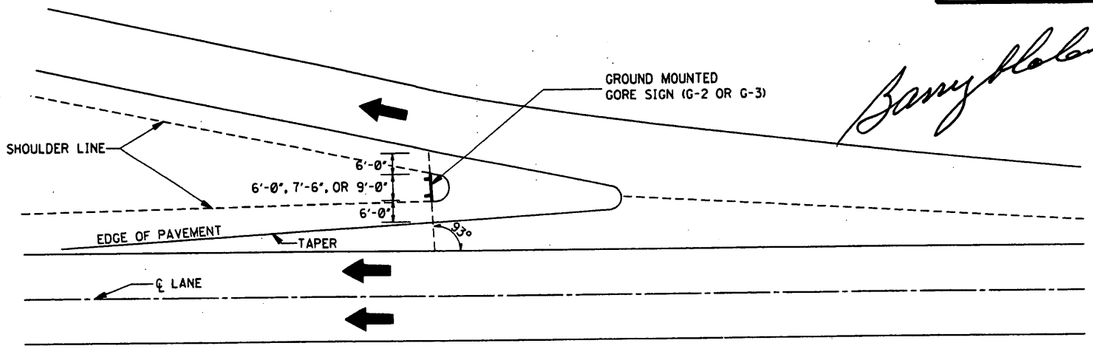
SHEET NUMBER
227

ISSUE DATE: OCTOBER 1, 1998

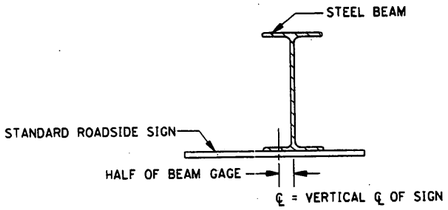
STATE	PROJECT NO.
MISS.	



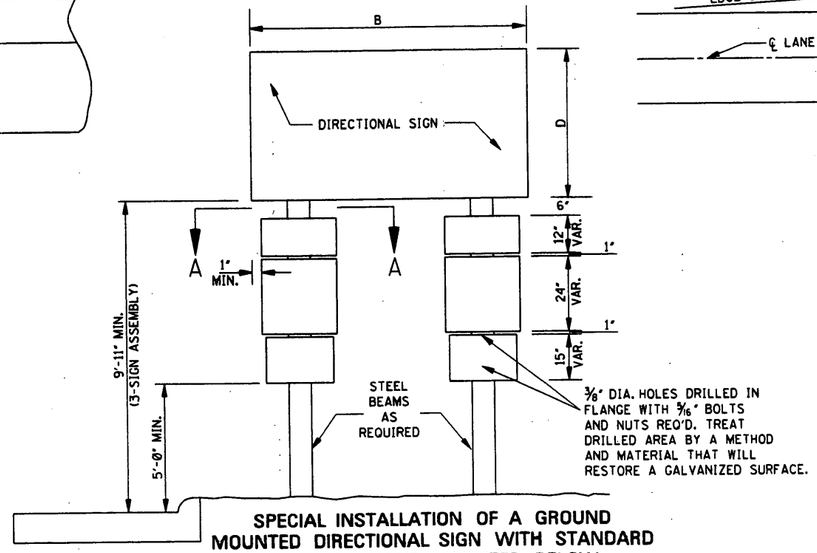
ALINEMENT OF SIGNS FOR TANGENT SECTIONS



TYPICAL INSTALLATION OF GROUND MOUNTED GORE SIGN (G-2 OR G-3)

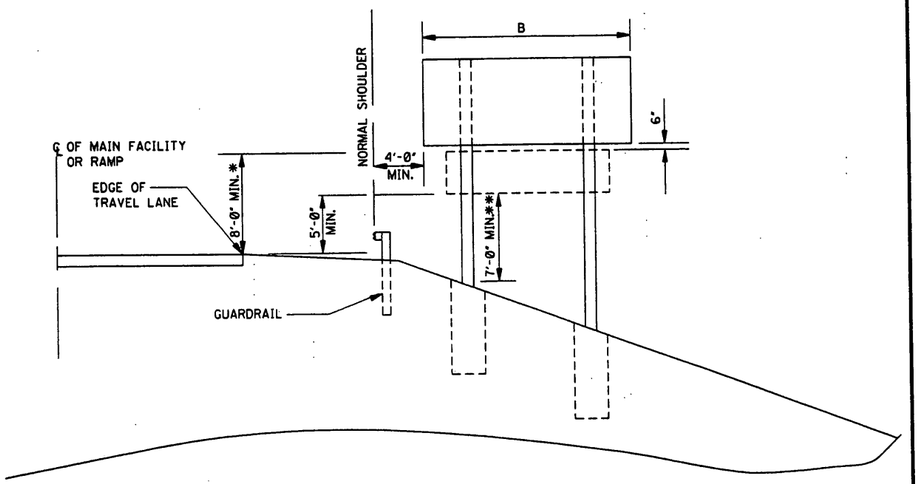


SECTION A–A

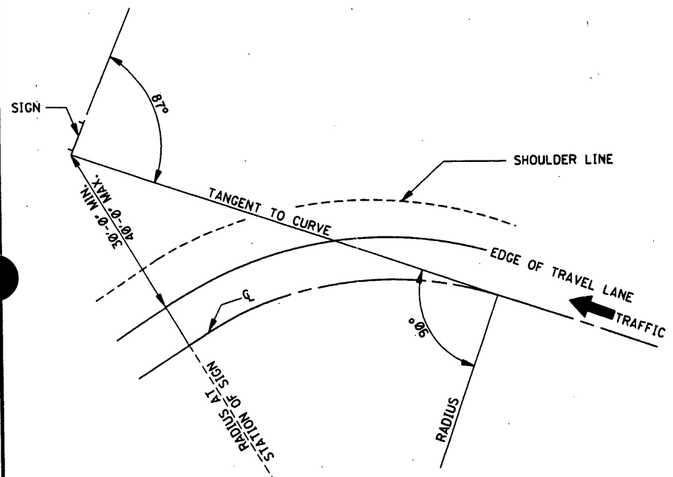


SPECIAL INSTALLATION OF A GROUND MOUNTED DIRECTIONAL SIGN WITH STANDARD ROADSIDE SIGNS MOUNTED BELOW

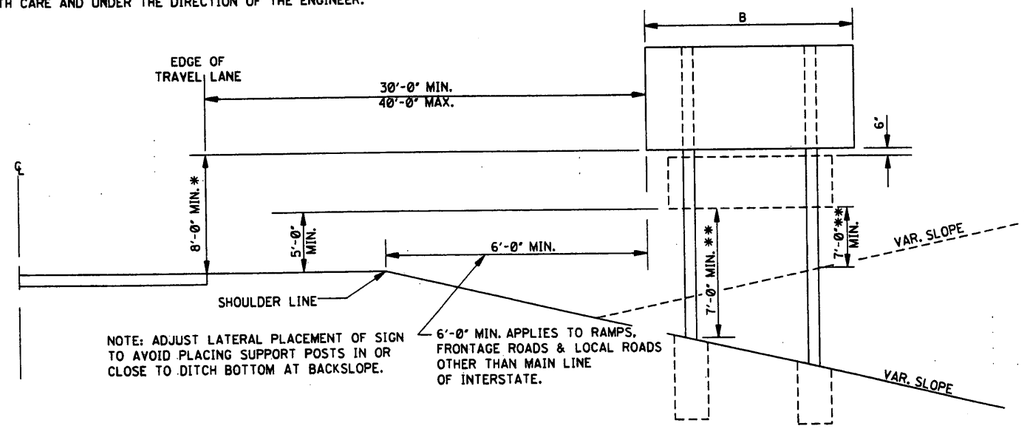
NOTE: BEFORE FINAL PLACEMENT OF SIGNS IN SHARP CURVE SECTIONS (AS IN THE CASE OF INTERCHANGE LOOPS AND RAMPS), THE SIGN SHALL BE INSPECTED BY THE ENGINEER AT NIGHT TO INSURE PROPER REFLECTORIZATION OF THE SIGN. IT MAY THEN BE NECESSARY TO ADJUST THE ALINEMENT OF THE SIGN (I.E., ORIENT THE SIGN FACE) TO AVOID OR MINIMIZE SPECULAR REFLECTION. THIS ADJUSTMENT SHOULD BE MADE WITH CARE AND UNDER THE DIRECTION OF THE ENGINEER.



TYPICAL INSTALLATION IN A FILL SECTION PROTECTED BY GUARDRAIL



ALINEMENT OF SIGN FOR CURVED SECTION



TYPCIAL INSTALLATION IN A CUT OR FILL SECTION

GENERAL NOTES:

* 1. 7'-0" MIN. WHERE THERE IS NO SUPPLEMENTARY SIGN (5'-0" MIN. WHERE NEAR EDGE OF SIGN IS 30'-0" OR MORE FROM PAVEMENT EDGE).

** 2. 7'-0" MINIMUM FROM GROUND TO BOTTOM EDGE OF LOWEST SIGN (SHORTEST POST).

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL INSTALLATION OF GROUND MOUNTED DIRECTIONAL SIGNS

BY	REVISION	DATE

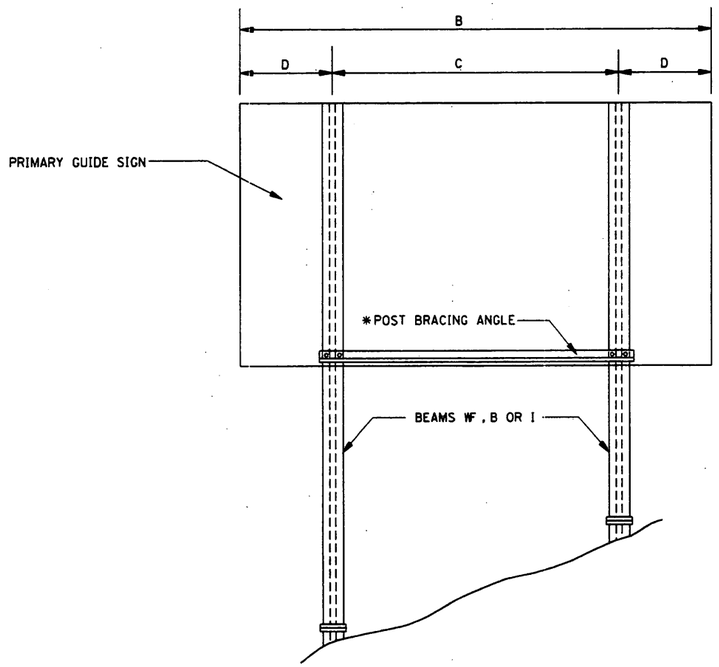
ENGLISH

WORKING NUMBER SN-5

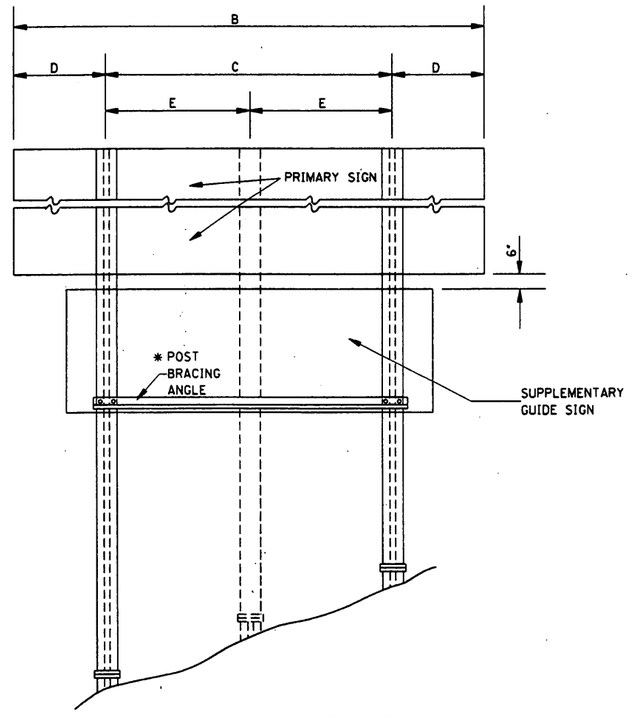
SHEET NUMBER 228

ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



TYPICAL 2-POST INSTALLATION
WITHOUT EXIT SIGN



TYPICAL 2 OR 3 POST INSTALLATION
WITH SUPPLEMENTARY GUIDE SIGN
AND POST BRACING ANGLE LOCATION

GENERAL NOTES FOR WORKING SHEETS SN-6, SN-6A AND SN-6B:

1. FOOTING
   ALL FOOTINGS SHALL BE CLASS 'B' CONCRETE. POST STUBS SHALL BE SET IN CONCRETE FOOTING AT REQUIRED GRADE AND ALIGNMENT WITH CARE SO THAT MINIMUM SHIMMING WILL BE REQUIRED.

2. BASE CONNECTION PROCEDURE
   ASSEMBLE POST TO STUB WITH BOLTS AND WITH A FLAT WASHER ON EACH BOLT BETWEEN PLATES. SHIM AS REQUIRED TO PLUMB POST. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS AND SHIMS AND TO CLEAN BOLT THREADS. THEN LOOSEN EACH BOLT IN TURN AND RETIGHTEN IN A SYSTEMATIC ORDER TO THE PRESCRIBED TORQUE AS SHOWN BY TABLE. BURR THREADS AT JUNCTION WITH NUT USING A CENTER PUNCH. HIGH STRENGTH BOLTS IN BASE CONNECTIONS SHALL BE TIGHTENED TO TORQUE AS SHOWN BY TABLE ON SN-6A. DO NOT OVER TIGHTEN!

3. POST LENGTH
   ALL POST LENGTHS SHALL BE VERIFIED AND APPROVED BY THE ENGINEER PRIOR TO FABRICATION. WHERE FIELD CONDITIONS REQUIRE THE POST LENGTH TO VARY MORE THAN 12", IT MAY BE NECESSARY TO CHANGE THE SIZE OR NUMBER OF POSTS. SUCH DETERMINATION WILL BE MADE BY THE ROADWAY DESIGN ENGINEER. ANY CHANGE OF SIZE OR NUMBER OF POSTS SHALL NOT BE JUSTIFICATION FOR ANY CONTRACT PRICE ADJUSTMENTS.

4. FABRICATOR NOTE
   IMPORTANT- ALL FRICTION FUSE BOLTS SHALL BE TIGHTENED IN SHOP BY A METHOD APPROVED BY THE BRIDGE DESIGN ENGINEER. TIGHTENING SHALL BE TO SUCH A DEGREE AS TO PROVIDE THE MINIMUM TENSION IN EACH BOLT WHEN ALL BOLTS ARE TIGHT, AS SHOWN BY TABLE SN-6A.

5. ALL HOLES IN FUSE PLATES AND HINGE PLATES SHALL BE DRILLED.

6. ALL PLATE CUTS SHALL PREFERABLY BE SAW CUTS. FLAME CUTTING WILL BE PERMITTED PROVIDED ALL EDGES ARE GROUND. METAL PROJECTING BEYOND THE PLANE OF THE PLATE FACE WILL NOT BE ACCEPTABLE.

7. WELDING FOR STEEL SIGN SUPPORTS
   WELDING SHALL BE PERFORMED IN SHOP BY ELECTRIC ARC PROCESS.

8. MATERIAL SPECIFICATIONS
   THE MATERIALS USED IN THE CONSTRUCTION OF THE GROUND MOUNTED SIGN SUPPORT STRUCTURES, AS LISTED BELOW, SHALL CONFORM WITH THE REQUIREMENTS OF THE DESIGNATED ASTM SPECIFICATION. ALL OTHER MATERIALS, FABRICATION AND ERECTION SHALL BE IN ACCORDANCE WITH THE REQUIREMENTS OF THE SPECIFICATIONS, EXCEPT AS OTHERWISE NOTED ON THE PLANS.

DESCRIPTION	MATERIALS PER ASTM DESIGNATION	GALVANIZE (1) PER ASTM DESIGNATION
POSTS OF STEEL PIPE	A 53 (GRADE 'B') (2)	A 53
BASE CONNECTION PLATES FOR PIPES	A 36	A 123
POSTS OF STEEL WF, B, AND I BEAMS INCLUDING BASE CONNECTION, FUSE AND HINGE PLATES	A 588 OR A 572 GRADE 50	A 123
POST BRACING ANGLES AND FLAT BARS USED IN FABRICATION AND ERECTION OF SIGN SUPPORTS	A 36	A 123
HIGH STRENGTH BOLTS, NUTS AND WASHERS	A 325	A 153
BOLTS OTHER THAN HIGH STRENGTH (3)	A 307 (GRADE 'A')	A 153

(1) ALL STEEL SHALL BE GALVANIZED AFTER FABRICATION EXCEPT AS NOTED ON THE PLANS.
(2) PIPES MAY BE WELDED OR SEAMLESS.
(3) BOLTS, WASHERS, AND NUTS USED FOR FASTENING ALUMINUM SIGN SHEETS AND PANELS SHALL BE ALUMINUM AS PER FOLLOWING TABLE.

DESCRIPTION	ASTM DESIGNATION	ALLOY
BOLTS AND WASHERS	B 209	2024-T4
PANEL BOLT NUTS	B 211	6061-T6
STOP NUTS	B 211	2017-T4

* NOTE: PLACE POST BRACING ANGLE AT BOTTOM OF PRIMARY OR SUPPLEMENTARY SIGN WHICHEVER IS LOWER. (SEE 'END ELEVATION OF POST AND FOOTING' ON SN-6A.)

SIGN POST SPACING TABLE

2 POST			2 POST (CONT'D)			3 POST			
"B"	"C"	"D"	"B"	"C"	"D"	"B"	"C"	"D"	"E"
4'-0"	2'-0"	1'-0"	14'-6"	8'-9"	2'-10½"	20'-0"	14'-0"	3'-0"	7'-0"
4'-6"	2'-6"	1'-0"	15'-0"	9'-0"	3'-0"	20'-6"	14'-3"	3'-1½"	7'-1½"
5'-0"	3'-0"	1'-0"	15'-6"	9'-3"	3'-1½"	21'-0"	14'-9"	3'-1½"	7'-4½"
5'-6"	3'-6"	1'-0"	16'-0"	9'-6"	3'-3"	21'-6"	15'-0"	3'-3"	7'-6"
6'-0"	4'-0"	1'-0"	16'-6"	10'-0"	3'-3"	22'-0"	15'-6"	3'-3"	7'-9"
6'-6"	4'-6"	1'-0"	17'-0"	10'-3"	3'-4½"	22'-6"	15'-9"	3'-4½"	7'-10½"
7'-0"	5'-0"	1'-0"	17'-6"	10'-6"	3'-6"	23'-0"	16'-0"	3'-6"	8'-0"
7'-6"	5'-6"	1'-0"	18'-0"	10'-9"	3'-7½"	23'-6"	16'-6"	3'-6"	8'-3"
8'-0"	6'-0"	1'-0"	18'-6"	11'-0"	3'-9"	24'-0"	16'-9"	3'-7½"	8'-4½"
8'-6"	6'-6"	1'-0"	19'-0"	11'-6"	3'-9"	24'-6"	17'-3"	3'-7½"	8'- 7½"
9'-0"	7'-0"	1'-0"	19'-6"	11'-9"	3'-10½"	25'-0"	17'-6"	3'-9"	8'-9"
9'-6"	7'-0"	1'-3"	20'-0"	12'-0"	4'-0"	25'-6"	17'-9"	3'-10½"	8'-10½"
10'-0"	7'-0"	1'-6"	20'-6"	12'-3"	4'-1½"	26'-0"	18'-3"	3'-10½"	9'-1½"
10'-6"	7'-0"	1'-9"	21'-0"	12'-6"	4'-3"	26'-6"	18'-6"	4'-0"	9'-3"
11'-0"	7'-0"	2'-0"	21'-6"	13'-0"	4'-3"	27'-0"	19'-0"	4'-0"	9'-6"
11'-6"	7'-0"	2'-3"	22'-0"	13'-3"	4'-4½"	27'-6"	19'-3"	4'-1½"	9'-7½"
12'-0"	7'-3"	2'-4½"	22'-6"	13'-6"	4'-6"	28'-0"	19'-6"	4'-3"	9'-9"
12'-6"	7'-6"	2'-6"	23'-0"	13'-9"	4'-7½"	28'-6"	20'-0"	4'-3"	10'-0"
13'-0"	7'-9"	2'-7½"	23'-6"	14'-0"	4'-9"	29'-0"	20'-3"	4'-4½"	10'-1½"
13'-6"	8'-0"	2'-9"	24'-0"	14'-6"	4'-9"	29'-6"	20'-6"	4'-6"	10'-3"
14'-0"	8'-6"	2'-9"				30'-0"	21'-0"	4'-6"	10'-6"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY SIGN SUPPORTS

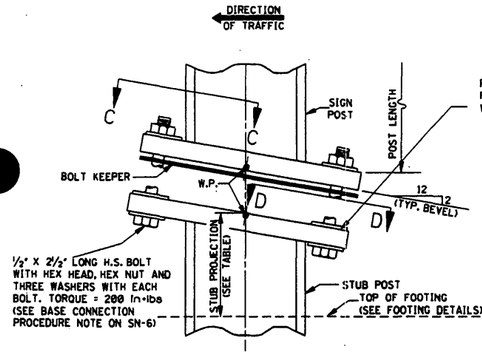
BY | REVISION | DATE

ISSUE DATE: OCTOBER 1, 1998

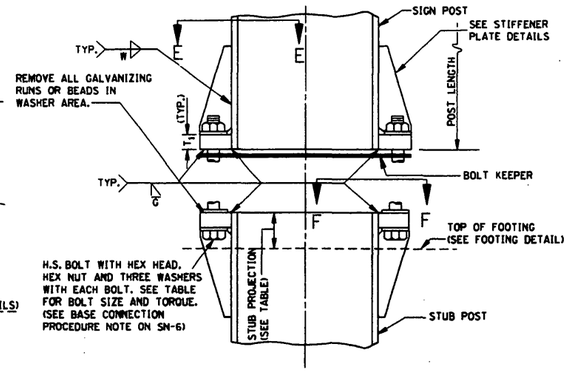
WORKING NUMBER
SN-6

SHEET NUMBER
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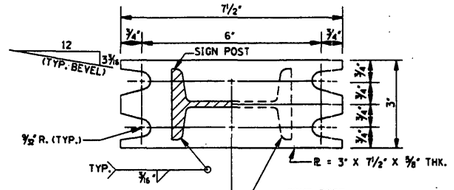
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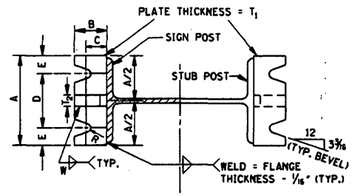
BASE CONNECTION DETAILS FOR S3 X 5.7 AND S4 X 7.7 SHAPED POSTS



BASE CONNECTION DETAILS FOR W SHAPED POSTS



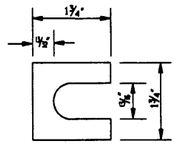
SECTION C–C | SECTION D–D



SECTION E–E SECTION F–F

NOTE: SEE TABLE FOR DIMENSIONS

NOTE: WHERE SIGN SUPPORTS MAY BE STRUCK FROM MORE THAN ONE DIRECTION, THE BASE CONNECTIONS SHALL BE LEVEL.



SHIM DETAIL

NOTE: FURNISH 2-0.012" ± THICK AND 2-0.032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B 36.

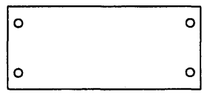
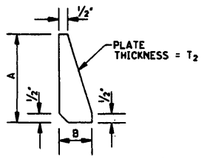


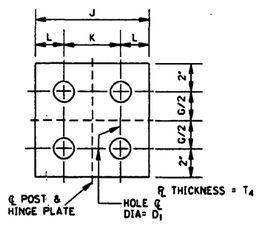
DIAGRAM OF "BOLT KEEPER"

NOTE: FABRICATED FROM 28 GAGE GALVANIZED STEEL. REQUIRED BETWEEN BASE ℄ AND STUB POST ℄. DIMENSIONED AS REQUIRED FOR EACH INSTALLATION.



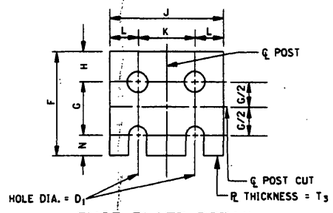
STIFFENER PLATE DETAIL

NOTE: SEE TABLE FOR DIMENSIONS



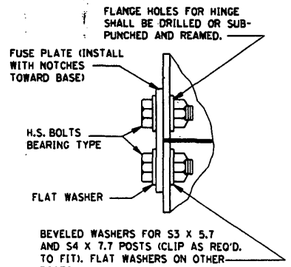
HINGE PLATE

NOTE: INSTALLATION SIMILAR TO DETAIL "A", FUSE PLATE.



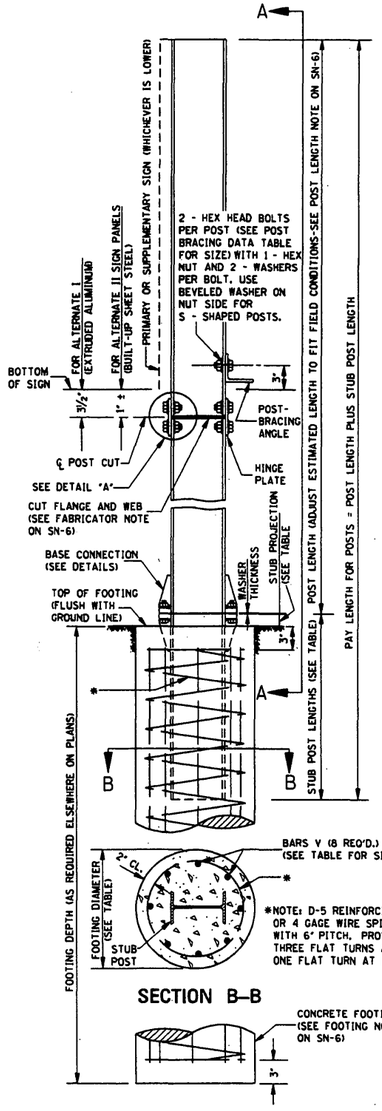
FUSE PLATE DETAIL

NOTE: SEE TABLE FOR DIMENSIONS. USE H.S. BOLTS WITH HEX HEAD, HEX NUTS, ONE FLAT WASHER UNDER EACH BOLT HEAD AND BEVEL OR FLAT WASHERS (WHERE REQUIRED) UNDER NUTS.



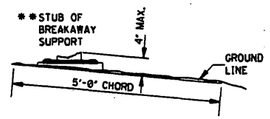
DETAIL "A", FUSE PLATE

NOTE: SEE FABRICATOR NOTE ON SN-6.



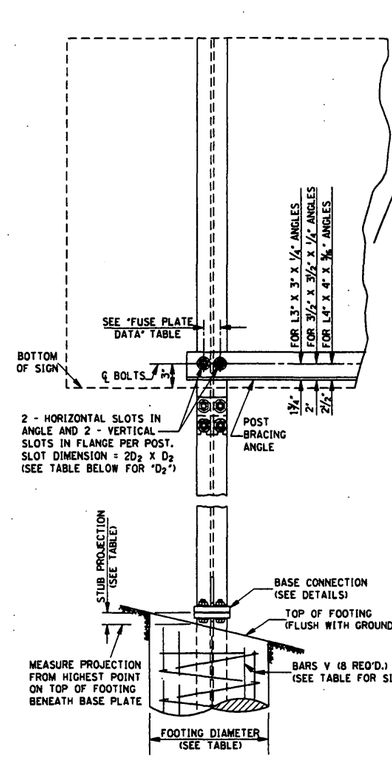
SECTION B–B

END ELEVATION OF POST AND FOOTING



BREAKAWAY SUPPORT STUD CLEARANCE DIAGRAM

** NOTE: STUB PROJECTION SHOULD BE MEASURED OVER A 5'-0" CHORD AS PER AASHTO SPECIFICATIONS LATEST EDITION.



SECTION A–A

GENERAL NOTE:

1. SEE SN-6 FOR GENERAL NOTES.

POST BRACING DATA

DESCRIPTION \ POST SIZE		W12 X 26 W10 X 26 W10 X 22	W8 X 21 W8 X 18 W6 X 20	W6 X 9 W6 X 12 "S" SHAPES
BOLT SIZE		⅞" X 2¼"	¾" X 2"	½" X 1¾"
D_2		15/16"	13/16"	9/16"
ANGLE LENGTH		Z + 9"	Z + 8"	Z + 6"
ANGLE SIZE FOR POST SPACING OF	0'-9'	L4" X 4" X 5/16"	L3½" X 3½" X ¼"	L3" X 3" X ¼"
	9'-11'	L4" X 4" X 5/16"	L3½" X 3½" X ¼"	L3½" X 3½" X ¼"
	11'-18'	L4" X 4" X 5/16"	L4" X 4" X 5/16"	L4" X 4" X 5/16"

NOTE: Z = DISTANCE BETWEEN ℄'S OF EXTERIOR POSTS.

BASE CONNECTION DATA

DIMENSION / POST SIZE	BOLT SIZE & TORQUE	A	B	C	D	E	T_1	T_2	W	R
S3 X 5.7	SEE DETAIL									
S4 X 7.7	SEE DETAIL									
W6 X 9	⅝" X 2¾" LONG TORQUE 300 in-lbs	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W6 X 12	⅝" X 2¾" LONG TORQUE 300 in-lbs	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W6 X 15	⅝" X 2¾" LONG TORQUE 300 in-lbs	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W8 X 18	⅝" X 2¾" LONG TORQUE 300 in-lbs	5"	2"	1¼"	2¾"	1⅛"	¾"	½"	¼"	11/32"
W8 X 21	¾" X 3½" LONG TORQUE 500 in-lbs	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"
W10 X 22	¾" X 3½" LONG TORQUE 500 in-lbs	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"
W10 X 26	¾" X 3½" LONG TORQUE 500 in-lbs	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"
W12 X 26	¾" X 3½" LONG TORQUE 500 in-lbs	6"	2¼"	1⅜"	3½"	1¼"	1"	¾"	5/16"	13/32"

FUSE PLATE DATA

F	G	H	J	K	L	N	D_1	T_3	BOLT SIZE (DIA. X LENGTH)	MIN. BOLT TENSION (lbs)	T_4
3⅛"	1½"	1⅛"	2⅝"	1½"	9/16"	½"	9/16"	¼"	½" X 1¾"	12,050	¼"
3⅛"	1½"	1⅛"	2⅝"	1½"	9/16"	½"	9/16"	¼"	½" X 1¾"	12,050	¼"
3⅜"	2"	1⅛"	4"	2¼"	⅞"	½"	9/16"	¼"	½" X 1½"	12,050	¼"
3¾"	2"	1⅛"	4"	2¼"	⅞"	⅝"	11/16"	⅜"	⅝" X 2"	19,200	⅜"
4½"	2½"	1¼"	6"	3½"	1¼"	¾"	13/16"	½"	¾" X 2¼"	28,400	⅜"
4½"	2½"	1¼"	5¼"	2¾"	1¼"	¾"	13/16"	½"	¾" X 2¼"	28,400	⅜"
4⅞"	2½"	1½"	5¼"	2¾"	1¼"	⅞"	15/16"	9/16"	⅞" X 2½"	39,250	⅜"
5⅜"	3"	1½"	5¾"	2¾"	1½"	⅞"	15/16"	9/16"	⅞" X 2½"	39,250	⅜"
5⅜"	3"	1½"	5¾"	2¾"	1½"	⅞"	15/16"	9/16"	⅞" X 2½"	39,250	7/16"
5⅜"	3"	1½"	6½"	3½"	1½"	⅞"	15/16"	9/16"	⅞" X 2½"	39,250	⅜"

FOOTING DATA

STUB LENGTH	STUB ** PROJECTION	FOOTING DIAMETER	BARS V SIZE	DIMENSION / POST SIZE
1'-6"	3½"	1'-6"	#4	S3 X 5.7
1'-6"	3½"	1'-6"	#4	S4 X 7.7
2'-0"	3"	2'-0"	#4	W6 X 9
2'-0"	3"	2'-0"	#5	W6 X 12
2'-6"	3"	2'-0"	#6	W6 X 15
2'-6"	3"	2'-0"	#7	W8 X 18
3'-0"	2½"	2'-0"	#8	W8 X 21
3'-0"	2½"	2'-0"	#9	W10 X 22
3'-0"	2½"	2'-0"	#10	W10 X 26
3'-0"	2½"	2'-0"	#11	W12 X 26

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

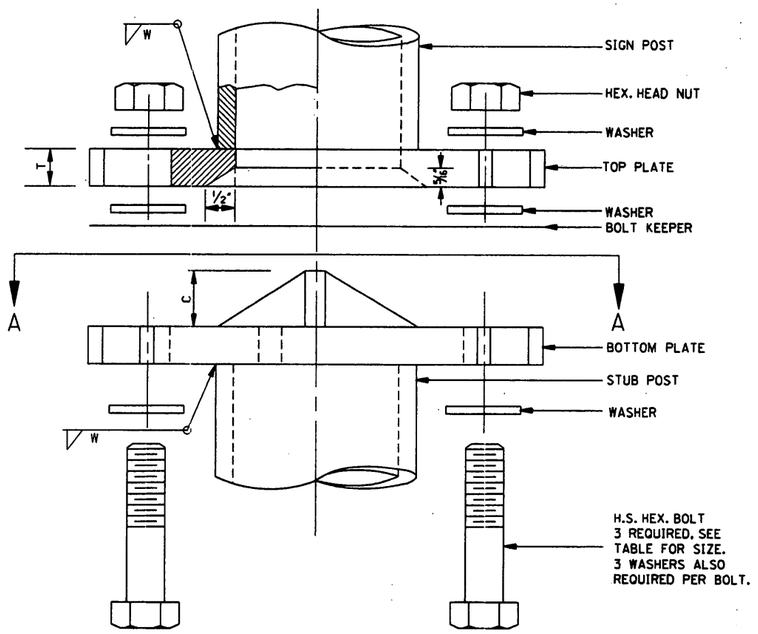
BREAKAWAY SIGN SUPPORTS

WORKING NUMBER: SN-6A

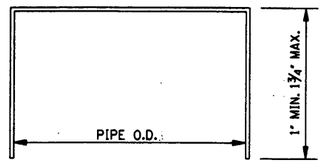
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ISSUE DATE: OCTOBER 1, 1998

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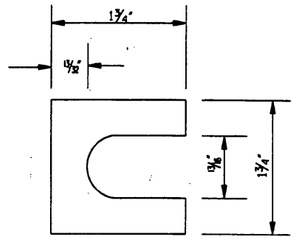


MULTI-DIRECTIONAL SIGN POST & STUB POST



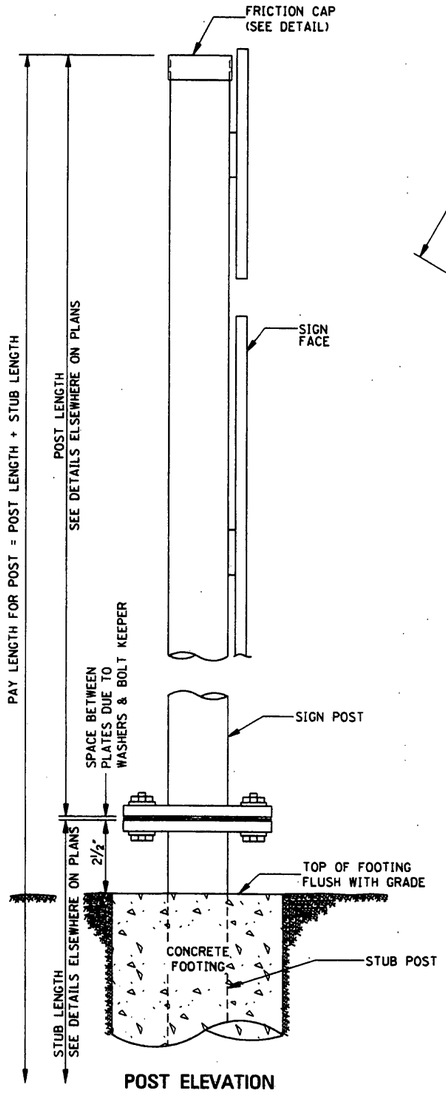
FRICTION CAP DETAIL

NOTE: SEE NOTE 3

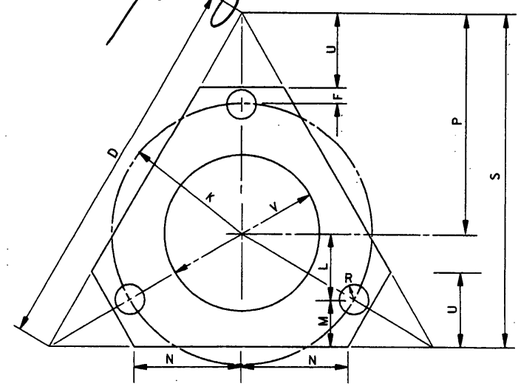


SHIM DETAIL

NOTE: FURNISH 2-0.012" ± THICK AND 2-0.032" ± THICK SHIMS PER POST. SHIMS SHALL BE FABRICATED FROM BRASS SHIM STOCK OR STRIP CONFORMING TO ASTM B 36.

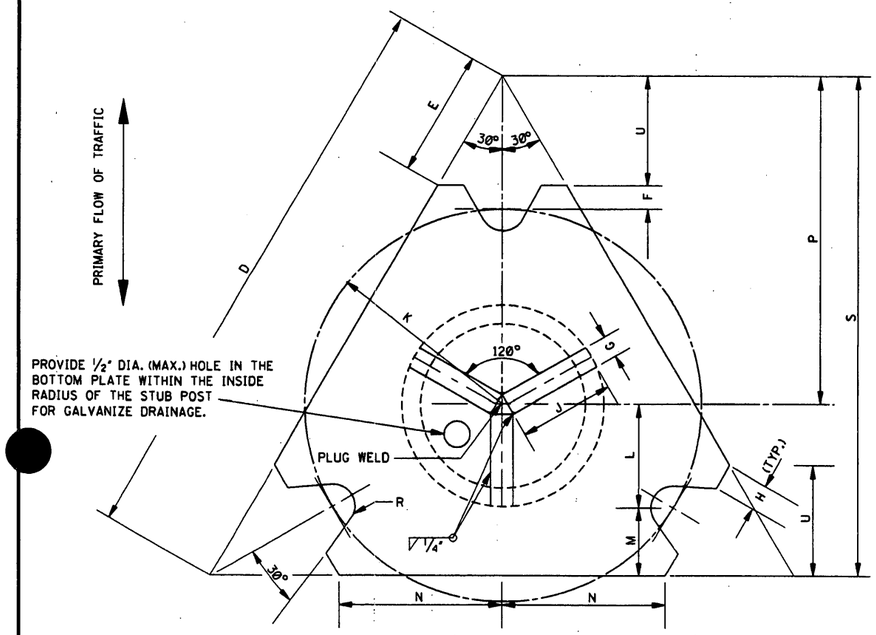


POST ELEVATION



BOLT KEEPER PLATE DETAIL

NOTE: TO BE FABRICATED FROM 28 GAGE THICK GALVANIZED STEEL. TO BE INSTALLED AS SHOWN IN DETAIL AT UPPER LEFT.



SECTION A–A

NOTE: SEE DATA TABLE FOR DIMENSIONS

GENERAL NOTES: (SEE SN-6 FOR ADDITIONAL GENERAL NOTES)

1. THE TOP PLATE OF THE TRIANGULAR SLIP BASE SHALL HAVE THE SAME EXTERIOR DIMENSIONS AS THE BOTTOM PLATE. THE LIFTING CONE SHALL BE WELDED TO THE BOTTOM PLATE ONLY. A HOLE EQUAL TO THE INSIDE DIAMETER OF THE SIGN POST SHALL BE CUT THROUGH THE CENTER OF THE TOP PLATE WITH THE HOLE EDGE BEVELED AS DETAILED. TOP & BOTTOM PLATES SHALL BE SYMMETRICAL FOR THE PURPOSE OF ASSEMBLY IN ANY POSITION.

2. BASE CONNECTION ASSEMBLY AS FOLLOWS:
   - A. ASSEMBLE POST TO STUB WITH 3 BOLTS AND WITH 3 FLAT WASHERS PER BOLT.
   - B. SHIM AS REQUIRED TO PLUMB POST.
   - C. TIGHTEN ALL BOLTS THE MAXIMUM POSSIBLE WITH A 12" TO 15" WRENCH TO BED WASHERS, KEEPER PLATE, SHIMS AND TO CLEAN THREADS.
   - D. LOOSEN EACH BOLT IN TURN & RETIGHTEN IN A SYSTEMATIC ORDER TO PRESCRIBED TORQUE. (SEE BASE CONNECTION DATA TABLE).
   - E. BURR THREADS AT JUNCTION WITH NUT WITH A CENTER PUNCH TO PREVENT NUT FROM LOOSENING.

3. FRICTION CAPS TO BE MANUFACTURED FROM HOT ROLLED OR COLD ROLLED STEEL SHEETS. FOR ALL PIPE SIZES, MINIMUM THICKNESS SHALL BE 20 GAGE SHEET METAL. RIM EDGES SHALL BE REASONABLY STRAIGHT AND SMOOTH. CAPS SHALL BE SIZED AND FORMED IN SUCH A MANNER AS TO PROVIDE A DRIVE-ON FRICTION FIT AND HAVE NO TENDENCY TO ROCK WHEN SEATED ON PIPE. THE DEPTH SHALL BE SUFFICIENT TO GIVE POSITIVE PROTECTION AGAINST ENTRANCE OF RAINWATER. THEY SHALL BE FREE OF SHARP CREASES OR INDENTATIONS AND SHOW NO SIGNS OF METAL FRACTURE. ALL CAPS TO BE SAME IN SHAPE AND GENERAL APPEARANCE AS APPROVED BY THE ENGINEER.

4. STUB PROJECTION SHOULD BE MEASURED OVER A 5'-0" CHORD AS PER AASHTO SPECIFICATIONS, LATEST EDITIONS. SEE SHEET SN-6A FOR DIAGRAM.

BASE CONNECTION DATA TABLE

DIMENSIONS NOMINAL PIPE SIZES	BOLT SIZE & TORQUE	T	W	C	*D	*E	F	G	*H	J	K	L	M	*N	P	S	U	V	R
3"	⅝" X 2½" 300 In · lbs	⅝"	⅜"	1"	10⅜"	2⅜16"	½"	⅜"	½"	1¾"	3½"	1¾"	1¼"	2⅞"	6"	9"	2"	4¼"	11/32"
3½"																			
4"	¾" X 3" 500 In · lbs	⅞"	7/16"	1 7/16"	13"	2⅞"	½"	⅜"	⅝"	2½"	4½"	2¼"	1½"	3⅝"	7½"	11¼"	2½"	5¾"	13/32"
5"																			

*NOTE: APPROXIMATE DIMENSIONS

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

BREAKAWAY SIGN SUPPORTS

DEPARTMENT OF TRANSPORTATION ENGLISH MISSISSIPPI

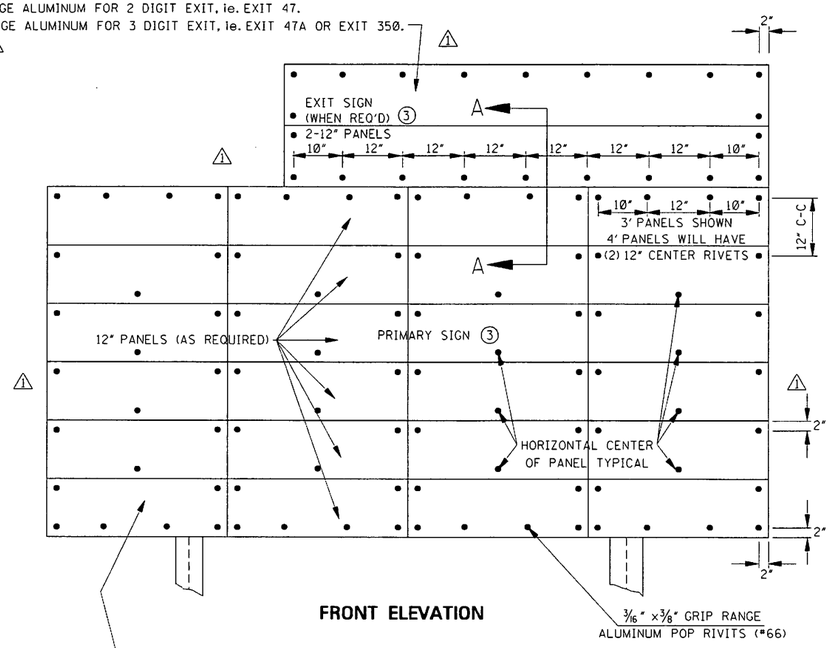
WORKING NUMBER SN-6B

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 231

STATE	PROJECT NO.
MISS.	

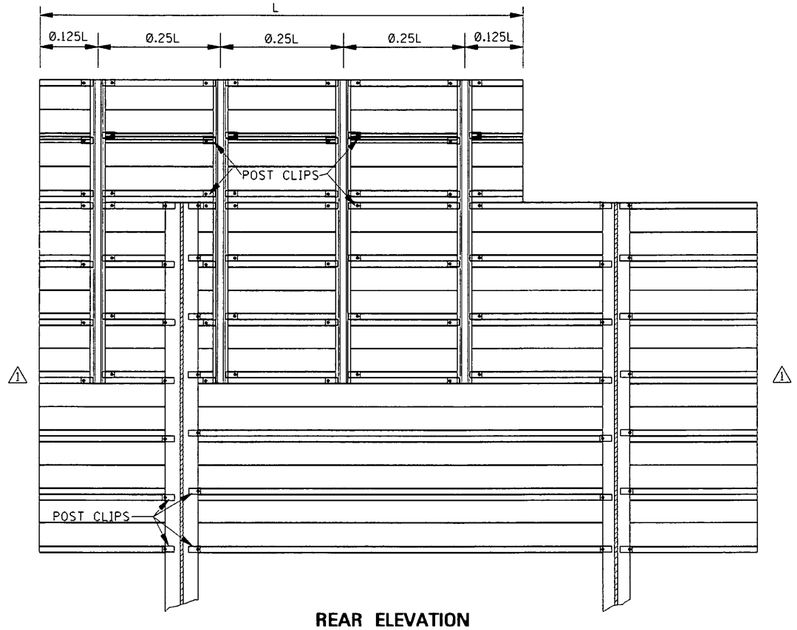
△2 2' x 8', 0.063 GAUGE ALUMINUM FOR 2 DIGIT EXIT, ie. EXIT 47.
△2 2' x 10', 0.063 GAUGE ALUMINUM FOR 3 DIGIT EXIT, ie. EXIT 47A OR EXIT 350.



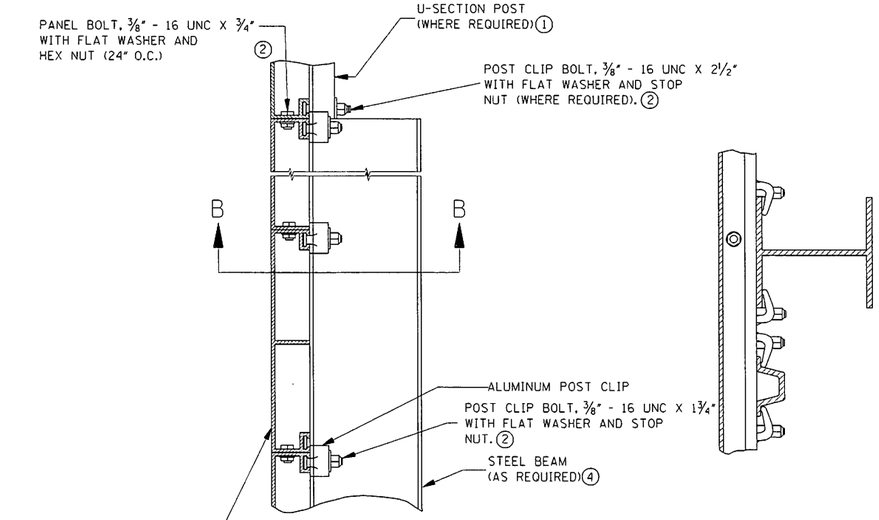
FRONT ELEVATION

△3 SIGN FACE IS TO BE CONSTRUCTED OF 3' AND 4' 0.063 GAUGE ALUMINUM. △2 4' PANELS SHOULD HAVE PRECEDENCE OVER 3' PANELS.
△1 EX. A 12' WIDE SIGN = (3) 4' PANELS.
A 15' WIDE SIGN = (3) 4' + (1) 3'

3/16" x 3/8" GRIP RANGE ALUMINUM POP RIVITS (#66)

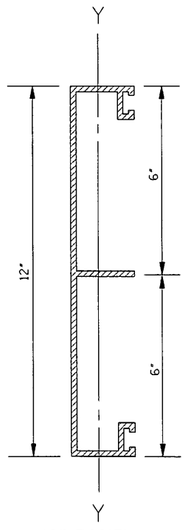


REAR ELEVATION



SECTION A–A

SECTION B–B



12" PANEL

△1

NOTE: THE REQUIRED SECTION MODULUS (MINIMUM) ABOUT THE Y-Y AXIS (CENTER OF GRAVITY) IS:
12" PANELS - 0.703 in³ △1

GENERAL NOTES:

1. △1 EXIT SIGNS, EXCEPT AS NOTED BELOW, SHALL BE ATTACHED TO PRIMARY SIGNS WITH POST CLIPS (AS REQUIRED) AND FOUR (4) STEEL U-SECTION POSTS (2.0 lb/ft) WITH HOLES PUNCHED AS NEEDED FOR INSTALLATION. U-SECTION POST LENGTHS SHALL BE 5'-0" FOR PRIMARY SIGNS WITH 12" UPPER PANELS. EACH POST SHALL HAVE FOURTEEN (14) POST CLIPS - SIX (6) IN EXIT SIGN AND EIGHT (8) IN PRIMARY SIGN. WHERE NECESSARY, THE POST SPACING (SHOWN ON REAR ELEVATION) MAY BE ADJUSTED SOMEWHAT TO STAY CLEAR OF SIGN POSTS AND POST CLIPS.

2. ALL BOLTS, WASHERS AND NUTS IN THE FABRICATION OF EXTRUDED ALUMINUM SIGNS AND THE ATTACHMENT OF SAME TO STEEL BEAMS SHALL BE ALUMINUM, AS PER SPECIFICATIONS. POST CLIP BOLTS AND BOLTS FOR U-SECTION POSTS SHALL HAVE HEADS DESIGNED TO FIT THE BOLT SLOTS IN THE PANELS. THE LOCK-NUTS SHALL BE TIGHTENED ON CLEAN, DRY, "AS RECEIVED" THREADS TO A TORQUE OF 150 in • lbs.

3. △1 UNLESS OTHERWISE SPECIFIED, THE BACKGROUND OF ALL DIRECTIONAL SIGNS (INCLUDING OVERHEAD SIGNS) SHALL BE INTERSTATE GREEN REFLECTORIZED SHEETING (AS PER STANDARD SPECIFICATIONS), DIRECT APPLIED TO 0.063 GAUGE SHEET △2 ALUMINUM. THE COPY SHALL BE WHITE, REFLECTORIZED, DIRECT APPLIED, ADHESIVE BACKED, LETTERS, NUMBERS, SYMBOLS, AND BORDER.

4. SEE OTHER DRAWINGS FOR SELECTION AND DETAILS OF STEEL BEAMS FOR VERTICAL SUPPORTS (SIGN POST).

5. THE DETAILS OF SIGN FACE CONSTRUCTION SHOWN ON THIS SHEET ARE THE SAME FOR OVERHEAD SIGNS, BUT THE METHOD OF MOUNTING IS SHOWN ON OVERHEAD TRUSS DRAWINGS.

6. △1 DATE OF ERECTION AND SIGN SIZE (WIDTH X HEIGHT) SHALL BE LEGIBLY WRITTEN ON THE BACK OF EACH SIGN WITH A PERMANENT GREASE MARKER.

△2 △2

DATE	REVISION	BY
3-01-02	ERRATA	S.W.R.
12-1-99	REVISED DRAWING	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SIGN FACE CONST. AND ATTACHMENT OF GROUND MOUNTED DIRECTIONAL SIGNS TO STEEL BEAMS (EXTRUDED ALUMINUM PANELS)

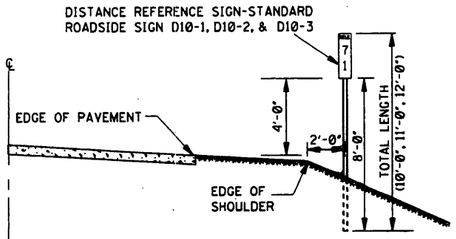
ENGLISH

WORKING NUMBER SN-7

SHEET NUMBER 232

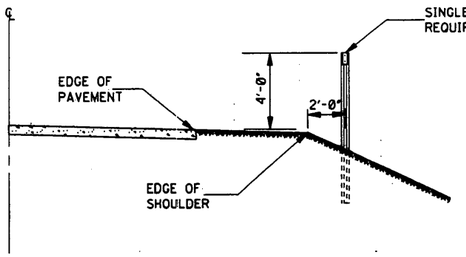
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

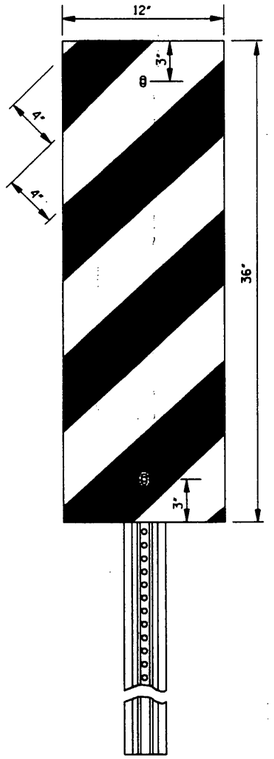


DISTANCE REFERENCE SIGN MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY

NOTE: SIGN MOUNTING ON LEFT LANE SHOULDER SHALL BE 90° OPPOSITE THE RIGHT LANE STATION. IF CONDITIONS ARE SUCH THAT MILE SIGN CANNOT BE LOCATED WITHIN 50 FEET OF ITS TRUE LOCATION, IT SHALL BE OMITTED ENTIRELY.

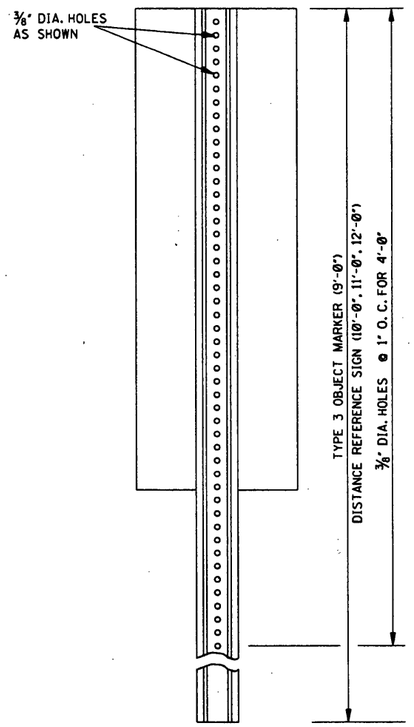


DELINEATOR MOUNTING ON OUTSIDE SHOULDER ALONG MAIN FACILITY OR RAMP



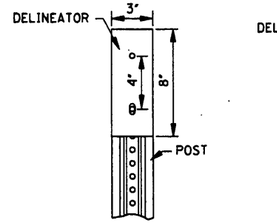
DETAIL OF TYPE 3 OBJECT MARKER

NOTE: COLORS- BLACK AND YELLOW. STRIPING SHOWN ABOVE FOR RIGHT SIDE ONLY. STRIPES SLANT DOWNWARD TO THE RIGHT FOR LEFT SIDE OF BRIDGE END. SEE DETAIL BELOW.

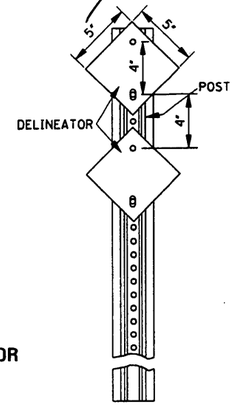


REAR VIEW OF TYPE 3 OBJECT MARKER OR DISTANCE REFERENCE SIGN ASSEMBLY

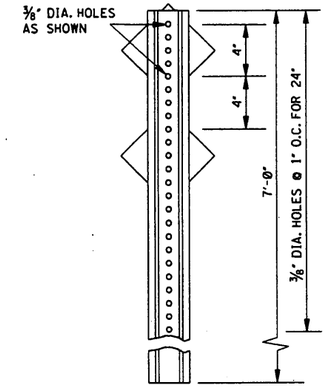
NOTE: TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGNS ARE TO BE FASTENED TO U-SECTION POSTS WITH 5/16" DIA. HUCK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OR OTHER APPROVED EQUAL.



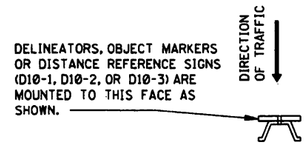
DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR



DETAIL OF DOUBLE WHITE OR DOUBLE YELLOW DELINEATOR

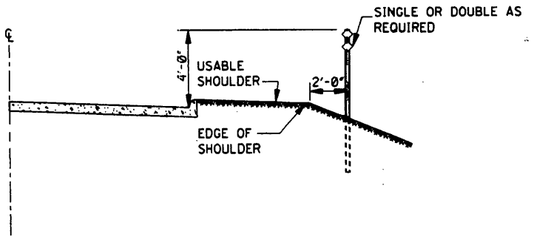


REAR VIEW OF DELINEATOR ASSEMBLY

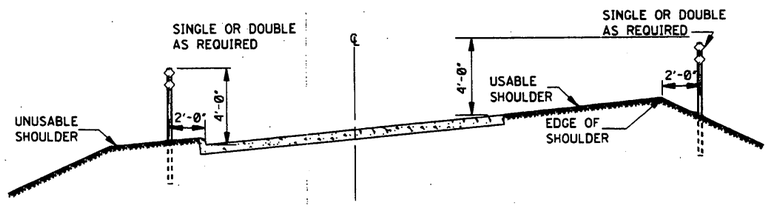


MOUNTING DETAIL

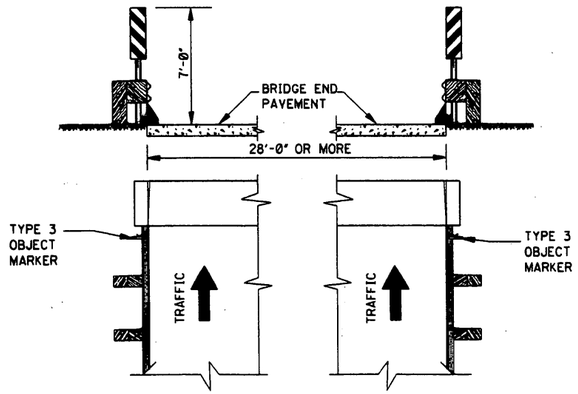
NOTE: DELINEATORS ARE TO BE FASTENED TO U-SECTION POSTS WITH 1/4" DIA. HUCK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OR OTHER APPROVED EQUAL.



DELINEATOR MOUNTING ON OUTSIDE SHOULDER WITH MOUNTABLE CURB ALONG MAIN FACILITY OR RAMP



DELINEATOR MOUNTING ON INTERCHANGE LOOPS WITH UNMOUNTABLE CURB ON INSIDE



DETAIL OF TYPE 3 OBJECT MARKER INSTALLATION

GENERAL NOTES:

1. DELINEATORS AND TYPE 3 OBJECT MARKER SHALL BE REFLECTIVE SHEETING ON 0.080" THICK ALUMINUM SHEET OR 14 GAGE GALVANIZED SHEET STEEL.
2. DELINEATOR, TYPE 3 OBJECT MARKER AND DISTANCE REFERENCE SIGN POSTS SHALL BE GALVANIZED STEEL. THE POSTS ARE TO BE FABRICATED BEFORE THE METAL IS GALVANIZED.
3. WEIGHT WITHOUT GROUND PLATES:
   A. DELINEATOR POST 7'-0" - 2.0 lb/ft TO 2.5 lb/ft
   B. TYPE 3 OBJECT MARKER POST 9'-0" - 2.5 lb/ft TO 3.0 lb/ft
   C. DISTANCE REFERENCE SIGN POST 10'-0", 11'-0", & 12'-0" - 3.0 lb/ft TO 3.5 lb/ft
4. UNIT PRICE OF DELINEATORS AND TYPE 3 OBJECT MARKERS SHALL INCLUDE COST OF POST. DISTANCE REFERENCE SIGN POST WILL BE PAID FOR PER FOOT.
5. RADIUS IN BENDS OF POST CROSS SECTION NOT TO EXCEED 9/32 FOR HOT ROLLED SECTION.
6. GROUND PLATE NOT REQUIRED ON U-SECTION POST.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL INSTALLATION AND DETAILS OF DELINEATORS AND DISTANCE REFERENCE SIGNS

ENGLISH

WORKING NUMBER SN-8

SHEET NUMBER 233

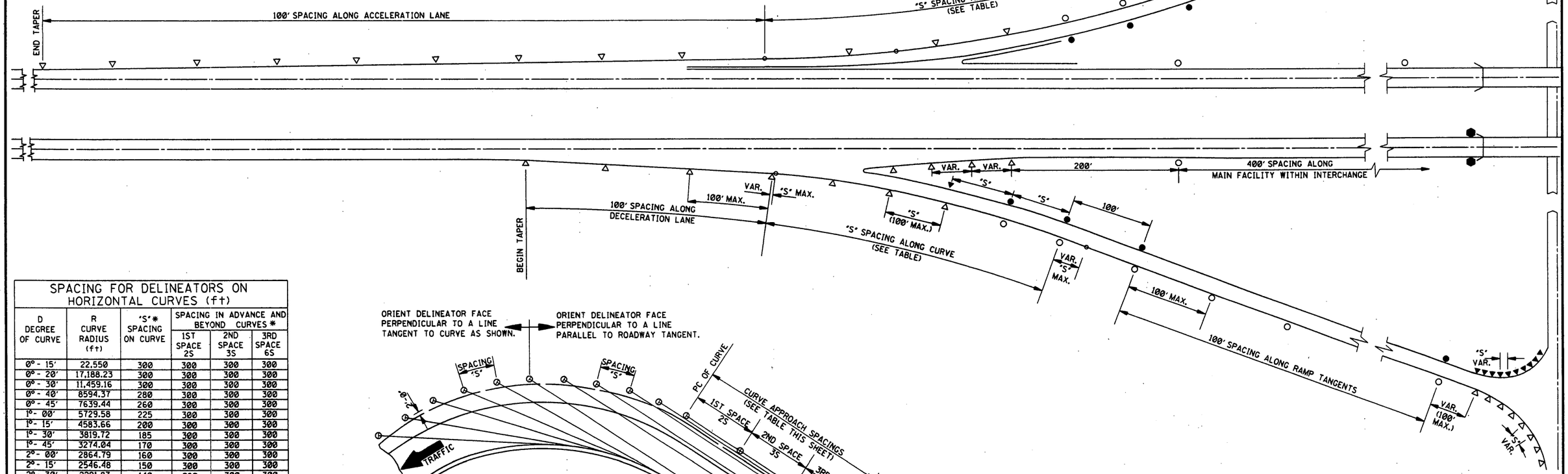
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	

LEGEND	
SYMBOL	DESCRIPTION
○	SINGLE WHITE DELINEATOR
△	DOUBLE WHITE DELINEATOR
●	SINGLE YELLOW DELINEATOR
▲	DOUBLE YELLOW DELINEATOR
⬢	TYPE 3 OBJECT MARKER

GENERAL NOTES:

1. SEE INDIVIDUAL PLAN SHEETS FOR DELINEATOR LAYOUT WITHIN EACH INTERCHANGE AREA.
2. DELINEATORS ALONG HORIZONTAL CURVES ON THE MAIN FACILITY ARE TO BE PLACED ACCORDING TO THIS DRAWING (WHICH INCLUDES THE TABLE). DELINEATORS ARE NOT REQUIRED ON TANGENT SECTIONS OF MAIN FACILITY OUTSIDE OF INTERCHANGE AREAS.
3. DELINEATORS IN ALL CURBED GORES AND AT TYPE 3 OBJECT MARKERS SHOULD BE TRANSITIONED IN A SMOOTH STRAIGHT LINE FROM THE STANDARD SHOULDER OFFSET TO THE REQUIRED CLEARANCE FOR A MINIMUM OF TWO SPACES.



SPACING FOR DELINEATORS ON HORIZONTAL CURVES (ft)					
D DEGREE OF CURVE	R CURVE RADIUS (ft)	"S"* SPACING ON CURVE	SPACING IN ADVANCE AND BEYOND CURVES *		
			1ST SPACE 2S	2ND SPACE 3S	3RD SPACE 6S
0°- 15'	22,550	300	300	300	300
0°- 20'	17,188.23	300	300	300	300
0°- 30'	11,459.16	300	300	300	300
0°- 40'	8594.37	280	300	300	300
0°- 45'	7639.44	260	300	300	300
1°- 00'	5729.58	225	300	300	300
1°- 15'	4583.66	200	300	300	300
1°- 30'	3819.72	185	300	300	300
1°- 45'	3274.04	170	300	300	300
2°- 00'	2864.79	160	300	300	300
2°- 15'	2546.48	150	300	300	300
2°- 30'	2291.83	140	280	300	300
2°- 45'	2083.48	135	270	300	300
3°- 00'	1909.86	130	260	300	300
3°- 30'	1637.02	120	240	300	300
4°- 00'	1432.39	110	220	300	300
6°- 00'	954.93	90	180	270	300
8°- 00'	716.20	75	150	225	300
	500.00	65	130	195	300
	350.00	50	100	150	300
	300.00	45	90	135	270
	250.00	40	80	120	240
	200.00	35	70	105	210
	150.00	30	60	90	180

ORIENT DELINEATOR FACE PERPENDICULAR TO A LINE TANGENT TO CURVE AS SHOWN.

ORIENT DELINEATOR FACE PERPENDICULAR TO A LINE PARALLEL TO ROADWAY TANGENT.

PLACEMENT AND ORIENTATION OF DELINEATORS ON CURVED SECTIONS

* NOTE: THE SPACING "S" ON THE CURVE IS FOUND FROM THE FORMULA $S=3\sqrt{R-50}$, WHERE R IS THE RADIUS OF THE CURVE IN FEET. THE SPACING OF THE FIRST DELINEATOR IN ADVANCE OF AND BEYOND THE CURVE IS 2S, THE SECOND DELINEATOR 3S, AND THE THIRD 6S, BUT NOT TO EXCEED 300' ALONG THE MAIN FACILITY AND 100' ALONG THE RAMPS. MINIMUM DELINEATOR SPACING IS 20'.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL INSTALLATION OF DELINEATORS

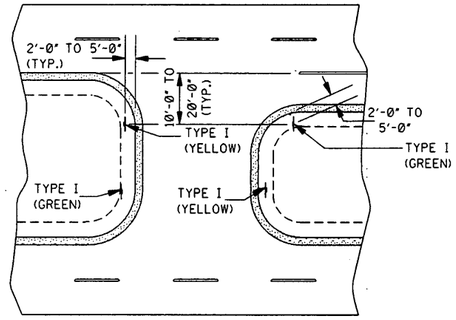
ENGLISH

WORKING NUMBER SN-8A

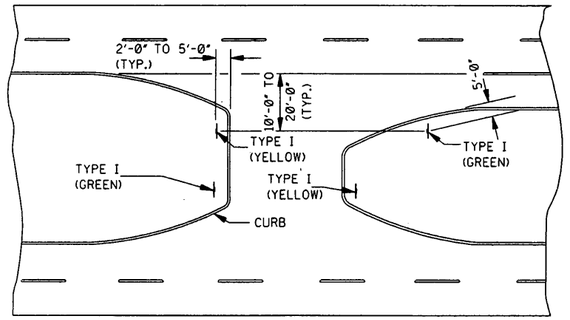
SHEET NUMBER 234

ISSUE DATE: OCTOBER 1, 1998

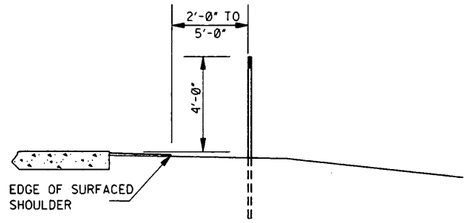
STATE	PROJECT NO.
MISS.	



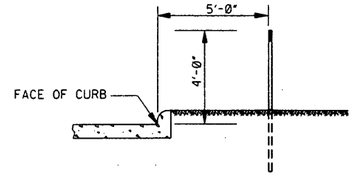
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OVER 40'–0"



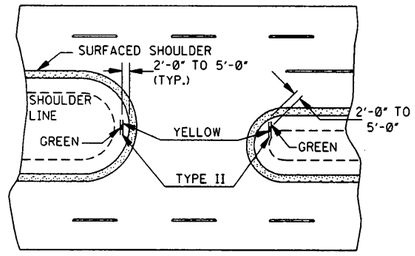
TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OVER 40'–0"



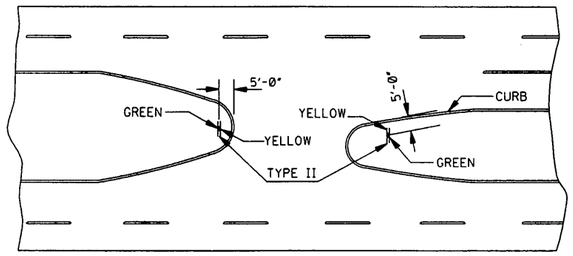
DELINEATOR MOUNTING ON CROSSOVER WITH USABLE SHOULDER



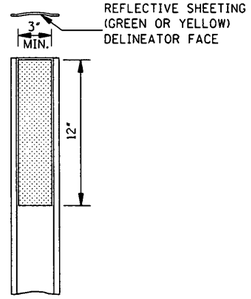
DELINEATOR MOUNTING ON CURBED CROSSOVER



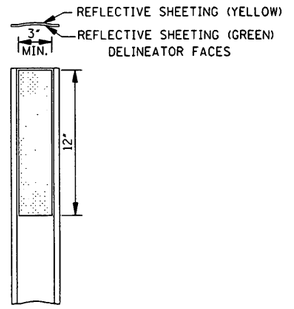
TYPICAL DELINEATION AT A CROSSOVER WITH USABLE SHOULDERS AND A MEDIAN WIDTH OF 40'–0" OR LESS



TYPICAL DELINEATION AT A CURBED CROSSOVER WITH A MEDIAN WIDTH OF 40'–0" OR LESS ⚠



DETAIL OF TYPE I FLEXIBLE POST DELINEATOR



DETAIL OF TYPE II FLEXIBLE POST DELINEATOR

NOTE: CARSONITE'S CURV-FLEX DELINEATOR POSTS ARE SHOWN. OTHER FLEXIBLE POSTS THAT HAVE BEEN APPROVED FOR LISTING IN THE DEPARTMENT'S "APPROVED SOURCE OF MATERIALS" MAY BE FURNISHED.

NOTE: PLACE DELINEATORS NO MORE THAN 20'-0" FROM EDGE OF TRAVEL LANES EDGES.

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. POST REQUIRING THE INSTALLATION OF A BASE SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

⚠

DATE	REVISED CAPTION	BY
12-1-99	REVISION	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

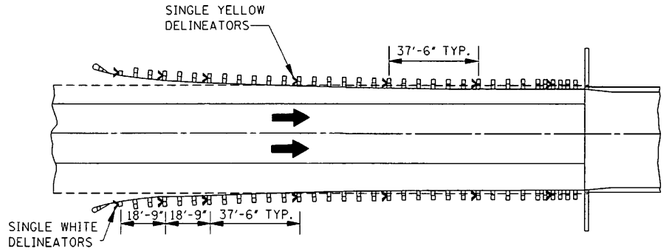
TYPICAL CROSSOVER DELINEATION

WORKING NUMBER SN-8B

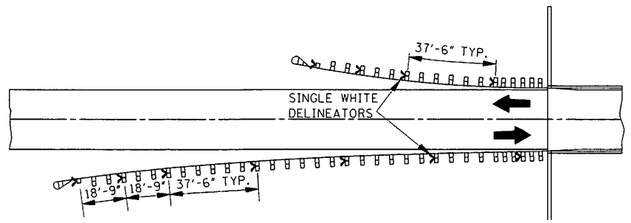
SHEET NUMBER 235

ISSUE DATE: OCTOBER 1, 1998

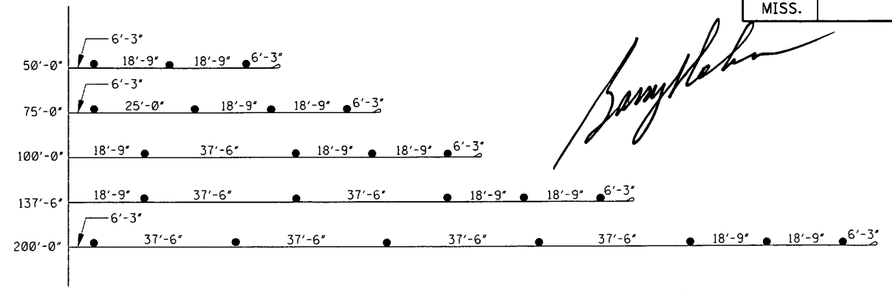
STATE	PROJECT NO.
MISS.	



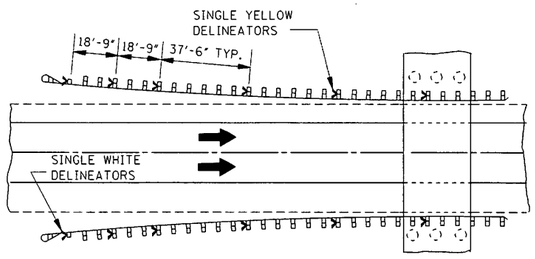
BRIDGE APPROACH INSTALLATION
(ONE-WAY TRAFFIC)



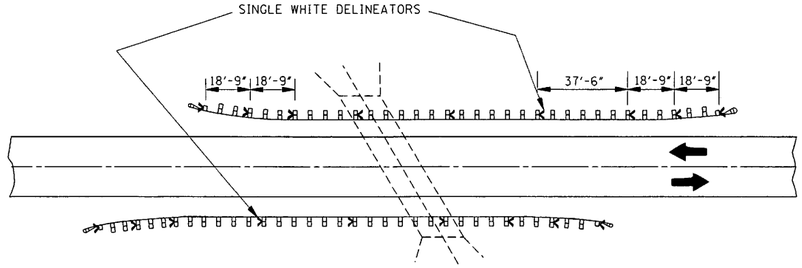
BRIDGE APPROACH INSTALLATION
(TWO-WAY TRAFFIC)



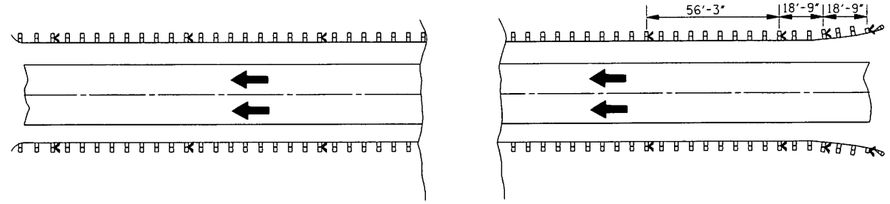
GRAPHIC SHOWING SPACINGS OF GUARDRAIL DELINEATORS AT SOME COMMONLY USED BRIDGE APPROACHES



ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS
(ONE-WAY TRAFFIC)

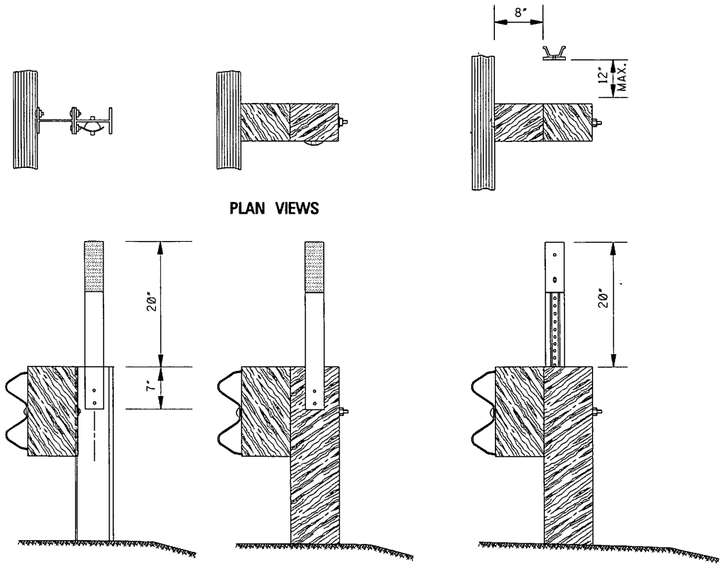


ROADSIDE OBSTACLE INSTALLATION–LENGTH 250' OR LESS
(TWO-WAY TRAFFIC)



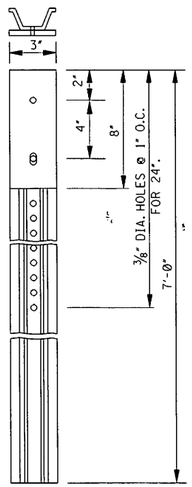
EMBANKMENT OR ROADSIDE OBSTACLE INSTALLATION–LENGTH GREATER THAN 250'
(ONE-WAY TRAFFIC)

NOTE: ONE-WAY TRAFFIC SHOWN. DELINEATOR SPACING FOR TWO-WAY TRAFFIC SIMILAR. DELINEATOR COLOR WILL BE THE SAME AS THE ADJACENT PAVEMENT EDGE MARKING. THE FIRST THREE (3) MARKERS WILL FACE TRAFFIC IN OFF LANE FOR TWO-WAY TRAFFIC AS SHOWN IN DRAWING FOR OBSTACLE INSTALLATION FOR TWO-WAY TRAFFIC.

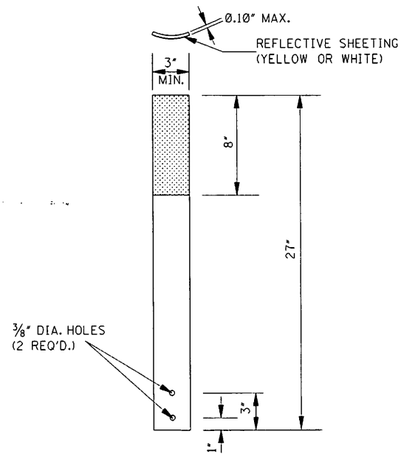


TYPICAL FLEXIBLE POST DELINEATOR GUARDRAIL INSTALLATION

TYPICAL STEEL POST DELINEATOR GUARDRAIL INSTALLATION



DETAIL OF SINGLE WHITE OR SINGLE YELLOW DELINEATOR



DETAIL OF FLEXIBLE GUARDRAIL DELINEATOR

GENERAL NOTES:

1. THE UNIT PRICE OF DELINEATOR INCLUDES: COST(S) OF DELINEATOR FACE(S), POST, HARDWARE AND INSTALLATION.
2. DELINEATOR FACE WILL BE ENCAPSULATED LENS REFLECTIVE SHEETING.
3. DELINEATORS FOR GUARDRAIL SHALL BE MOUNTED ON STEEL POSTS OR FLEXIBLE POSTS AS FOLLOWS:

3A. DELINATORS ON STEEL POSTS:

1. DELINEATOR FACE SHALL BE PLACED ON 0.080" THICK SHEET ALUMINUM OR 14 GAUGE GALVANIZED SHEET STEEL.
2. DELINEATOR POSTS SHALL BE GALVANIZED STEEL U-SECTION POSTS (2.0 lb/ft TO 2.5 lb/ft). THE POSTS ARE TO BE FABRICATED BEFORE THE METAL IS GALVANIZED. RADIUS IN BENDS OF POST CROSS-SECTION NOT TO EXCEED 1/32" FOR HOT ROLLED SECTION.
3. WHEN COVER OVER A DRAINAGE STRUCTURE IS LESS THAN THE NORMAL DELINEATOR POST DEPTH, THE DELINEATOR POSTS WILL BE FIELD CUT, DRILLED AND FASTENED TO THE BACK OF THE GUARDRAIL POSTS WITH (2) 1/4" DIA. LAG SCREWS.

3B. DELINEATORS ON FLEXIBLE POSTS:

⚠

1. THE DELINEATOR POSTS WILL BE FROM THE DEPARTMENTS "APPROVED SOURCE OF MATERIALS" AND WILL BE FASTENED TO GUARDRAIL POST IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATION.

⚠

DATE	REVISION	BY
3-01-02	DELETED NOTE	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPICAL GUARDRAIL DELINEATION

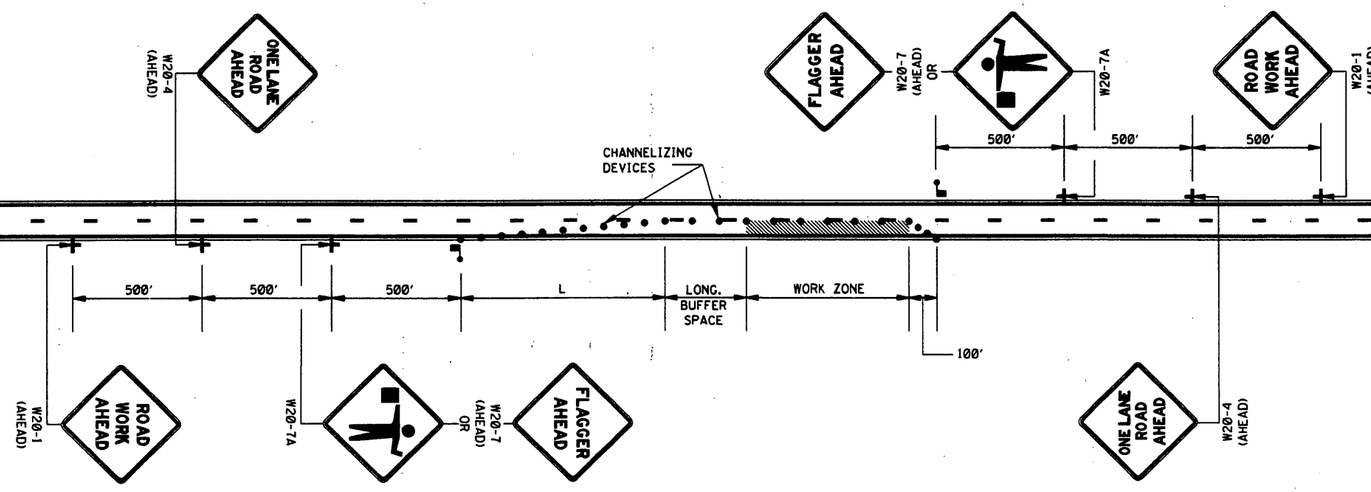
ENGLISH

WORKING NUMBER
SN-8C

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236

ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



LEGEND

- FLAGGER
- CHANNELIZING DEVICES

GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER † RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
$L = WS$ FOR SPEEDS OF 45 mph OR GREATER
$L = WS^2/60$ FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. ALL CHANNELIZING DEVICES SHALL BE A MINIMUM OF 24" IN HEIGHT.
3. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.
4. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" x 48".
5. WHEN THERE IS NO EXISTING HAZARD OR AT THE END OF THE WORK DAY, ALL SIGNS SHALL BE COVERED OR REMOVED AND ALL CHANNELIZING DEVICES SHALL BE MOVED TO THE SHOULDER EDGE.
6. WHERE THE WORK ZONE IS STATIONARY, THE W20-7 (500 FT.) SIGN OR THE W20-7A SIGN TOGETHER WITH THE W20-7 (500 FT.) SUPPLEMENTAL PLATE SHOULD BE USED TO INDICATE THE DISTANCE TO THE FLAGGER.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN WITH FLAGGER
(ONE-LANE CLOSURE OF TWO-WAY TRAFFIC)

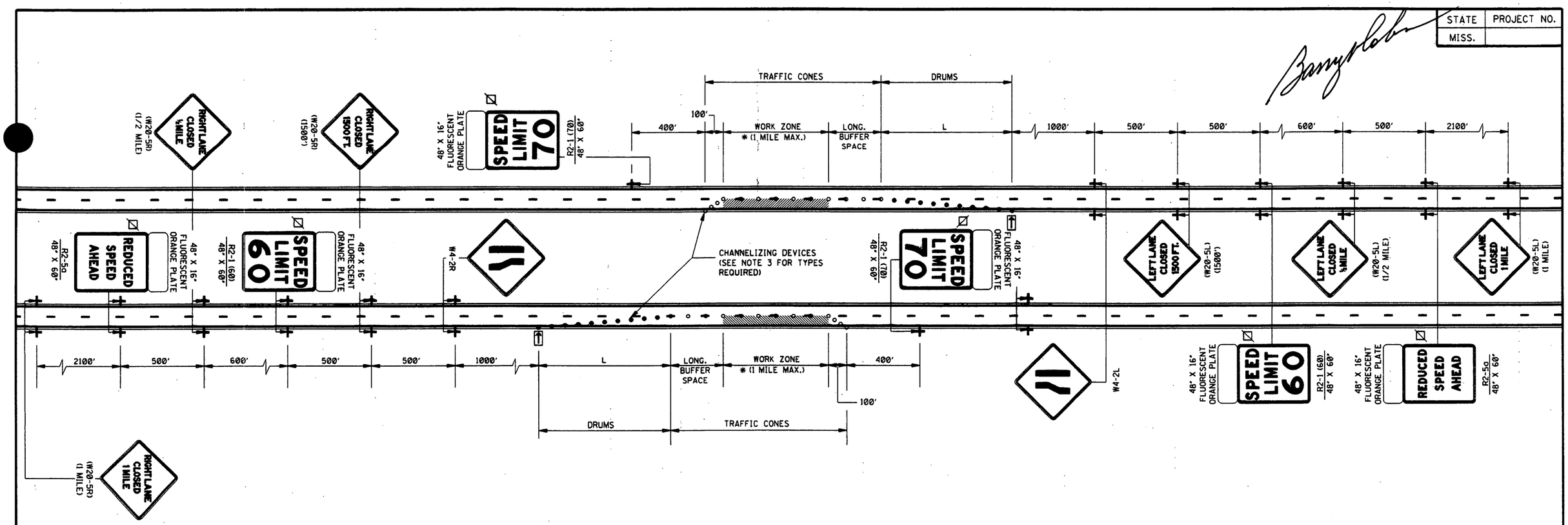
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GENERAL NOTES:

1. THE LOCATION OF CHANNELIZING DEVICES AND THE WORK AREA LAYOUT SHALL BE BASED ON THE CRITERIA IN THE FOLLOWING TABLE:

POSTED SPEED AND/OR DESIGN SPEED	MAXIMUM CHANNELIZING DEVICE SPACING (ft)		MINIMUM LONGITUDINAL BUFFER SPACE (ft)	TAPER † RATES
	TAPER	ALONG LANE LINE & WORK ZONE		
mph				
≤40	40	80	170	27:1
45	45	90	220	45:1
50	50	100	280	50:1
55	55	110	335	55:1
60	60	120	415	60:1
65	65	130	485	65:1
70	70	140	575	70:1

† NOTE: TAPER RATES ARE DETERMINED USING THE FOLLOWING EQUATIONS:
L = WS FOR SPEEDS OF 45 mph OR GREATER
$L = WS^2/60$ FOR SPEEDS OF 40 mph OR LESS
WHERE: L = MINIMUM LENGTH OF TAPER IN FEET
W = WIDTH OF OFFSET (USUALLY LANE WIDTH) IN FEET
S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR

2. FLASHING ARROW PANEL SHALL BE AS LEVEL AS POSSIBLE AS APPROVED BY THE ENGINEER. FLASHING ARROW PANEL SHOULD BE LOCATED AT THE BEGINNING OF THE TAPER OR, IF THE SHOULDER IS TOO NARROW, BEHIND THE CHANNELIZING DEVICES IN THE CLOSED LANE.

3. CHANNELIZING DEVICE TYPES FOR:
A. APPROACH TAPER- REFLECTORIZED PLASTIC DRUMS
B. ALONG LANE LINE AND WORK ZONE- TRAFFIC CONES (28" HEIGHT)
C. EXIT TAPER- TRAFFIC CONES (28" HEIGHT)

4. WHEN THERE IS NO EXISTING HAZARD, ALL SIGNS SHALL BE COVERED OR REMOVED AND THE DRUMS SHALL BE MOVED TO THE SHOULDER EDGE AT THE END OF THE WORK DAY.

5. FOR MOVING OPERATIONS (PAVING) THE CONTRACTOR SHALL HAVE TWO (2) SETS OF ADVANCE WARNING AND REGULATORY SIGNS, PLASTIC DRUMS, AND ARROW BOARD. WHEN THE CONSTRUCTION ZONE IS MOVED AHEAD, ALL SIGNS, PLASTIC DRUMS AND ARROW BOARD SHALL BE IN PLACE ON THE SECOND ZONE BEFORE REMOVING ANY SIGNS, PLASTIC DRUMS OR ARROW BOARD ON THE FIRST ZONE.

6. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

7. DIAMOND SHAPED TRAFFIC CONTROL SIGNS SHALL BE A MINIMUM OF 48" X 48".

8. ALL EXISTING SPEED LIMIT SIGNS WHICH ARE INFLUENCED BY OR CONFLICT WITH THE SPEED ZONE REDUCTION SHALL BE COVERED AS DIRECTED BY THE ENGINEER WHILE THE REDUCED SPEED LIMIT IS IN EFFECT. TAPE SHALL NOT BE USED ON THE FACE OF SIGN.

9. ADDITIONAL REDUCED SPEED LIMIT SIGNS ARE REQUIRED AT EACH ENTRANCE RAMP WITHIN THE SPEED ZONE. A MINIMUM OF TWO (2) WILL BE REQUIRED FOR EACH RAMP. LOCATION AND NUMBER REQUIRED WILL BE DETERMINED BY THE ENGINEER.

10. THIS TRAFFIC CONTROL PLAN, WITH SPEED ZONE, MAY NOT BE USED ON ANY FACILITY WHERE THE POSTED SPEED LIMIT IS BELOW 65 MPH WITHOUT A COMMISSION ORDER REQUESTING A SPEED LIMIT REDUCTION.

11. LAYOUT SHOWN ABOVE IS FOR AN INTERSTATE WITH A POSTED SPEED LIMIT OF 70 MPH. FOR POSTED SPEED LIMIT OF 65 MPH, THE REDUCED SPEED LIMIT WILL BE 55 MPH.

12. A FLUORESCENT ORANGE PLATE IS REQUIRED WITH ALL REGULATORY SPEED LIMIT SIGNS AND 'REDUCED SPEED AHEAD' SIGNS REQUIRED FOR LANE CLOSURE.

LEGEND

* OR AS SHOWN ELSEWHERE OF THE PLANS.
FLASHING ARROW PANEL (TYPE 'C')
BLACK LEGEND AND BORDER ON WHITE BACKGROUND
● REFLECTORIZED FREE-STANDING PLASTIC DRUMS
○ TRAFFIC CONES (28" HEIGHT)

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN FOR POSTED SPEED LIMIT OF 65 OR 70 MPH

(INTERSTATES AND OTHER 4-LANE DIVIDED HIGHWAYS) (MEDIAN LANE OR OUTSIDE LANE CLOSURE) (WORK DAY ONLY)

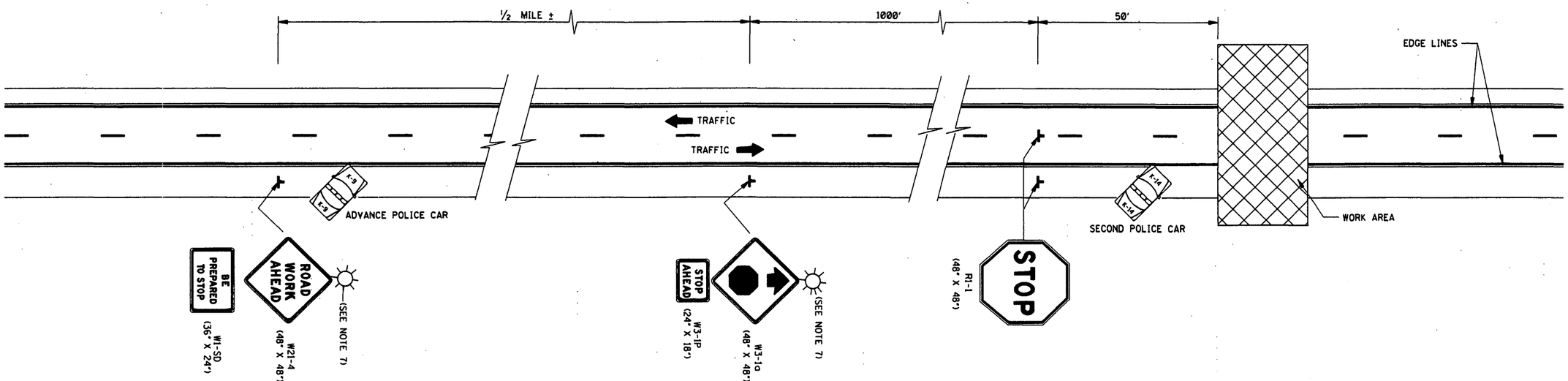
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GENERAL NOTES:

1. THIS TYPE OF HIGHWAY CLOSURE SHALL ONLY BE USED FOR EMERGENCIES OR FOR CONSTRUCTION OPERATIONS WHEN THE DURATION OF CLOSURE WILL NOT EXCEED 30 MINUTES. AFTER THE HIGHWAY HAS BEEN CLOSED AND REOPENED VIA THIS PROCEDURE, A MINIMUM PERIOD OF 30 MINUTES SHALL ELAPSE BEFORE ANOTHER SHORT DURATION CLOSURE, EXCEPT WITH THE APPROVAL OF THE ENGINEER.

2. AT LEAST TWO POLICEMEN AND TWO POLICE CARS SHALL BE PROVIDED ON EACH APPROACH TO THE CLOSURE. EACH POLICE CAR SHALL HAVE A ROOF MOUNTED ROTATING BLUE LIGHT OR LIGHT BAR.

3. ROAD CLOSURES ARE NOT PERMITTED ON HOLIDAYS OR BETWEEN THE HOURS OF 6 AM TO 9 AM, 11 AM TO 1 PM AND 3 PM TO 6 PM ON MONDAY THROUGH FRIDAY, EXCEPT BY PERMISSION OF THE ENGINEER.

4. THE ADVANCE POLICE CAR AND THE "W21-4 (48" X 48")", "W1-SD (36" X 24")", "W3-1a (48" X 48")", AND "W3-1P (24" X 18")" SIGNS SHALL BE MOVED BACK AS REQUIRED BY THE QUEUING OF STOPPED VEHICLES.

5. TRAFFIC CONTROL FOR THE CLOSURE SHALL BE ACCOMPLISHED IN THE FOLLOWING ORDER:
   A. ADVANCE POLICE CAR, LIGHTS AND FLASHERS ON.
   B. "W21-4 (48" X 48")" AND "W1-SD (36" X 24")" SIGNS ERECTED.
   C. "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS ERECTED.
   D. SECOND POLICE CAR, LIGHTS AND FLASHERS ON.
   E. "R1-1 (48" X 48")" SIGNS ERECTED TO STOP TRAFFIC. THE ORDER OF ERECTION SHALL BE IN THE FOLLOWING ORDER: RIGHT SHOULDER THEN CENTER.

6. TRAFFIC CONTROL SHALL BE REMOVED IN THE FOLLOWING ORDER:
   A. WITH TRAFFIC STOPPED REMOVE THE "R1-1 (48" X 48")" SIGNS TOWARD THE RIGHT SHOULDER IN THE FOLLOWING ORDER: CENTER THEN SIGN ON THE RIGHT SHOULDER.
   B. AFTER ALL STOPPED VEHICLES HAVE STARTED MOVING, THE "W3-1a (48" X 48")" AND "W3-1P (24" X 18")" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.
   C. AFTER ALL CARS HAVE RESUMED APPROXIMATELY NORMAL SPEED, THE "W21-4 (48" X 48")" AND "W1-SD (36" X 24")" SIGNS SHALL BE REMOVED. THESE SIGNS MAY BE COVERED IF RE-USE IS IMMINENT.

7. UNILLUMINATED SECTIONS OF HIGHWAYS SHALL NOT BE CLOSED DURING HOURS OF DARKNESS EXCEPT FOR EMERGENCIES OR WITH THE APPROVAL OF THE ENGINEER. WHEN THE HIGHWAY MUST BE CLOSED DURING HOURS OF DARKNESS, A TYPE B HIGH INTENSITY FLASHING BARRICADE WARNING LIGHT SHALL BE USED ON EACH W21-4 AND W3-1a SIGN.

8. IF AN ENTRANCE RAMP IS LOCATED BETWEEN THE W21-4 AND R1-1, THE "W21-4 (48" X 48")", "W1-SD (36" X 24")", "W3-1a (48" X 48")", AND "W3-1P (24" X 18")" SIGNS SHALL ALSO BE ERECTED ON THE RAMP SHOULDER.

9. SIGN "W1-SD (36" X 24")" IS 4" SERIES "C" BLACK LEGEND AND BORDER ON ORANGE BACKGROUND.

10. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC, INCLUDING SECURING POLICE SERVICES.

11. THE ABOVE DURATION WILL APPLY TO EACH APPROACH TO THE CLOSURE.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SHORT DURATION CLOSING OF TWO-LANE TWO-WAY HIGHWAYS

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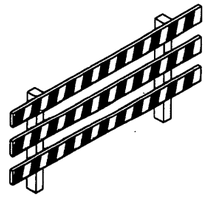
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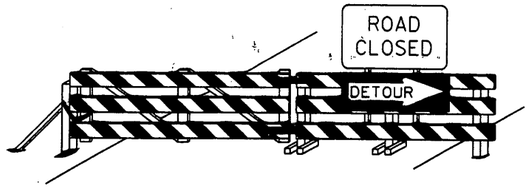
TYPE I



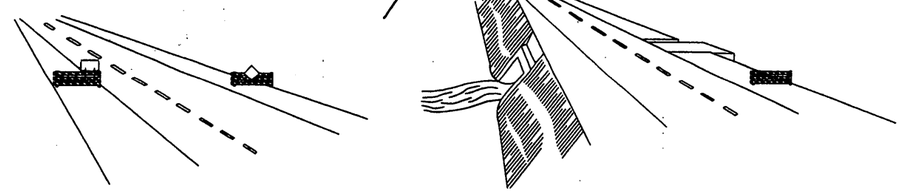
TYPE II



TYPE III



BARRICADE CLOSING A ROAD



WING BARRICADES

STANDARD BARRICADES

1. A TYPE I BARRICADE CONSISTS OF ONE (1) HORIZONTAL RAIL SUPPORTED BY A DEMOUNTABLE FRAME OR A LIGHT "A" FRAME. A TYPE I BARRICADE NORMALLY WOULD BE USED ON CONVENTIONAL ROADS OR URBAN STREETS AND ARTERIALS.
2. A TYPE II BARRICADE CONSISTS OF TWO (2) HORIZONTAL RAILS ON A LIGHT "A" FRAME. TYPE II BARRICADES ARE INTENDED FOR USE ON EXPRESSWAYS AND FREEWAYS AND OTHER HIGH-SPEED ROADWAYS.
3. TYPE I AND TYPE II BARRICADES ARE INTENDED FOR USE WHERE THE HAZARD IS RELATIVELY SMALL AS, FOR EXAMPLE, ON CITY STREETS, OR FOR THE MORE OR LESS CONTINUOUS DELIMITING OF A RESTRICTED ROADWAY, OR FOR TEMPORARY DAYTIME USE.
4. A TYPE III BARRICADE CONSISTS OF THREE (3) HORIZONTAL RAILS SUPPORTED BY FIXED POSTS, A RIGID SKID, A HEAVY DEMOUNTABLE FRAME OR A HEAVY, HINGED "A" FRAME.
5. TYPE III BARRICADES ARE INTENDED FOR USE ON CONSTRUCTION AND MAINTENANCE PROJECTS AS WING BARRICADES AND AT ROAD CLOSURES, WHERE THEY MUST REMAIN IN PLACE FOR EXTENDED PERIODS.
6. THE MARKING FOR BARRICADE RAILS SHALL BE ORANGE AND WHITE (SLOPING DOWNWARD AT AN ANGLE OF 45° IN THE DIRECTION TRAFFIC IS TO PASS).
7. DO NOT PLACE SANDBAGS OR OTHER DEVICES TO PROVIDE MASS ON THE BOTTOM RAIL THAT WILL BLOCK VIEW OR RAIL FACE.
8. FOR ADDITIONAL INFORMATION OR DETAILS, SEE MUTCD, LATEST EDITION.

BARRICADE CHARACTERISTICS

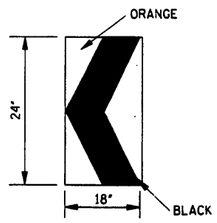
	I	II	III
WIDTH OF RAIL * *	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.	8" MIN. - 12" MAX.
LENGTH OF RAIL * *	24" MIN.	24" MIN.	48" MIN.
WIDTH OF STRIPE *	6"	6"	6"
HEIGHT	36" MIN.	36" MIN.	60" MIN.
NUMBER OF REFLECTORIZED RAIL FACES	2 (ONE EACH DIRECTION)	4 (TWO EACH DIRECTION)	3 IF FACING TRAFFIC IN ONE DIRECTION 6 IF FACING TRAFFIC IN TWO DIRECTIONS
TYPE OF FRAME	LIGHT	LIGHT "A" FRAME	POST OR SKID

* 1. FOR RAILS LESS THAN 36" LONG, 4" WIDE STRIPES MAY BE USED.

** 2. BARRICADES INTENDED FOR USE ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH SPEED ROADWAYS, SHALL HAVE A MINIMUM OF 270 in^2 OF REFLECTIVE AREA FACING TRAFFIC.

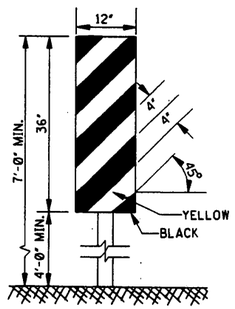
WING BARRICADES

1. WING BARRICADES ARE TYPE III BARRICADES ERECTED ON THE SHOULDER ON ONE OR BOTH SIDES OF THE PAVEMENT TO GIVE THE SENSATION OF A NARROWING OR RESTRICTED ROADWAY. WING BARRICADES MAY BE USED AS A MOUNTING FOR THE ADVANCE WARNING SIGNS OR FLASHERS.
2. WING BARRICADES SHOULD BE USED:
   A. IN ADVANCE OF A CONSTRUCTION PROJECT EVEN WHEN NO PART OF THE ROADWAY IS ACTUALLY CLOSED.
   B. IN ADVANCE OF ALL BRIDGE OR CULVERT WIDENING OPERATIONS.



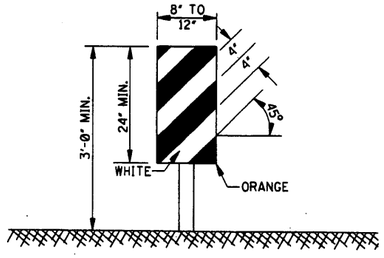
CHEVRON SIGN DETAIL

1. A CHEVRON SIGN CONSISTS OF A BLACK CHEVRON TYPE MARKING ON AN ORANGE BACKGROUND AND SHALL POINT IN THE DIRECTION OF TRAFFIC FLOW.
2. THE CHEVRON SIGN SHALL BE MOUNTED ON FIXED POST OR RIGID SKID.
3. CHEVRON SIGNS MAY BE USED TO SUPPLEMENT OTHER STANDARD DEVICES WHERE ONE OR MORE LANES ARE CLOSED FOR CONSTRUCTION OR MAINTENANCE. THEY SHALL BE PLACED APPROXIMATELY 2'-0" BEHIND THE LANE TRANSITION STRIPE.



TYPE 3 OBJECT MARKER
(OM-3R)

1. TYPE 3 OBJECT MARKERS SHALL BE USED AT ALL EXPOSED BRIDGE ABUTMENTS AND AT OTHER LOCATIONS AS DEEMED NECESSARY BY THE ENGINEER.
2. THE OM-3R IS SHOWN. THE OM-3L IS SIMILAR EXCEPT THE STRIPES SLOPE DOWNWARD FROM THE UPPER LEFT SIDE TO THE LOWER RIGHT SIDE AND SHALL BE PLACED ON THE LEFT SIDE OF THE OBJECT.
3. THE INSIDE EDGE OF THE MARKER SHALL BE IN LINE WITH THE INNER EDGE OF THE OBSTRUCTION.

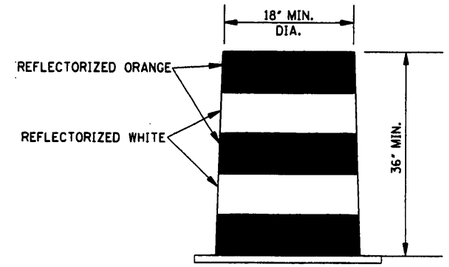


VERTICAL PANEL

1. VERTICAL PANELS CONSIST OF AT LEAST ONE PANEL 8" TO 12" IN WIDTH AND A MINIMUM OF 24" IN HEIGHT.
2. THE DIAGONAL STRIPES SHALL SLOPE DOWNWARD IN THE DIRECTION THAT TRAFFIC IS TO PASS THE PANEL. THE PANELS SHALL BE MOUNTED WITH THE TOP A MINIMUM OF 36" ABOVE THE ROADWAY ON A SINGLE LIGHTMASS POST.
3. VERTICAL PANELS USED ON EXPRESSWAYS, FREEWAYS AND OTHER HIGH-SPEED ROADWAYS SHALL HAVE A MINIMUM OF 270 in^2 OF RETROREFLECTIVE AREA FACING TRAFFIC.
4. FOR TWO-WAY TRAFFIC OPERATIONS, BACK-TO-BACK PANELS SHALL BE USED.

GENERAL NOTES:

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



PLASTIC DRUM STRIPING DETAIL

1. PLASTIC DRUMS SHALL BE ON END AND USED AS AN EXPEDIENT METHOD FOR TRAFFIC CHANNELIZATION. THE COLOR AND MARKING OF DRUMS SHALL BE CONSISTENT WITH MARKING STANDARDS FOR BARRICADE. THE PREDOMINANT COLOR ON DRUMS SHALL BE ORANGE WITH FOUR (4) REFLECTORIZED, HORIZONTAL, CIRCUMFERENTIAL STRIPES (2 ORANGE & 2 WHITE) 6" WIDE.
2. DRUMS SHOULD NEVER BE PLACED IN THE ROADWAY WITHOUT WARNING SIGNS.
3. WHERE PRACTICAL PLASTIC DRUMS SHALL BE PLACED NO CLOSER THAN 3'-0" FROM THE EDGE OF TRAVELED LANE.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

HIGHWAY SIGN AND BARRICADE DETAILS FOR CONSTRUCTION PROJECTS

ENGLISH

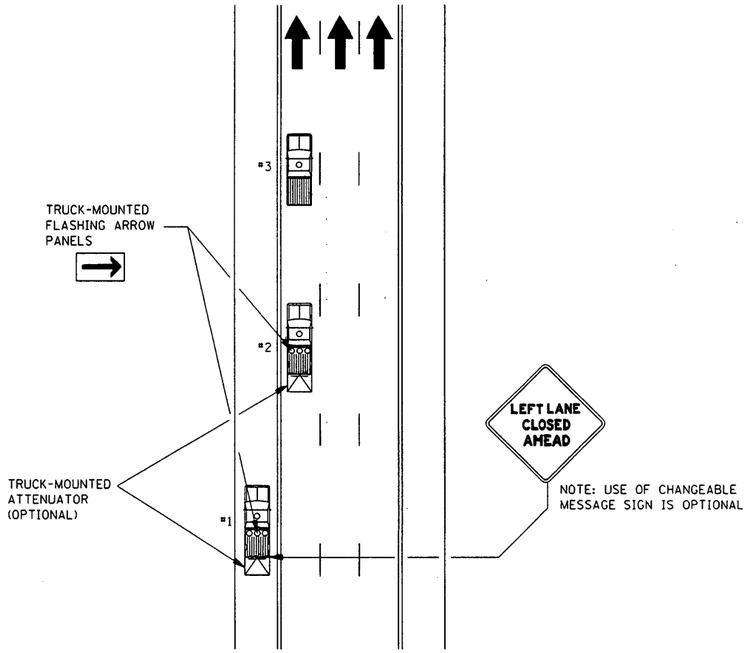
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MOBILE OPERATIONS ON MULTILANE ROAD ⚠

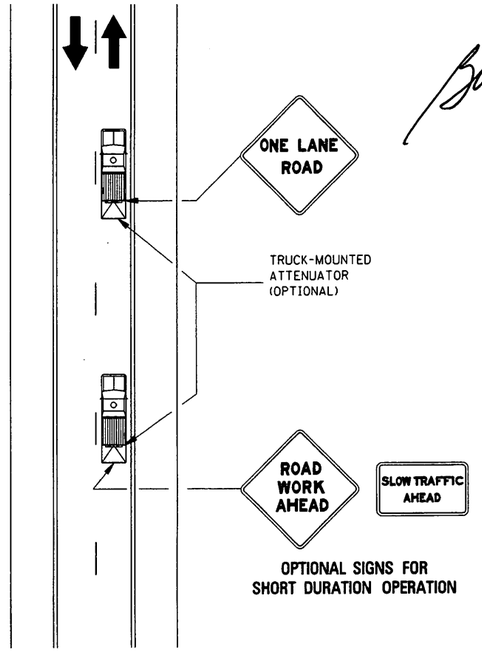


MOBILE OPERATIONS ON MULTILANE ROAD

NOTES:

1. VEHICLES USED FOR THESE OPERATIONS SHOULD BE MADE HIGHLY VISIBLE WITH APPROPRIATE EQUIPMENT, SUCH AS FLASHING LIGHTS, ROTATING BEACONS, FLAGS, SIGNS, OR ARROW PANELS.
2. PROTECTION VEHICLE #1 SHOULD BE EQUIPPED WITH AN ARROW PANEL. AN APPROPRIATE LANE CLOSURE SIGN SHOULD BE PLACED ON PROTECTION VEHICLE #1 SO AS NOT TO OBSCURE THE ARROW PANEL.
3. PROTECTION VEHICLE #2 SHOULD BE EQUIPPED WITH AN ARROW PANEL AND TRUCK-MOUNTED ATTENUATOR (TMA).
4. PROTECTION VEHICLE #1 SHOULD TRAVEL AT A VARYING DISTANCE FROM THE WORK OPERATION SO AS TO PROVIDE ADEQUATE SIGHT DISTANCE FOR TRAFFIC APPROACHING FROM THE REAR.
5. WHEN ADEQUATE SHOULDER WIDTH IS NOT AVAILABLE, PROTECTION VEHICLE #1 SHOULD BE ELIMINATED.
6. ON HIGH-SPEED ROADWAYS, A THIRD PROTECTION VEHICLE SHOULD BE USED (I.e., VEHICLE #1 ON THE SHOULDER (IF PRACTICAL), VEHICLE #2 IN THE CLOSED LANE, AND VEHICLE #3 IN THE CLOSED LANE).
7. ARROW PANELS SHALL BE AS A MINIMUM TYPE B, 60" X 30" IN ACCORDANCE WITH THE CRITERIA PRESENTED IN THE MUTCD.
8. WORK SHOULD NORMALLY BE DONE DURING OFF-PEAK HOURS.
9. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

MOBILE OPERATIONS ON TWO-LANE ROAD



OPTIONAL SIGNS FOR
SHORT DURATION OPERATION

MOBILE OPERATIONS ON TWO-LANE ROAD

NOTES:

1. WHERE PRACTICAL AND WHEN NEEDED, THE WORK AND PROTECTION VEHICLES SHOULD PULL OVER PERIODICALLY TO ALLOW TRAFFIC TO PASS. IF THIS CAN NOT BE DONE FREQUENTLY, AS AN ALTERNATIVE, A "DO NOT PASS" SIGN MAY BE PLACED ON THE REAR OF THE VEHICLE BLOCKING THE LANE.
2. THE DISTANCE BETWEEN THE WORK AND PROTECTION VEHICLES MAY VARY ACCORDING TO TERRAIN, PAINT DRYING TIME, AND OTHER FACTORS. PROTECTION VEHICLES ARE USED TO WARN TRAFFIC OF THE OPERATION AHEAD. WHENEVER ADEQUATE STOPPING SIGHT DISTANCE EXISTS TO THE REAR, THE PROTECTION VEHICLE SHOULD MAINTAIN THE MINIMUM DISTANCE AND PROCEED AT THE SAME SPEED AS THE WORK VEHICLE. THE PROTECTION VEHICLE SHOULD SLOW DOWN IN ADVANCE OF VERTICAL OR HORIZONTAL CURVES THAT RESTRICT SIGHT DISTANCE.
3. ADDITIONAL PROTECTION VEHICLES TO WARN AND REDUCE THE SPEED OF ONCOMING OR OPPOSING TRAFFIC MAY BE USED. POLICE PATROL CARS MAY BE USED FOR THIS PURPOSE.
4. A TRUCK-MOUNTED ATTENUATOR (TMA) SHOULD BE USED ON THE PROTECTION VEHICLE AND MAY BE USED ON THE WORK VEHICLE.
5. THE WORK VEHICLE SHALL BE EQUIPPED WITH BEACONS, AND THE PROTECTION VEHICLES SHALL BE EQUIPPED WITH TWO HIGH-INTENSITY FLASHING LIGHTS MOUNTED ON THE REAR, ADJACENT TO THE SIGN. PROTECTION AND WORK VEHICLES SHOULD DISPLAY FLASHING OR ROTATING BEACONS BOTH FORWARD AND TO THE REAR.
6. VEHICLE-MOUNTED SIGNS SHALL BE MOUNTED WITH THE BOTTOM OF THE SIGN LOCATED AT A MINIMUM HEIGHT OF 48" ABOVE THE PAVEMENT. SIGN LEGENDS SHALL BE COVERED OR TURNED FROM VIEW WHEN WORK IS NOT IN PROGRESS.
7. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

DATE	REVISION CAPTION	BY
12-1-99	REVISED	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLAN
MOBILE OPERATIONS
MULTILANE ROADS
AND
TWO-LANE ROADS

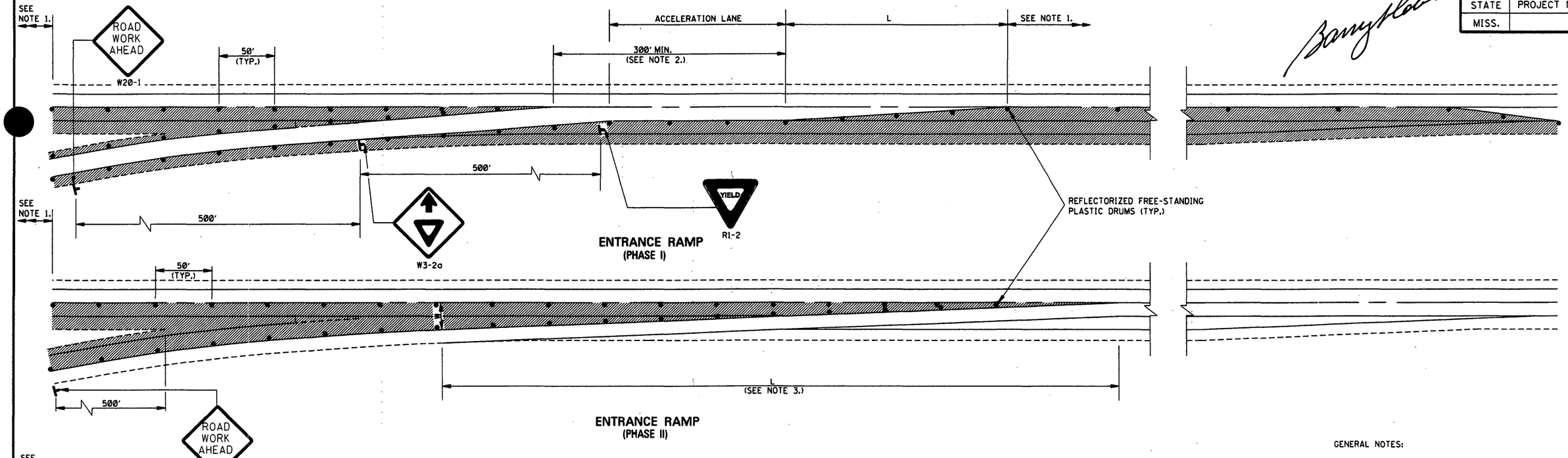
ENGLISH

WORKING NUMBER
TCP-11

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
260

STATE	PROJECT NO.
MISS.	



GENERAL NOTES:

1. FOR SIGNING, FLASHING ARROW PANEL, AND DRUM SPACING CRITERIA, SEE TYPICAL TRAFFIC CONTROL PLANS FOR LANE CLOSURES ON SHEETS TCP-2, TCP-3, TCP-4, AND TCP-5, AS APPROPRIATE
2. IF NO ADEQUATE ACCELERATION LANE EXISTS FOR THE TEMPORARY ENTRANCE, THE YIELD SIGN (R1-2) AND THE YIELD AHEAD SIGN (W3-2A) SHALL BE REPLACED WITH A STOP SIGN (R1-1) AND A STOP AHEAD SIGN (W3-1a), ONE ON EACH SIDE OF APPROACH. WHERE STOP SIGNS ARE USED, A TEMPORARY STOP LINE SHOULD BE PLACED ACROSS THE RAMP AT THE DESIRED STOP LOCATION. IF INSUFFICIENT GAPS ARE AVAILABLE IN THE TRAFFIC STREAM, CONSIDERATION SHOULD BE GIVEN TO CLOSING THE RAMP.
3. DETERMINE TAPER LAYOUTS USING THE FOLLOWING EQUATIONS:
   L = WS FOR SPEED OF 45 mph OR GREATER
   L = WS²/60 FOR SPEEDS OF 40 mph OR LESS
   WHERE:
   L = MINIMUM LENGTH OF TAPER IN FEET
   W = WIDTH OF OFFSET IN FEET
   S = DESIGN SPEED OR 85TH PERCENTILE SPEED IN MILES PER HOUR
4. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET WILL NOT BE MEASURED FOR SEPARATE PAYMENT. THIS WORK IS TO BE INCLUDED IN THE PRICE BID FOR MAINTENANCE OF TRAFFIC.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF OUTSIDE LANE CLOSURE AT EXIT AND ENTRANCE RAMPS

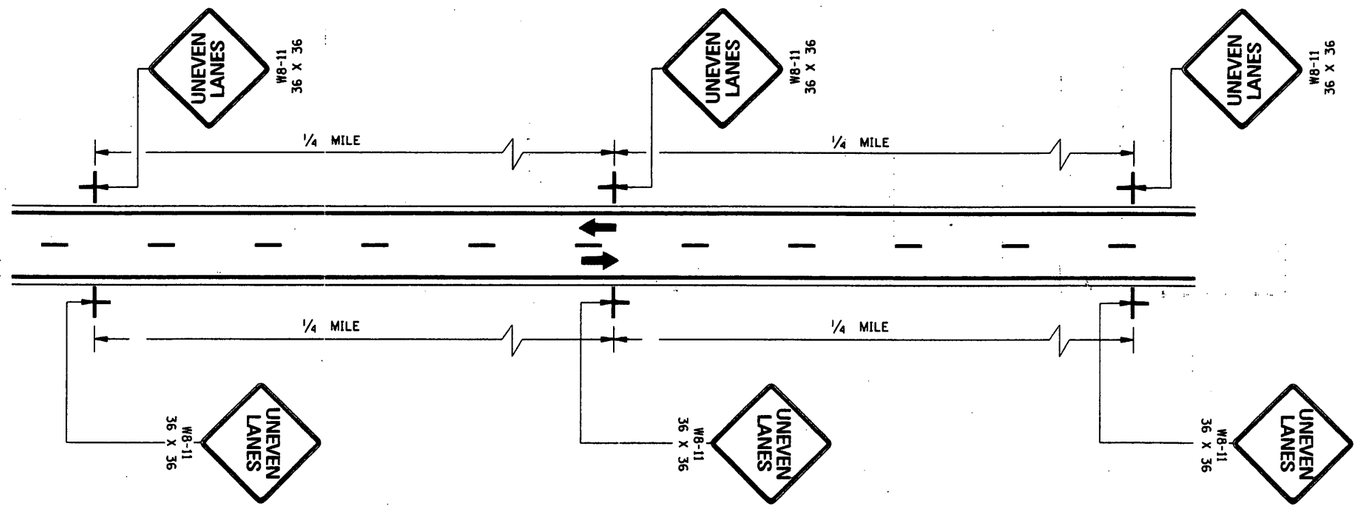
ENGLISH

WORKING NUMBER: TCP-12

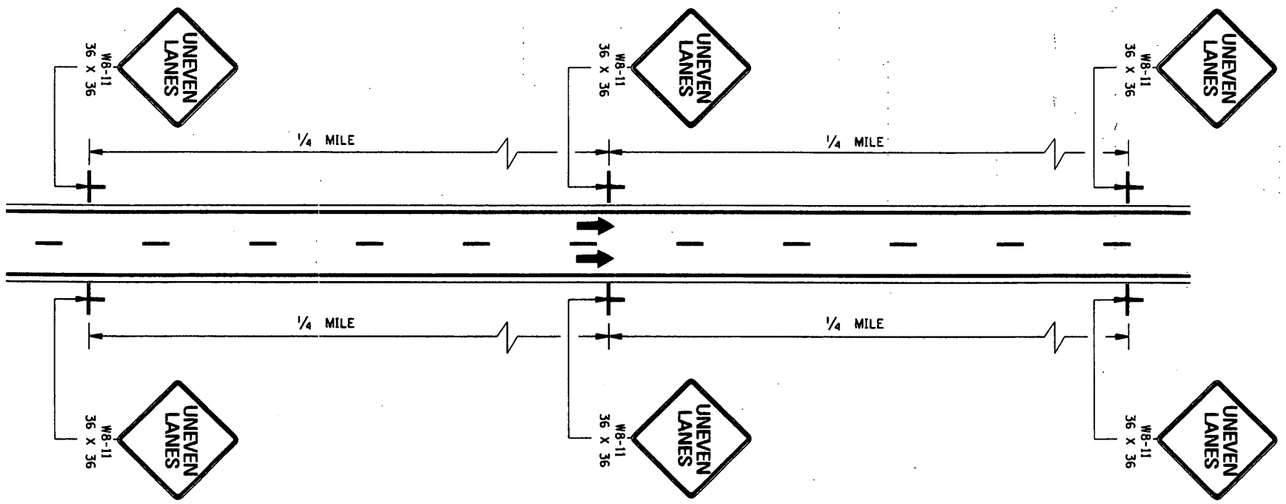
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER: 261

STATE	PROJECT NO.
MISS.	



TWO-WAY TRAFFIC



ONE-WAY TRAFFIC

GENERAL NOTES:

1. UNEVEN LANE LINE:
   A. IF LESS THAN OR EQUAL TO 1½", NO SIGNS REQUIRED.
   B. IF GREATER THAN 1½" AND LESS THAN OR EQUAL TO 2¼", PLACE SIGNS AS SHOWN ON THIS SHEET.
   C. IF GREATER THAN 2¼", TRAFFIC SHOULD NOT BE ALLOWED TO CROSS UNEVEN LANE LINE.
2. ALL TRAFFIC CONTROL ITEMS SHOWN ON THIS SHEET SHALL BE PAID FOR UNDER MAINTENANCE OF TRAFFIC.
3. THE W8-11 SIGNS SHALL BE SPACED AT ¼-MILE INTERVALS THROUGHOUT UNEVEN LANE LINE LIMITS.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TRAFFIC CONTROL PLANS
UNEVEN PAVEMENT DETAILS

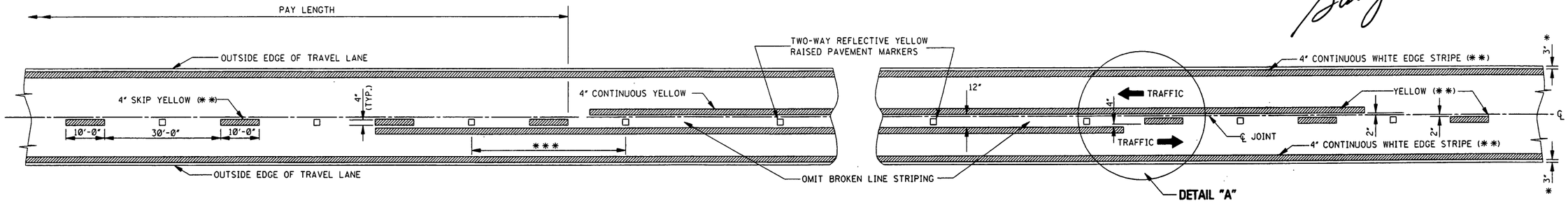
ENGLISH

WORKING NUMBER
TCP-14

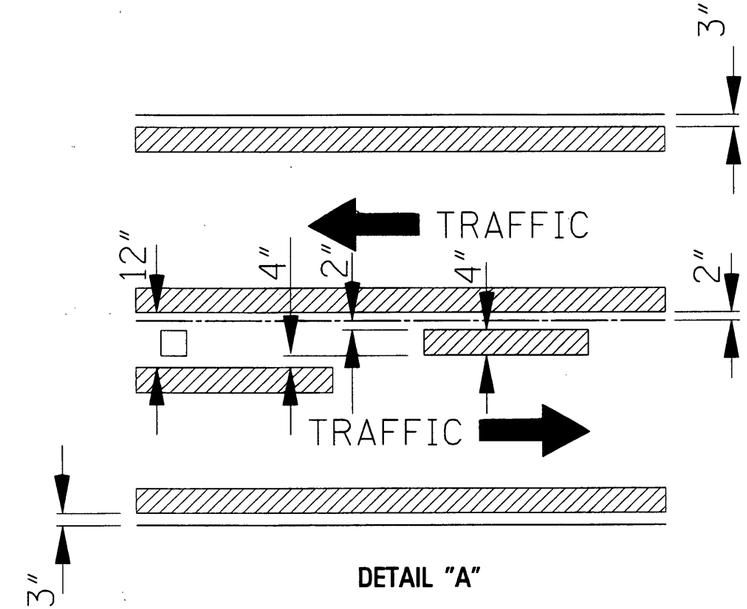
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
263

STATE	PROJECT NO.
MISS.	



TWO-WAY TRAFFIC
(ASPHALT OR CONCRETE PAVEMENT)



DETAIL "A"

DIRECTION OF TRAFFIC

GENERAL NOTES:

* 1. 3" UNLESS SHOWN ELSEWHERE ON THE PLANS.

** 2. EDGE STRIPE SHALL BE SAME MATERIAL AS LANE-LINE STRIPE (PAINT OR TAPE AS INDICATED IN PAY ITEMS).

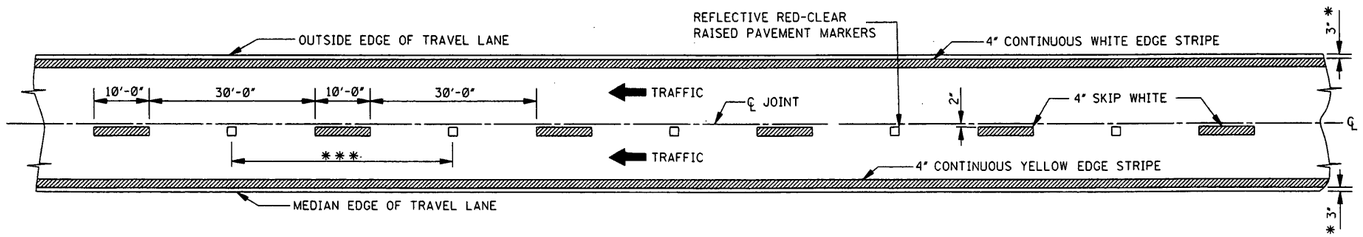
*** 3. SPACING OF REFLECTIVE RAISED PAVEMENT MARKERS IS AS FOLLOWS:

	URBAN AREA (ft-in)	RURAL AREA (ft-in)
TANGENT SECTIONS	40'-0"	80'-0"
HORIZONTAL CURVES	40'-0"	40'-0"
INTERCHANGE LIMITS	40'-0"	† 40'-0"

† NOTE: ON THE MAIN FACILITY, REFLECTIVE RED-CLEAR RAISED PAVEMENT MARKERS ON A 40'-0" SPACING WILL BE REQUIRED ON LANE-LINE(S) THROUGH ALL INTERCHANGE AREAS BEGINNING 1000' IN ADVANCE (IN DIRECTION OF TRAFFIC) OF THE EXIT RAMP TAPER AND CONTINUING THROUGH THE INTERCHANGE TO THE END OF THE ENTRANCE RAMP TAPER.

4. PAVEMENT MARKERS SHALL BE HIGH PERFORMANCE REFLECTIVE RAISED PAVEMENT MARKERS AS LISTED IN THE MDOT "APPROVED SOURCES OF MATERIALS."

5. REFLECTIVE RAISED PAVEMENT MARKERS TO BE USED IF TEMPORARY MARKINGS ARE TO REMAIN IN PLACE OVER 3 MONTHS



4-LANE WITH ONE-WAY TRAFFIC

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

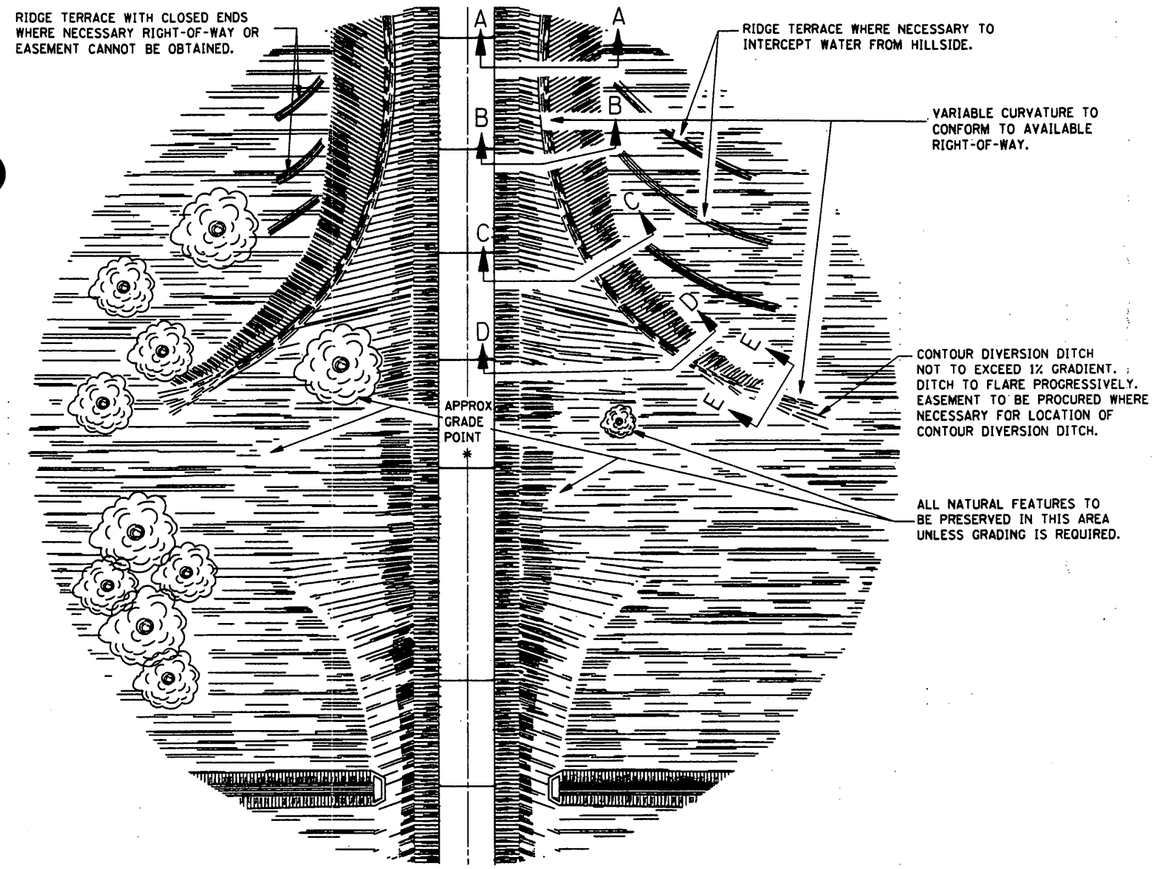
TEMPORARY STRIPING FOR TRAFFIC CONTROL 2-LANE AND 4-LANE DIVIDED HIGHWAYS

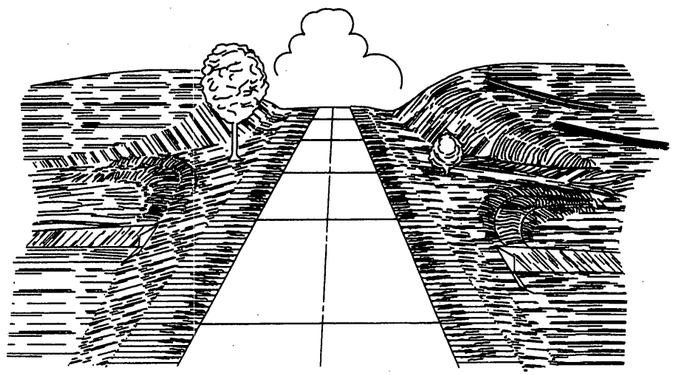
BY	REVISION	DATE

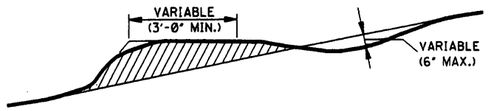
ISSUE DATE: DECEMBER 1, 1999

WORKING NUMBER TCP-15

SHEET NUMBER 264

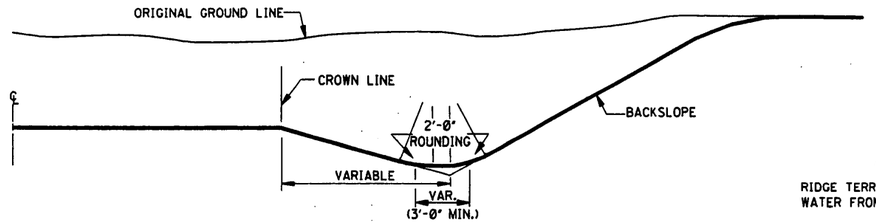




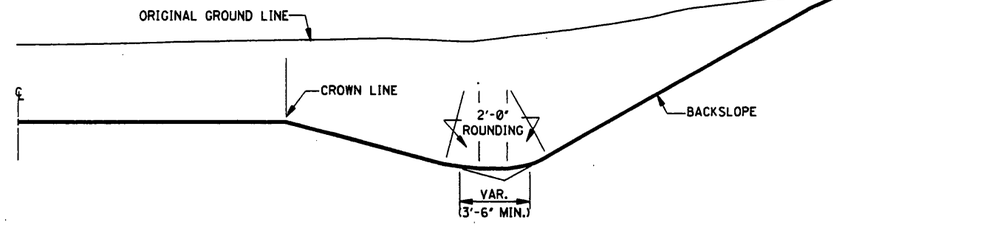


RIDGE TERRACE

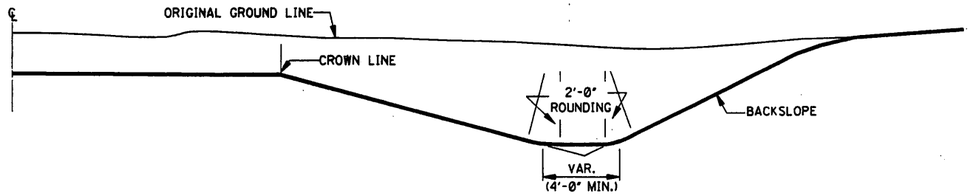
NOTE: RIDGE TERRACES SHALL BE SPACED 4'-0" VERTICALLY ON SLOPES STEEPER THAN 3:1 AND 3'-0" VERTICALLY ON SLOPES FLATTER THAN 3:1. TERRACES ARE TO BE USED WHERE NECESSARY TO INTERCEPT WATER FROM HILLSIDES.



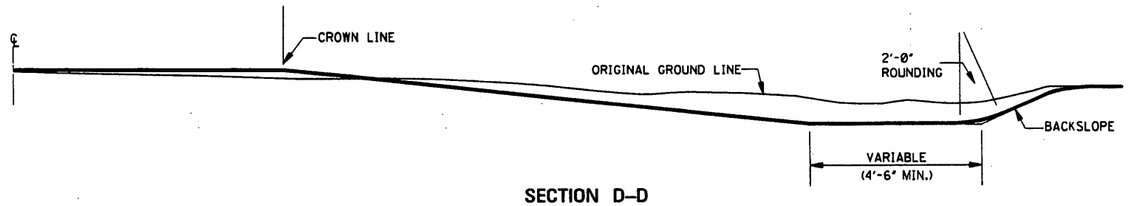
SECTION A–A



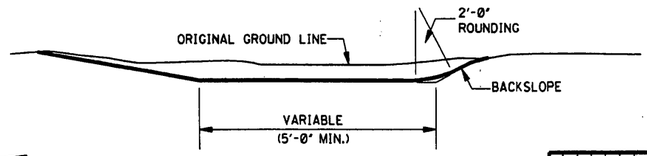
SECTION B–B



SECTION C–C



SECTION D–D



SECTION E–E

STATE	PROJECT NO.
MISS.	

RIDGE TERRACED TO INTERCEPT WATER FROM HILLSIDE.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

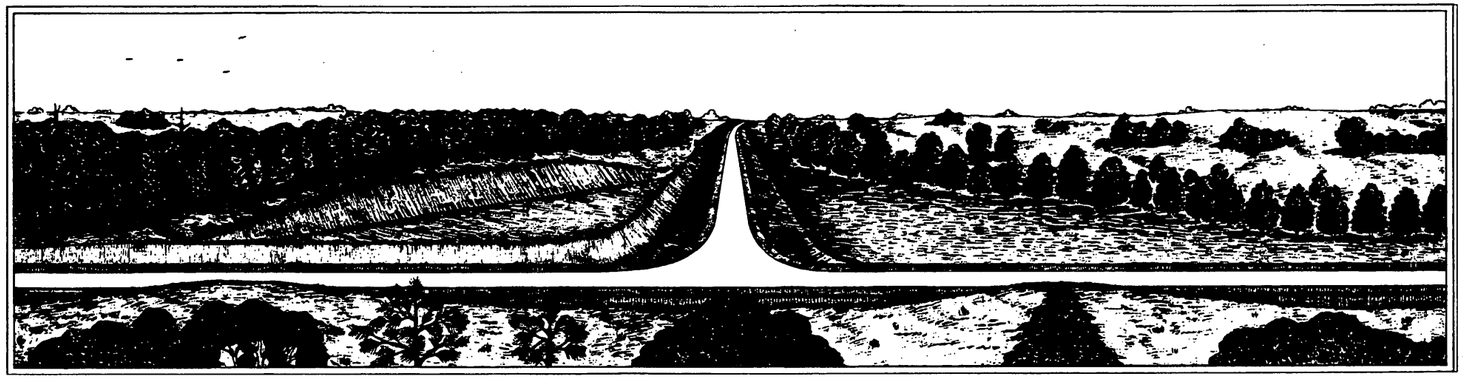
TYPICAL GRADING TRANSITION BETWEEN CUTS AND FILLS

WORKING NUMBER GT-1

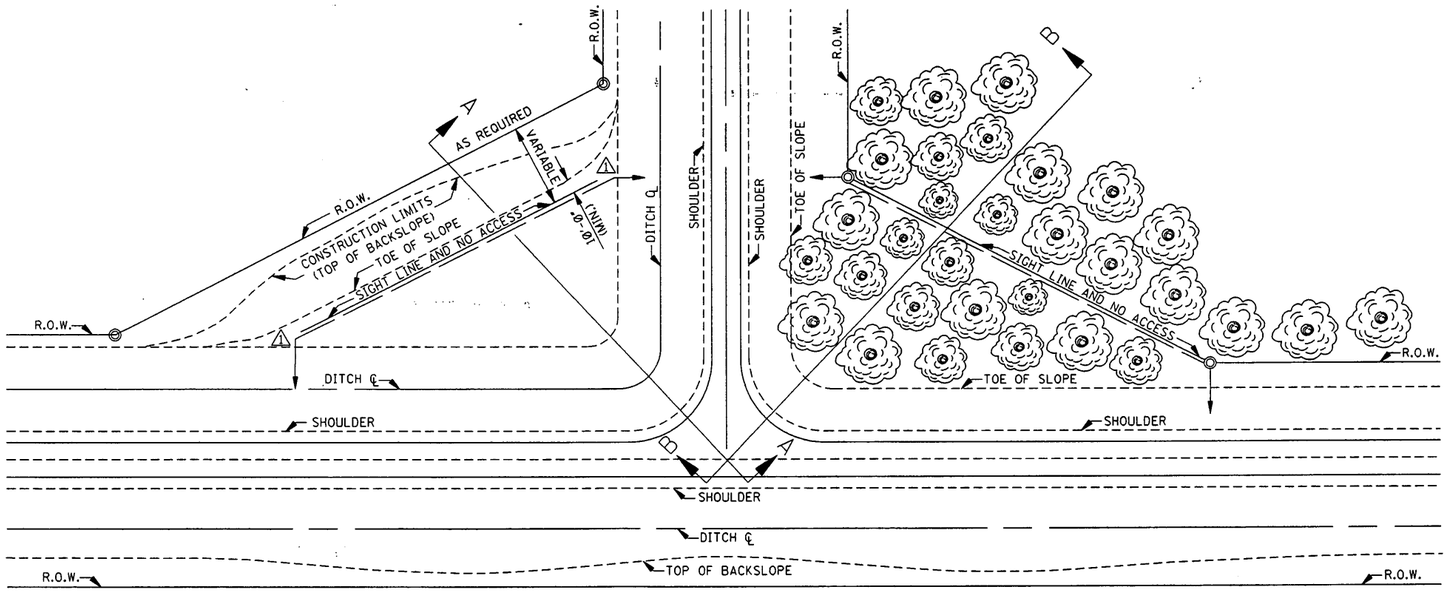
SHEET NUMBER 272

ISSUE DATE: OCTOBER 1, 1998

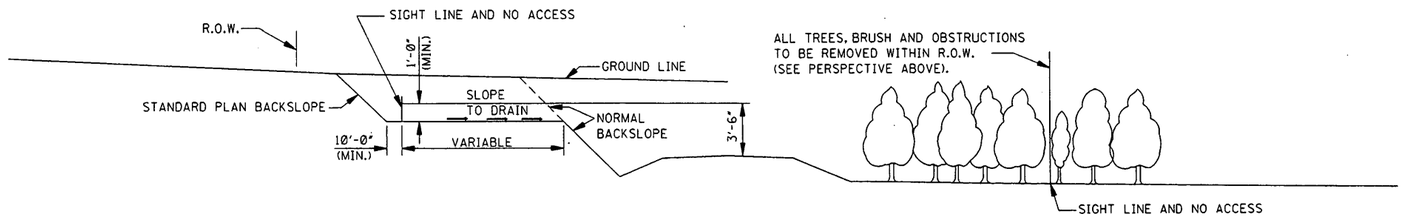
STATE	PROJECT NO.
MISS.	



PERSPECTIVE OF TYPICAL DAYLIGHTING AT INTERSECTION IN CUT AND FILL



PLAN



SECTION A–A

SECTION B–B

DATE	REVISION	BY
12-1-99	REVISED R.O.W. MARKER	S.M.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SIGHT FLARE

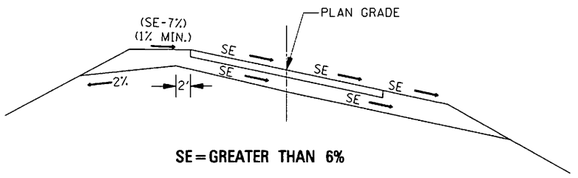
ENGLISH

WORKING NUMBER SF-1

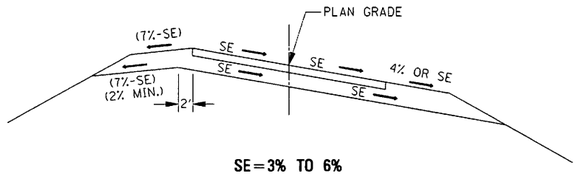
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 273

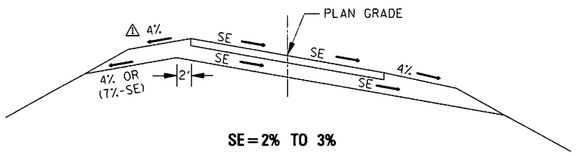
STATE	PROJECT NO.
MISS.	



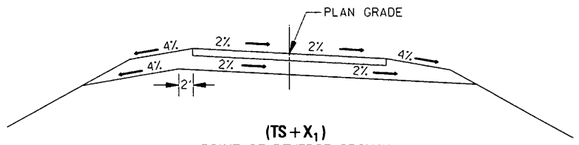
SE = GREATER THAN 6%



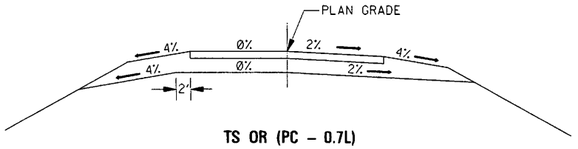
SE = 3% TO 6%



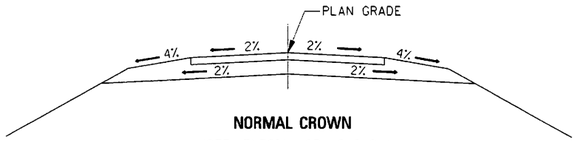
SE = 2% TO 3%



$(TS + X_1)$
POINT OF REVERSE CROWN



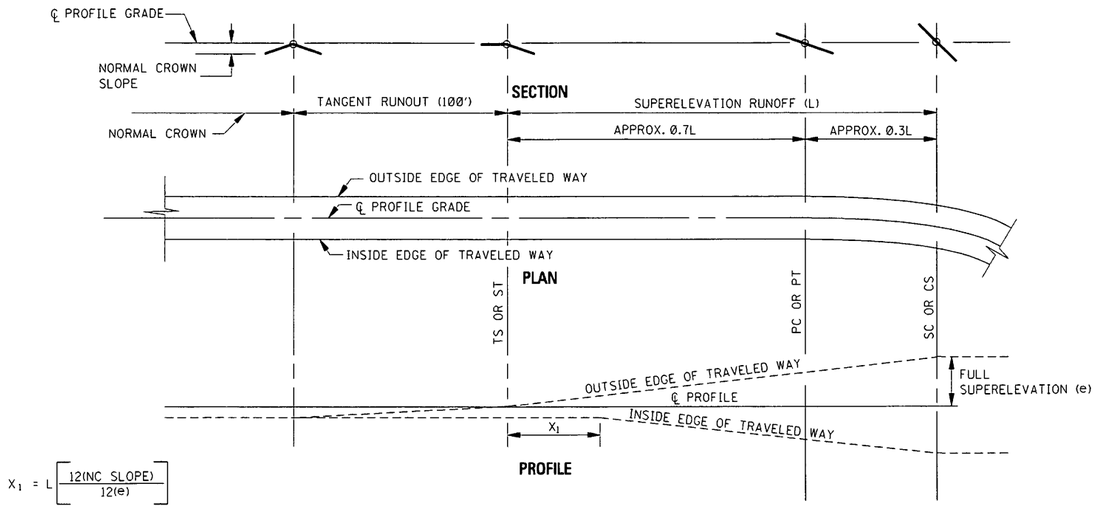
TS OR (PC – 0.7L)



NORMAL CROWN

NOTE: TYPCIAL, OR AS SHOWN ELSEWHERE ON PLANS.

DETAILS OF SHOULDER & SUBGRADE TREATMENT



$$X_1 = L\left[\frac{12(\text{NC SLOPE})}{12(e)}\right]$$

DIAGRAMMATIC PLAN AND PROFILE

*D	V = 30 mph			V = 40 mph			V = 50 mph			V = 55 mph			V = 60 mph			V = 65 mph			V = 70 mph		
	e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)		e	L(ft)	
		A	B		A	B		A	B		A	B		A	B		A	B		A	B
0°15′	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0	NC	0	0
0°30′	NC	0	0	NC	0	0	NC	0	0	NC	0	0	RC	175	175	RC	190	190	RC	200	200
0°45′	NC	0	0	NC	0	0	RC	150	150	RC	160	160	.023	175	175	.025	190	190	.028	200	200
1°00′	NC	0	0	NC	0	0	.021	150	150	.025	160	160	.030	175	175	.033	190	190	.037	200	200
1°30′	NC	0	0	.021	125	125	.031	150	150	.037	160	160	.043	175	190	.048	190	220	.054	200	260
2°00′	RC	100	100	.028	125	125	.040	150	150	.048	160	180	.055	175	230	.062	190	290	.070	220	330
2°30′	.021	100	100	.034	125	125	.049	150	180	.056	160	210	.067	190	280	.075	220	330	.085	260	390
3°00′	.025	100	100	.040	125	125	.057	150	210	.067	170	250	.077	210	320	.087	250	380	.096	280	420
3°30′	.029	100	100	.046	125	140	.065	160	240	.075	190	290	.086	230	350	.095	270	400	.100	300	450
4°00′	.033	100	100	.051	125	160	.072	180	260	.083	210	320	.093	250	380	.099	280	420	D_{max} = 3°30′		
5°00′	.040	100	110	.061	130	190	.083	200	300	.094	240	360	.098	270	400	D_{max} = 4°15′					
6°00′	.046	100	120	.070	150	220	.092	220	330	.099	250	380	D_{max} = 5°15′								
7°00′	.053	100	140	.078	160	240	.098	240	350	D_{max} = 6°30′											
8°00′	.058	110	160	.084	180	260	.100	240	360												
9°00′	.063	120	170	.089	190	280	D_{max} = 8°15′														
10°00′	.068	120	180	.094	200	290															
11°00′	.072	130	200	.097	200	310															
12°00′	.076	140	210	.099	210	310															
13°00′	.080	140	220	.100	210	320															
14°00′	.083	150	220	D_{max} = 13°15′																	
16°00′	.089	160	240																		
18°00′	.093	170	250																		
20°00′	.097	170	260																		
22°00′	.099	180	270																		
24°00′	.100	180	270																		
	D_{max} = 24°45′																				

e_{max} = 10%

KEY:
- D = DEGREE OF CURVE
- V = DESIGN SPEED (mph)
- e = FULL SUPERELEVATION RATE (%)
- L = MINIMUM LENGTH OF SUPERELEVATION RUNOFF (FROM ADVERSE CROWN REMOVED TO FULL SUPER) (ft)
- A = "L" FOR 1-LANE WIDTH OF ROTATION
- B = "L" FOR 2-LANE WIDTH OF ROTATION
- NC = NORMAL CROWN (2% CROSS SLOPE)
- RC = REVERSE CROWN; SUPERELEVATE AT NORMAL CROWN SLOPE (2%)

*NOTE: FOR DEGREES OF CURVE INTERMEDIATE BETWEEN TABLE VALUES, USE A STRAIGHT-LINE INTERPOLATION TO DETERMINE THE SUPERELEVATION RATE.

GENERAL NOTES:
1. STATE AID DIVISION: USE STANDARD SA-SE-1.
2. "L" IN THE TABLE IS FOR ROTATION ABOUT THE CENTERLINE OF 2 LANES ("A") AND 4 LANES ("B") OF TRAVELED WAYS (1 LANE AND 2 LANES EACH SIDE OF THE ROTATION POINT RESPECTIVELY). MINIMUM LENGTH OF RUNOFF FOR VARIOUS WIDTHS OF ROTATION ARE AS FOLLOWS:
   FOR ROTATING A WIDTH OF 3 TRAVEL LANES: L = (1.33)(L IN COLUMN B)
   FOR ROTATING A WIDTH OF 4 TRAVEL LANES: L = (1.67)(L IN COLUMN B)
3. SPIRAL TRANSITION CURVES SHOULD BE USED FOR THE LENGTH OF SUPERELEVATION RUNOFF FOR ALL CURVES IN THE TABLE BELOW THE HEAVY LINE (e > 5%).
4. A VERTICAL CURVE WITH A LENGTH (IN FEET) EQUAL TO THE DESIGN SPEED (IN mph) SHOULD BE PLACED AT EXCESSIVE ANGULAR BREAKS.

DATE	REVISION	BY
3-01-02	REVISED SHOULDER SLOPE	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

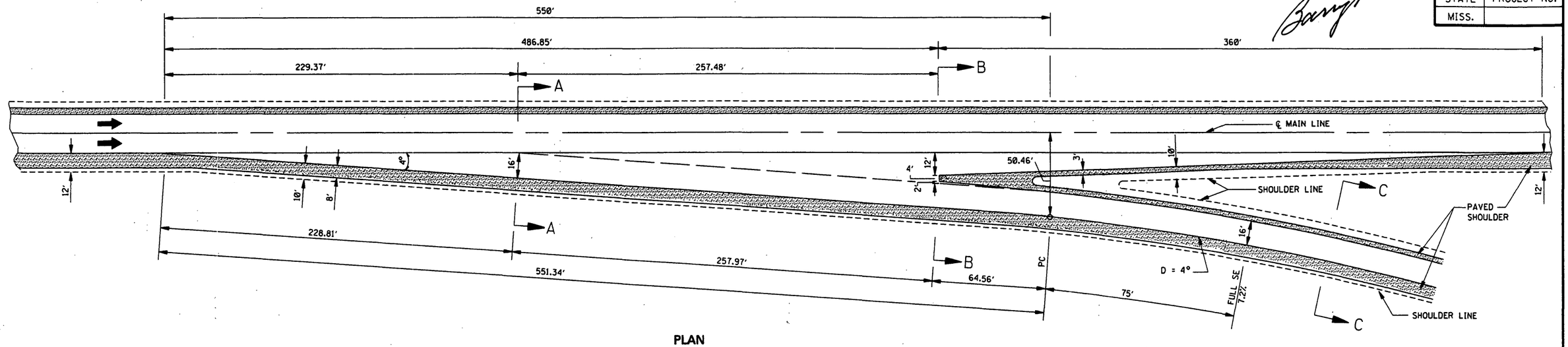
SUPERELEVATION TRANSITION CASE I ROTATION ABOUT CENTERLINE
(2% NORMAL SUBGRADE)

ISSUE DATE: OCTOBER 1, 1998

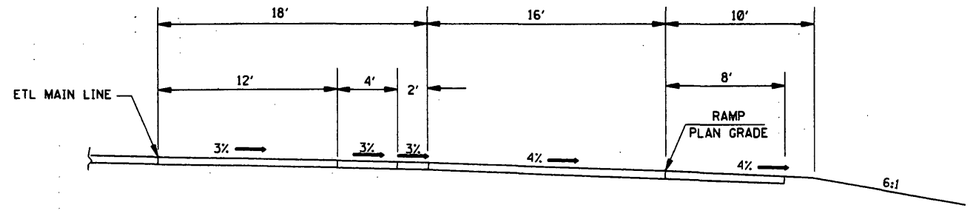
WORKING NUMBER: SE-2A

SHEET NUMBER: 276

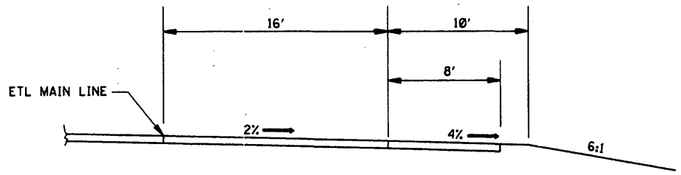
STATE	PROJECT NO.
MISS.	



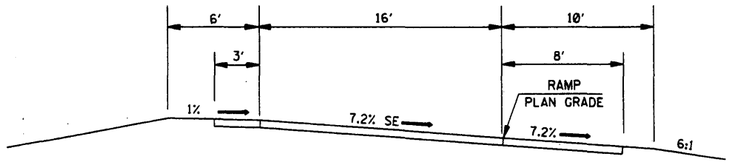
PLAN



SECTION B–B



SECTION A–A



SECTION C–C

GENERAL NOTE:

1. THIS SHEET ASSUMES A RAMP DESIGN SPEED = 50 mph, A MAINLINE DESIGN SPEED = 70 mph AND A RAMP CURVE OF D = 4°. FOR OTHER RAMP CURVES AND/OR MAINLINE DESIGN SPEEDS, MODIFICATIONS SHOULD BE MADE AS NECESSARY TO THE LOCATION OF THE PC, SUPERELEVATION TRANSITIONS, SUPERELEVATION RATE, DECELERATION LENGTHS, ETC.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

INTERCHANGE DESIGN FOR HIGH SPEED TAPERED EXIT RAMP

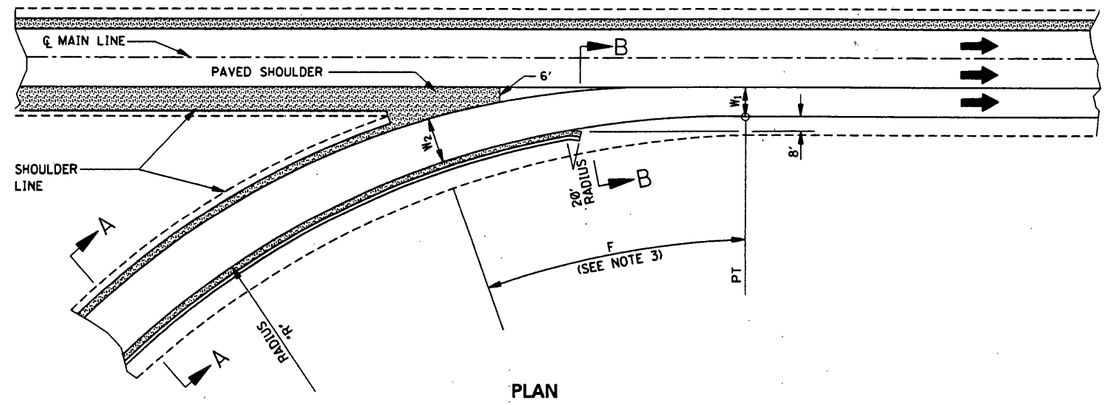
ENGLISH

WORKING NUMBER IR-1

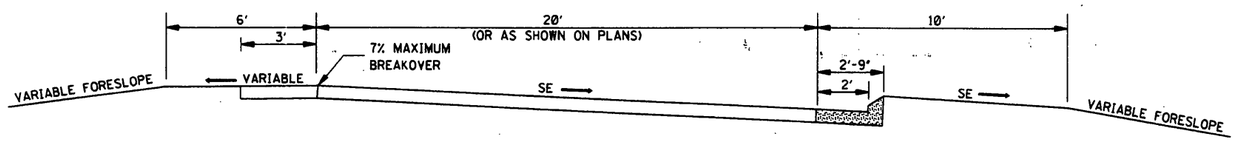
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 283

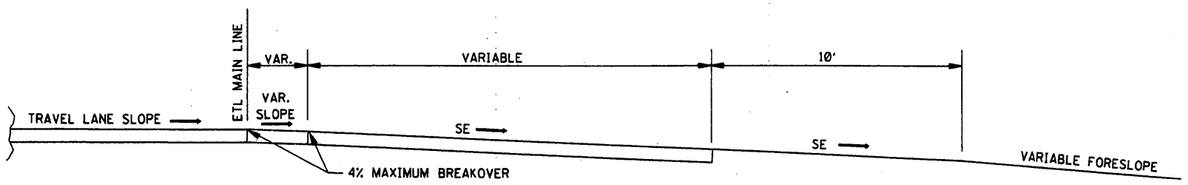
STATE	PROJECT NO.
MISS.	



PLAN



SECTION A–A



SECTION B–B

GENERAL NOTES:

1. THE RADIUS OF THE LOOP RAMP WILL VARY AS SHOWN ON THE PLANS.
2. W_1 IS NORMALLY 12' AND W_2 IS NORMALLY 20'.
3. THE LENGTH OF THE TRAVELED WAY WIDTH TRANSITION (F) IS DETERMINED BY:

$$F = 0.5\ V'(W_2 - W_1)$$

WHERE: F IS IN FEET AND
W_2 & W_1 = WIDTHS AS SHOWN IN FEET
V' = AVERAGE RUNNING SPEED (MPH)

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

INTERCHANGE DESIGN FOR LOOP ENTRANCE RAMP

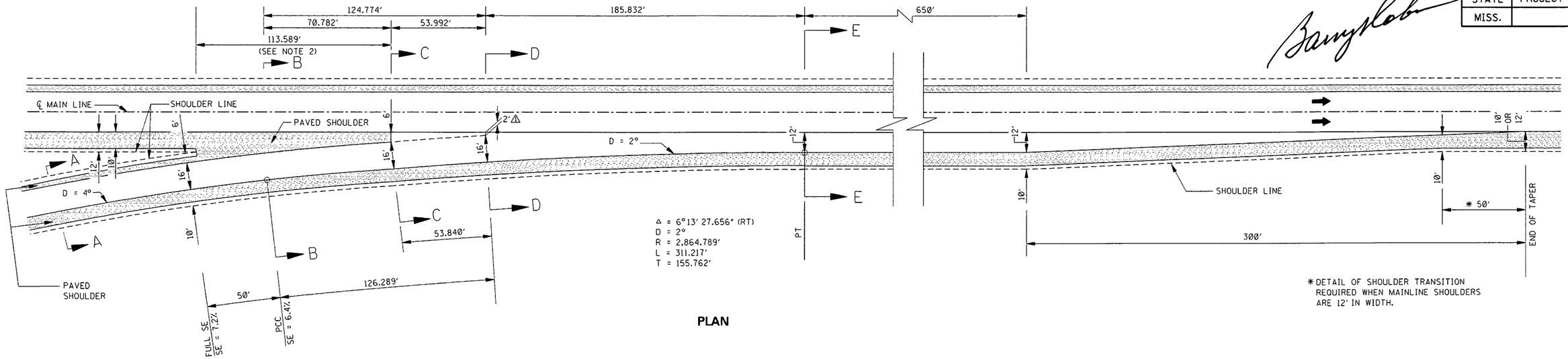
ENGLISH

WORKING NUMBER
IR-2

SHEET NUMBER
285

ISSUE DATE: OCTOBER 1, 1998

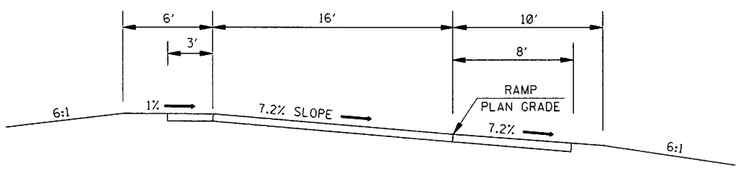
STATE	PROJECT NO.
MISS.	



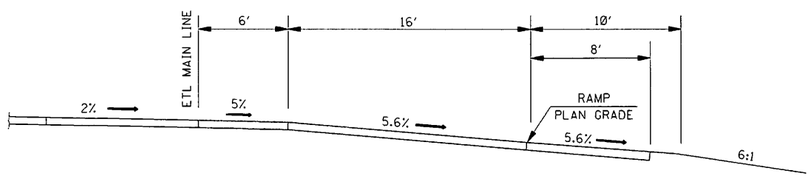
Δ = 6°13' 27.656" (RT)
D = 2°
R = 2,864.789'
L = 311.217'
T = 155.762'

PLAN

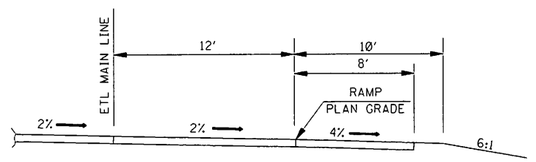
* DETAIL OF SHOULDER TRANSITION REQUIRED WHEN MAINLINE SHOULDERS ARE 12' IN WIDTH.



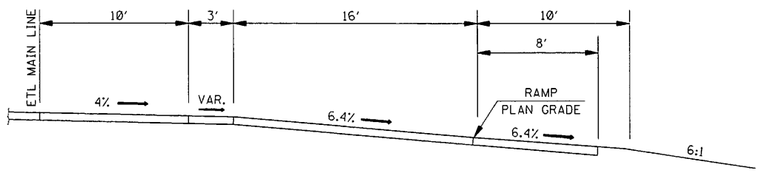
SECTION A–A



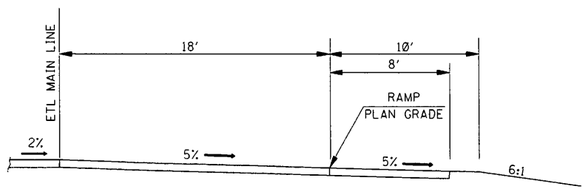
SECTION C–C



SECTION E–E



SECTION B–B



SECTION D–D

GENERAL NOTE:

1. THIS SHEET IS FOR A RAMP CURVE OF D = 4°. FOR OTHER RAMP CURVES, MODIFICATIONS SHOULD BE MADE IN THE LOCATION OF THE PC, PAVEMENT SLOPE TRANSITIONS, SUPERELEVATIONS, ETC.
2. THIS AREA TO BE PAVED WHETHER SHOULDERS ARE PAVED OR NOT.

DATE	REVISION	BY
3-01-02	MOVED DIMENSION	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

INTERCHANGE DESIGN FOR HIGH-SPEED PARALLEL ENTRANCE RAMP

ENGLISH

WORKING NUMBER IR-2A

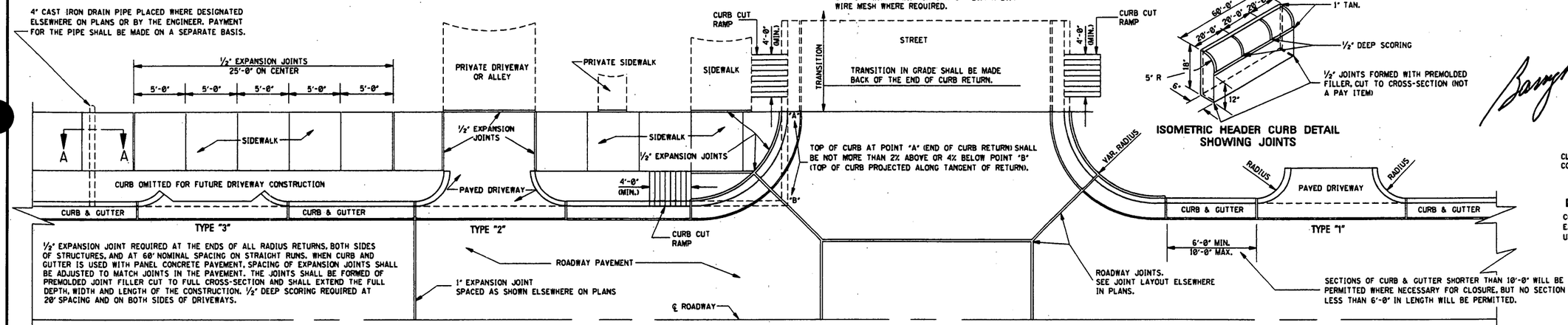
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 286

STATE	PROJECT NO.
MISS.	

4" CAST IRON DRAIN PIPE PLACED WHERE DESIGNATED ELSEWHERE ON PLANS OR BY THE ENGINEER. PAYMENT FOR THE PIPE SHALL BE MADE ON A SEPARATE BASIS.

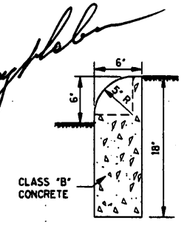
NOTE: DRIVEWAY REINFORCEMENT SHALL BE 6 X 6 - W1.4 X W1.4 OR 6 X 6 - D1.4 X D1.4 WIRE MESH WHERE REQUIRED.



½" EXPANSION JOINTS AT THE ENDS OF ALL RADIUS RETURNS, BOTH SIDES OF STRUCTURES, AND AT 60' NOMINAL SPACING ON STRAIGHT RUNS. WHEN CURB AND GUTTER IS USED WITH PANEL CONCRETE PAVEMENT, SPACING OF EXPANSION JOINTS SHALL BE ADJUSTED TO MATCH JOINTS IN THE PAVEMENT. THE JOINTS SHALL BE FORMED OF PREMOLDED JOINT FILLER CUT TO FULL CROSS-SECTION AND SHALL EXTEND THE FULL DEPTH, WIDTH AND LENGTH OF THE CONSTRUCTION. ½" DEEP SCORING REQUIRED AT 20' SPACING AND ON BOTH SIDES OF DRIVEWAYS.

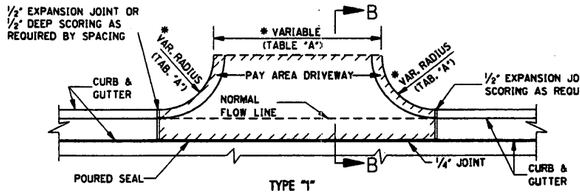
PLAN SHOWING ARRANGEMENT OF CURB & GUTTER, DRIVEWAYS AND SIDEWALK

ISOMETRIC HEADER CURB DETAIL SHOWING JOINTS



DETAIL OF HEADER CURB

CONTRACTION JOINTS REQUIRED AT 20' O.C.
EXPANSION JOINTS REQUIRED AT 60' O.C.
UNLESS OTHERWISE DIRECTED BY ENGINEER.



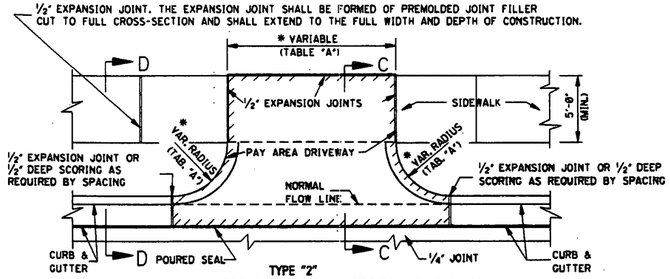
TYPE "1"

PLAN OF CONCRETE DRIVEWAY

11.858 yd² FOR DRIVEWAY 16'-0" IN WIDTH.
0.574 yd² FOR EACH ADDED OR SUBTRACTED FOOT OF WIDTH.
NOTE: THIS DRIVEWAY AREA EXAMPLE IS COMPUTED ON THE BASIS OF 3'-0" RADIUS. PAYMENT FOR CURB RADIUS SHALL BE INCLUDED IN COMPENSATION FOR DRIVEWAY.

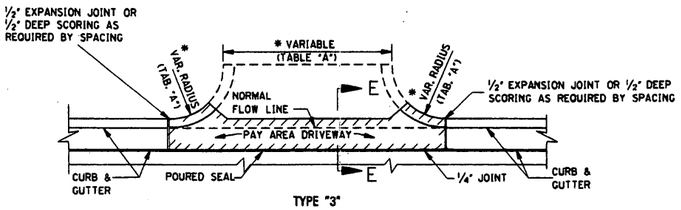
*TABLE "A"		
DRIVEWAY TYPE	DRIVEWAY WIDTH (ft)	CURB RETURN RADIUS (ft)
RESIDENTIAL	16'	3' - 10'
COMMERCIAL/ INDUSTRIAL	30' - 50'	5' - 30'

½" EXPANSION JOINT. THE EXPANSION JOINT SHALL BE FORMED OF PREMOLDED JOINT FILLER CUT TO FULL CROSS-SECTION AND SHALL EXTEND TO THE FULL WIDTH AND DEPTH OF CONSTRUCTION.



TYPE "2"

PLAN OF CONCRETE DRIVEWAY ACROSS SIDEWALK AREA

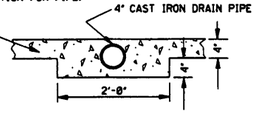


TYPE "3"

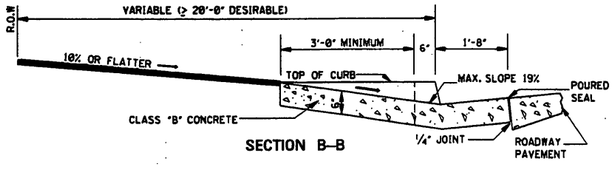
PLAN–CURB OMITTED FOR FUTURE DRIVEWAY CONSTRUCTION

NOTE: THIS TYPE CONSTRUCTION SHALL BE USED WHERE DESIGNATED ELSEWHERE ON PLANS OR BY THE ENGINEER.

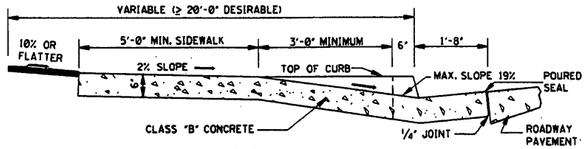
4" EXTRA DEPTH SHALL BE PLACED FULL WIDTH OF SIDEWALK, WHERE DRAIN PIPE PASSES THROUGH SIDEWALK. PAYMENT SHALL BE INCLUDED IN COMPENSATION FOR PIPE.



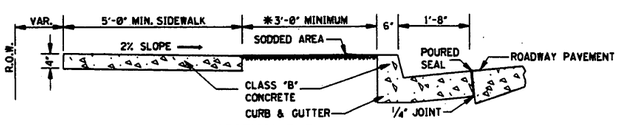
SECTION A–A



SECTION B–B

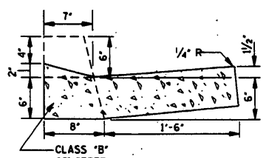


SECTION C–C

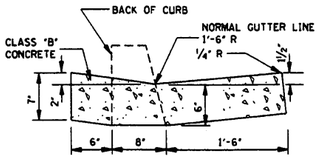


SECTION D–D

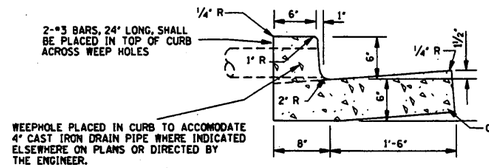
*NOTE: THE 3'-0" BUFFER SHOWN IS FOR A BUFFER ZONE. BUFFER ZONE IS NOT REQUIRED UNLESS INDICATED ELSEWHERE ON PLANS.



SECTION E–E

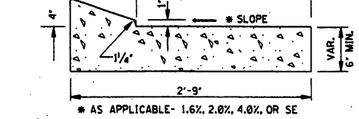


DETAIL OF VALLEY GUTTER



TYPE "1"

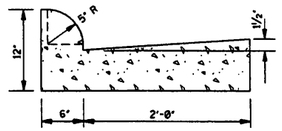
DETAIL OF COMBINATION CURB & GUTTER



* AS APPLICABLE- 1.6%, 2.0%, 4.0%, OR SE

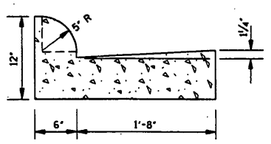
TYPE "2"

DETAIL OF COMBINATION CURB & GUTTER



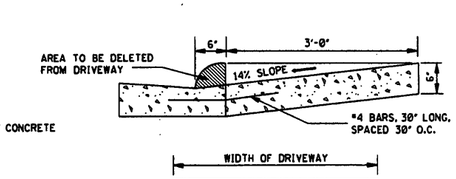
TYPE "3A"

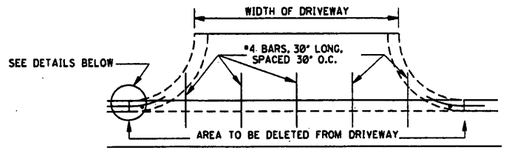
DETAIL OF COMBINATION CURB & GUTTER

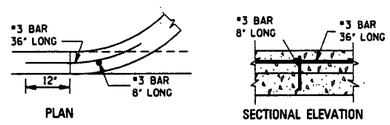


TYPE "3B"

DETAIL OF COMBINATION CURB & GUTTER







PERMISSIBLE DRIVEWAY CONSTRUCTION METHOD FOR SLIP–FORM PLACEMENT OF CURB & GUTTER

GENERAL NOTES:

1. THE STANDARD SPECIFICATIONS ADOPTED BY THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION SHALL, UNLESS OTHERWISE SPECIFIED HEREIN, APPLY TO ALL ITEMS INCLUDED ON THIS DRAWING.
2. TRAVERSE CONTRACTION JOINTS ARE REQUIRED AT 20' ON CENTER FOR ALL CONCRETE DRIVEWAYS THAT EXTEND PAST THE END OF THE CURB RETURN. A ½" WIDE EXPANSION JOINT IS REQUIRED AT THE END OF THE CURB RETURN AND AT 60' ON CENTER THROUGHOUT THE LENGTH OF THE DRIVEWAY. A LONGITUDINAL CONTRACTION JOINT IS REQUIRED FOR ALL DRIVEWAYS EXCEEDING 20' IN WIDTH.
3. SEE SHEET CCR-1 FOR DETAILS OF CURB-CUT RAMPS.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

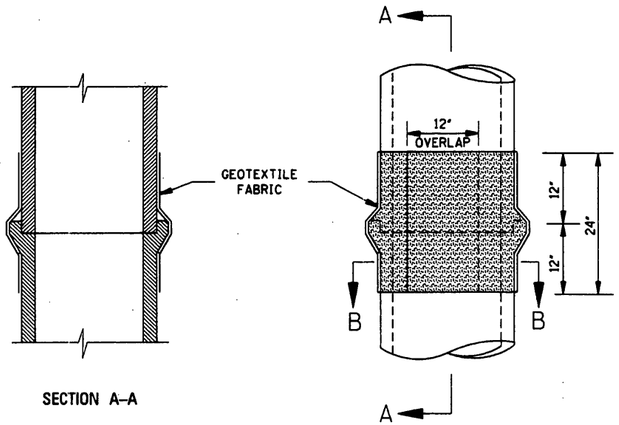
DRIVEWAYS, CURB & GUTTER & SIDEWALK

WORKING NUMBER SD-1

SHEET NUMBER 287

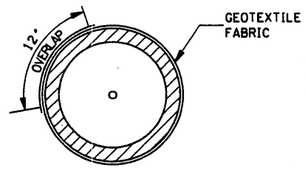
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



SECTION A–A

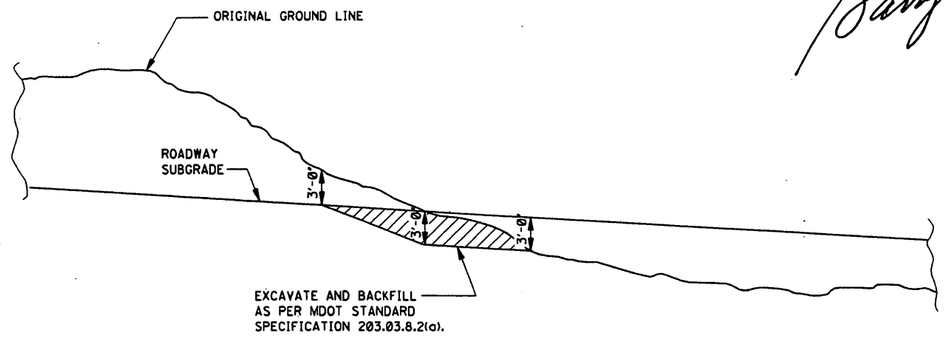
ELEVATION



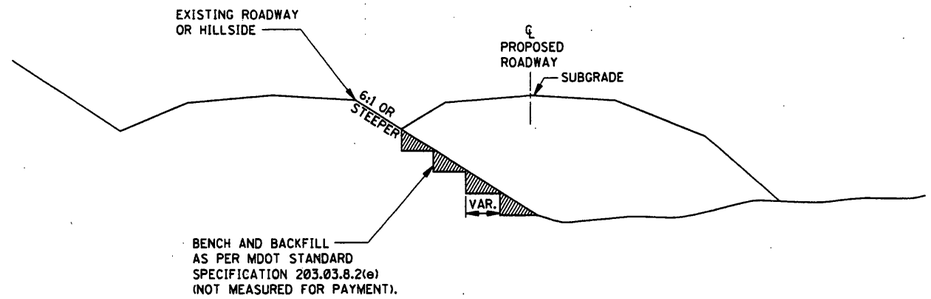
SECTION B–B

STACKED PIPE JOINTS

NOTE: EACH STACKED PIPE JOINT SHALL BE WRAPPED WITH 24" WIDE TYPE V GEOTEXTILE FABRIC (AASHTO M 288). THE FABRIC SHALL OVERLAP A MINIMUM OF 12" AT THE WRAP AND SHALL BE SECURED WITH STRING OR WIRE AS APPROVED BY THE ENGINEER PRIOR TO BACKFILLING. THE COST FOR THE MATERIALS AND LABOR SHALL BE ABSORBED.



PROFILE SHOWING REQUIRED EXCAVATION AT GRADE POINTS



CROSS–SECTION SHOWING REQUIRED BENCHING
UNDER EMBANKMENTS ON STEEP SLOPES

EXCAVATION AT GRADE POINTS

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

MISCELLANEOUS DETAIL SHEET

1. STACKED PIPE JOINTS
2. EXCAVATION AT GRADE POINTS

ENGLISH

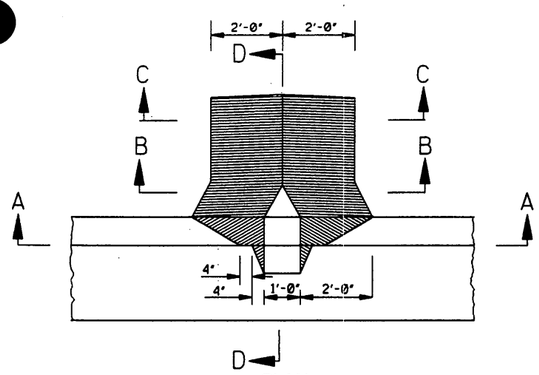
WORKING NUMBER
MDS-1

ISSUE DATE: OCTOBER 1, 1998

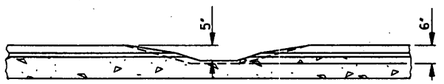
SHEET NUMBER
290

STATE	PROJECT NO.
MISS.	

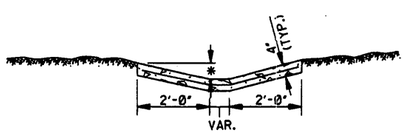
FLUME – TYPE "A"
(INTERMEDIATE RUNOFF THROUGH CURB & GUTTER)



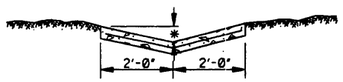
PLAN



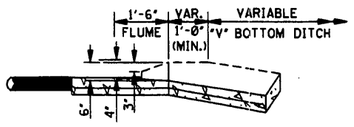
SECTION A–A



SECTION B–B
(TRANSITION SECTION)

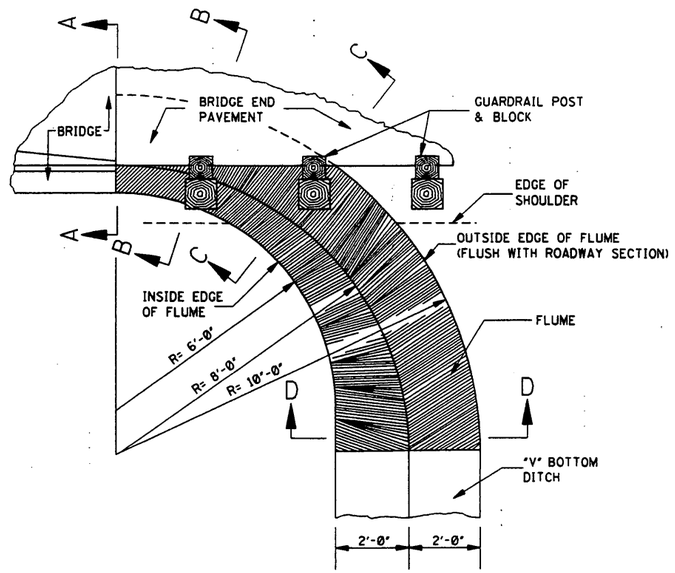


SECTION C–C
(DITCH SECTION)

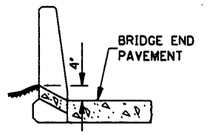


SECTION D–D

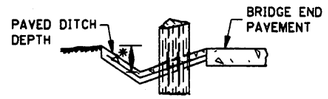
FLUME – TYPE "B"
(AT END OF BRIDGE)



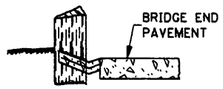
PLAN



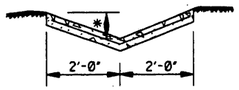
SECTION A–A
(AT BRIDGE END)



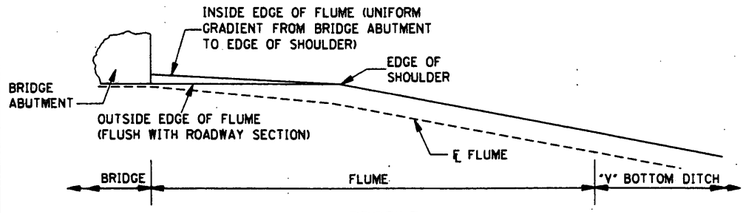
SECTION C–C
(AT EDGE OF SHOULDER)



SECTION B–B

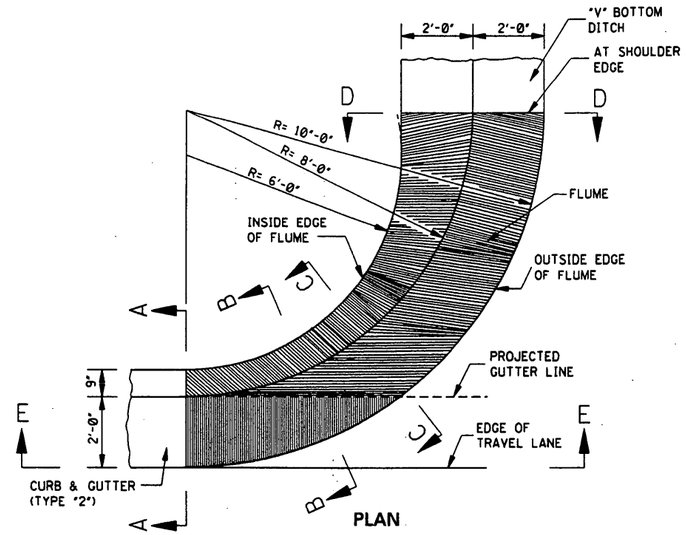


SECTION D–D
(AT "V" BOTTOM DITCH)

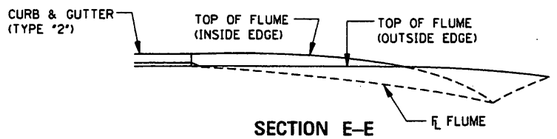


PROFILE

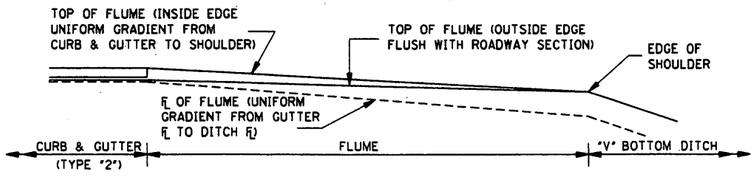
FLUME – TYPE "C"
(AT END OF CURB & GUTTER)



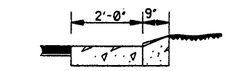
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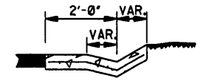
SECTION E–E



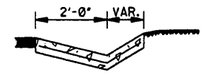
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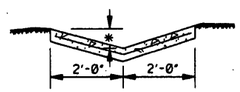
SECTION A–A
(AT END OF CURB & GUTTER)



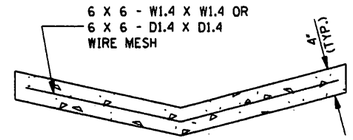
SECTION B–B



SECTION C–C
(AT EDGE OF PROJECTED GUTTER LINE)



SECTION D–D
(AT EDGE OF SHOULDER)



TYPICAL SECTION
(WIRE MESH REQUIREMENTS OF PAVED FLUME)

*1. THIS DIMENSION IS 6" FOR 4:1 SLOPES AND 8" FOR 3:1 SLOPES.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF PAVED FLUMES

ENGLISH

WORKING NUMBER
PF-1

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
291

STATE	PROJECT NO.
MISS.	

CORRUGATED STEEL AND ALUMINUM PIPE (ROUND) H-20 LOADING

PIPE DIAMETER (In)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE (In)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) SHEET THICKNESS (In)				
		0.064 STEEL 0.060 ALUM. 16 GAGE	0.079 STEEL 0.075 ALUM. 14 GAGE	0.109 STEEL 0.105 ALUM. 12 GAGE	0.138 STEEL 0.135 ALUM. 10 GAGE	0.168 STEEL 0.164 ALUM. 8 GAGE
		2⅔" X ½" CORRUGATED STEEL RIVETED, WELDED OR HELICAL /		3" X 1" OR 5" X 1" CORRUGATED STEEL RIVETED, WELDED, HELICAL OR BOLTED		2⅔" X ½" CORRUGATED ALUMINUM RIVETED OR HELICAL
12"	12"	84' / - / 45'	91' / - / 45'	- / - / 78'	- / - / 81'	- / - / 84'
15"	12"	67' / - / -	73' / - / -	- / - / -	- / - / -	- / - / -
18"	12"	56' / - / 30'	61' / - / 30'	- / - / 52'	- / - / 54'	- / - / 56'
24"	12"	42' / - / 22'	46' / - / 22'	59' / - / 39'	- / - / 41'	- / - / 42'
30"	12"	34' / - / 18'	36' / - / 18'	47' / - / 31'	- / - / 32'	- / - / 34'
36"	12"	28' / 48' / 15'	30' / 60' / 15'	39' / 78' / 26'	41' / 89' / 27'	- / 101' / 28'
42"	12"	31' / 41' / -	43' / 51' / 26'	46' / 64' / 43'	48' / 71' / 43'	50' / 79' / 44'
48"	12"	27' / 36' / -	37' / 45' / -	45' / 57' / 40'	46' / 61' / 41'	47' / 66' / 43'
54"	12"	- / 32' / -	33' / 40' / -	43' / 52' / 35'	44' / 55' / 37'	45' / 59' / 38'
60"	12"	- / 29' / -	- / 36' / -	43' / 49' / -	43' / 51' / 33'	44' / 54' / 34'
66"	12"	- / 26' / -	- / 33' / -	42' / 47' / -	43' / 49' / 30'	43' / 51' / 31'
72"	12"	- / 24' / -	- / 30' / -	- / 44' / -	41' / 47' / -	43' / 49' / 29'
78"	12"	- / 22' / -	- / 28' / -	- / 41' / -	- / 46' / -	39' / 47' / -
84"	12"	- / 21' / -	- / 26' / -	- / 38' / -	- / 45' / -	35' / 46' / -
90"	12"	- / 19' / -	- / 24' / -	- / 35' / -	- / 43' / -	- / 45' / -
96"	12"	- / 18' / -	- / 22' / -	- / 33' / -	- / 40' / -	- / 44' / -
102"	24"	- / 17' / -	- / 21' / -	- / 31' / -	- / 38' / -	- / 42' / -
108"	24"	- / - / -	- / 20' / -	- / 30' / -	- / 35' / -	- / 39' / -
114"	24"	- / - / -	- / 19' / -	- / 28' / -	- / 34' / -	- / 37' / -
120"	24"	- / - / -	- / - / -	- / 27' / -	- / 32' / -	- / 35' / -

NOTE: THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR ½", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).

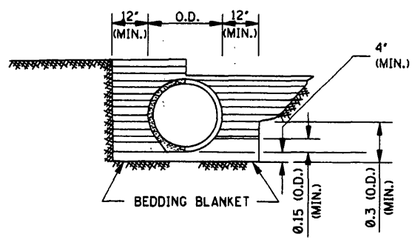
CORRUGATED METAL PIPE ARCHES H-20 LOADING

EQUIV. DIAMETER (In)	PIPE DIMENSION (SPAN X RISE) (In)	MINIMUM CORNER RADIUS (In)	MINIMUM COVER FROM TOP OF PIPE TO TOP OF SUBGRADE FOR 2 tons/ft² (In)	STEEL			ALUMINUM		
				MINIMUM THICKNESS REQUIRED (In)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft²)		MINIMUM THICKNESS REQUIRED (In)	MAXIMUM FILL HEIGHT ABOVE TOP OF PIPE (ft) FOR THE FOLLOWING CORNER BEARING PRESSURE (tons/ft²)	
					2 tons/ft²	† 3 tons/ft²		2 tons/ft²	† 3 tons/ft²
				2⅔" X ½" CORRUGATION RIVETED, WELDED OR HELICAL			2⅔" X ½" CORRUGATION RIVETED OR HELICAL		
15"	17" X 13"	3"	18"	0.064"	13'	15'+	0.060"	15'	-
18"	21" X 15"	3"	18"	0.064"	12'	15'+	0.060"	14'	-
24"	28" X 20"	3"	18"	0.064"	10'	15'	0.060"	10'	15'+
30"	35" X 24"	3"	18"	0.079"	9'	14'	0.060"	9'	14'
36"	42" X 29"	3½"	18"	0.079"	9'	13'	0.075"	9'	13'
42"	49" X 33"	4"	18"	0.079"	8'	12'	0.105"	8'	12'
48"	57" X 38"	5"	18"	0.109"	8'	12'	0.135"	8'	12'
54"	64" X 43"	6"	18"	0.109"	8'	12'	0.135"	8'	12'
60"	71" X 47"	7"	18"	0.138"	8'	12'	0.164"	8'	12'
66"	77" X 52"	8"	18"	0.168"	8'	12'			
72"	83" X 57"	9"	18"	0.168"	9'	13'			
				5" X 1" OR 3" X 1" CORRUGATION RIVETED, WELDED OR HELICAL					
36"	40" X 31"	5"	18"	0.079"	12'	15'+			
42"	46" X 36"	6"	18"	0.079"	12'	15'+			
48"	53" X 41"	7"	18"	0.079"	12'	15'+			
54"	60" X 46"	8"	18"	0.079"	12'	15'+			
60"	66" X 51"	9"	18"	0.079"	12'	15'+			
66"	73" X 55"	12"	18"	0.079"	15'+	-			
72"	81" X 59"	14"	18"	0.079"	15'	-			
78"	87" X 63"	14"	18"	0.079"	14'	15'+			
84"	95" X 67"	16"	18"	0.109"	13'	15'+			
90"	103" X 71"	16"	24"	0.109"	12'	15'+			
96"	112" X 75"	18"	24"	0.109"	11'	15'+			

NOTES:
1. THE AVERAGE INSIDE DIAMETER SHALL NOT VARY MORE THAN ONE (1) PERCENT OR ½", WHICHEVER IS GREATER, FROM THE NOMINAL DIAMETER WHEN MEASURED ON THE INSIDE CREST OF THE CORRUGATIONS. (AASHTO M 36M/M 36 & AASHTO M 196M/M 196).

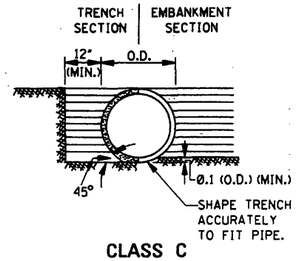
† 2. BEARING PRESSURES EXCEEDING 2 tons/ft² REQUIRED FOR GIVEN FILL HEIGHT SHALL HAVE FOUNDATION MATERIALS INVESTIGATED TO DETERMINE BEARING CAPACITY.

TRENCH SECTION | EMBANKMENT SECTION

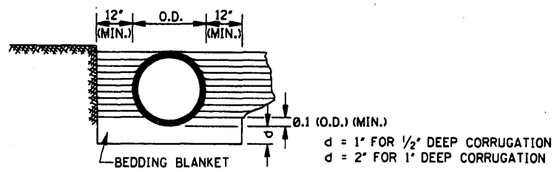


CLASS B

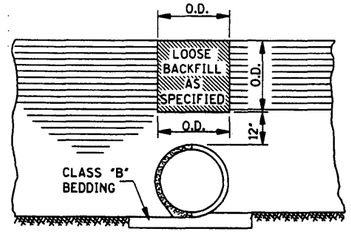
TRENCH SECTION | EMBANKMENT SECTION



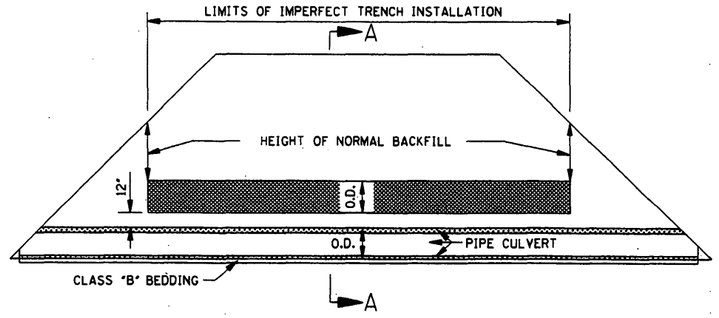
CLASS C



CLASS C MODIFIED



SECTION A-A



ELEVATION

IMPERFECT TRENCH INSTALLATION

MAXIMUM HEIGHT OF FILL OVER REINFORCED CONCRETE PIPE

CLASS OF PIPE	TYPE OF BACKFILL	MAXIMUM COVER (ft) CLASS "C" BEDDING	MAXIMUM COVER (ft) CLASS "B" BEDDING
III	NORMAL	16'	-
IV	NORMAL	23'	28'
V	NORMAL	30'	36'
IV	IMPERFECT	-	90'
V	IMPERFECT	-	115'

NOTE: CLASS OF PIPE AND BEDDING TO BE CONSISTENT THROUGHOUT THE PIPE LENGTH.

MAXIMUM HEIGHT OF FILL OVER CLASS 2 NONREINFORCED CONCRETE PIPE, PERFORATED AND/OR PLAIN, FOR UNDERDRAINS

PIPE SIZE (In)	MAXIMUM COVER (ft) BEDDING CLASS "C"/CLASS "B" TRENCH B_d (In)	TRENCH SAND & GRAVEL	TRENCH DAMP CLAY	PROJECTING POSITIVE $p = 0.7$: $R_{sd} = 0.7$
4"	2.00'	*	*	34'/42'
6"	2.00'	*	*	25'/30'
8"	2.25'	*	16'/ *	19'/24'
10"	2.50'	*	12'/20'	16'/19'
12"	2.75'	*	12'/18'	14'/17'

NOTES:
* 1. INDICATES NO LIMIT OF FILL HEIGHT (130 lbs/ft³).
2. TRENCH WIDTH (B_d) NO GREATER THAN 16" PLUS O.D.
3. FACTOR OF SAFETY IS 1.25 ON MINIMUM ULTIMATE STRENGTH.
4. MINIMUM COVER FOR HIGHWAY LOADS IS 18".
5. PERFORATED PIPE SHALL BE TYPE 1.

GENERAL NOTES:

1. MINIMUM SPACING BETWEEN MULTIPLE LINES OF PARALLEL PIPE SHALL BE THE DISTANCE REQUIRED FOR INSTALLING THE ADJACENT FLARED END SECTIONS OR AS SHOWN ON THE HEADWALL DRAWINGS FOR CONDUITS REQUIRING HEADWALLS.
2. UNLESS OTHERWISE INDICATED, THE TOP OF THE PIPE SHALL BE BELOW THE TOP OF THE SUBGRADE, AND A MINIMUM OF 12" OF COVER OVER THE TOP OF THE PIPE SHALL BE MAINTAINED BETWEEN THE SHOULDER LINES.
3. WHERE PRE-BED PIPE IS INSTALLED, FLARED END SECTIONS FROM OTHER MANUFACTURERS MAY BE JOINED TO PRE-BED PIPE PROVIDED A CONCRETE COLLAR IS PLACED AT THE CONTRACTORS EXPENSE AND A DEFORMATION TO THE PIPE'S FLOWLINE IS NOT EVIDENT ON FINAL PLACEMENT.

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

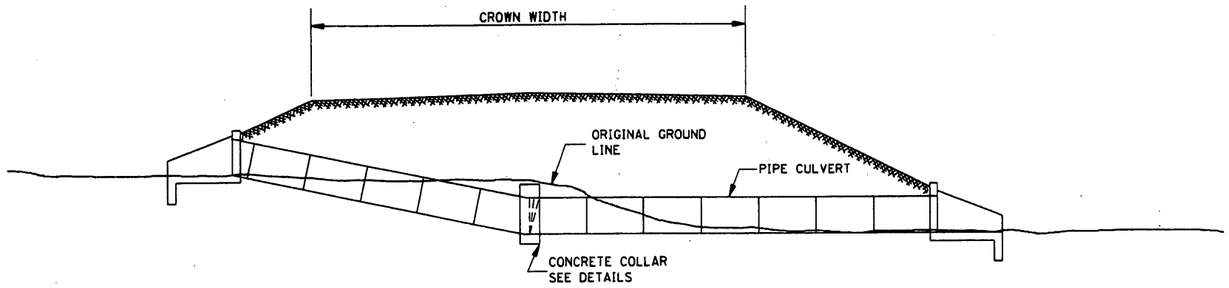
PIPE CULVERT INSTALLATION

ISSUE DATE: OCTOBER 1, 1998

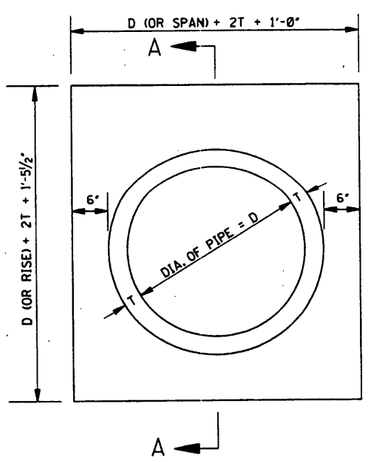
WORKING NUMBER PI-1

SHEET NUMBER 300

STATE	PROJECT NO.
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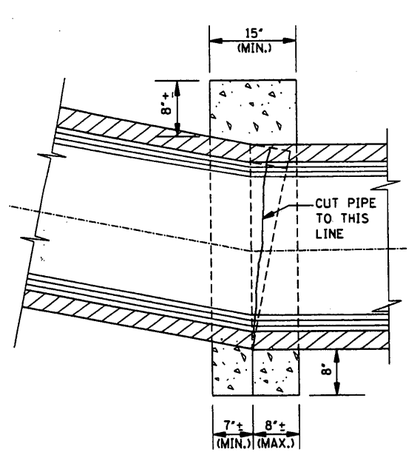


TYPICAL INSTALLATION FOR PIPE CULVERT WITH BROKEN FLOW LINE



ELEVATION OF CONCRETE COLLAR

NOTE: CIRCULAR PIPE IS SHOWN, ARCH PIPE IS SIMILAR.



SECTION A–A

GENERAL NOTE:

1. THE FOLLOWING QUANTITIES SHALL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE:

QUANTITIES FOR
CONCRETE COLLAR FOR PIPE CULVERTS

CIRCULAR PIPE		ARCH PIPE	
DIA. OF PIPE	CLASS "B" CONCRETE (yd^3)	SIZE OF PIPE	CLASS "B" CONCRETE (yd^3)
12"	0.240		
15"	0.260	18 x 11	0.280
18"	0.320	22 x 13	0.310
24"	0.410	29 x 18	0.410
30"	0.510	36 x 23	0.490
36"	0.620	44 x 27	0.600
42"	0.730	51 x 31	0.690
48"	0.850	58 x 36	0.820
54"	0.980	65 x 40	0.920
60"	1.110	73 x 45	1.070
66"	1.248	88 x 54	1.366
72"	1.393		

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

CONCRETE PIPE COLLAR

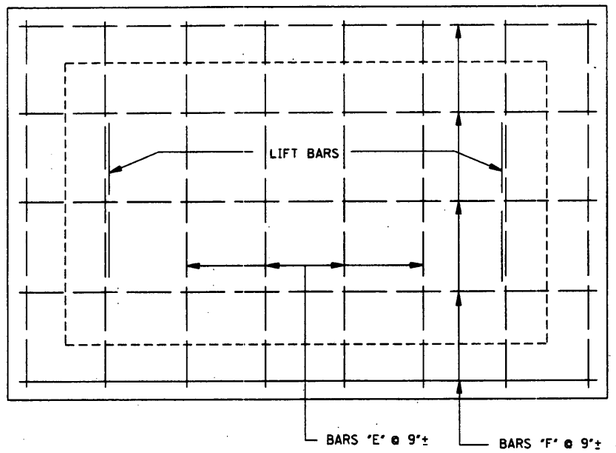
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WORKING NUMBER
PC-1

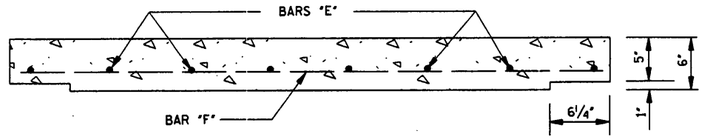
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
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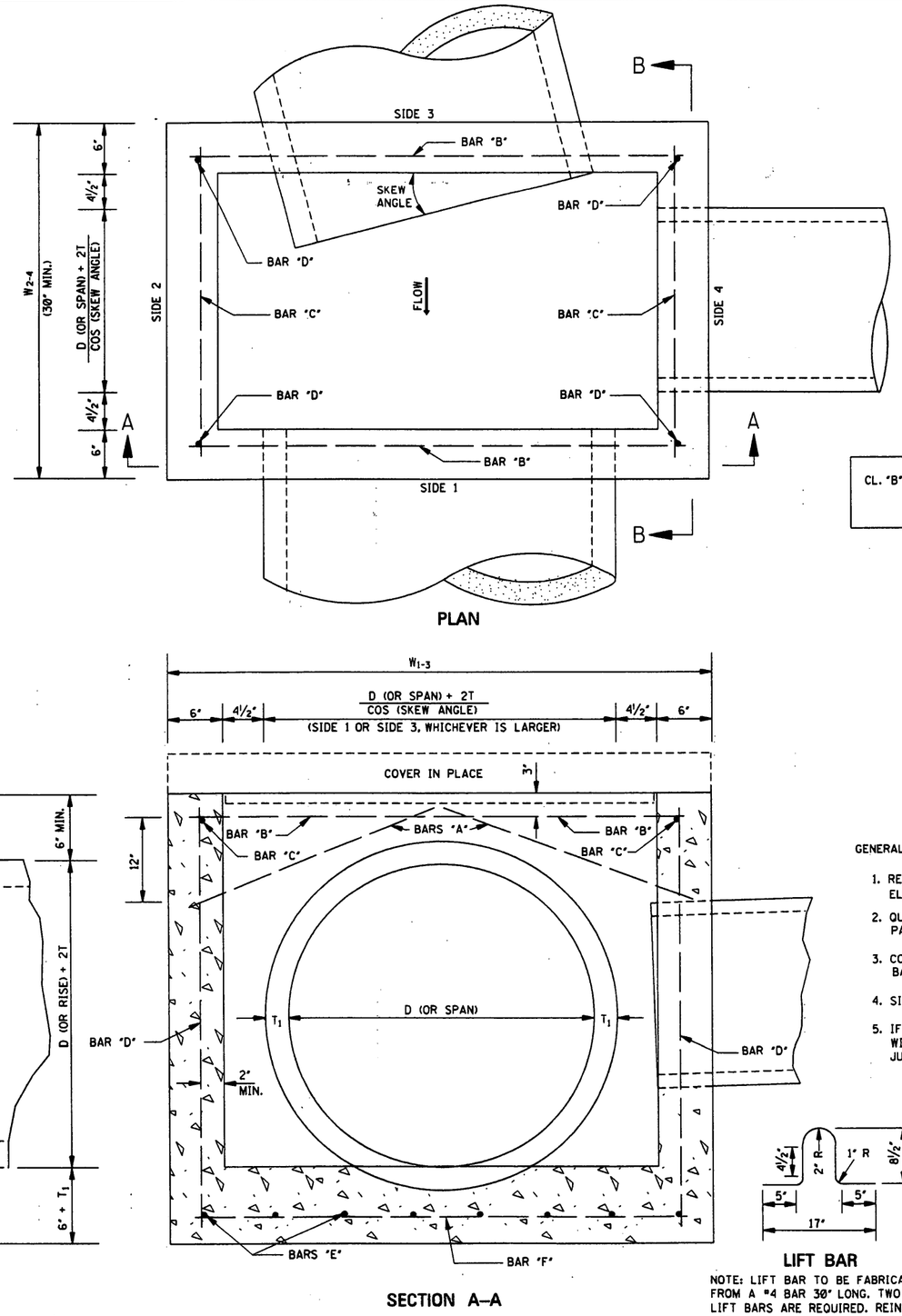
STATE	PROJECT NO.
MISS.	



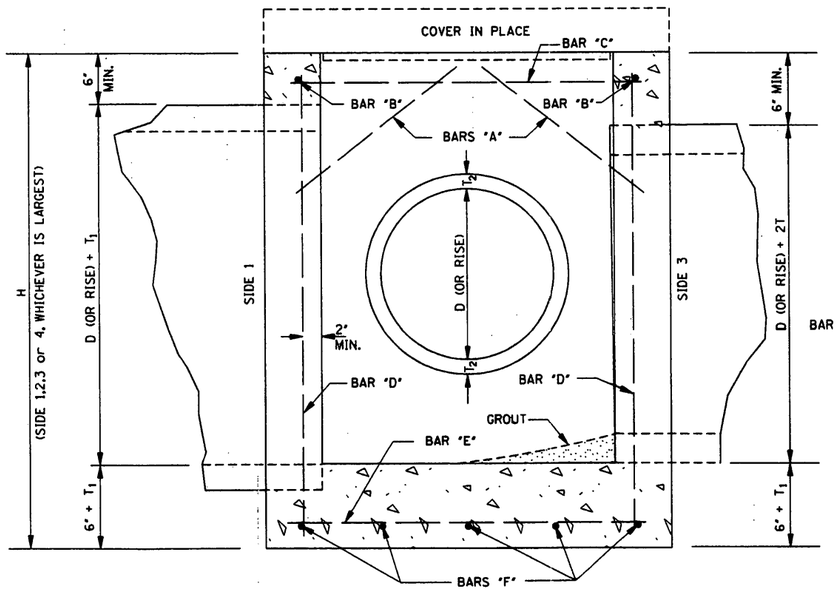
PLAN OF COVER



ELEVATION OF COVER



PLAN



SECTION B–B

SECTION A–A

LIFT BAR

NOTE: LIFT BAR TO BE FABRICATED FROM A #4 BAR 30" LONG. TWO LIFT BARS ARE REQUIRED. REINFORCING STEEL FOR 2 LIFT BARS = 3.3 lbs.

REINFORCING BAR LIST

BAR	SIZE	NUMBER REQUIRED	LENGTH
A	#4	2 PER PIPE OPENING	$\sqrt{196" + \left(\frac{W^*}{2} + 2"\right)^2}$
B	#4	2	W_{1-3} - 6"
C	#4	2	W_{2-4} - 6"
D	#4	4	H - 6"
E	#4	$2\left[\left(\frac{W_{1-3}}{9"}\right)^{**} + 1\right]$	W_{2-4} - 4"
F	#4	$2\left[\left(\frac{W_{2-4}}{9"}\right)^{**} + 1\right]$	W_{1-3} - 4"

NOTE: VARIABLES AND DESIGNATIONS ARE AS FOLLOWS:
D (OR SPAN) = PIPE DIAMETER (OR SPAN)
W_{1-3} = WIDTH OF SIDE 1 & SIDE 3
W_{2-4} = WIDTH OF SIDE 2 & SIDE 4
W^* = W_{1-3} OR W_{2-4} (SIDE OF ENTERING PIPE)
** = ROUND TO NEAREST WHOLE NUMBER

CL. "B" CONC. (yd^3) = [(Q1 + Q2) / 46,656] - Σ PIPE OPENING DEDUCTIONS
WHERE: Q1 = [5"$W_{1-3}W_{2-4}$] + [1"(W_{1-3} - 12.5")(W_{2-4} - 12.5")] + [(T_1 + 6")$W_{1-3}W_{2-4}$]
Q2 = 12"[H - (T_1 + 6")] [(W_{1-3} - 12") + W_{2-4}]

COMMON PIPE SIZE

CIRCULAR PIPE			ARCH PIPE		
PIPE SIZE	T	PIPE OPENING DEDUCTION (yd^3)	PIPE SIZE	T	PIPE OPENING DEDUCTION (yd^3)
18"	2½"	0.053	22" x 13"	2½"	0.053
24"	3"	0.091	29" x 18"	3"	0.087
30"	3½"	0.138	36" x 23"	3½"	0.129
36"	4"	0.196	44" x 27"	4"	0.185
42"	4½"	0.263	51" x 31"	4½"	0.245
48"	5"	0.340	58" x 36"	5"	0.318
54"	5½"	0.427	65" x 40"	5½"	0.394
60"	6"	0.524	73" x 45"	6"	0.489
66"	6½"	0.630			
72"	7"	0.747			

GENERAL NOTES:

1. REINFORCING STEEL QUANTITIES TO BE COMPUTED FROM BAR LIST AND SHOWN ELSEWHERE ON THE PLANS.
2. QUANTITIES FOR JUNCTION BOXES SHOWN ON THE PLANS WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
3. CONCRETE SHALL BE CLASS "B" AND REINFORCING STEEL SHALL BE DEFORMED BARS.
4. SIDE 1 OF THE JUNCTION BOX WILL ALWAYS BE THE OUTFLOW SIDE.
5. IF PIPES ARE SKEWED MORE THAN 15° OR IF SKEWED PIPES PRODUCE CONFLICTS WITH ANOTHER OPENING, THE PIPE SHALL BE BROKEN BACK TO THE WALL OF THE JUNCTION BOX.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

JUNCTION BOX FOR PIPE CULVERTS

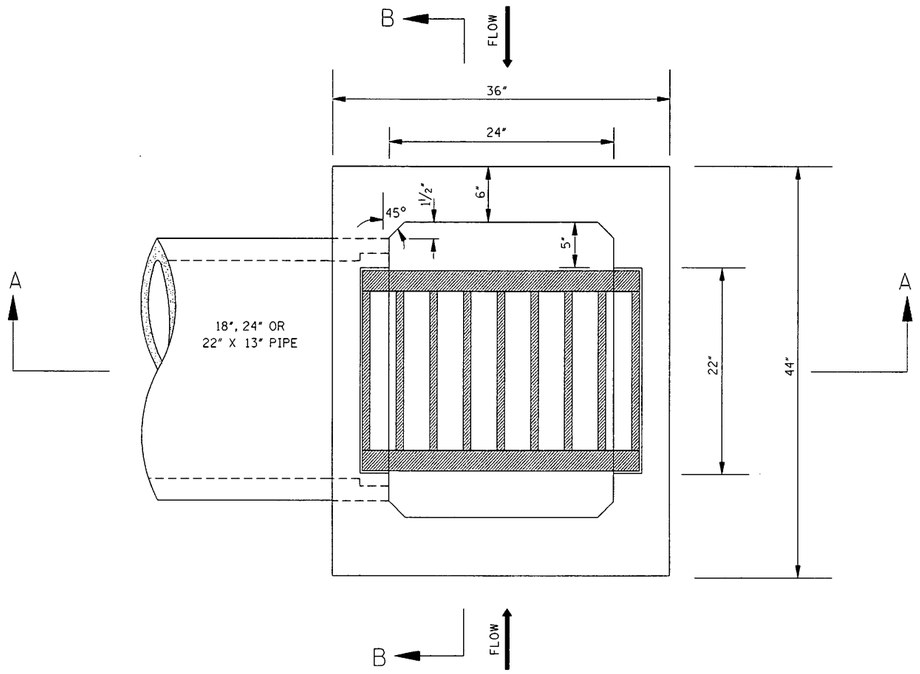
ENGLISH

WORKING NUMBER JB-1

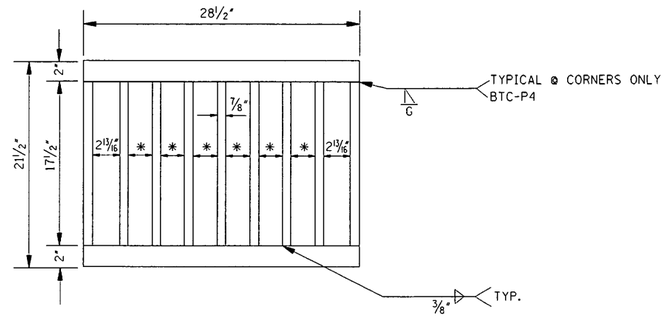
SHEET NUMBER 302

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PLAN OF CONCRETE DIMENSIONS



PLAN OF GRATE NO.1

* NOTE: TYPICAL SPACING 2½"

PIPE SIZE	MIN. DEPTH TO F.L.	QUANTITIES				T	PIPE OPENING DEDUCTION (yd^3)
		MIN. DEPTH INLET		EACH ADDED FOOT			
		CONC. (yd^3)	STEEL (lbs)	CONC. (yd^3)	STEEL (lbs)		
18"	2.500'	0.670	48	0.211	10	2½"	0.053
24"	3.042'	0.747	54	0.211	10	3"	0.091
22" X 13"	2.125'	0.591	46	0.211	10	2½"	0.053

NOTE: ONE (1) PIPE OPENING DEDUCTED FROM INLET.

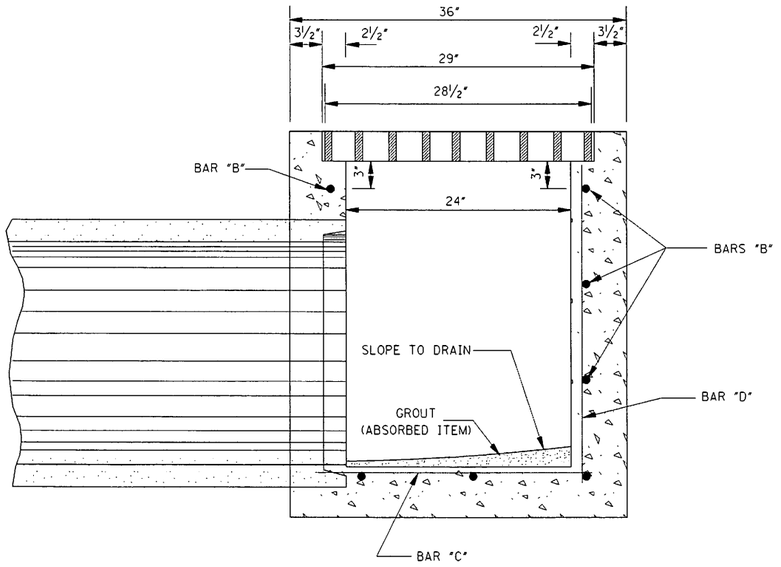
BAR LIST FOR MINIMUM DEPTH INLET				
PIPE SIZE	BARS/SIZES			
	"A" / #4	"B" / #4	"C" / #4	"D" / #4
	NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.	NO. @ LGTH.
18"	2 @ 1'-6"	6 @ 3'-2"	10 @ 2'-5"	10 @ 2'-6"
24"	2 @ 1'-6"	7 @ 3'-2"	10 @ 2'-5"	10 @ 3'-1"
22" X 13"	2 @ 1'-6"	6 @ 3'-2"	10 @ 2'-5"	10 @ 2'-4"

GENERAL NOTES:

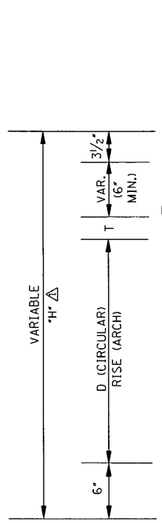
1. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.

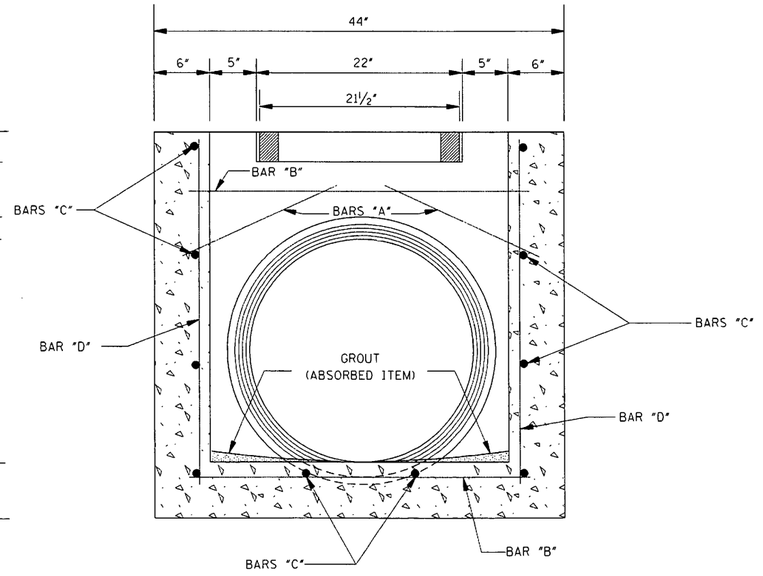
2. INLET:
   A. THE INLET ON THIS DRAWING IS SHOWN AS THE ENTRANCE TO A PIPE CULVERT BUT MAY ALSO BE USED ON A CROSSDRAIN.
   B. THE CONCRETE SHALL BE CLASS "B".
   C. THE REINFORCEMENT SHALL BE SPACED A MAXIMUM OF 12" ON CENTER BOTH WAYS WITH A MINIMUM CLEARANCE OF 1" TO THE INSIDE OF THE INLET WALLS.

3. GRATE:
   A. THE CONTRACTOR HAS THE OPTION TO PROVIDE GRATE NO. 1 OR GRATE NO. 2 AS SHOWN ON SHEET IG-1.



SECTION A–A





SECTION B–B

DATE	REVISION	BY
3-01-02	ADDED "H"	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

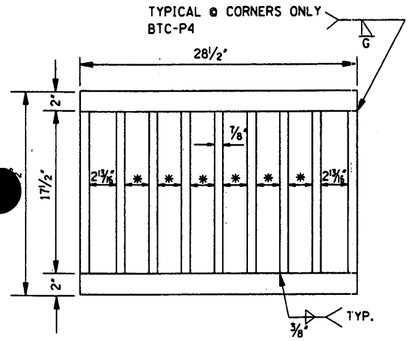
TYPE I MEDIAN INLET
(24" PIPE AND UNDER)

ENGLISH

WORKING NUMBER
MI-1

SHEET NUMBER
306

ISSUE DATE: OCTOBER 1, 1998



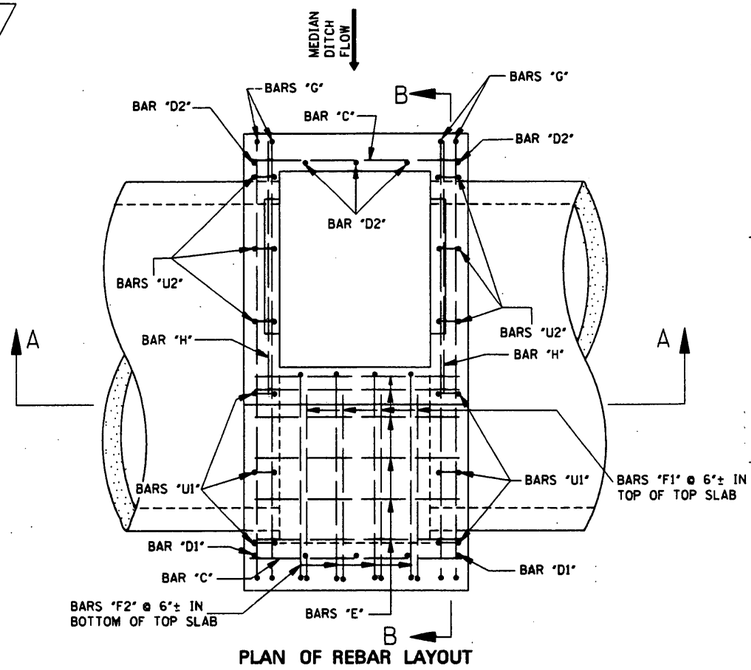
PLAN OF GRATE NO. 1

*NOTE: TYPICAL SPACING 2½"

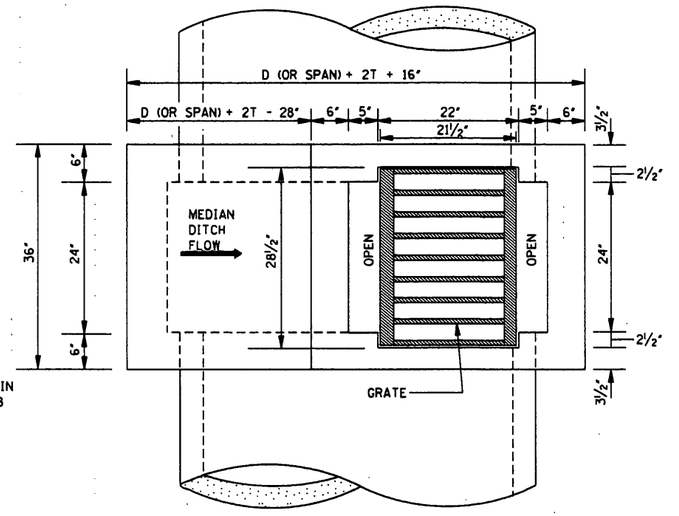
2'-9"	"A", "C" & "E"
D (OR SPAN) + 2T + 8"	"B"
D (OR RISE) + 2T + 12"	"D1"
D (OR RISE) + 2T + 18"	"D2"
3'-5"	"H"

*4 BAR EXCEPT BAR "E" WHICH IS *5.

BARS "A", "C", "E", "B", "D1", "D2" & "H"



PLAN OF REBAR LAYOUT



PLAN OF CONCRETE DIMENSIONS

BAR LIST											
PIPE SIZES	BARS/SIZES										
	"A"/#4	"B"/#4	"C"/#4	"D1"/#4	"D2"/#4	"E"/#5	"F1"/#5	"F2"/#5	"G"*/#5	"H"/#4	"U1"/#4	"U2"/#4
	LENGTHS											
	2'-9"	L_B	2'-9"	L_{D1}	L_{D2}	2'-9"	L_{F1}	L_{F2}	L_G	3'-5"	1'-10"	L_{U2}
	NUMBER OF BARS											
30"	4	4	15	4	4	4	4	4	8	2	2	6
36"	4	4	17	4	4	6	4	4	8	2	2	6
42"	4	4	18	4	4	7	4	4	8	2	4	6
48"	4	4	20	4	4	8	4	4	8	2	4	6
29" X 18"	4	4	12	4	4	4	4	4	8	2	2	6
36" X 23"	4	4	13	4	4	6	4	4	8	2	2	6
44" X 27"	4	4	16	4	4	7	4	4	8	2	4	6
51" X 31"	4	4	17	4	4	8	4	4	8	2	6	6

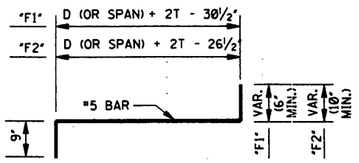
NOTES:
*1. USE *6 BARS FOR A 51" X 31" ARCH PIPE.
2. BAR SPACINGS FOR ADDITIONAL INLET HEIGHTS:
BARS "E" @ 6"±
BARS "H" @ 11"±
BARS "C" @ 11"±

INLET QUANTITIES							
PIPE SIZE	MIN. DEPTH TO F.L.	MIN. DEPTH INLET		EACH ADDED FOOT		T	PIPE OPENING DEDUCTION (yd^3)
		CONC. (yd^3)	STEEL (lbs)	CONC. (yd^3)	STEEL (lbs)		
30"	4.29'	1.138	161	0.210	25	3½"	0.138
36"	4.85'	1.341	185	0.210	25	4"	0.196
42"	5.38'	1.554	206	0.210	25	4½"	0.263
48"	5.92'	1.776	227	0.210	25	5"	0.340
29" X 18"	3.25'	0.935	146	0.210	25	3"	0.087
36" X 23"	3.71'	1.139	170	0.210	25	3½"	0.129
44" X 27"	4.08'	1.343	197	0.210	25	4"	0.185
51" X 31"	4.46'	1.543	259	0.210	25	4½"	0.245

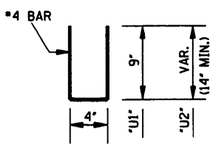
NOTE: TWO PIPE OPENINGS HAVE BEEN DEDUCTED.

GENERAL NOTES:

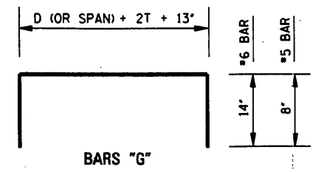
1. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. INLET:
   A. THE CONCRETE SHALL BE CLASS "B".
   B. THE REINFORCEMENT SHALL BE SPACED A MAXIMUM OF 12" ON CENTER BOTH WAYS WITH A MINIMUM CLEARANCE OF 1" TO THE INSIDE OF THE INLET WALLS. SEE CHART FOR BAR SIZES.
3. GRATE:
   A. THE CONTRACTOR HAS THE OPTION TO PROVIDE GRATE NO. 1 OR GRATE NO. 2 AS SHOWN ON SHEET IG-1.



BARS "F1" & "F2"



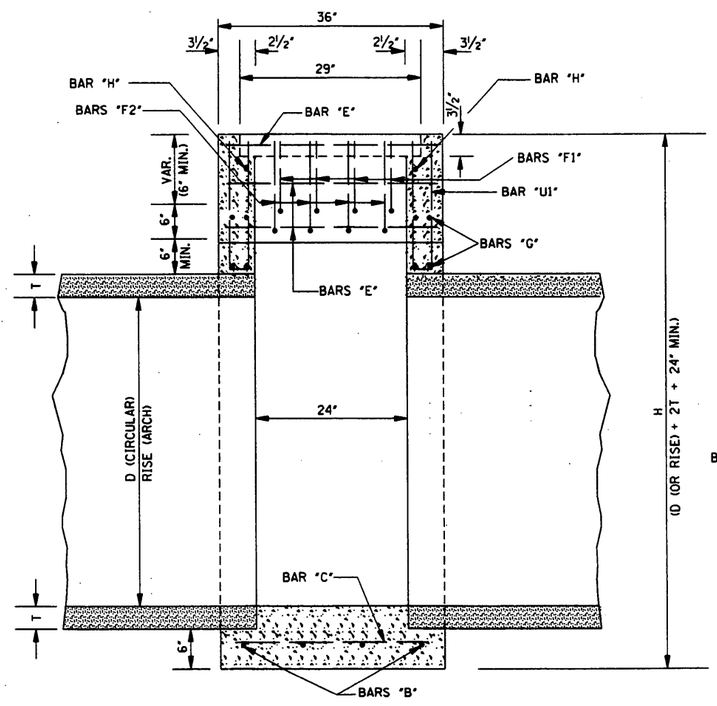
BARS "U1" & "U2"



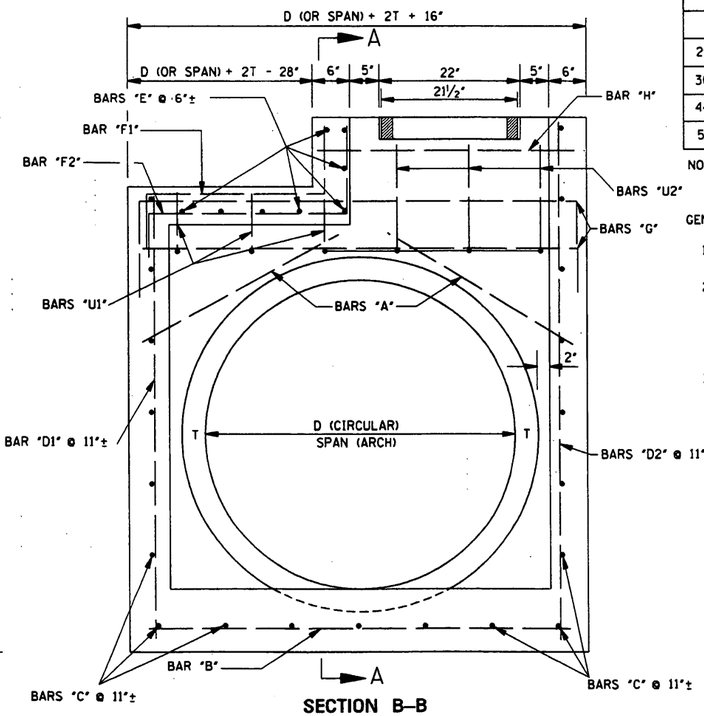
BARS "G"

NOTE: BARS "G" ARE *5 BARS FOR ALL CIRCULAR PIPES AND FOR PIPE ARCHES UP TO AND INCLUDING A 44" SPAN. FOR PIPE ARCHES WITH A SPAN LARGER THAN 44", USE *6 BARS FOR BARS "G".

BAR DETAILS



SECTION A–A



SECTION B–B

STATE	PROJECT NO.
MISS.	

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

TYPE I MEDIAN INLET
(29" – 51" PIPE)

REVISION	BY	DATE

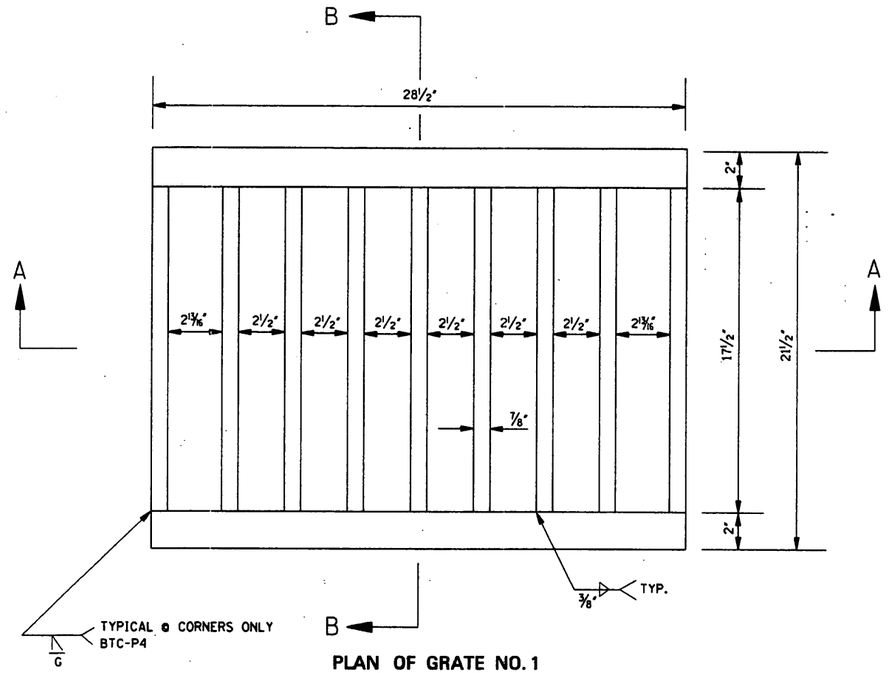
WORKING NUMBER: MI-1A

ISSUE DATE: OCTOBER 1, 1998

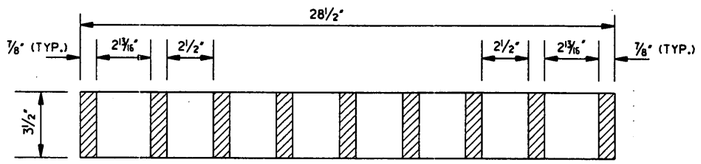
SHEET NUMBER: 307

STATE	PROJECT NO.
MISS.	

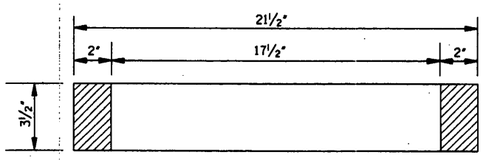
GRATE NO. 1



PLAN OF GRATE NO. 1

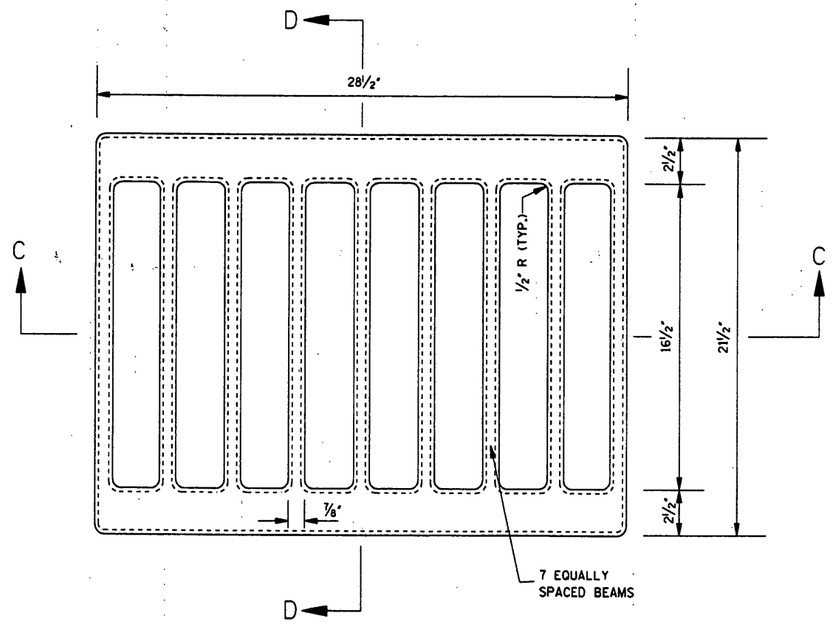


SECTION A–A

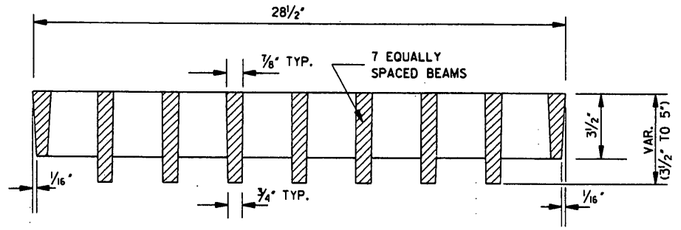


SECTION B–B

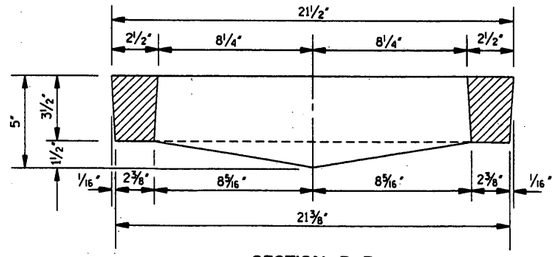
GRATE NO. 2



PLAN OF GRATE NO. 2



SECTION C–C



SECTION D–D

GENERAL NOTES:

1. BASIS OF PAYMENT WILL BE 250 lbs OF GRATING FOR EITHER GRATE.
2. GRATE NO.1

   THE GRATE MAY BE WELDED STEEL (ASTM A 588) OR STEEL CASTING (AASHTO M 192, CLASS 90). STEEL CASTING SHALL BE GALVANIZED (AASHTO M 111).
3. GRATE NO.2

   THE GRATE SHALL BE DUCTILE IRON (ASTM A 536, GRADE 80-55-06).

BY
REVISION
DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF GRATES FOR MEDIAN INLETS

ENGLISH

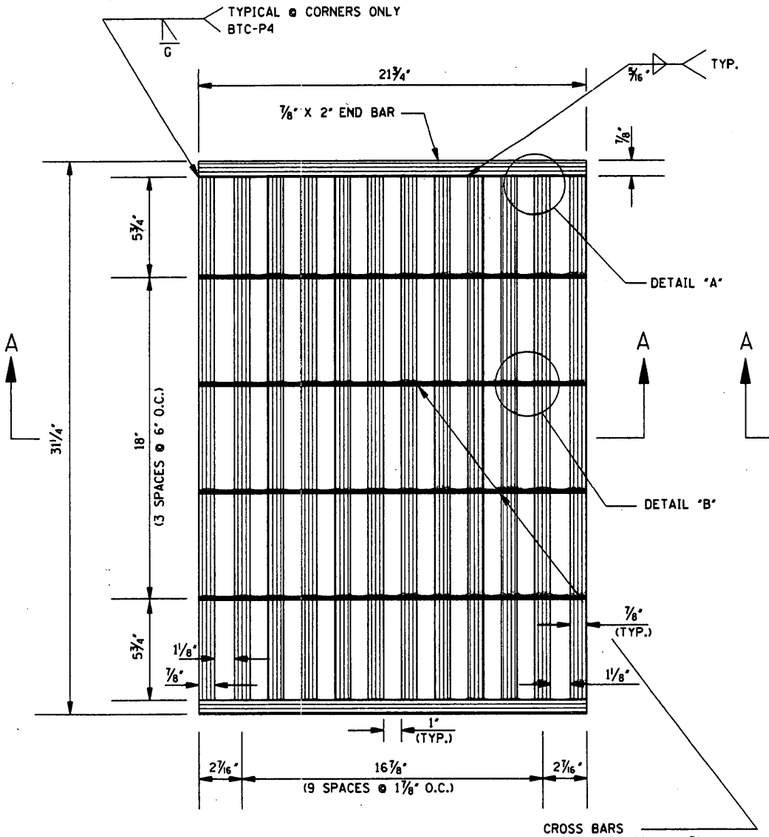
WORKING NUMBER
IG-1

ISSUE DATE: OCTOBER 1, 1998

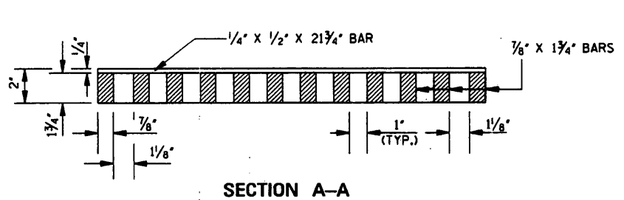
SHEET NUMBER
314

STATE	PROJECT NO.
MISS.	

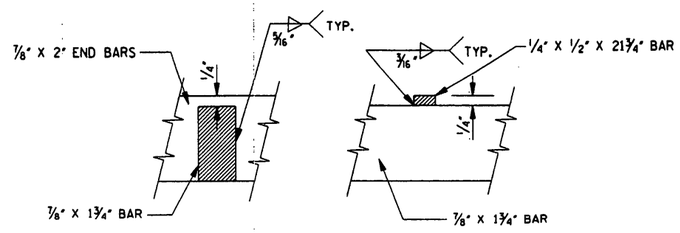
GRATE NO. 1 – ALTERNATE #1



PLAN



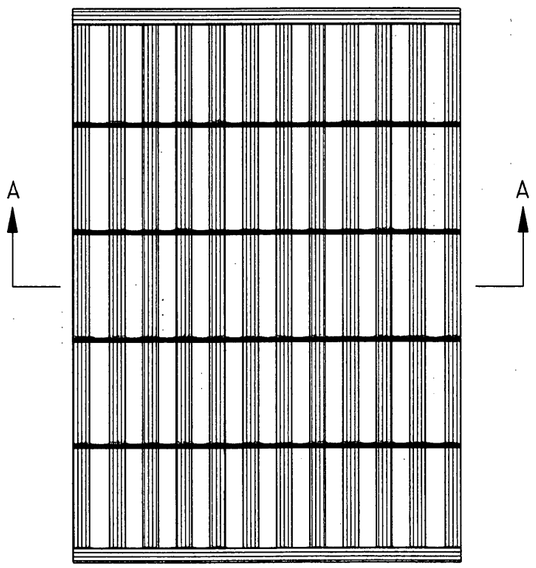
SECTION A–A



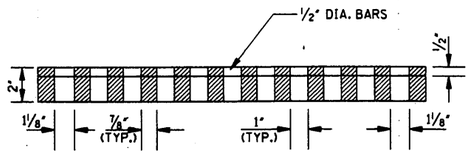
DETAIL A DETAIL B

GRATE NO. 1 – ALTERNATE #2

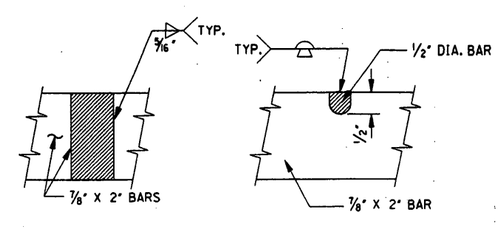
NOTE: PLAN DIMENSIONS FOR ALTERNATE #2 ARE IDENTICAL TO THAT OF ALTERNATE #1 AS SHOWN ON THE FIGURE AT LEFT.



PLAN

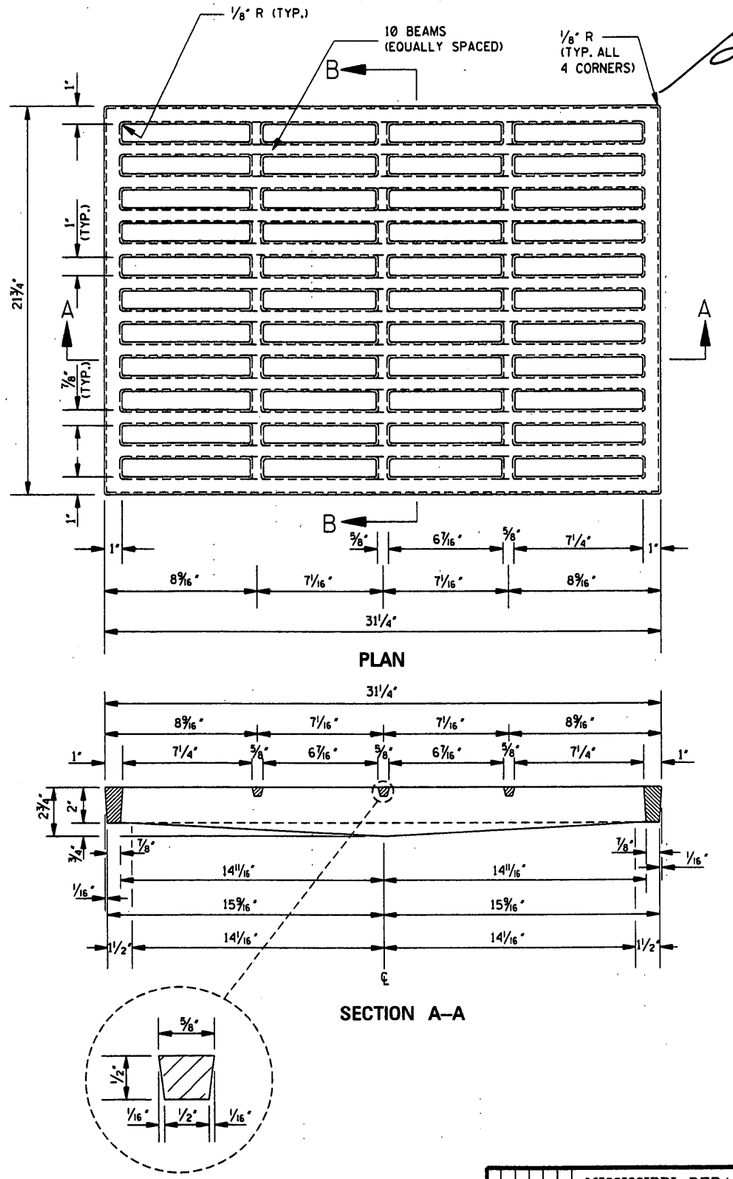


SECTION A–A

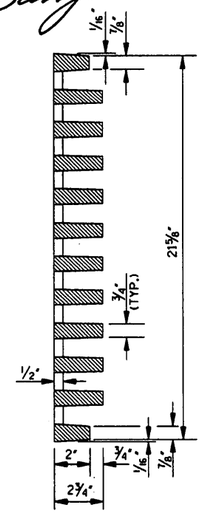


DETAIL A DETAIL B

GRATE NO. 2



SECTION A–A



SECTION B–B

GENERAL NOTES:

1. BASIS OF PAYMENT WILL BE 200 lbs OF GRATING FOR EITHER GRATE.
2. GRATE NO. 1
   THE GRATE MAY BE WELDED STEEL (ASTM A 588) OR STEEL CASTING (AASHTO M 192, CLASS 90).
3. GRATE NO. 2
   THE GRATE SHALL BE DUCTILE IRON (ASTM A 536, GRADE 80-55-06).

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF GRATES FOR GUTTER INLETS

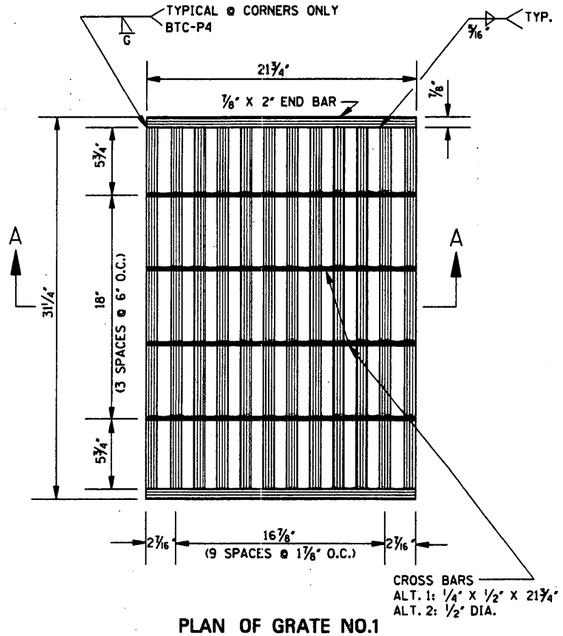
ENGLISH

WORKING NUMBER IG-2

SHEET NUMBER 315

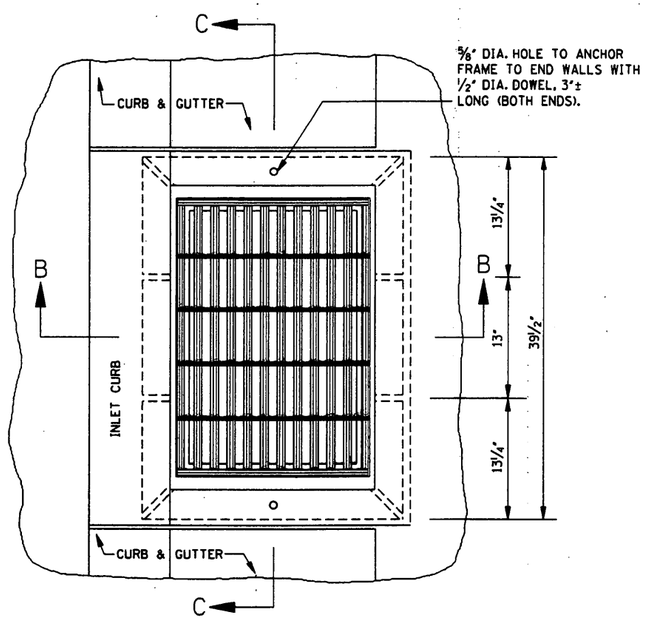
ISSUE DATE: OCTOBER 1, 1998

STATE	PROJECT NO.
MISS.	



PLAN OF GRATE NO.1

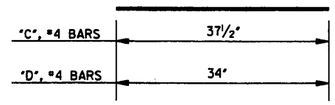
NOTE: FOR OTHER GRATE DETAILS SEE SHEET IG-2.



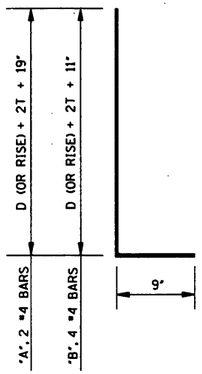
PLAN OF INLET

QUANTITIES									
PIPE SIZE	MIN. DEPTH TO F.L.	MIN. DEPTH INLET CONC. (yd^3)	MIN. DEPTH INLET STEEL (lbs)	PIPE OPENING DEDUCTION (yd^3)	T	BAR LIST BARS "A" / #4	BARS "B" / #4	BARS "C" / #4	BARS "D" / #4
18"	2.708'	0.763	55	0.053	2 1/2"	2 @ 4'-3"	4 @ 3'-7"	10 @ 3'-1 1/2"	10 @ 2'-10"
24"	3.250'	0.822	57	0.091	3"	2 @ 4'-10"	4 @ 4'-2"	10 @ 3'-1 1/2"	10 @ 2'-10"
22" X 13"	2.333'	0.686	48	0.053	2 1/2"	2 @ 3'-10 1/2"	4 @ 3'-2 1/2"	9 @ 3'-1 1/2"	8 @ 2'-10"

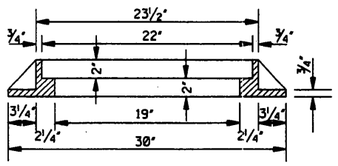
NOTES:
1. ONE (1) PIPE OPENING HAS BEEN DEDUCTED FROM THE STRUCTURE.
2. FOR EACH ADDITIONAL FOOT OF INLET HEIGHT, ADD 0.238 yd^3 CLASS "B" CONCRETE AND 13 lbs REINFORCING STEEL.
3. 3 BARS "C" AND 2 BARS "D" REQUIRED PER EACH ADDITIONAL FOOT OF INLET HEIGHT. LENGTH OF BARS "A" & BARS "B" WILL BE INCREASED ACCORDING TO ADDITIONAL HEIGHT.
4. WEIGHT OF FRAME CASTING = 244 lbs.
   WEIGHT OF GRATE = SEE SHEET IG-2.



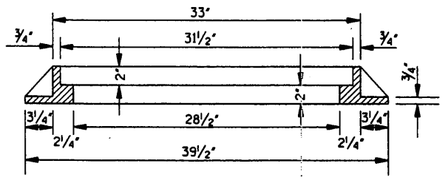
BARS "C" & "D"



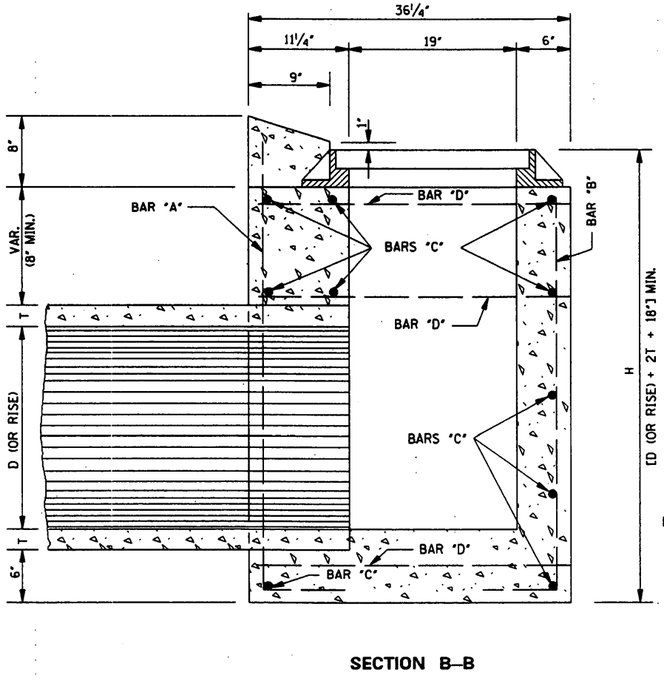
BARS "A" & "B"



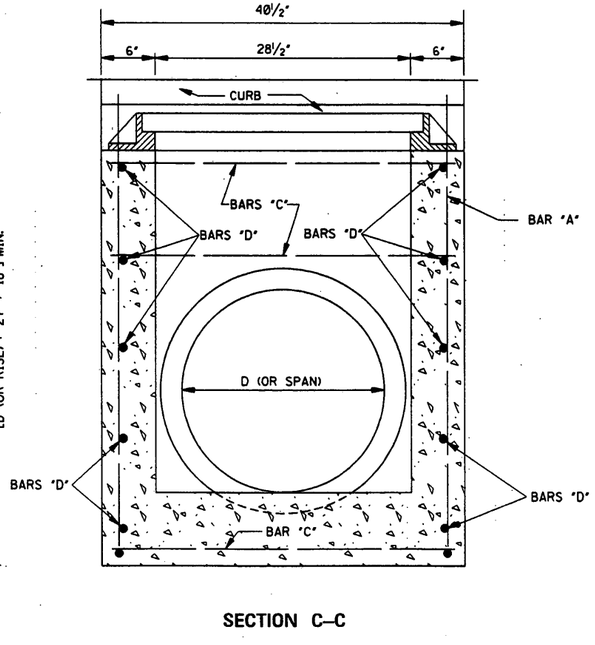
SECTION B–B
(FRAME)



SECTION C–C
(FRAME)



SECTION B–B



SECTION C–C

BAR DETAILS

GENERAL NOTES:

1. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. CONCRETE SHALL BE CLASS "B" CONCRETE AND REINFORCING STEEL SHALL BE DEFORMED BARS.
3. THE CONTRACTOR HAS THE OPTION TO PROVIDE GRATE NO. 1 OR GRATE NO. 2 AS SHOWN ON SHEET IG-2.
4. FRAME TO BE GRAY IRON CASTING, (AASHTO M 105, CLASS 30).

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUTTER INLET FOR TYPE 2 CURB
(OUTLET 90° TO ROADWAY)

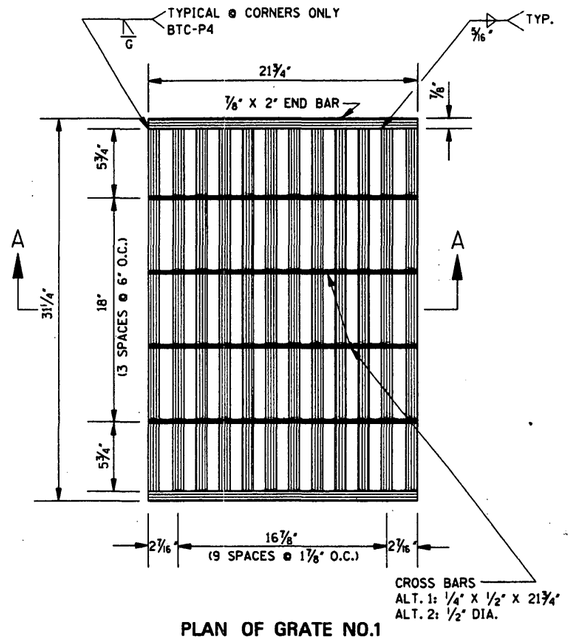
ENGLISH

WORKING NUMBER GI-1

ISSUE DATE: OCTOBER 1, 1998

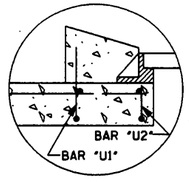
SHEET NUMBER 316

STATE	PROJECT NO.
MISS.	

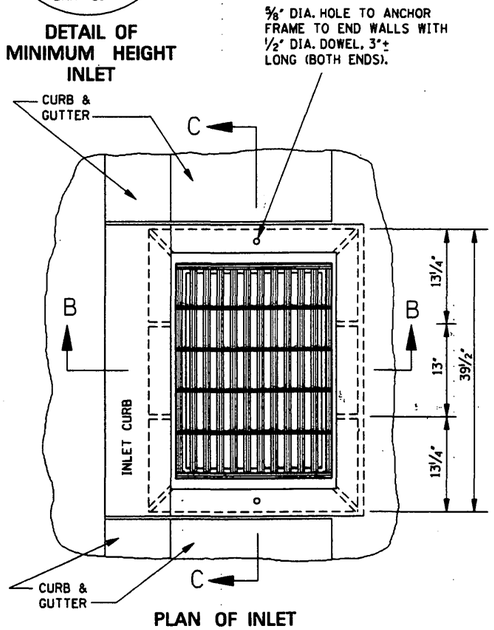


PLAN OF GRATE NO.1

NOTE: FOR OTHER GRATE DETAILS SEE SHEET IG-2.



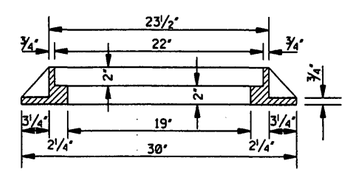
DETAIL OF MINIMUM HEIGHT INLET



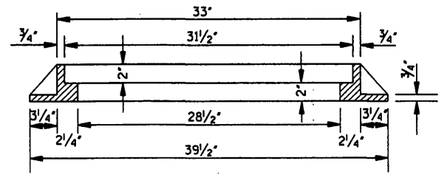
PLAN OF INLET

QUANTITIES																			
PIPE SIZE	MIN. DEPTH TO F.L.	MIN. DEPTH INLET CONC. (yd^3)	MIN. DEPTH INLET STEEL (lbs)	PIPE OPENING DEDUCTION (yd^3)	T	BARS/SIZES "A" / #4 NO. @ LGTH.	"B" / #4 NO. @ LGTH.	"C" / #4 NO. @ LGTH.	"D" / #4 NO. @ LGTH.	"E" / #4 NO. @ LGTH.	"U1" / #4 NO. @ LGTH.	"U2" / #4 NO. @ LGTH.
18"	2.792'	0.973	67	0.053	2 1/2"	4 @ 5'-0"	4 @ 3'-8"	10 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 3'-5"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
24"	3.333'	1.259	78	0.091	3"	4 @ 6'-2"	4 @ 4'-3"	12 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 4'-0"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
30"	3.875'	1.574	88	0.138	3 1/2"	4 @ 7'-4"	4 @ 4'-10"	13 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 4'-7"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
36"	4.417'	1.918	101	0.196	4"	4 @ 8'-6"	4 @ 5'-5"	16 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 5'-2"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
42"	4.958'	2.292	112	0.263	4 1/2"	4 @ 9'-8"	4 @ 6'-0"	18 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 5'-9"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
48"	5.500'	2.695	121	0.340	5"	4 @ 10'-10"	4 @ 6'-7"	19 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 6'-4"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
54"	6.042'	3.128	132	0.427	5 1/2"	4 @ 12'-0"	4 @ 7'-2"	21 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 6'-11"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
60"	6.583'	3.591	146	0.524	6"	4 @ 13'-2"	4 @ 7'-9"	24 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 7'-6"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
66"	7.125'	4.082	159	0.630	6 1/2"	4 @ 14'-4"	4 @ 8'-4"	27 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 8'-1"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
72"	7.667'	4.604	168	0.747	7"	4 @ 15'-6"	4 @ 8'-11"	28 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 8'-8"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
22" X 13"	2.417'	0.991	67	0.053	2 1/2"	4 @ 4'-11 1/2"	4 @ 3'-3 1/2"	10 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 3'-9"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
29" X 18"	2.833'	1.222	82	0.087	3"	4 @ 6'-1/2"	4 @ 3'-9"	13 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 4'-5"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
36" X 23"	3.250'	1.537	90	0.129	3 1/2"	4 @ 7'-3"	4 @ 4'-2 1/2"	14 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 5'-1 1/2"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
44" X 27"	3.667'	1.877	97	0.185	4"	4 @ 8'-5"	4 @ 4'-8"	14 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 5'-10"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
51" X 31"	4.068'	2.237	110	0.245	4 1/2"	4 @ 9'-7"	4 @ 5'-1 1/2"	17 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 6'-6"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
58" X 36"	4.500'	2.637	120	0.318	5"	4 @ 10'-8 1/2"	4 @ 5'-7"	18 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 7'-2 1/2"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
65" X 40"	4.875'	3.020	132	0.394	5 1/2"	4 @ 11'-9"	4 @ 6'-0"	21 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 7'-10"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
73" X 45"	5.333'	3.505	140	0.489	6"	4 @ 13'-0"	4 @ 6'-6"	21 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 8'-7"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"
88" X 54"	6.167'	4.504	163	0.688	7"	4 @ 15'-4"	4 @ 7'-5"	25 @ 3'- 1 1/2"	2 @ 2'-9"	6 @ 10'-0"	1 @ 4'-11 1/2"	1 @ 3'-9 1/2"

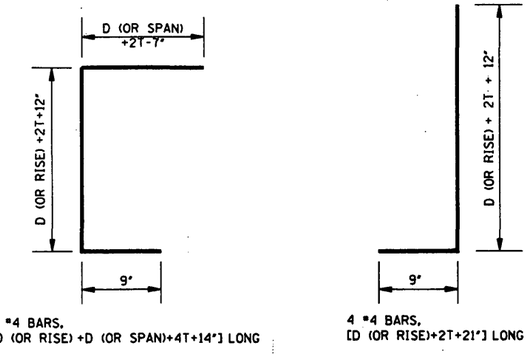
NOTES: 1. NO PIPE OPENINGS HAVE BEEN DEDUCTED FROM QUANTITY SHOWN.
2. FOR EACH ADDITIONAL FOOT OF INLET HEIGHT, ADD 0.238 yd^3 CLASS "B" CONCRETE AND 13 lbs REINFORCING STEEL.
3. 3 BARS "C" AND 2 BARS "D" REQUIRED PER EACH ADDITIONAL FOOT OF INLET HEIGHT. LENGTH OF BARS "B" WILL INCREASE WITH ADDITIONAL HEIGHT.
4. WEIGHT OF FRAME CASTING = 244 lbs.
WEIGHT OF GRATE = SEE SHEET IG-2.



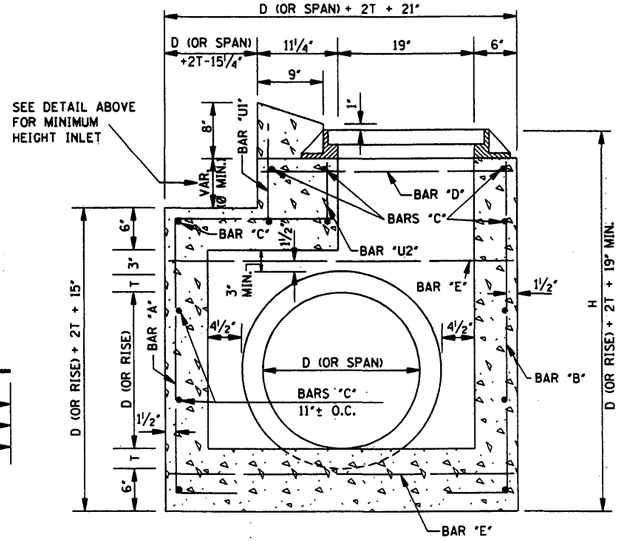
SECTION B–B (FRAME)



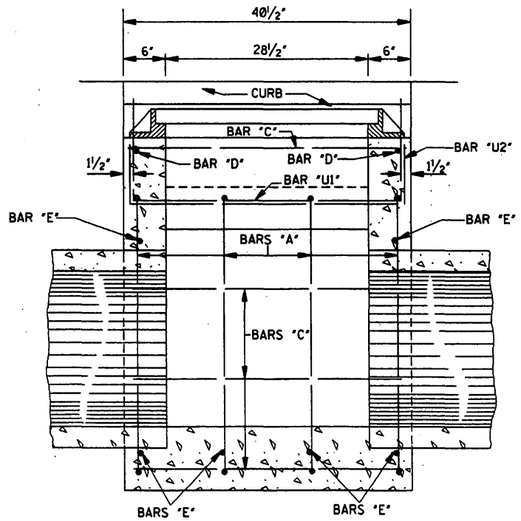
SECTION C–C (FRAME)



BAR DETAILS



SECTION B–B



SECTION C–C

GENERAL NOTES:

1. QUANTITIES SHOWN WILL BE THE BASIS OF PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. CONCRETE SHALL BE CLASS "B" CONCRETE AND REINFORCING STEEL SHALL BE DEFORMED BARS.
3. THE CONTRACTOR HAS THE OPTION TO PROVIDE GRATE NO. 1 OR GRATE NO. 2 AS SHOWN ON SHEET IG-2.
4. FRAME TO BE GRAY IRON CASTING, (AASHTO M 105, CLASS 30).

BY | REVISION | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

GUTTER INLET FOR TYPE 2 CURB STORM SEWER ALONG ROADWAY

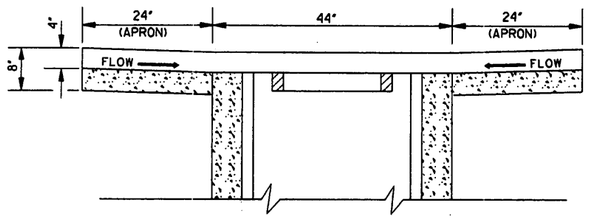
ENGLISH

WORKING NUMBER GI-1A

ISSUE DATE: OCTOBER 1, 1998

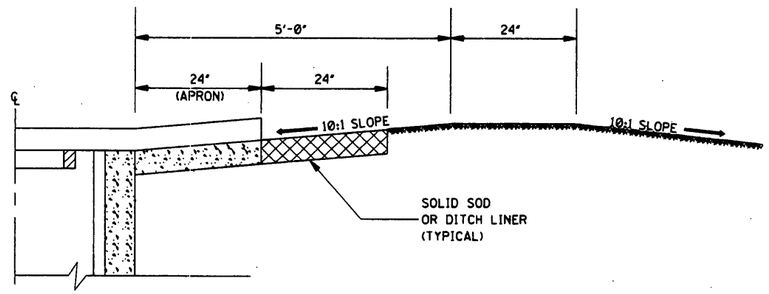
SHEET NUMBER 317

STATE	PROJECT NO.
MISS.	

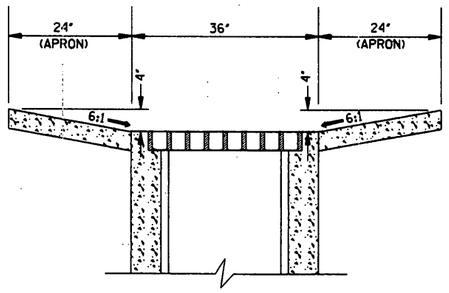


SECTION A–A

NOTE: APRON REINFORCEMENT & SOLID SOD NOT SHOWN (SEE SECTION C-C).



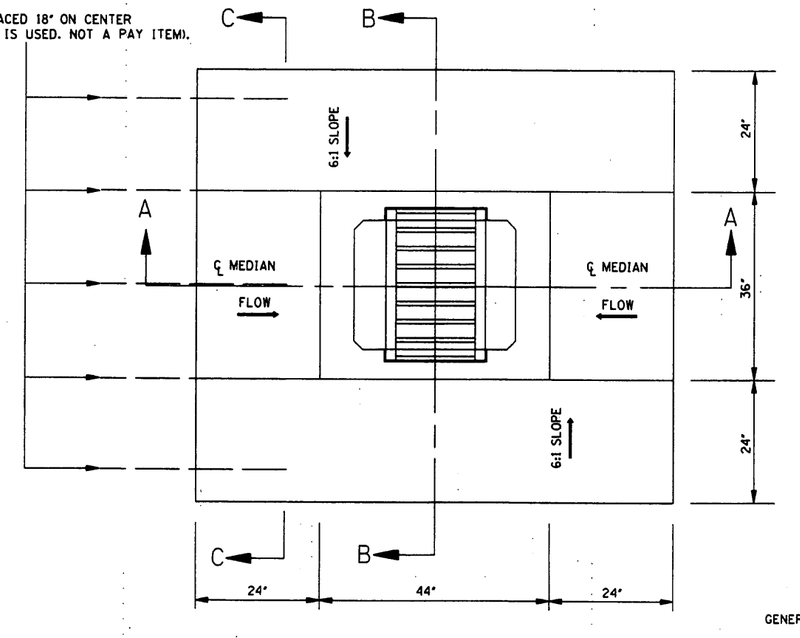
HALF SECTION A–A SHOWING DITCH PLUG



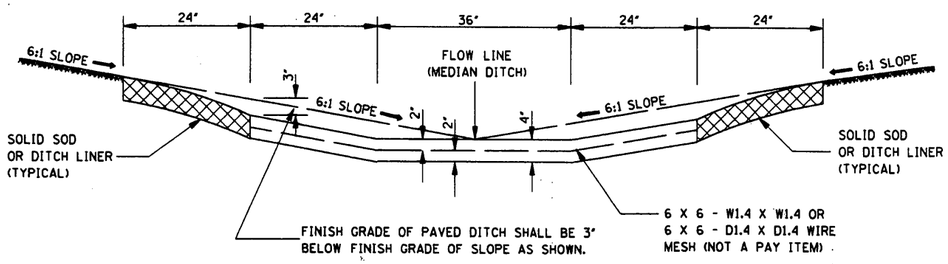
SECTION B–B

NOTE: APRON REINFORCEMENT & SOLID SOD NOT SHOWN (SEE SECTION C-C).

TYPICAL #4 BARS, 30" LONG, SPACED 18" ON CENTER (REQUIRED WHERE PAVED DITCH IS USED. NOT A PAY ITEM).



PLAN OF INLET & PAVED APRON



SECTION C–C

GENERAL NOTES:

1. CONSTRUCTION JOINTS TO BE TIED WITH 5 #4 BARS, 30" LONG, SPACED 18" ON CENTER. EXPANSION JOINT WILL NOT BE USED. CHAIR SUPPORTS FOR THE WIRE MESH WILL NOT BE REQUIRED. HOWEVER, THE CONTRACTOR SHALL PLACE THE WIRE MESH IN A SATISFACTORY AND WORKMANLIKE MANNER TO ENSURE THAT THE FINAL POSITION IS REASONABLY NEAR THE POSITION INDICATED.
2. PAVED APRON TO BE CONSTRUCTED AND PAID FOR IN ACCORDANCE WITH THE REQUIREMENTS FOR PAVED DITCHES.
3. 0.532 yd^3 CLASS 'C' CONCRETE REQUIRED.
4. QUANTITY SHOWN WILL BE USED AS THE BASIS FOR FINAL PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

PAVED INLET APRON AND MEDIAN DITCH PLUG

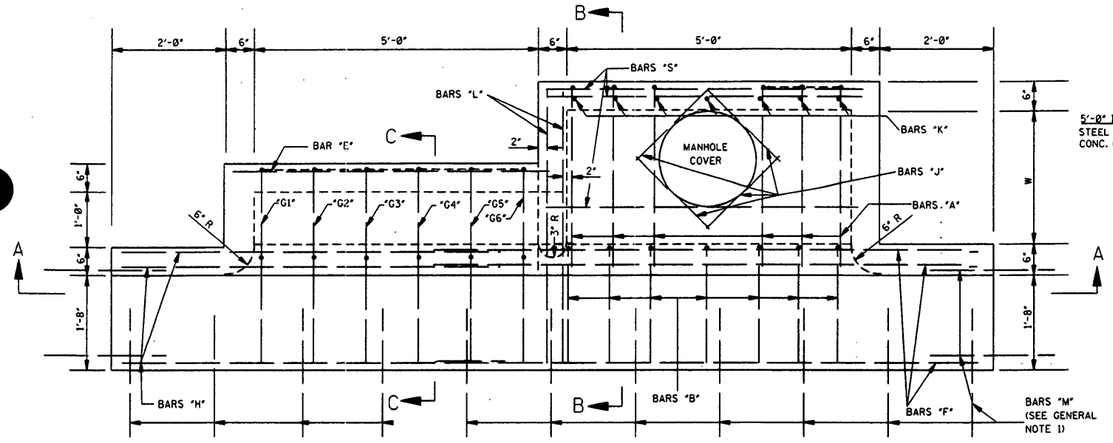
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WORKING NUMBER
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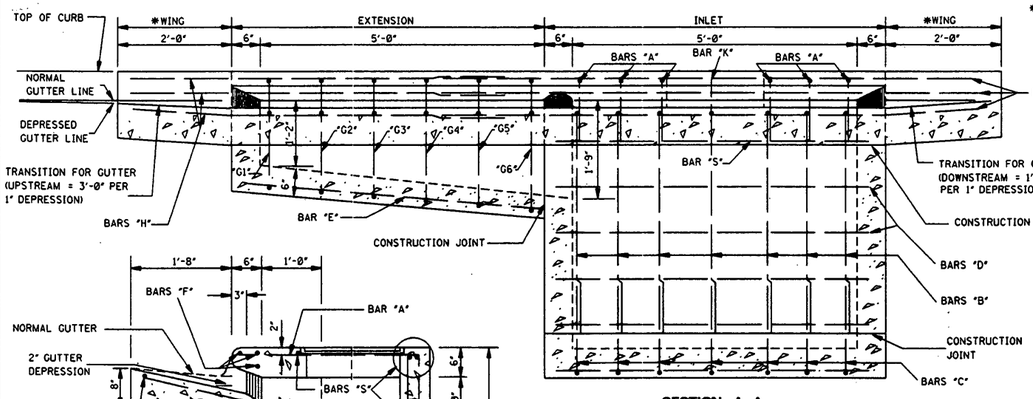
ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER
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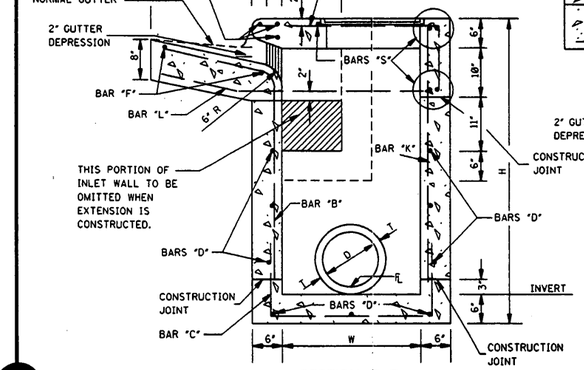
STATE	PROJECT NO.
MISS.	



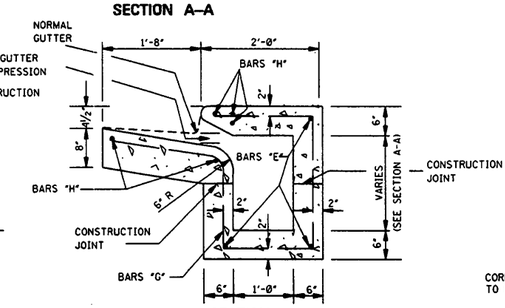
PLAN



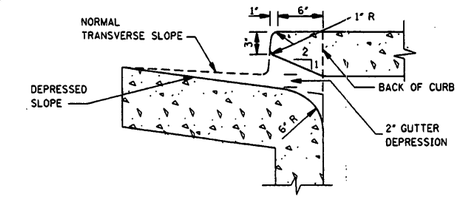
SECTION A–A



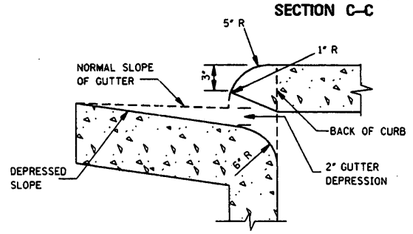
SECTION B–B



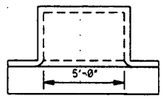
SECTION C–C



THROAT DETAIL OF BARRIER CURB

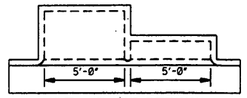


THROAT DETAIL OF ROLLED CURB



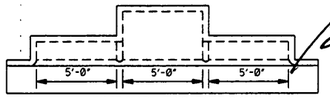
REGULAR INLET

5'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 121
CONC. = (WY + 5.5W + 6Y + 14.611)/27



INLET WITH ONE EXTENSION

10'-0" INLET
STEEL = 8.68W + 9.35Y + 3.79W' + 7.57H' + 231
CONC. = (WY + 5.5W + 6Y + 38.641)/27



INLET WITH TWO EXTENSIONS

15'-0" INLET
STEEL = 8.68W + 9.35Y +3.79W' + 7.57H' +341
CONC = (WY + 5.5W + 6Y + 62.671)/27

NOTES:
1. W AND H ARE EXPRESSED IN DECIMAL FEET.
2. W' = W ROUNDED TO NEAREST WHOLE FOOT.
3. Y = (H-Ø.5).
4. H'= (H - 2.Ø8) ROUNDED TO NEAREST WHOLE FOOT.
5. NO DEDUCTIONS ARE MADE FOR PIPE OPENINGS IN FORMULAS.

ADD. CONCRETE PER FOOT OF H		ADD. CONCRETE PER FOOT OF W	
W	yd^3/ft	H	yd^3/ft
2'-6"	Ø.315	3'-6"	Ø.315
3'-Ø"	Ø.333	4'-Ø"	Ø.333
3'-6"	Ø.352	4'-6"	Ø.352
4'-Ø"	Ø.371	5'-Ø"	Ø.370
4'-6"	Ø.389	5'-6"	Ø.389
5'-Ø"	Ø.408	6'-Ø"	Ø.408
5'-6"	Ø.426	6'-6"	Ø.426
6'-Ø"	Ø.445	7'-Ø"	Ø.445
6'-6"	Ø.463	7'-6"	Ø.463
7'-Ø"	Ø.481	8'-Ø"	Ø.482
		8'-6"	Ø.500

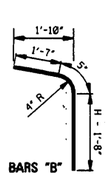
PLAN OF INLET AND EXTENSIONS

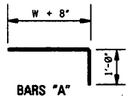
QUANTITIES FOR ONE EXTENSION				
BAR	SIZE	LENGTH	SPACING	NUMBER	TWEIGHT
"E"	#4	5'-8"	AS SHOWN	3	11
"G"	#4	SEE SCHEDULE	Ø'-11"	6	34
"H"	#6	6'-9"	AS SHOWN	5	51
"L"	#6	4'-9"	AS SHOWN	2	14
TOTAL STEEL FOR ONE EXTENSION = 110 lbs					
TOTAL CONCRETE FOR ONE EXTENSION = Ø.89 yd^3					

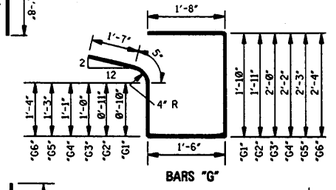
†NOTE: WHERE EXTENSION IS USED WITH CONCRETE PAVEMENT, ADD 27 lbs OF STEEL FOR BARS "M".

BAR "G" SCHEDULE	
BAR "G"	LENGTH
"G1"	7'-10"
"G2"	8'-Ø"
"G3"	8'-2"
"G4"	8'-5"
"G5"	8'-8"
"G6"	8'-10"

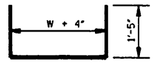
*NOTE: WING QUANTITIES ARE INCLUDED IN INLET QUANTITIES.



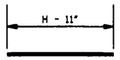




BARS "G"

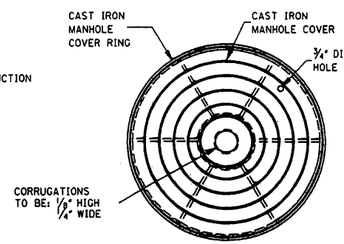


BARS "C"

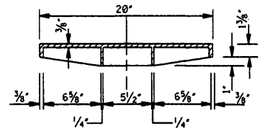


BARS "K"

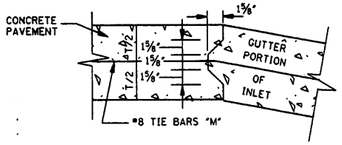
BAR DETAILS



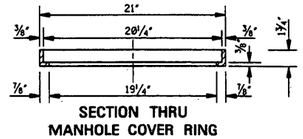
PLAN



SECTION THRU
MANHOLE COVER



DETAIL OF KEYED CONSTRUCTION JOINTS
NOTE: FIELD BEND BARS "L"
TO CENTER OF GUTTER SECTION



SECTION THRU
MANHOLE COVER RING
NOTE: WEIGHT OF RING & COVER = 79 lbs

W=2'-6"	BILL OF REINFORCING STEEL FOR 1-5'-Ø" INLET																
H	BAR "A" L = 4'-2" #4 @ 9"		BAR "C" L = 5'-8" #4 @ 9"		BAR "S" L = 5'-8" #4 @ 12"		BAR "D" L = 5'-8" #4 @ 12"±		BAR "F" L=9'-8" #6		BAR "J" L=2'-3" #4		BAR "B" #4 @ 9"		BAR "K" #4 @ 9"±		*TOTAL STEEL	TOTAL CONC.
	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	LGTH.	NO.	LGTH.	NO.	lbs	lbs	yd^3
3'-6"	6	17	7	27	5	19	5	19	5	73	4	6	3'-10"	7	18	7	12	190	1.99
4'-Ø"	6	17	7	27	5	19	7	26	5	73	4	6	4'-4"	7	20	7	14	202	2.15
4'-6"	6	17	7	27	5	19	7	26	5	73	4	6	4'-10"	7	23	7	17	207	2.31
5'-Ø"	6	17	7	27	5	19	9	34	5	73	4	6	5'-4"	7	25	7	19	219	2.47
5'-6"	6	17	7	27	5	19	9	34	5	73	4	6	5'-10"	7	27	7	21	224	2.62
6'-Ø"	6	17	7	27	5	19	11	42	5	73	4	6	6'-4"	7	30	7	24	238	2.78
6'-6"	6	17	7	27	5	19	11	42	5	73	4	6	6'-10"	7	32	7	26	240	2.94
7'-Ø"	6	17	7	27	5	19	13	49	5	73	4	6	7'-4"	7	34	7	28	253	3.10
7'-6"	6	17	7	27	5	19	13	49	5	73	4	6	7'-10"	7	37	6'-7"	7	31	257	3.25

W=3'-Ø"	BILL OF REINFORCING STEEL FOR 1-5'-Ø" INLET																
H	BAR "A" L = 4'-8" #4 @ 9"		BAR "C" L = 6'-2" #4 @ 9"		BAR "S" L = 5'-8" #4 @ 12"		BAR "D" L = 5'-8" #4 @ 12"±		BAR "F" L=9'-8" #6		BAR "J" L=2'-3" #4		BAR "B" #4 @ 9"		BAR "K" #4 @ 9"±		*TOTAL STEEL	TOTAL CONC.
	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	LGTH.	NO.	LGTH.	NO.	lbs	lbs	yd^3
3'-6"	6	19	7	29	5	19	5	19	5	73	4	6	3'-10"	7	18	7	12	194	2.15
4'-Ø"	6	19	7	29	5	19	7	26	5	73	4	6	4'-4"	7	20	7	14	206	2.32
4'-6"	6	19	7	29	5	19	7	26	5	73	4	6	4'-10"	7	23	7	17	211	2.49
5'-Ø"	6	19	7	29	5	19	9	34	5	73	4	6	5'-4"	7	25	7	19	223	2.65
5'-6"	6	19	7	29	5	19	9	34	5	73	4	6	5'-10"	7	27	7	21	228	2.82
6'-Ø"	6	19	7	29	5	19	11	42	5	73	4	6	6'-4"	7	30	7	24	240	2.99
6'-6"	6	19	7	29	5	19	11	42	5	73	4	6	6'-10"	7	32	7	26	245	3.15
7'-Ø"	6	19	7	29	5	19	13	49	5	73	4	6	7'-4"	7	34	7	28	257	3.32
7'-6"	6	19	7	29	5	19	13	49	5	73	4	6	7'-10"	7	37	6'-7"	7	31	262	3.49

W=3'-6"	BILL OF REINFORCING STEEL FOR 1-5'-Ø" INLET																
H	BAR "A" L = 5'-2" #4 @ 9"		BAR "C" L = 6'-8" #4 @ 9"		BAR "S" L = 5'-8" #4 @ 12"		BAR "D" L = 5'-8" #4 @ 12"±		BAR "F" L=9'-8" #6		BAR "J" L=2'-3" #4		BAR "B" #4 @ 9"		BAR "K" #4 @ 9"±		*TOTAL STEEL	TOTAL CONC.
	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	NO.	lbs	LGTH.	NO.	LGTH.	NO.	lbs	lbs	yd^3
3'-6"	6	21	7	31	5	19	6	23	5	73	4	6	3'-10"	7	18	7	12	202	2.31
4'-Ø"	6	21	7	31	5	19	8	30	5	73	4	6	4'-4"	7	20	7	14	214	2.49
4'-6"	6	21	7	31	5	19	8	30	5	73	4	6	4'-10"	7	23	7	17	219	2.66
5'-Ø"	6	21	7	31	5	19	10	38	5	73	4	6	5'-4"	7	25	7	19	231	2.84
5'-6"	6	21	7	31	5	19	10	38	5	73	4	6	5'-10"	7	27	7	21	236	3.01
6'-Ø"	6	21	7	31	5	19	12	45	5	73	4	6	6'-4"	7	30	7	24	248	3.19
6'-6"	6	21	7	31	5	19	12	45	5	73	4	6	6'-10"	7	32	7	26	253	3.37
7'-Ø"	6	21	7	31	5	19	14	53	5	73	4	6	7'-4"	7	34	7	28	265	3.54
7'-6"	6	21	7	31	5	19	14	53	5	73	4	6	7'-10"	7	37	6'-7"	7	31	270	3.72

* NOTE: WHERE INLET IS USED WITH CONCRETE PAVEMENT, ADD 73 lbs OF STEEL FOR BARS "M".

GENERAL NOTES:

1. WHERE INLET OR INLET WITH EXTENSION(S) IS USED WITH CONCRETE PAVEMENT WITH INTERGRAL CURB, THE PAVEMENT IS TO BE BLOCKED OUT TO THE DIMENSIONS AS SHOWN FOR THE GUTTER PORTION OF THE INLET OR INLET WITH EXTENSIONS(S). THE PORTION BLOCKED OUT SHALL BE PLACED INTEGRAL WITH THE TOP OF THE INLET OR INLET WITH EXTENSION(S). #8 DEFORMED BARS 30" LONG SHALL BE PLACED ON 18" CENTERS AT THE CENTER OF THE PAVEMENT. THESE BARS SHALL EXTEND INTO THE GUTTER PORTION OF THE INLET OR INLET WITH EXTENSION(S) 15". THE CONSTRUCTION JOINT BETWEEN THE CONCRETE PAVEMENT AND THE INLET OR INLET WITH EXTENSION(S) SHALL BE A KEYED JOINT AS SHOWN. A SMOOTH CONSTRUCTION JOINT WILL NOT BE PERMITTED. QUANTITIES FOR BLOCKED OUT AREA OF PAVEMENT SHALL BE INCLUDED IN QUANTITIES FOR INLET OR INLET WITH EXTENSION(S).
2. THE STANDARD SPECIFICATIONS ADOPTED BY THE MISSISSIPPI DEPARTMENT OF TRANSPORTATION SHALL APPLY TO ALL ITEMS ON THIS SHEET.
3. THE QUANTITIES SHOWN, MINUS VOLUMETRIC DISPLACEMENT OF CONCRETE BY PIPE CULVERTS THROUGH INLET WALLS, WILL BE USED AS THE BASIS OF FINAL PAYMENT UNLESS THIS PLAN IS MODIFIED.
4. FOR CONVENIENCE, DEPTHS OF INLETS SHOWN IN ABOVE TABLE ARE INCREMENTS OF 6". BUT ANY DEPTHS OTHER THAN THESE SHOWN MAY BE USED WHEREVER DEEMED NECESSARY. QUANTITIES FOR OTHER DEPTHS, FALLING WITHIN THE LIMITS OF THE TABLE, MAY BE FOUND BY INTERPOLATION.
5. FIELD CUT AND BEND BARS AS NECESSARY TO ACCOMMODATE STORM SEWER. NO DEDUCTIONS ARE TO BE MADE IN STEEL QUANTITIES.

BY
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DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

STORM SEWER STRUCTURE TYPE SS-2

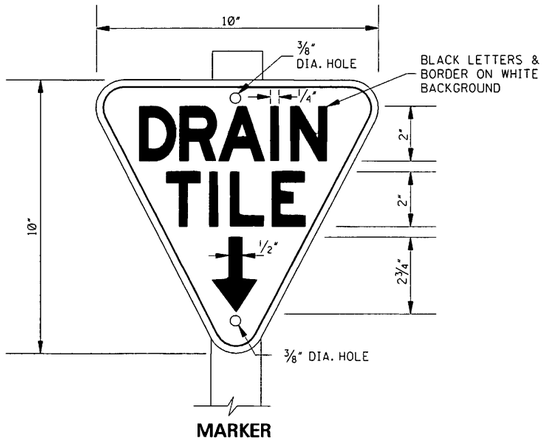
DEPARTMENT OF TRANSPORTATION ENGLISH MISSISSIPPI

WORKING NUMBER
SS-2

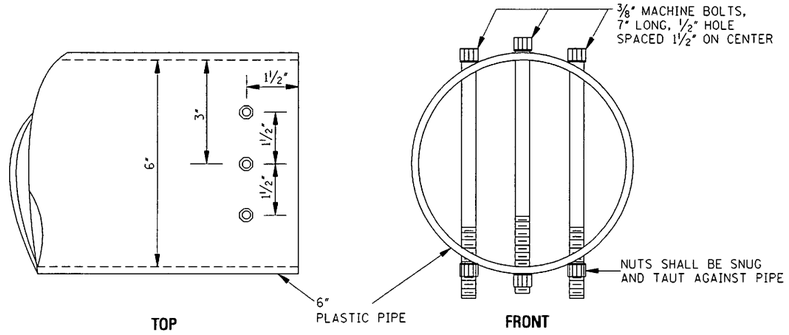
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ISSUE DATE: OCTOBER 1, 1998

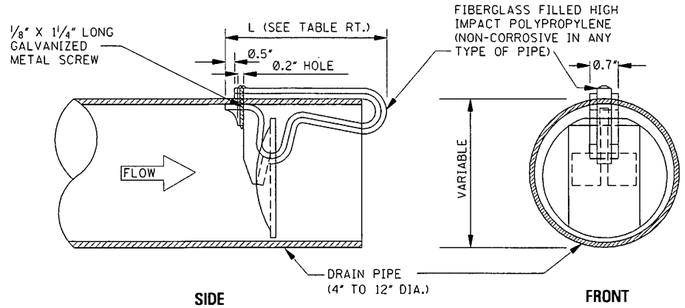
STATE	PROJECT NO.
MISS.	



MARKER



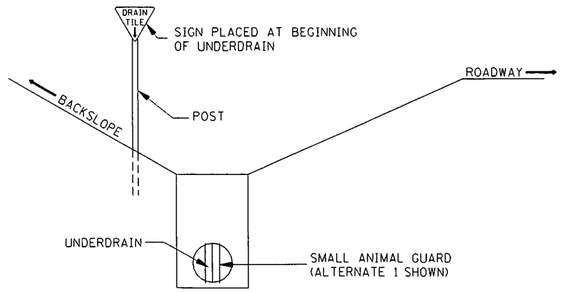
SMALL ANIMAL GUARD – ALTERNATE I



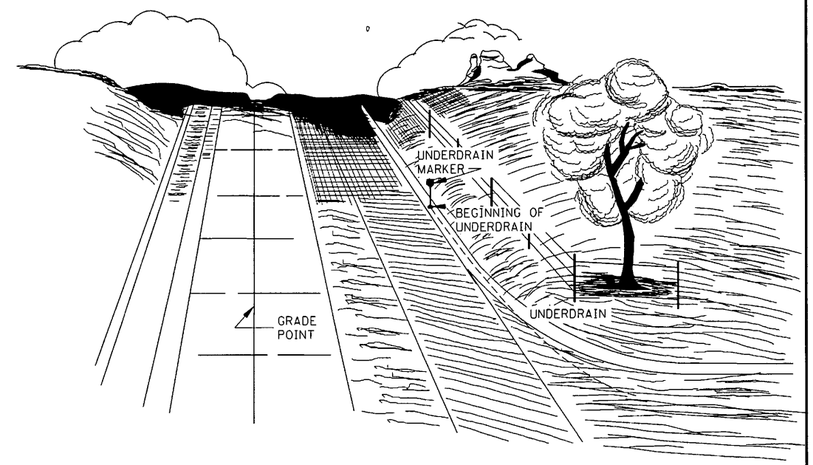
FOR UNDERDRAINS 4" TO 12" IN DIAMETER

FOR UNDERDRAINS LESS THAN 4" IN DIAMETER

SMALL ANIMAL GUARD – ALTERNATE II

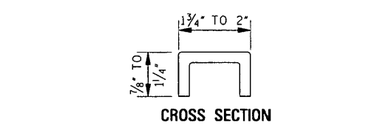


CROSS SECTION OF UNDERDRAIN

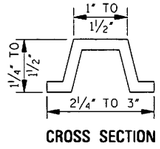


LOCATION OF UNDERDRAIN MARKER

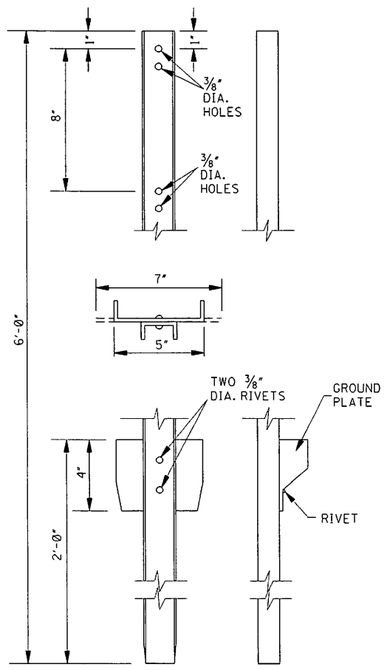
DIA. OF UNDERDRAIN	L
4"	3"
5"	3"
6"	4.75"
8"	4.75"
10"	9.50"
12"	9.50"



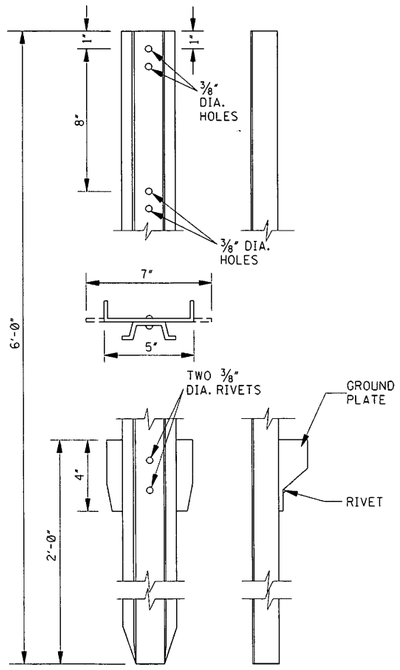
CROSS SECTION



CROSS SECTION



ALTERNATIVE 1



ALTERNATIVE 2

METAL POST

GENERAL NOTES:

1. MARKER IS TO BE FASTENED TO POST WITH 5/16" HUCK FASTENERS OR CHERRY RIVETS OF THE COLLAR TYPE OF OTHER APPROVED EQUAL.
2. MARKER FACE SHALL BE 0.080" ALUMINUM SHEET OR 14 GAGE SHEET STEEL WHICH IS GALVANIZED.
3. POSTS SHALL BE GALVANIZED AS SPECIFIED BY SECTION 630 OF THE MDOT STANDARD SPECIFICATIONS.
4. POSTS SHALL BE 2.0 lbs/ft TO 2.5 lbs/ft.
5. PAYMENT FOR INSTALLED DRAIN TILE MARKERS AND SMALL ANIMAL GUARDS ARE TO BE ABSORBED IN THE PRICE FOR PIPE UNDERDRAINS.
6. BOLTS, NUTS, WASHERS AND HARDWARE CLOTH SHALL BE ZINC COATED BY THE MECHANICAL OR HOT DIP GALVANIZING PROCESS.
7. ANIMAL GUARD AND SIGN TO BE PLACED IMMEDIATELY AFTER PIPE INSTALLATION

DATE	REVISION	BY
3-01-02	ADDED NOTE 7	S.W.R.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

SMALL ANIMAL GUARD AND UNDERDRAIN MARKER

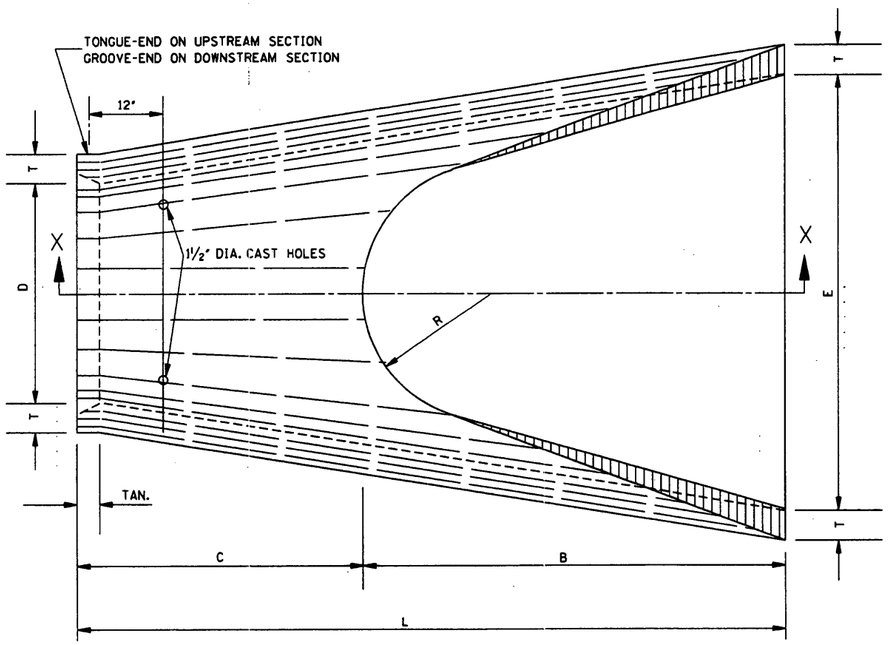
ENGLISH

WORKING NUMBER: SAG-1

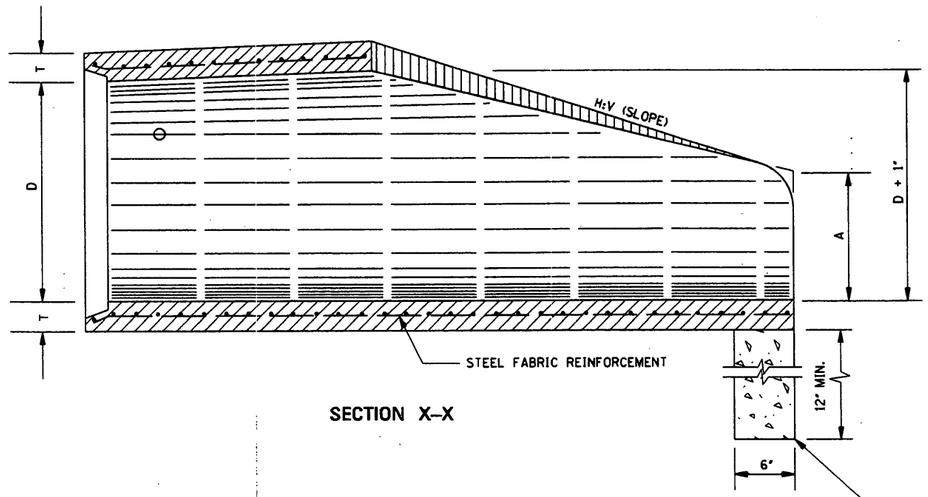
SHEET NUMBER: 327

ISSUE DATE: OCTOBER 1, 1998

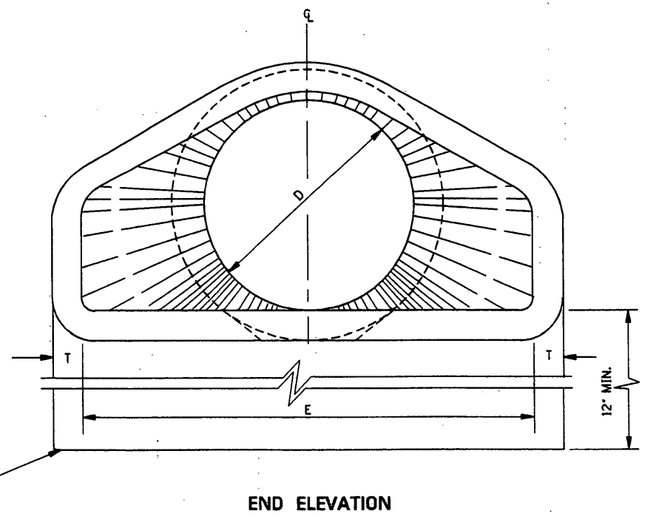
STATE	PROJECT NO.
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PLAN OF DOWNSTREAM END



SECTION X–X



END ELEVATION

TOE WALL REQUIRED ON ALL DOWNSTREAM FLARED END SECTIONS. TOE WALL AT UPSTREAM END WILL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER. TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE - MINOR STRUCTURES.

BELL AND SPIGOT END OPTION

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

TABLE OF DIMENSIONS							
D	T	H:V	A	B	C	E	L
15"	2¼"	3:1	6"	2'-3"	4'-1"	2'-8"	6'-1"
18"	2½"	3:1	9"	2'-3"	3'-10"	3'-0"	6'-1"
24"	3"	3:1	10"	3'-8"	2'-6"	4'-0"	6'-2"
30"	3½"	3:1	1'-0"	4'-6"	1'-8"	5'-0"	6'-2"
36"	4"	3:1	1'-3"	5'-3"	2'-11"	6'-0"	8'-2"
42"	4½"	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"	5½"	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"	6½"	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.

TOE WALL CONC. QUANTITY (yd^3)
0.056
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.177
0.188

GENERAL NOTES:

1. REINFORCEMENT SHALL CONFORM TO THE REQUIREMENTS OF REINFORCED CONCRETE PIPE OF LIKE DIAMETER PER AASHTO M 170, TABLE 2, WALL B.
2. 2 - 1½" DIA. CAST HOLES REQUIRED AS SHOWN TO ACCOMMODATE 2 - 1" DIA. TIE BOLTS, USED IN TIEING SECTION TO PIPE CULVERT.
3. LENGTH (L) OF A BELL-END OPTION MAY VARY BY A NOMINAL EXTENSION ON THE BELL END.
4. FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
5. ALL SIZES OF FLARED END SECTIONS FOR CIRCULAR CONCRETE PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.

BY
REVISION
DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FLARED END SECTION FOR CONCRETE PIPE

ENGLISH

WORKING NUMBER
FE-1

ISSUE DATE: OCTOBER 1, 1998

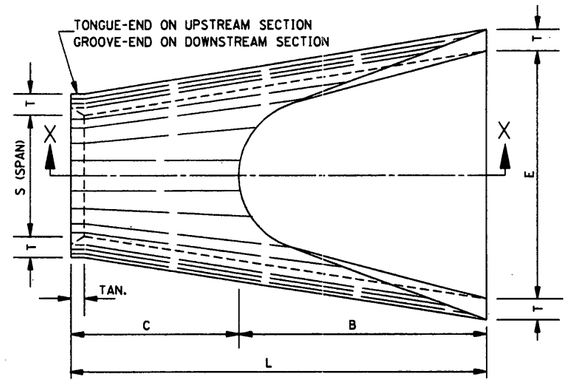
SHEET NUMBER
328

BELL AND SPIGOT END OPTION TYPE I

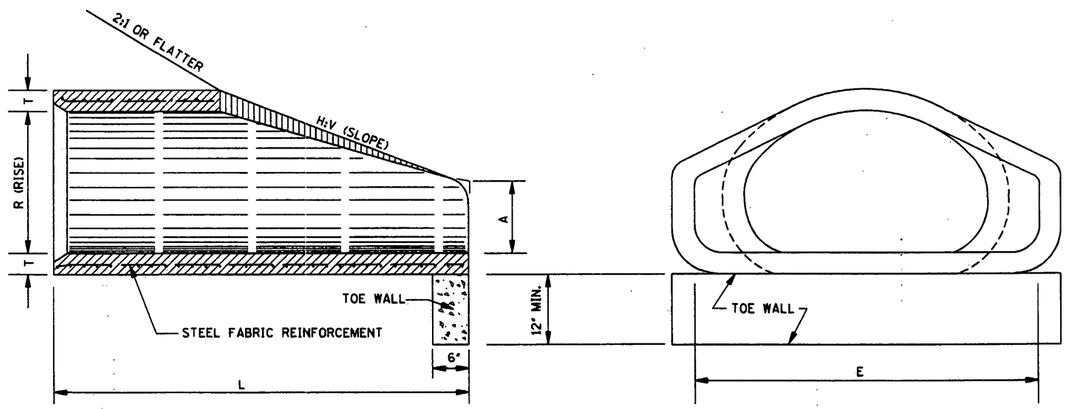
NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

FLARED END SECTION FOR CONCRETE ARCH PIPE									
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L
18"	13½"	22"	2½"	3:1	7"	2'-3"	3'-9"	3'-0"	6'-0"
24"	18"	28½"	3"	3:1	8"	3'-3"	2'-9"	4'-0"	6'-0"
30"	22½"	36¼"	3½"	3:1	10"	4'-0"	2'-0"	5'-0"	6'-0"
36"	26⅝"	43¾"	4"	3:1	10⅝"	5'-0"	3'-0"	6'-0"	8'-0"
42"	31⅜"	51⅛"	4½"	3:1	1'-3⅜"	5'-0"	3'-0"	6'-6"	8'-0"
48"	36"	58½"	5"	3:1	1'-9"	5'-0"	3'-0"	7'-0"	8'-0"
54"	40"	65"	5½"	3:1	2'-1½"	5'-0"	3'-0"	7'-6"	8'-0"
60"	45"	73"	6"	3:1	2'-2"	6'-3"	1'-9"	8'-0"	8'-0"
72"	54"	88"	7"	3:1	2'-11"	6'-6"	1'-10"	10'-0"	8'-4"

TOE WALL CONC. QUANTITY (yd^3)
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167
0.207



PLAN OF DOWNSTREAM END



SECTION X–X

FRONT ELEVATION

BELL AND SPIGOT END OPTION TYPE II

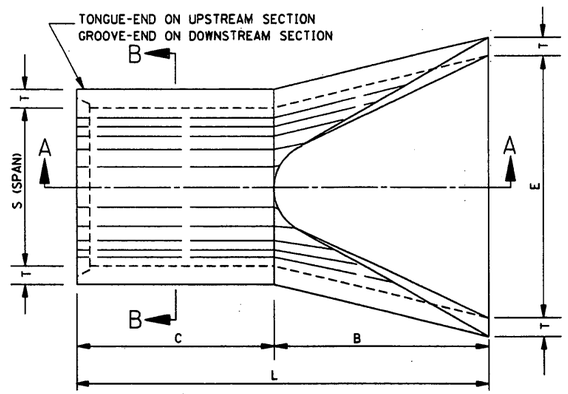
NOTE: BELL-END ON DOWNSTREAM SECTION
SPIGOT-END ON UPSTREAM SECTION.

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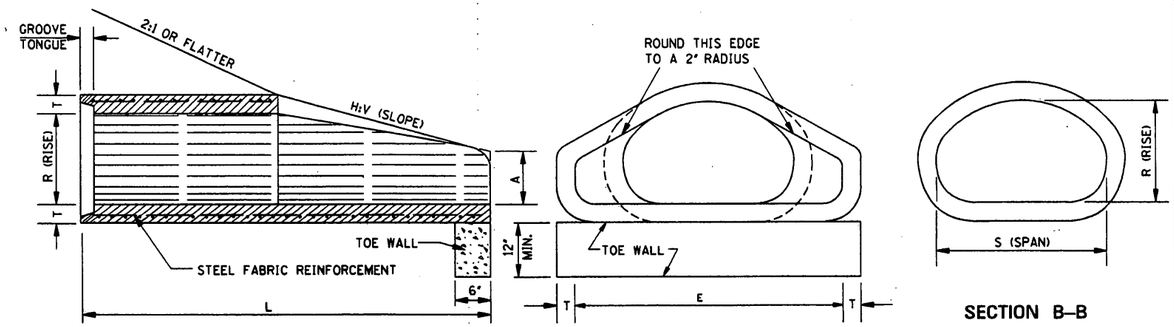
FLARED END SECTION FOR CONC. ARCH PIPE-SHORT FLARE										
EQUIV. SIZE	R	S	T	H:V	A	B	C	E	L	GROOVE TONGUE
* 18"	13½"	22"	2½"	3:1	7"	2'-3"	3'-9"	3'-0"	6'-0"	2¼"
24"	18"	28½"	3½"	3.12:1	9"	3'-3"	2'-9½"	4'-0"	6'-0½"	3"
30"	22½"	36¼"	4"	2.94:1	9½"	4'-2"	3'-10½"	5'-0"	8'-0½"	3½"
36"	26⅝"	43¾"	4½"	3.08:1	11⅝"	5'-0"	3'-0½"	6'-0"	8'-0½"	4"
42"	31⅜"	51⅛"	4½"	3.08:1	1'-4⅜"	5'-0"	3'-0½"	6'-6"	8'-0½"	4"
48"	36"	58½"	5"	3.16:1	1'-10"	5'-0"	3'-0½"	7'-0"	8'-0½"	5"
54"	40"	65"	5½"	3.24:1	2'-3"	5'-0"	3'-0⅝"	7'-6"	8'-0⅝"	5"
60"	45"	73"	6"	3.33:1	2'-9"	5'-0"	3'-0⅝"	8'-0"	8'-0⅝"	5"

TOE WALL CONC. QUANTITY (yd^3)
0.063
0.083
0.102
0.123
0.134
0.145
0.156
0.167

NOTES: *1. EQUIVALENT 18" FLARED END SECTION SIMILAR TO TYPE I.
2. DIMENSIONS A, B, C, E AND L MAY VARY 1"±.



PLAN OF DOWNSTREAM END



SECTION A–A

FRONT ELEVATION

SECTION B–B

GENERAL NOTES:

1. FLARED END SECTIONS ARE NOT TO BE USED INSIDE THE CLEAR ZONE.
2. UNLESS OTHERWISE DESIGNATED, EITHER TYPE I OR TYPE II MAY BE USED, PROVIDED THE SELECTED TYPE IS COMPATIBLE WITH THE CONFIGURATION OF THE PIPE TO WHICH IT IS TO BE ATTACHED.
3. ALL SIZES OF TYPE I AND TYPE II FLARED END SECTIONS FOR CONCRETE ARCH PIPE MAY BE FURNISHED WITH EITHER BELL AND SPIGOT OR TONGUE AND GROOVE ENDS.
4. REINFORCEMENT (SINGLE LINE) FOR FLARED END SECTION SHALL CONFORM TO REQUIREMENTS OF AASHTO M 206 FOR CLASS II ARCH PIPE.
5. TOE WALL REQUIRED ON ALL DOWNSTREAM FLARED END SECTIONS. TOE WALL AT UPSTREAM END WILL BE CONSTRUCTED WHERE DIRECTED BY THE ENGINEER. TO BE PAID FOR AS CLASS "B" STRUCTURAL CONCRETE-MINOR STRUCTURES.
6. FLARED END SECTIONS MUST MEET THE REQUIREMENTS FOR ARCH PIPE OF EITHER AASHTO M 206 OR ASTM C 506.

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MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

FLARED END SECTION FOR CONCRETE ARCH PIPE

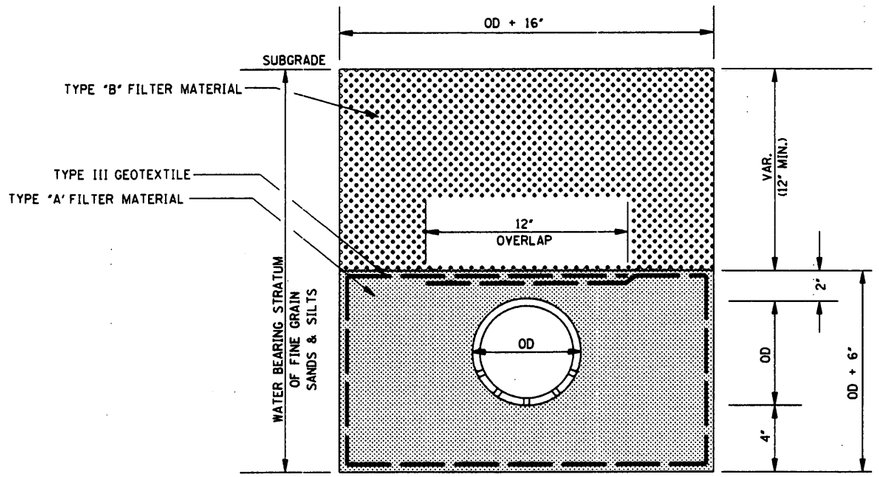
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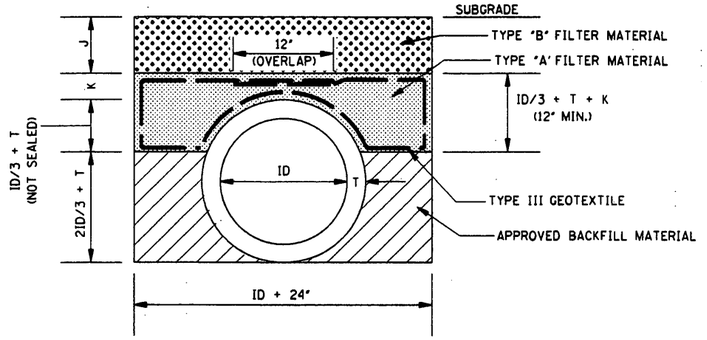
SHEET NUMBER
329

ISSUE DATE: OCTOBER 1, 1998

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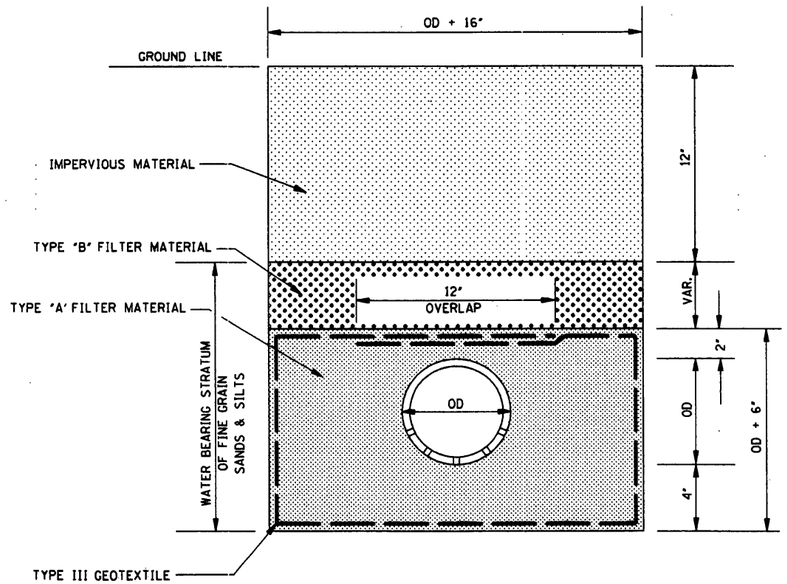
NORMAL UNDERDRAIN TYPE I



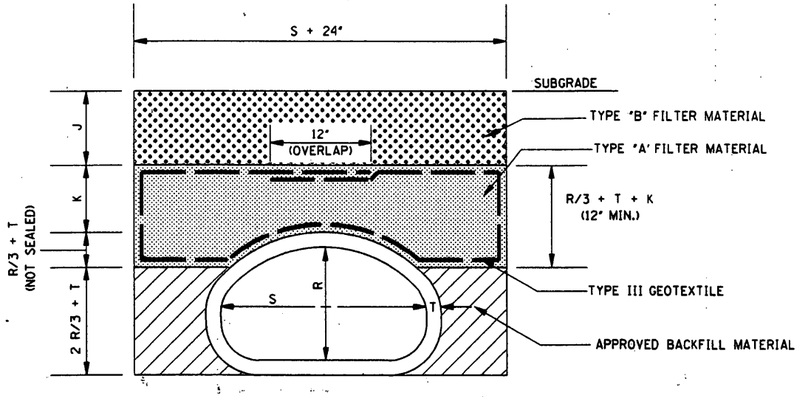
CIRCULAR STORM DRAIN USED AS UNDERDRAIN

PIPE SIZE	T	K	TYPE "A" MATERIAL (yd^3/ft)	TYPE "B" MATERIAL* ($yd^3/ft/ft$)	TYPE III GEOTEXTILE (yd^2/ft)	IMPERVIOUS MATERIAL (yd^3/ft)
6"	--	--	0.0638	0.0694	0.7593	0.0694
18"	2½"	4"	0.099	0.130	1.193	--
24"	3"	2"	0.100	0.148	1.334	--
30"	3½"	2"	0.124	0.167	1.513	--
36"	4"	2"	0.149	0.185	1.691	--
42"	4½"	2"	0.176	0.204	1.869	--
48"	5"	2"	0.204	0.222	2.048	--
54"	5½"	2"	0.233	0.241	2.226	--
60"	6"	2"	0.264	0.259	2.404	--
66"	6½"	2"	0.296	0.278	2.583	--
72"	7"	2"	0.330	0.296	2.761	--
84"	8"	2"	0.401	0.333	3.118	--
96"	9"	2"	0.477	0.370	3.474	--

*NOTE: $yd^3/ft/ft$ = CUBIC YARD PER FOOT DEPTH OF MATERIAL PER FOOT LENGTH OF PIPE.



NORMAL UNDERDRAIN TYPE II



ARCH STORM DRAIN USED AS UNDERDRAIN

PIPE SIZE	T	K	TYPE "A" MATERIAL (yd^3/ft)	TYPE "B" MATERIAL* ($yd^3/ft/ft$)	TYPE III GEOTEXTILE (yd^2/ft)
22" X 13"	2½"	5"	0.109	0.142	1.231
29" X 18"	3"	2.92"	0.113	0.162	1.383
36" X 23"	3½"	2"	0.124	0.186	1.537
44" X 27"	4"	2"	0.154	0.209	1.734
51" X 31"	4½"	2"	0.184	0.232	1.913
58" X 36"	5"	2"	0.217	0.255	2.098
65" X 40"	5½"	2"	0.248	0.275	2.158
73" X 45"	6"	2"	0.289	0.299	2.471
88" X 54"	7"	2"	0.374	0.346	2.849

*NOTE: $yd^3/ft/ft$ = CUBIC YARD PER FOOT DEPTH OF MATERIAL PER FOOT LENGTH OF PIPE.

GENERAL NOTES:

1. QUANTITIES SHOWN WILL BE THE BASIS FOR PAYMENT UNLESS AUTHORIZED MODIFICATIONS ARE MADE.
2. TYPE I UNDERDRAIN IS GENERALLY USED WHEN UNDERDRAIN IS REQUIRED UNDER THE ROADWAY SUBGRADE.
3. TYPE II UNDERDRAIN IS USED AS REQUIRED OUTSIDE THE ROADWAY.
4. 6" OVERLAP SHALL BE REQUIRED AT THE END OF EACH ROLL OF TYPE III GEOTEXTILE. BOTH THE 6" AND 12" OVERLAP SHALL BE INCLUDED FOR PAYMENT UNDER PAY ITEM NO. 605-AA (GEOTEXTILE TYPE III FOR SUBSURFACE DRAINAGE PER SQUARE YARD).
5. (J + K) SHALL BE 12" MINIMUM OR VARIABLE DEPTH UNLESS SPECIFIED ELSEWHERE ON THE PLANS.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

DETAILS OF NORMAL UNDERDRAIN AND STORM DRAIN USED AS UNDERDRAIN

ENGLISH

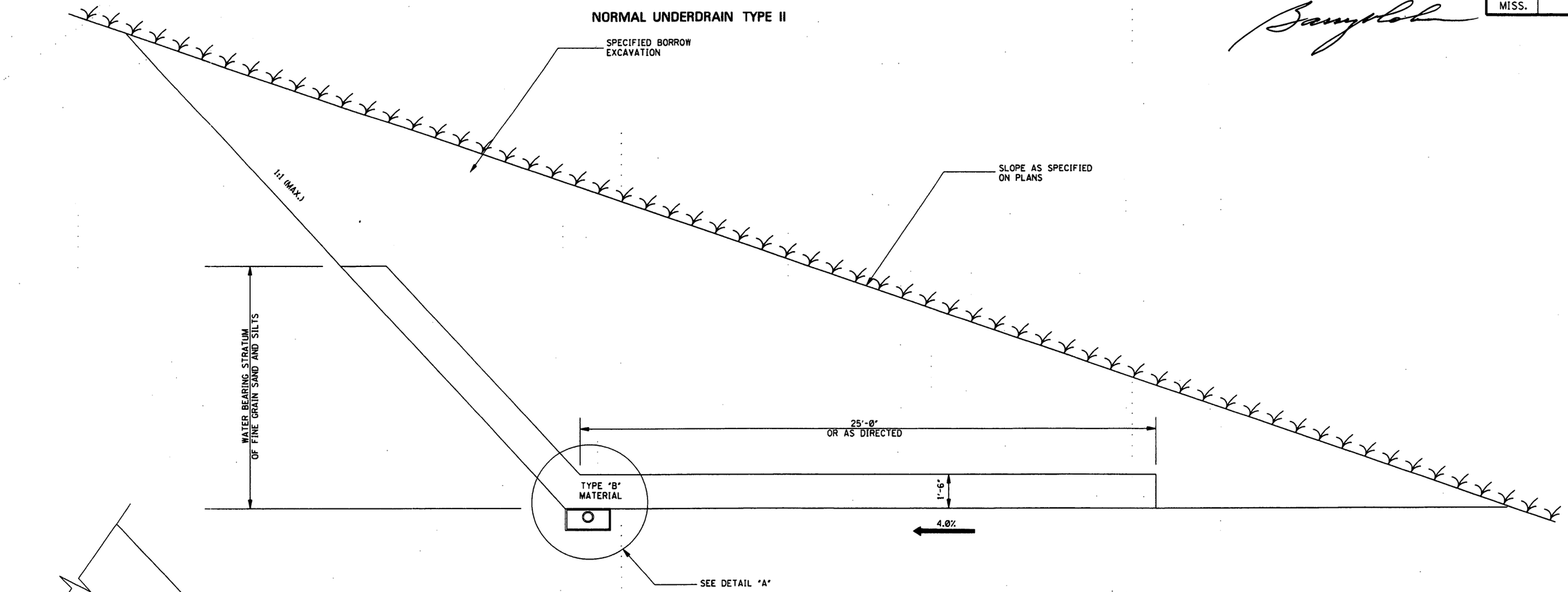
WORKING NUMBER
UD-1

ISSUE DATE: OCTOBER 1, 1998

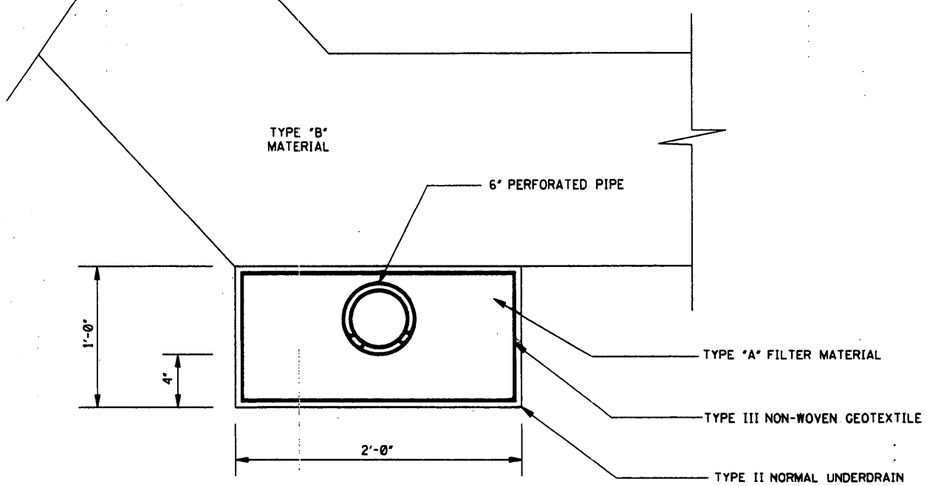
SHEET NUMBER
331

STATE	PROJECT NO.
MISS.	

NORMAL UNDERDRAIN TYPE II



SAND BLANKET DETAIL



DETAIL "A"

GENERAL NOTE:

1. SEE SHEET UD-1 FOR OTHER DETAILS AND RATES.

DATE	REVISION	BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
ROADWAY DESIGN DIVISION
STANDARD PLAN

NORMAL UNDERDRAIN TYPE II

ENGLISH

WORKING NUMBER UD-2

ISSUE DATE: OCTOBER 1, 1998

SHEET NUMBER 332

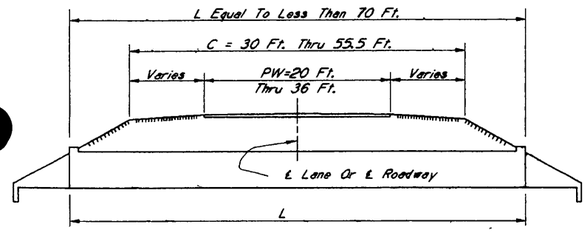


DIAGRAM "A" ~ DRAWN FOR L = 60 Ft. & PW = 24 Ft.

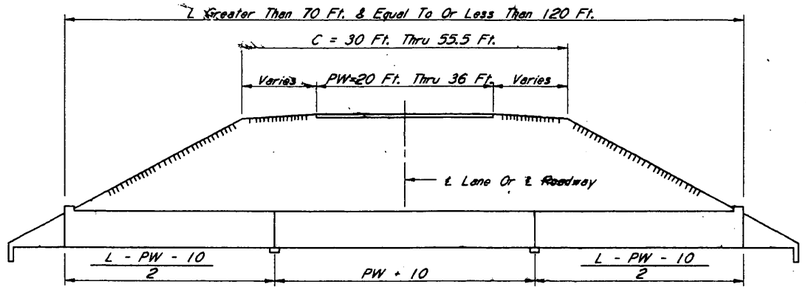


DIAGRAM "B" ~ DRAWN FOR L = 90 Ft. & PW = 24 Ft.

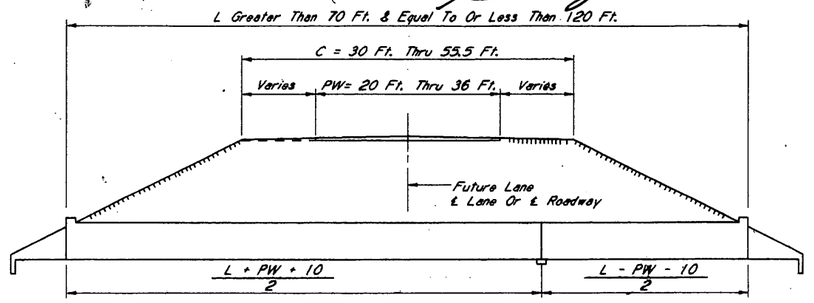


DIAGRAM "C" ~ DRAWN FOR L = 90 Ft. & PW = 24 Ft.

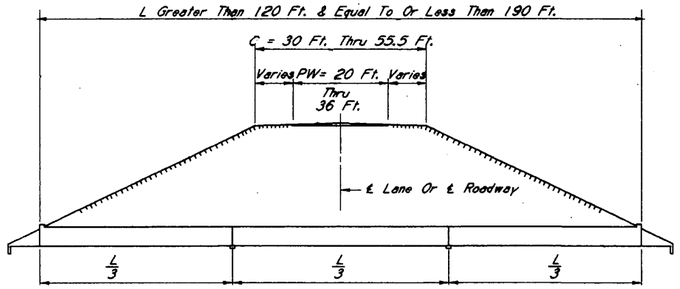


DIAGRAM "D" ~ DRAWN FOR L = 150 Ft. & PW = 24 Ft.

NOTE: These Joint Locations Are For Culverts Constructed Normal To ℄ Of Roadway And Shall Be Adjusted For Skew Per Details In Group IV.

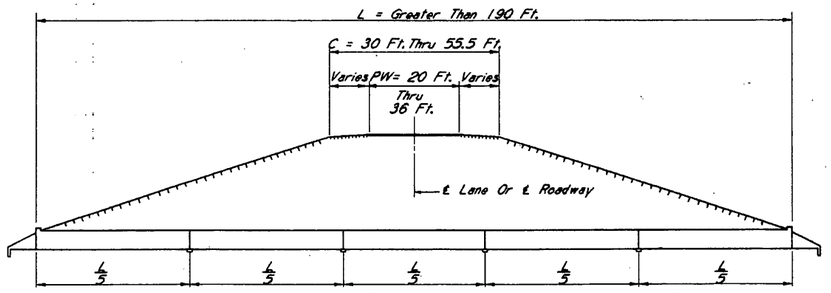


DIAGRAM "E" ~ DRAWN FOR L = 200 Ft. & PW = 24 Ft.

SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO ℄ ROADWAY

Showing Barrel Joint And Auxiliary Slabs "J".

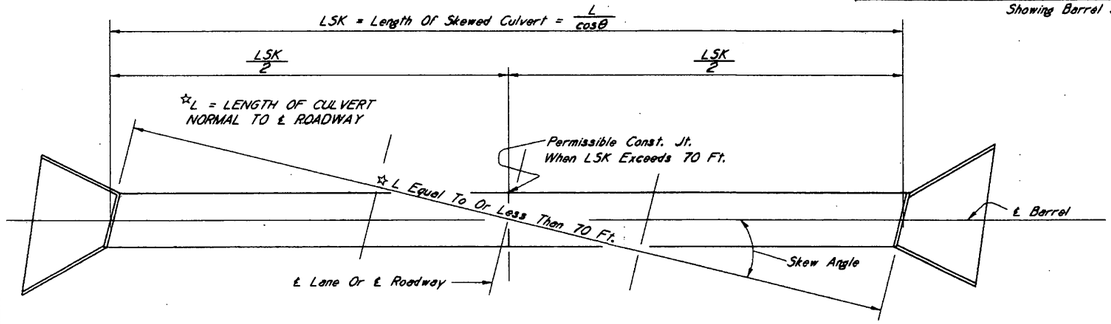


DIAGRAM "A"

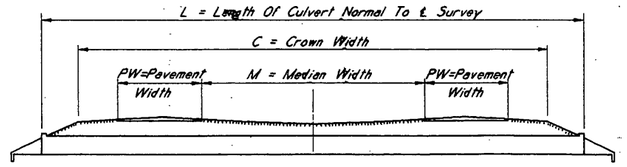
PLAN OF SKEWED CULVERT

TYPICAL FOR DIAGRAM "A" GROUP I AND SKEWED 15° RIGHT FORWARD
(NO BARREL JOINTS REQUIRED)
NOTE : LSK = 1.03528(L) FOR 15° SKEW.

GROUP IV DIAGRAMS
TYPICAL DIAGRAMS FOR SKEWED CULVERTS

APPLICATION OF DIAGRAMS:
The Following Diagrams Show The General Application Of JOINT LOCATION DIAGRAMS IN Groups I, II & III To Skewed Culverts
Location Of Barrel Joints For Skewed Culverts Is Determined As Follows:

1. With LSK(Length Of Skewed Culvert Along ℄ Barrel) Given And Number Of Joints And Length Of Barrel Sections Required, MULTIPLY LSK By The COSINE Of The SKEW ANGLE θ To Obtain L (Length Of Culvert Normal To ℄ Roadway).
2. Enter Group I, II Or III (Determined By Roadway Cross Section) With L To Determine The Number Of Joints And Length Of Each Barrel Section For A Culvert Constructed Normal To ℄ Roadway.
3. DIVIDE Each Length Of Section By The COSINE Of The SKEW ANGLE θ To Determine The Length Of Each Barrel Section Along ℄ Barrel.
4. Place The Barrel Joints (Type Per Basic Dwg.) At These Locations. If The Length Of Any Section Exceeds 70 Ft. And A Construction Joint Is Desired (To Reduce Yardage Of Pour) Place A Construction Joint In Center Of Section.



SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO ℄ SURVEY

Showing Variable For Diagrams In Group I.

GENERAL NOTES:

This Drawing Shows The Barrel Joint Locations For Box Culverts Constructed Normal To ℄ Of Roadway And General Details Necessary To Locate Joints For Culverts On 15, 30 And 45° Skews.
The Diagrams On This Sheet Show Joint Locations For Culverts Under Variable Amounts Of Cover, Crown Width And Side Slopes.
Barrel Joints Shall Not Be Of Type Per Basic Drawing And Shall Be Placed Only At Locations Shown Unless Otherwise Stated.
Joints Shall Not Be Located Closer Than 5 Ft. Outside Pavement For Cover Of 8 Ft. Or Less Except In Cases Where Median Is Less Than 10 Ft. Where Cover Is 8 Ft. Or Less And A Joint Occurs Within The Limits Of 5 Ft. Beyond Each Edge Of Pavement, Use Complete Collar At Joints Per Drawing ICJ-1 Or ICJS-1.
Where Cover Exceeds 8 Ft., Joints May Be Located Without Regard To Pavement Edge.
Construction Joints Per Group IV, If Required, Shall Have Reinforcement Continuous Thru Joint And Shall Be Placed Only At Locations Indicated.
General Requirements Of Basic Culvert Drawings Shall Apply Except As Specifically Modified Hereon.

✳NOTE: GROUP I ~ 2 Or 3 - 10 Ft. Thru 12 Ft. Traffic Lanes
Or 2 - 12 Ft. (PRESENT) & 1 - 12 Ft. (FUTURE) Traffic Lanes

REVISIONS | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BASIC CULVERT DRAWING
BARREL JOINT LOCATIONS
NORMAL AND SKEWED CULVERTS
GROUP I DIAGRAMS ✳

DESIGNED NA | CHECKED BJJ | ISSUED TMT
DETAILED ALT | DATE 07-11-97 | DATE 08-01-97

WORKING NUMBER IBJL-1
SHEET NUMBER 366.1

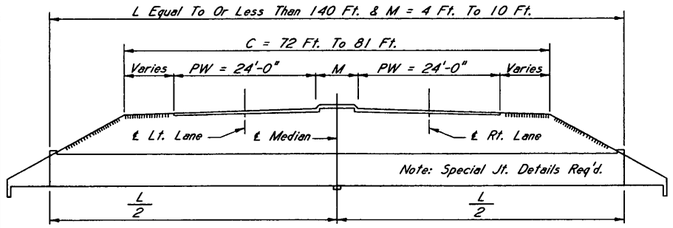


DIAGRAM "A" ~ DRAWN FOR L = 100 Ft. & M = 6 Ft.

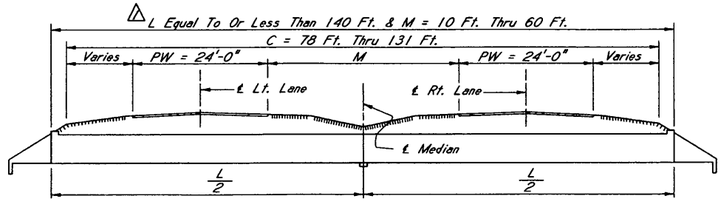


DIAGRAM "B" ~ DRAWN FOR L = 110 Ft. & M = 35 Ft.

NOTE: These Joint Locations Are For Culverts Constructed Normal To ℄ Of Roadway And Shall Be Adjusted For Skew Per Details In Group IV.

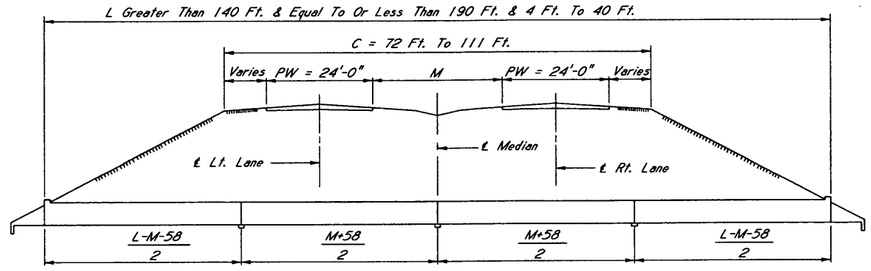


DIAGRAM "C" ~ DRAWN FOR L = 165 Ft. & M = 22 Ft.

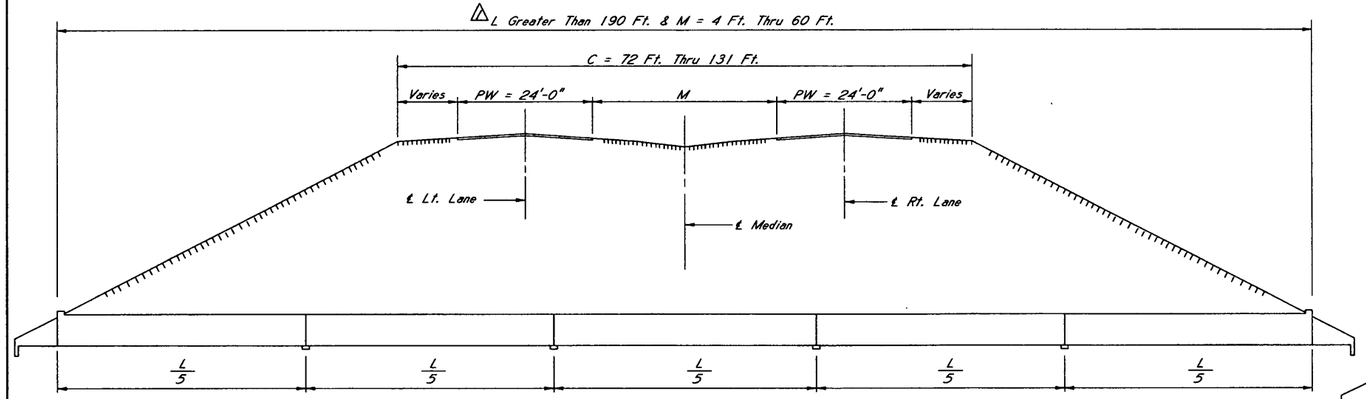


DIAGRAM "E" ~ DRAWN FOR L = 220 Ft. & M = 32 Ft.

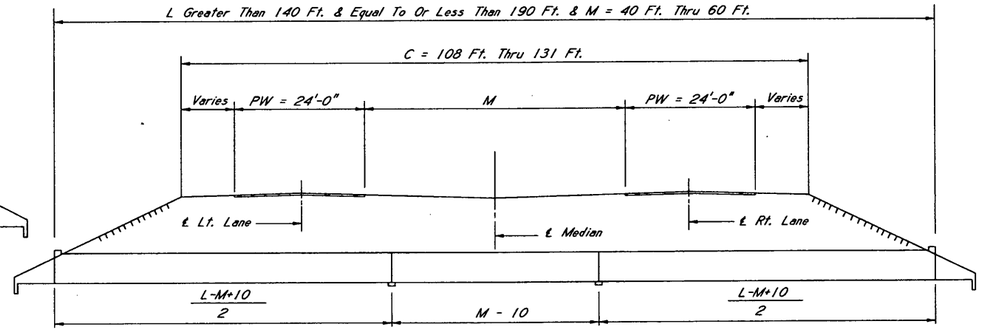


DIAGRAM "D" ~ DRAWN FOR L = 165 Ft. & M = 50 Ft.

SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO ℄ ROADWAY

Showing Barrel Joint And Auxiliary Slabs "J".

NOTE: For GROUP IV DIAGRAM Application Notes, See Sheet No. 366.1.

GENERAL NOTES:

This Drawing Shows The Barrel Joint Locations For Box Culverts Constructed Normal To ℄ Of Roadway And General Details Necessary To Locate Joints For Culverts On 15, 30 And 45° Skews.
The Diagrams On This Sheet Show Joint Locations For Culverts Under Variable Amounts Of Cover, Crown Width And Side Slopes.
Barrel Joints Shall Not Be Of Type Per Basic Drawing And Shall Be Placed Only At Locations Shown Unless Otherwise Stated.
Joints Shall Not Be Located Closer Than 5 Ft. Outside Pavement For Cover Of 8 Ft. Or Less Except In Cases Where Median Is Less Than 10 Ft. Where Cover Is 8 Ft. Or Less And A Joint Occurs Within The Limits Of 5 Ft. Beyond Each Edge Of Pavement, Use Complete Collar At Joints Per Drawing ICJ-1 Or ICJS-1.
Where Cover Exceeds 8 Ft., Joints May Be Located Without Regard To Pavement Edge.
Construction Joints Per Group IV, If Required, Shall Have Reinforcement Continuous Thru Joint And Shall Be Placed Only At Locations Indicated.
General Requirements Of Basic Culvert Drawings Shall Apply Except As Specifically Modified Hereon.

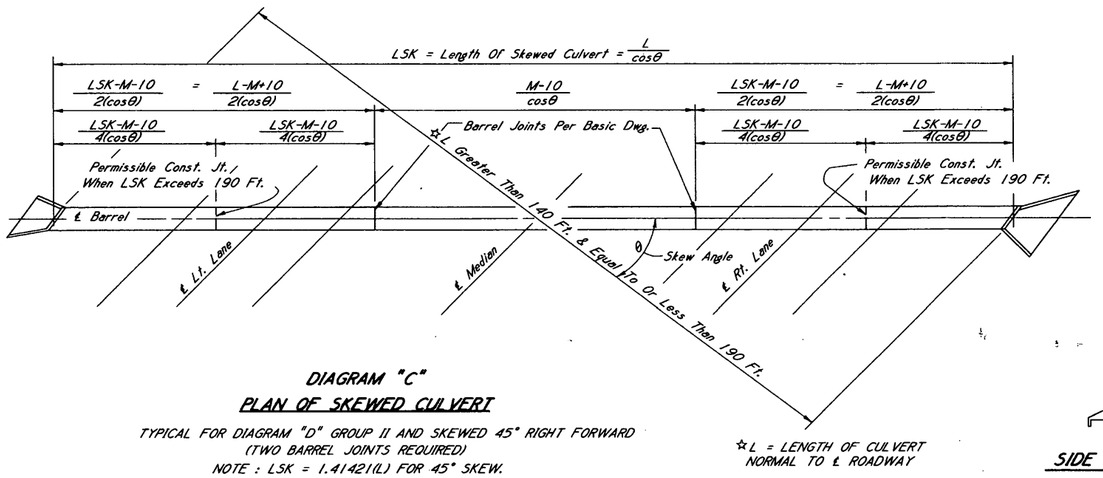
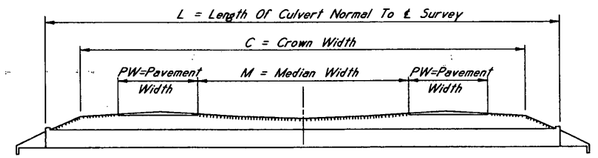


DIAGRAM "C"

PLAN OF SKEWED CULVERT

TYPICAL FOR DIAGRAM "D" GROUP II AND SKEWED 45° RIGHT FORWARD (TWO BARREL JOINTS REQUIRED)
NOTE : LSK = 1.41421(L) FOR 45° SKEW.

☆L = LENGTH OF CULVERT NORMAL TO ℄ ROADWAY



SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO ℄ SURVEY

Showing Variable For Diagrams In Group II.

*** NOTE:** GROUP II ~ 4 - 12 Ft. Traffic Lanes 4 Ft. Thru 60 Ft. Medians.

DATE	REVISIONS	BY
△ 07/17/98	Revised Diagrams "B" & "E"	BJJ

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BASIC CULVERT DRAWING
BARREL JOINT LOCATIONS
NORMAL AND SKEWED CULVERTS
GROUP II DIAGRAMS *

DESIGNED NA	CHECKED BJJ	ISSUED TMT	WORKING NUMBER IBJL-1
DETAILED ALT	DATE 07-11-97	DATE 08-01-97	SHEET NUMBER 366.2

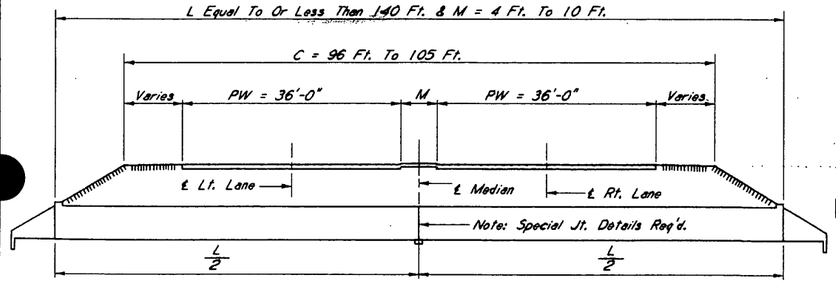


DIAGRAM "A" ~ DRAWN FOR L = 124 Ft. & M = 6 Ft.

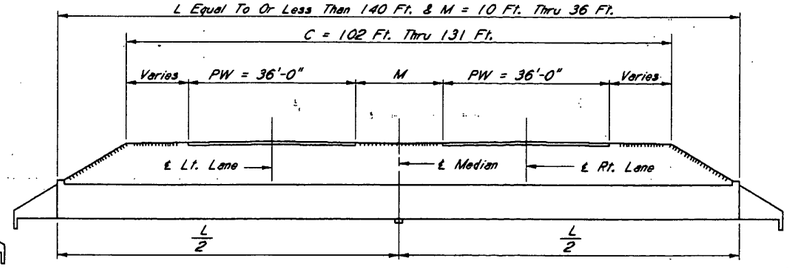


DIAGRAM "B" ~ DRAWN FOR L = 134 Ft. & M = 23 Ft.

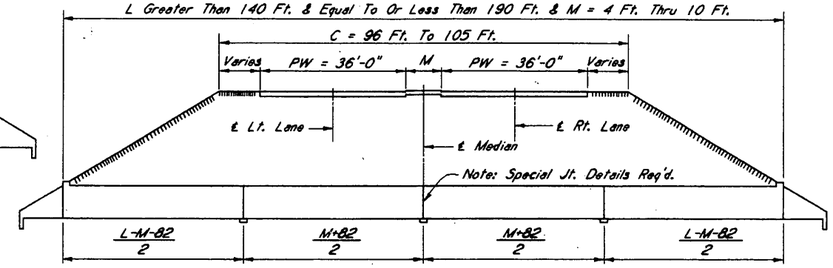


DIAGRAM "C" ~ DRAWN FOR L = 165 Ft. & M = 6 Ft.

NOTE: These Joint Locations Are For Culverts Constructed Normal To ℄ Of Roadway And Shall Be Adjusted For Skew Per Details In Group IV.

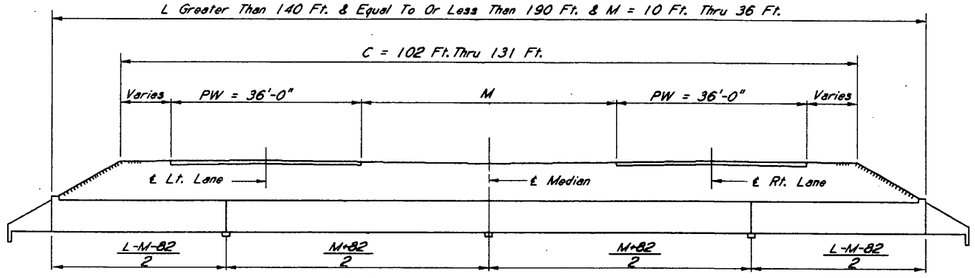


DIAGRAM "D" ~ DRAWN FOR L = 165 Ft. & M = 23 Ft.

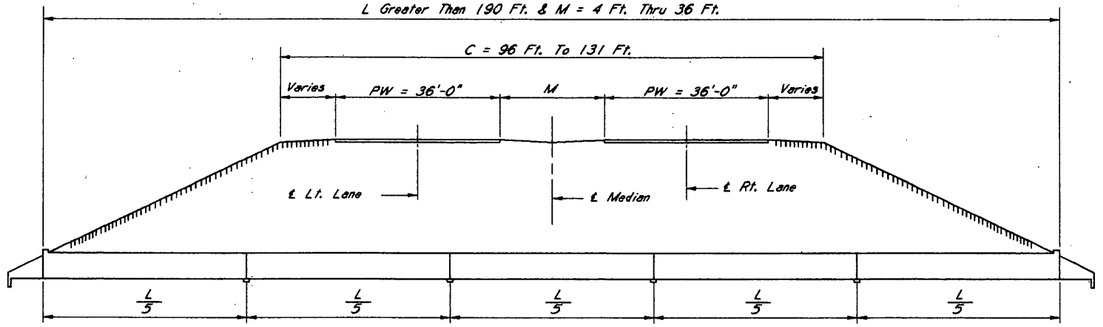


DIAGRAM "E" ~ DRAWN FOR L = 220 Ft. & M = 20 Ft.

SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO ℄ ROADWAY

Showing Barrel Joint And Auxiliary Slabs "J".

GENERAL NOTES:

This Drawing Shows The Barrel Joint Locations For Box Culverts Constructed Normal To ℄ Of Roadway And General Details Necessary To Locate Joints For Culverts On 15, 30 And 45° Skews.
The Diagrams On This Sheet Show Joint Locations For Culverts Under Variable Amounts Of Cover, Crown Width And Side Slopes.
Barrel Joints Shall Not Be Of Type Per Basic Drawing And Shall Be Placed Only At Locations Shown Unless Otherwise Stated.
Joints Shall Not Be Located Closer Than 5 Ft. Outside Pavement For Cover Of 8 Ft. Or Less Except In Cases Where Median Is Less Than 10 Ft. Where Cover Is 8 Ft. Or Less And A Joint Occurs Within The Limits Of 5 Ft. Beyond Each Edge Of Pavement, Use Complete Collar At Joints Per Drawing ICJ-1 Or ICJS-1.
Where Cover Exceeds 8 Ft., Joints May Be Located Without Regard To Pavement Edge.
Construction Joints Per Group IV, If Required, Shall Have Reinforcement Continuous Thru Joint And Shall Be Placed Only At Locations Indicated.
General Requirements Of Basic Culvert Drawings Shall Apply Except As Specifically Modified Hereon.

NOTE: For GROUP IV DIAGRAM Application Notes, See Sheet No. 366.1.

*NOTE: GROUP III ~ 6 - 12 Ft. Traffic Lanes ~ 4 Ft. Thru 36 Ft. Medians Or 4 - 12 Ft. (PRESENT) & 2 - 12 Ft. (FUTURE) Traffic Lanes With 28 Ft. Thru 60 Ft. Medians.

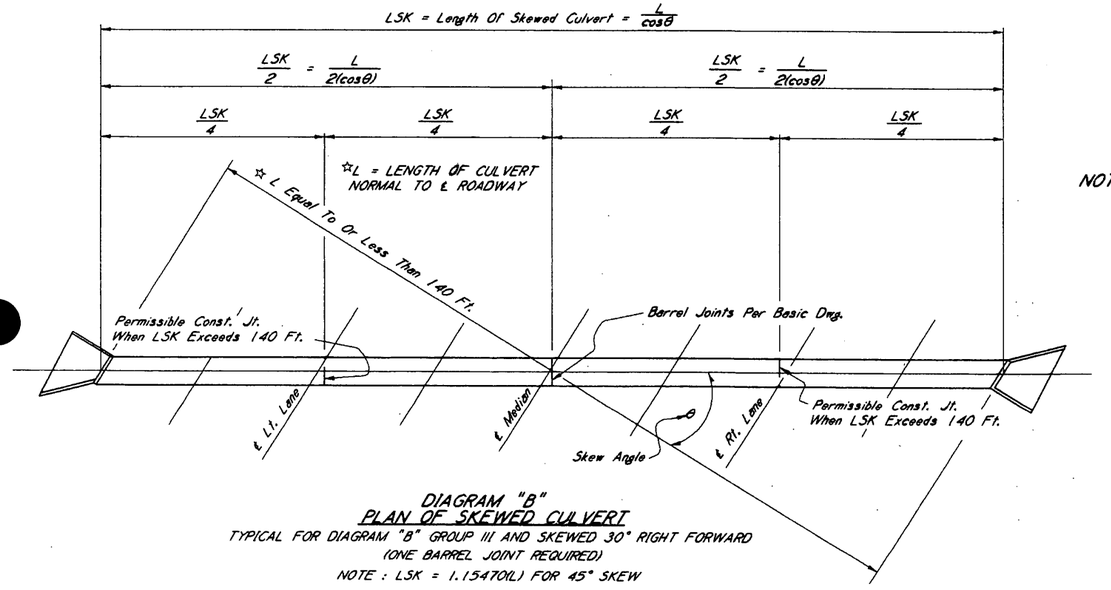
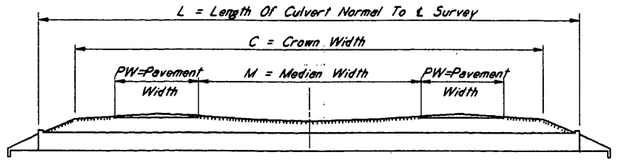


DIAGRAM "B"
PLAN OF SKEWED CULVERT
TYPICAL FOR DIAGRAM "B" GROUP III AND SKEWED 30° RIGHT FORWARD
(ONE BARREL JOINT REQUIRED)
NOTE : LSK = 1.15470(L) FOR 45° SKEW



SIDE ELEVATION OF CULVERTS CONSTRUCTED NORMAL TO ℄ SURVEY

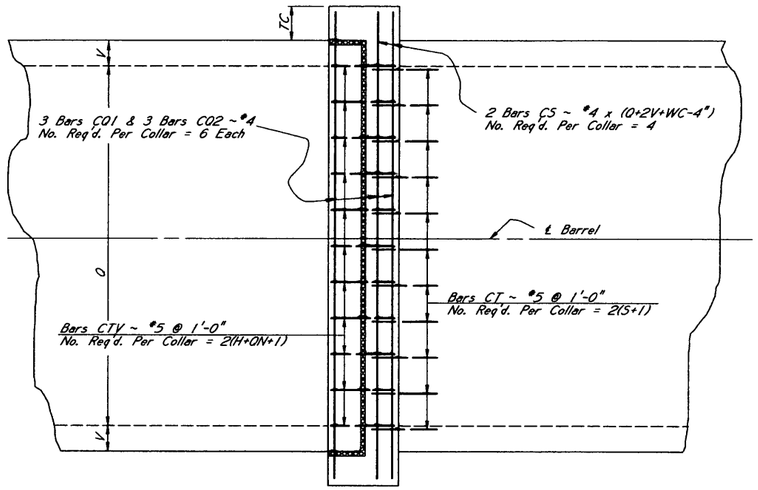
Showing Variable For Diagrams In Group III.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BASIC CULVERT DRAWING
BARREL JOINT LOCATIONS
NORMAL AND SKEWED CULVERTS
GROUP III DIAGRAMS *

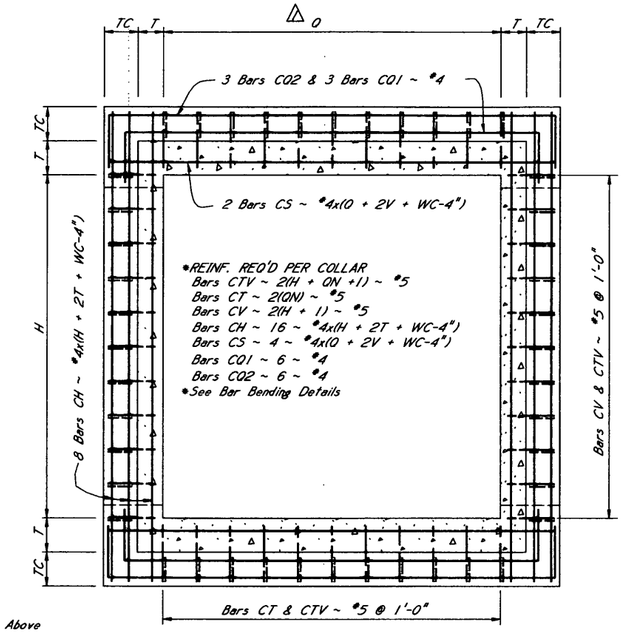
REVISIONS | BY

DATE
DESIGNED NA | CHECKED BJJ | ISSUED TMT
DETAILED ALT | DATE 07-11-97 | DATE 08-01-97

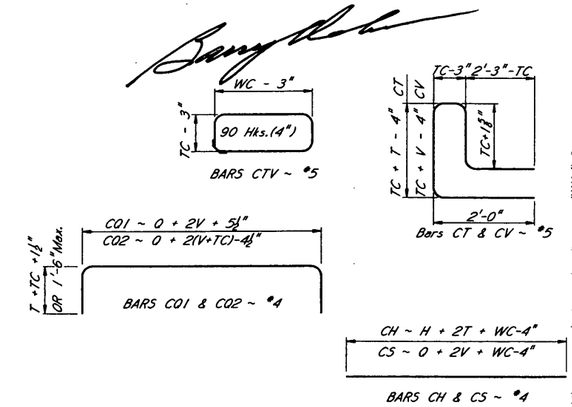
WORKING NUMBER IBJL-1
SHEET NUMBER 366.3



PLAN OF COLLAR



SECTION A-A



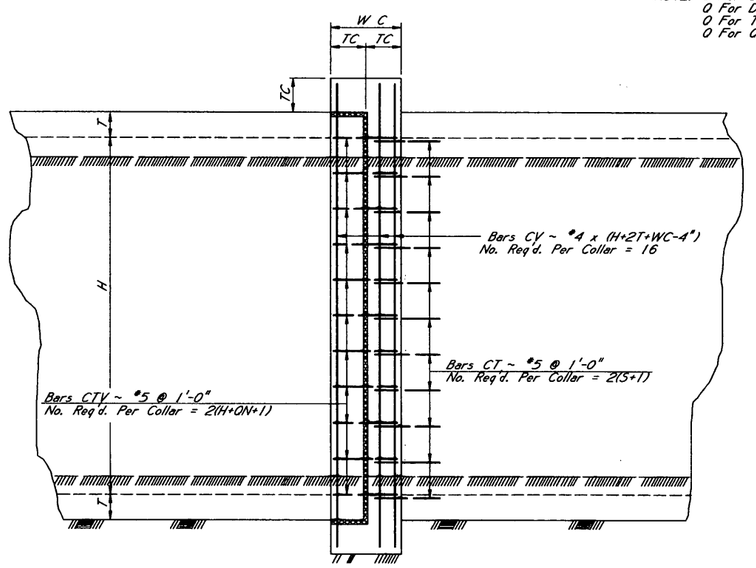
BAR BENDING DETAILS

NOTE: See * Below

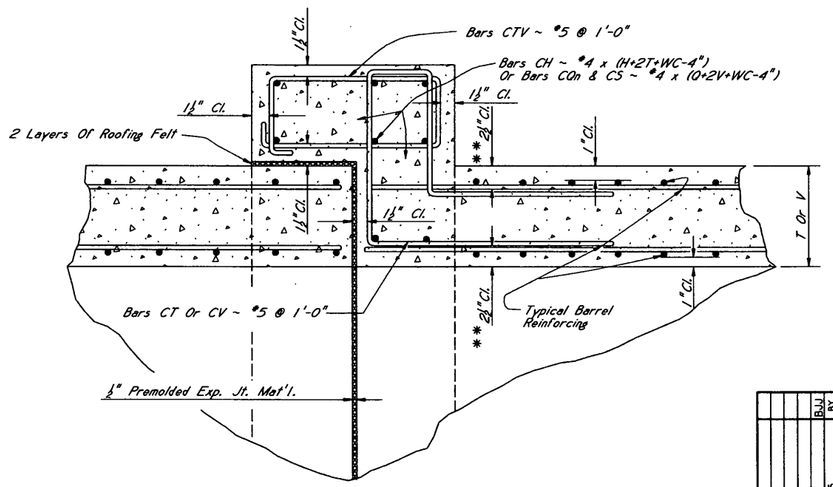
NOTE: For H = 6 Ft. TC = 9" WC = 1'-6"

For H = 8 Ft. & Above TC = 1'-0" WC = 2'-0"

NOTE: O For Single Cell Box = S (Clear Span) , ON = S+1
O For Double Cell Box = 2S + V, ON = 2(S+1)
O For Triple Cell Box = 3S + 2V, ON=3(S+1)
O For Quadruple Cell Box = 4S + 3V, ON = 4(S+1)



ELEVATION OF COLLAR



** **NOTE:** 2½" Cl. Based On 1" Cl. For Typ. Barrel Reinf. This Cl. Shall Be Adjusted For Cl. Other Than 1".

TYPICAL SECTION OF COLLAR

GENERAL NOTES:

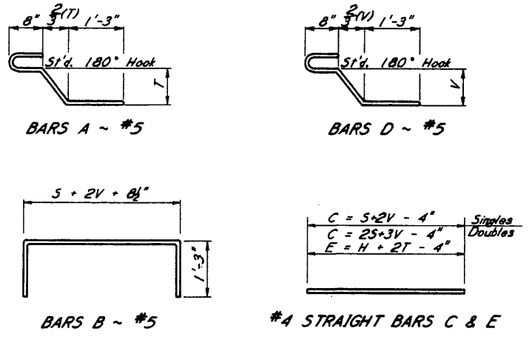
This Drawing Shows The Details Necessary To Construct A Complete Collar Around Barrel At Expansion Joints For Single, Double, Triple And Quadruple Cell Box Structures.
All Details And Requirements Not Shown Hereon Shall Be As Per Specific Drawings Or Sheets As Listed In The Plan Assembly.
This Drawing Is Detailed For A Single Cell Box Structure, And Multi-Cell Box Structures Shall Be Treated Similarly As Shown.

△	DATE	REVISIONS	BY
	07/17/98	Changed H To O	BJJ

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

COLLAR DETAILS
FOR BOX STRUCTURES
(SINGLE, DOUBLE, TRIPLE & QUADRUPLE)

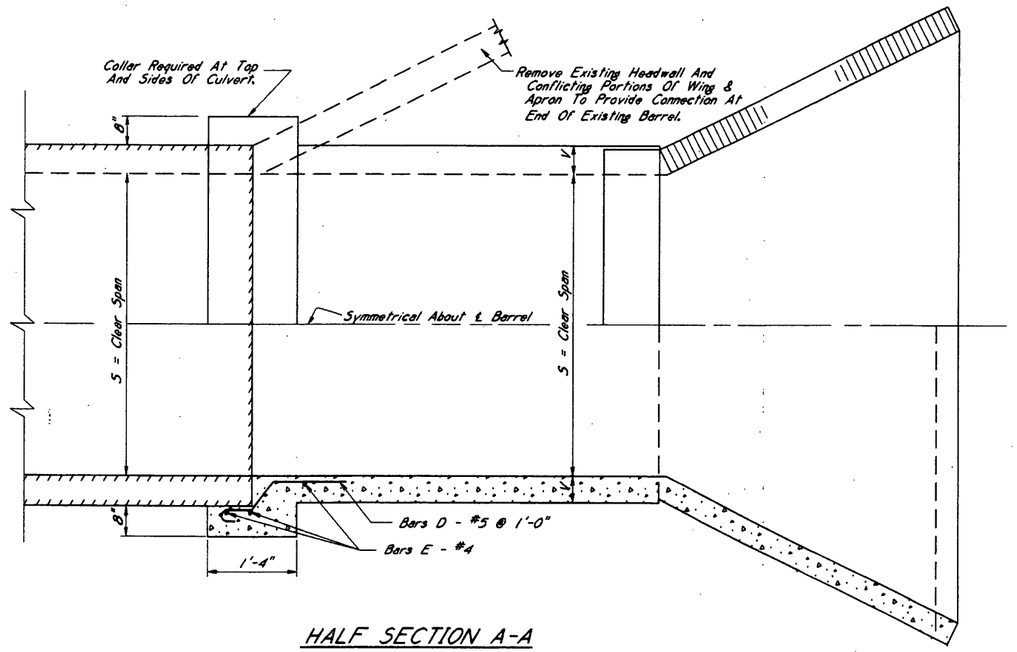
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DETAILED ALT	DATE 07-11-97	DATE 08-01-97	SHEET NUMBER 367



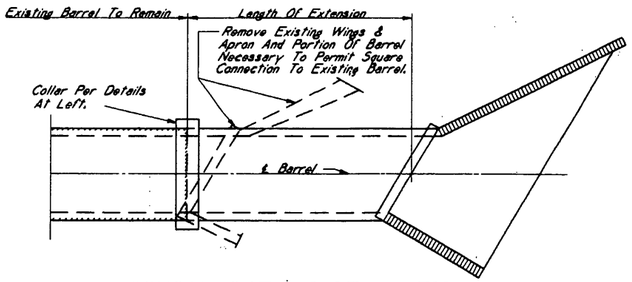
BAR BENDING DETAILS

Dimensions Are Out To Out.

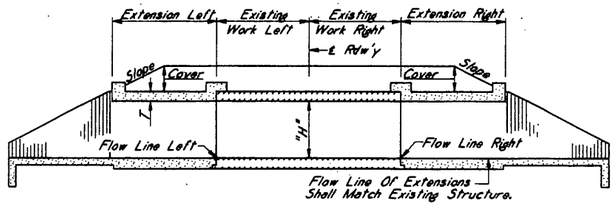
HALF TOP PLAN



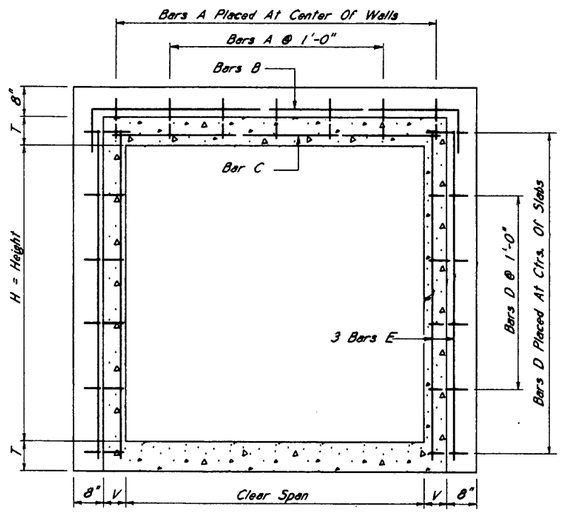
HALF SECTION A-A



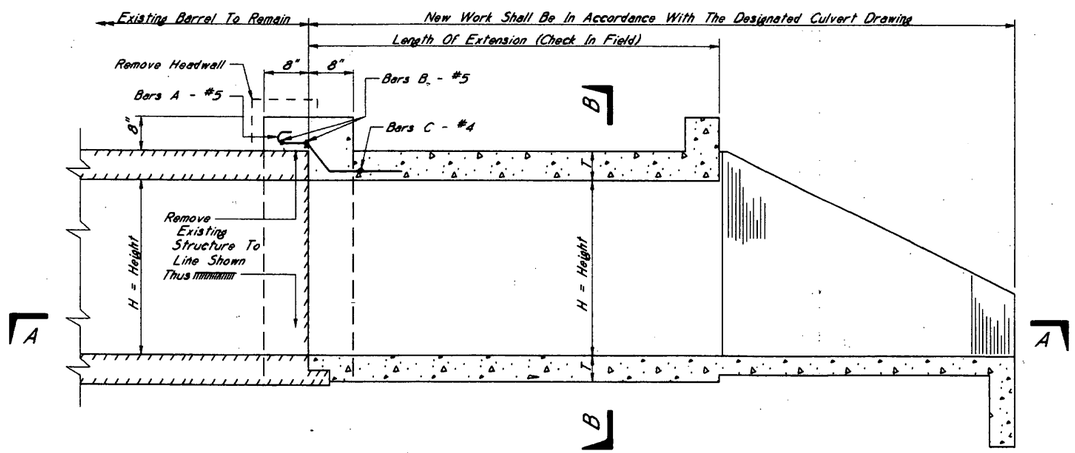
TYPICAL SKEW INSTALLATION



TYPICAL LONGITUDINAL SECTION



SECTION B-B



LONGITUDINAL SECTION

GENERAL NOTES:

This Drawing Is Supplementary To Basic Culvert Drawings Of The 125 And 130 Series And All Typical Details And General Notes Shown Thereon Shall Apply.
The Length Of Extensions For Each End Of The Culvert Shall Be Checked In The Field By The Project Engineer Before The Reinforcing Steel Is Ordered.
Bar List Of Reinforcing Steel Shall Be Submitted To The Project Engineer Prior To Fabrication. Placing Plan Shall Be Furnished When Extensions Are Skewed.
When The Length Of The Extension Is Less Than 10 Ft, The Vertical Construction Joints At The Junction Of The Barrel And Wings Shown On The Basic Culvert Drawings For Culvert Heights Of 8 Ft And Greater Shall Be Omitted.
This Drawing Is Detailed For A Single Cell Culvert And Double Cell Structure Shall Be Treated Similarly.

REVISIONS | BY

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

CULVERT DRAWING

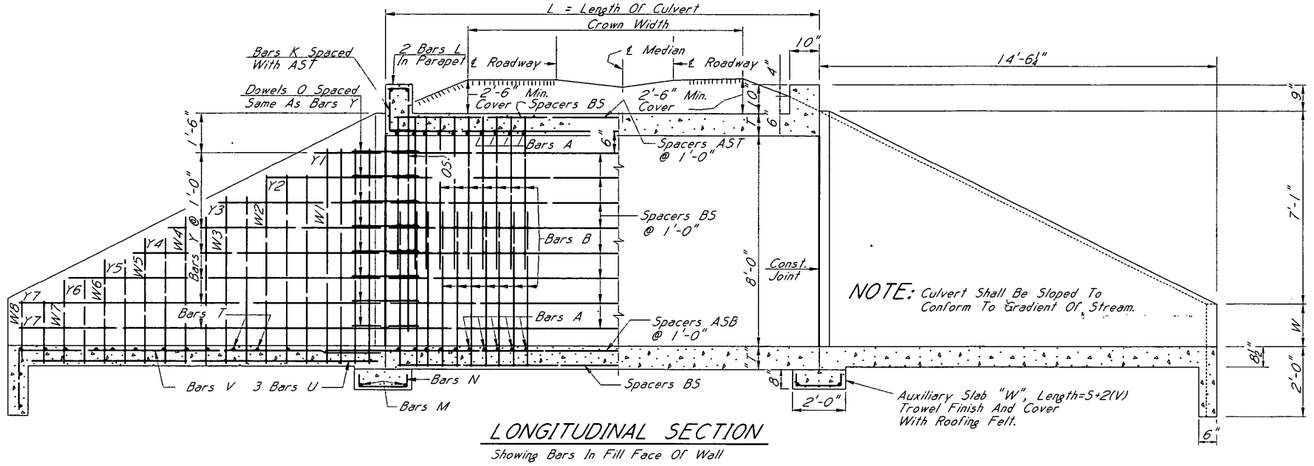
EXTENSION DETAILS FOR LENGTHENING EXISTING BOX CULVERTS

WORKING NUMBER ICX-1

SHEET NUMBER 369

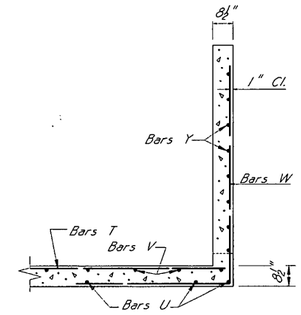
DATE | DESIGNED NA | CHECKED BJJ | ISSUED TMT

DETAILED ALT | DATE 07-11-97 | DATE 08-01-97

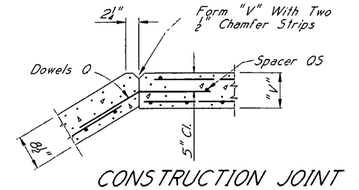


LONGITUDINAL SECTION

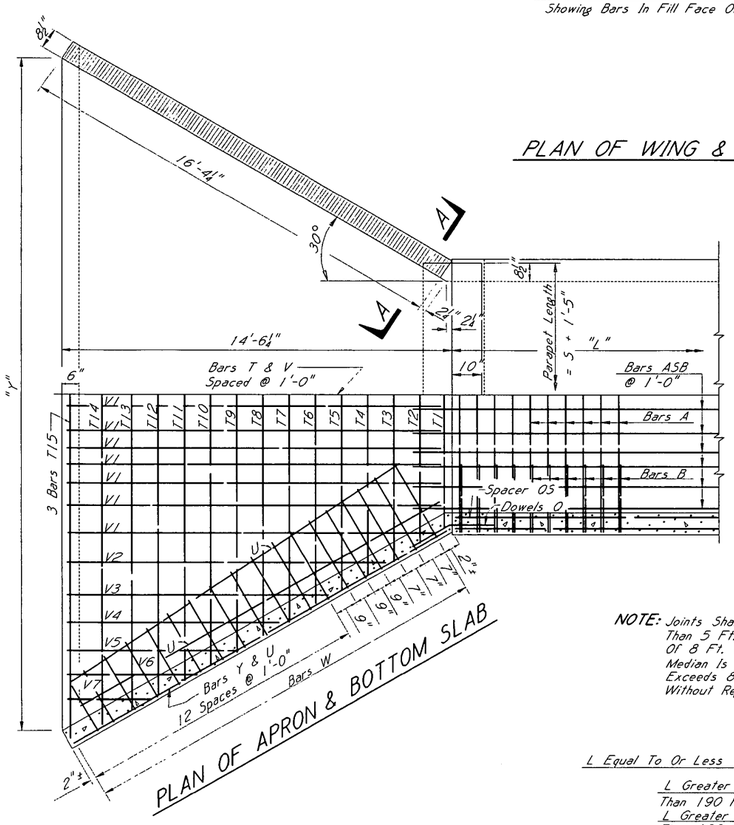
Showing Bars In Fill Face Of Wall



SECTION A-A

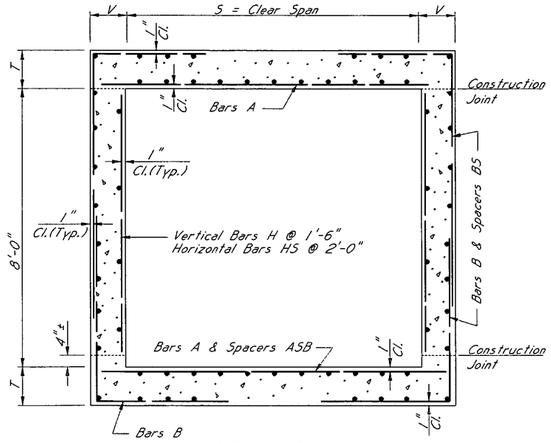


CONSTRUCTION JOINT AT WING



PLAN OF APRON & BOTTOM SLAB

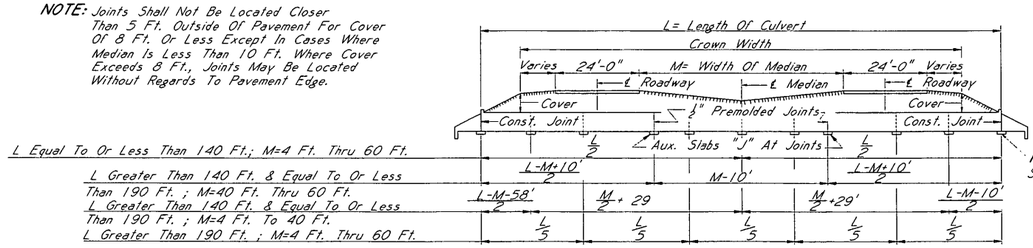
PLAN OF WING & PARAPET



CROSS SECTION

Bars AST Tie To Bars A In Top Slab.
Bars ASB Tie To Bars A In Bottom Slab.
Bars BS Tie To Bars B.

NOTE: Joints Shall Not Be Located Closer Than 5 Ft. Outside Of Pavement For Cover Of 8 Ft. Or Less Except In Cases Where Median Is Less Than 10 Ft. Where Cover Exceeds 8 Ft., Joints May Be Located Without Regards To Pavement Edge.



NOTE: Auxiliary Slabs "W" At Wings.

SIDE ELEVATION OF CULVERT

Showing ½" Joints And Auxiliary Slabs "J" Drawn For L = 150 Ft. & M = 60 Ft.

NOTE: Where Cover Is 8 Ft. Or Less And A Joint Occurs Within The Limits Of 5 Ft. Beyond Each Edge Of Pavement, Use Complete Collar At Joints Per Drawing ICJ-1 Or ICJS-1.

NOTE: See Drawing IBJL-1 For Additional Joint Locations.

CULVERT DIMENSIONS						ESTIMATED QUANTITIES					
						CULVERT(L=150 FT.)		PER LIN. FT. BARREL		/ AUX. SLAB "J"	
CLEAR SPAN	MAX. COVER	T	V	W	Y	CONC. cu. yd.	REINF. STEEL lb.	CONC. cu. yd.	REINF. STEEL lb.	CONC. cu. yd.	REINF. STEEL lb.
8'	11'	9"	8"	1'-9"	24'-6½"	163.41	25,289	0.9136	154.8	0.46	27
10'	7'	9½"	8½"	1'-9½"	26'-6½"	191.99	28,639	1.0892	176.2	0.56	32
12'	6'	10½"	9"	1'-10½"	28'-6½"	228.90	33,580	1.3194	207.7	0.67	38
14'	6'	1'-0"	10"	2'-0"	30'-6½"	281.66	41,042	1.6543	256.9	0.77	44
16'	6'	1'-1"	11"	2'-1"	32'-6½"	332.12	50,954	1.9743	321.5	0.88	49
18'	6'	1'-2"	1'-0"	2'-2"	34'-6½"	386.61	60,691	2.3210	385.3	0.99	55
20'	6'	1'-3"	1'-1"	2'-3"	36'-6½"	445.11	71,230	2.6944	454.1	1.09	61

DESIGN DATA:

Specifications. . . . A.A.S.H.O. 1969
Live Load. . . . . HS 20-44 Mod. For 2-24,000 lbs Axles
Unit Stresses. . . . fs=20,000 psi, fc= 1,200 psi, n=10.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BASIC CULVERT DRAWING

SINGLE CELL

HEIGHT 8 FT.

SPANS 8-20 FT.

REVISIONS BY DATE

DESIGNED NA CHECKED BJJ ISSUED TMT

DETAILED ALT DATE 07-11-97 DATE 08-01-97

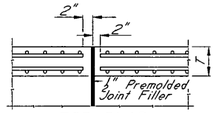
WORKING NUMBER IBS-8-2W

SHEET NUMBER 371.1

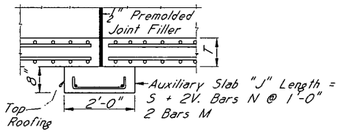
BAR LIST FOR BARREL (L= 150 FT.) PARAPETS & 4 AUXILIARY SLABS (2 "J's" & 2 "W's")

CLEAR SPAN	BARS "A"				BARS "B"				DOWELS "O" ~ #4		SPACERS "OS" ~ #4		SETS OF BARS "AST" #4 @		SETS OF BARS "ASB" #4 @		SETS OF BARS "BS" #4 @		BARS "H" #4		SETS OF BARS "HS" #4 @		BARS "K" #4		BARS "L" #4		BARS "M" #4		BARS "N" #4	
	NO.	SIZE	SPAC.	LGTH.	NO.	SIZE	SPAC.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.
8'	552	#6	6½"	9'-1"	1104	#5	6½"	8'-2"	32	2'-6"	4	7'-7"	8	152'-9"	8	155'-7"	28	152'-9"	204	7'-7"	8	152'-9"	16	4'-4"	4	9'-1"	8	9'-0"	40	2'-2"
10'	552	#6	6½"	11'-2"	1104	#5	6½"	8'-9"	32	2'-6"	4	7'-7"	10	152'-9"	10	155'-7"	32	152'-9"	204	7'-7"	8	152'-9"	20	4'-5"	4	11'-1"	8	11'-1"	48	2'-2"
12'	600	#6	6"	13'-3"	1200	#5	6"	9'-5"	32	2'-6"	4	7'-7"	12	152'-9"	12	155'-7"	32	152'-9"	204	7'-7"	8	152'-9"	24	4'-7"	4	13'-1"	8	13'-2"	56	2'-2"
14'	684	#6	5¼"	15'-5"	1368	#5	5¼"	10'-1"	32	2'-6"	4	7'-7"	14	152'-9"	14	155'-7"	36	152'-9"	204	7'-7"	8	152'-9"	28	4'-10"	4	15'-1"	8	15'-4"	64	2'-2"
16'	576	#7	6¼"	17'-7"	1152	#6	6¼"	10'-11"	32	2'-6"	4	7'-7"	16	152'-9"	16	155'-7"	36	152'-9"	204	7'-7"	8	152'-9"	32	5'-0"	4	17'-1"	8	17'-6"	72	2'-2"
18'	480	#7	7½"	19'-9"	960	#7	7½"	11'-9"	32	2'-6"	4	7'-7"	18	152'-9"	18	155'-7"	40	152'-9"	204	7'-7"	8	152'-9"	36	5'-2"	4	19'-1"	8	19'-8"	80	2'-2"
20'	534	#8	6¾"	21'-11"	1068	#7	6¾"	12'-5"	32	2'-6"	4	7'-7"	20	152'-9"	20	155'-7"	40	152'-9"	204	7'-7"	8	152'-9"	40	5'-4"	4	21'-1"	8	21'-10"	88	2'-2"

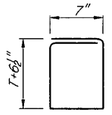
@ NOTE: The Number And Length Of Bars Are Listed For Sets Of Bars Composed Of Sections As Shown In Bar Bending Details See Elevation Of Culvert For Number Of Sections.



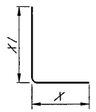
TOP SLAB
SIDE WALLS SIMILAR



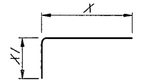
BOTTOM SLAB
DETAILS OF BARREL JOINT
& AUXILIARY SLAB "J"



BARS K - #4



BARS W - #4

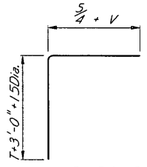


BARS V - #4

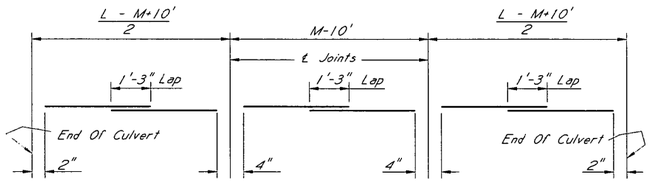
DOWELS O ~ #4



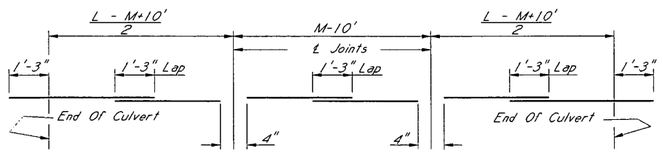
BARS N - #4



BARS B



ONE SET OF BARS AST & BS ~ #4



ONE SET OF BARS ASB ~ #4

BAR BENDING DETAILS

Dimensions Are Out To Out.

NOTE: The Diagrams For Bars ASB, AST And BS Are For A Culvert Length Greater Than 140 Ft. And Equal To Or Less Than 190 Ft. With A Median Of 40 Ft. Thru 60 Ft. For Conditions Other Than These, Use Sections As Shown On Elevation Of Culvert.

BAR LISTS FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 8'	10'	12'	14'	16'	18'	20'	DIM. X	DIM. X1	LENGTH
T1	#4	2	2	2	2	2	2	2			S+1'-0"
T2	#4	2	2	2	2	2	2	2			S+2'-2"
T3	#4	2	2	2	2	2	2	2			S+3'-4"
T4	#4	2	2	2	2	2	2	2			S+4'-6"
T5	#4	2	2	2	2	2	2	2			S+5'-8"
T6	#4	2	2	2	2	2	2	2			S+6'-10"
T7	#4	2	2	2	2	2	2	2			S+8'-0"
T8	#4	2	2	2	2	2	2	2			S+9'-2"
T9	#4	2	2	2	2	2	2	2			S+10'-4"
T10	#4	2	2	2	2	2	2	2			S+11'-6"
T11	#4	2	2	2	2	2	2	2			S+12'-8"
T12	#4	2	2	2	2	2	2	2			S+13'-10"
T13	#4	2	2	2	2	2	2	2			S+15'-0"
T14	#4	2	2	2	2	2	2	2			S+16'-2"
T15	#4	6	6	6	6	6	6	6			S+17'-0"
U	#4	12	12	12	12	12	12	12			16'-1"
V1	#4	20	24	28	32	36	40	44	14'-2"	1'-8"	15'-10"
V2	#4	4	4	4	4	4	4	4	12'-3"	1'-8"	13'-11"
V3	#4	4	4	4	4	4	4	4	10'-6"	1'-8"	12'-2"
V4	#4	4	4	4	4	4	4	4	8'-10"	1'-8"	10'-6"
V5	#4	4	4	4	4	4	4	4	7'-1"	1'-8"	8'-9"
V6	#4	4	4	4	4	4	4	4	5'-5"	1'-8"	7'-1"
V7	#4	4	4	4	4	4	4	4	3'-8"	1'-8"	5'-4"
W1	#5	16	16	16	16	16	16	16	4'-6"	W+6'-7"	W+11'-1"
W2	#5	12	12	12	12	12	12	12	4'-1"	W+5'-8"	W+9'-9"
W3	#5	8	8	8	8	8	8	8	3'-8"	W+4'-9"	W+8'-5"
W4	#4	8	8	8	8	8	8	8	3'-4"	W+3'-11"	W+7'-3"
W5	#4	8	8	8	8	8	8	8	3'-0"	W+3'-0"	W+6'-0"
W6	#4	8	8	8	8	8	8	8	2'-8"	W+2'-2"	W+4'-10"
W7	#4	8	8	8	8	8	8	8	2'-4"	W+1'-4"	W+3'-8"
W8	#4	8	8	8	8	8	8	8	2'-0"	W+6"	W+2'-6"
Y1	#4	4	4	4	4	4	4	4			2'-11"
Y2	#4	4	4	4	4	4	4	4			5'-3"
Y3	#4	4	4	4	4	4	4	4			7'-7"
Y4	#4	4	4	4	4	4	4	4			9'-10"
Y5	#4	4	4	4	4	4	4	4			12'-2"
Y6	#4	4	4	4	4	4	4	4			14'-5"
Y7	#4	8	8	8	8	8	8	8			16'-1"

GENERAL NOTES:

Specifications: Mississippi Standard Specifications For Road And Bridge Construction, 1990.
All Concrete Shall Be Class "B".
Concrete Surfaces Shall Be Finished In Accordance With Sub-Section 804.03.19.
Expansion Joint Material Shall Be Bituminous Fiber Type Unless Otherwise Noted.
All Exposed Corners Shall Be Chamfered ¾".
Reinforcing Steel Shall Be Placed 1" Clear Minimum From The Surface Of The Concrete And Shall Be Adequately Supported From The Forms.
All Bars Shall Be Accurately Spaced And Securely Wired At Each Intersection Before Placing Concrete.
Horizontal Construction Joints Shall Be Placed Only At The Locations Shown, And The Concrete Shall Be Allowed To Set A Minimum Period Of Two Hours Before Continuing The Pour.
Auxiliary Slabs "W" And Vertical Construction Joints At The Wings Shall Be Placed In All Culverts Regardless Of Length.
The Quantities Shown Will Be Used As A Basis For Final Payment Unless This Drawing Is Modified.

REVISIONS | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

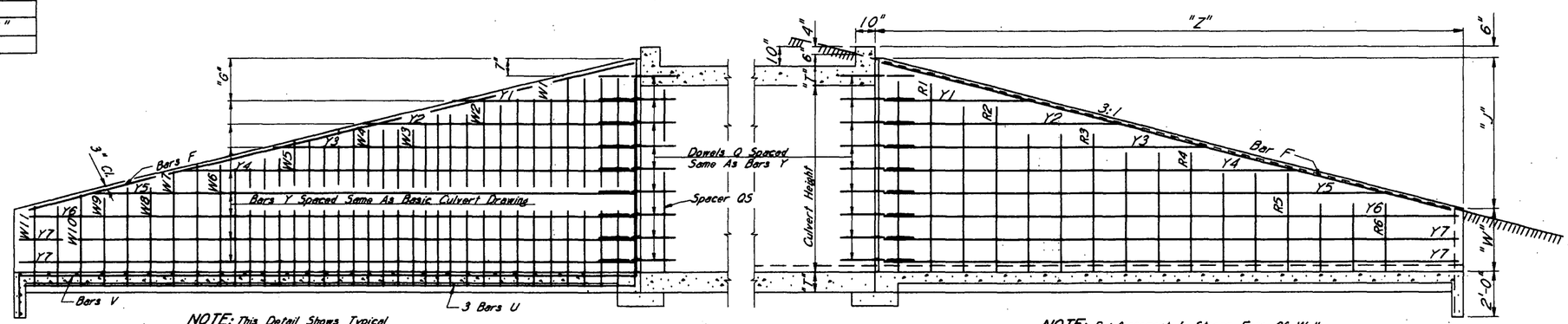
BASIC CULVERT DRAWING
SINGLE CELL
HEIGHT 8 FT.
SPANS 8-20 FT.

WORKING NUMBER IBS-8-2W

DESIGNED NA | CHECKED BJJ | ISSUED TMT
DETAILED ALT | DATE 07-11-97 | DATE 08-01-97

SHEET NUMBER 371.2

CULVERT HEIGHT "H"	"G"
6'	1'-9"
8'	1'-9"
10'	1'-11"
12'	2'-0"



NOTE: This Detail Shows Typical Scheme For Bars W And Y.

FILL SIDE

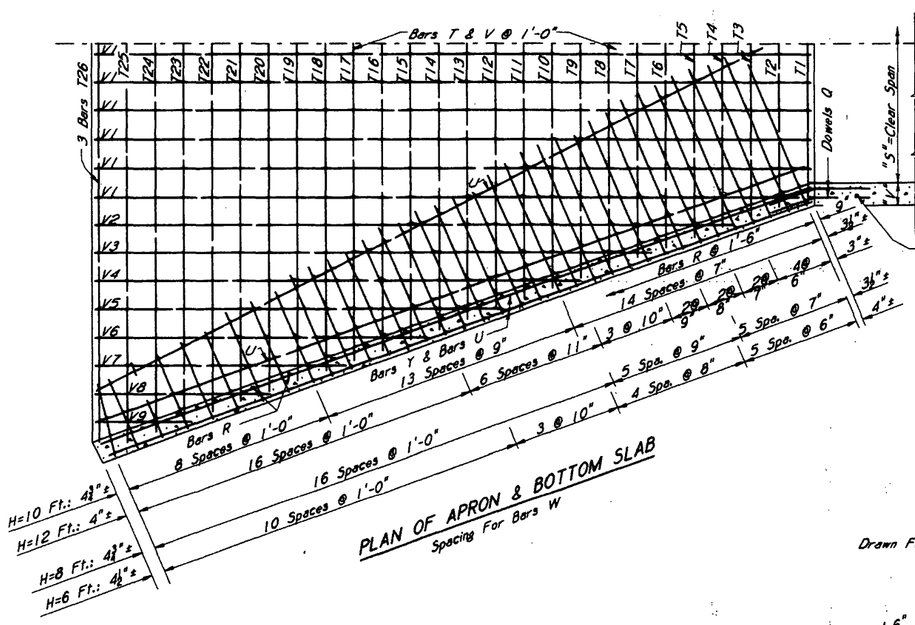
LONGITUDAL SECTION

Showing Bars In Both Faces Of Wall
Drawn For Single Cell 10' x 10' Culvert

NOTE: Reinforcement In Stream Face Of Wall Required For H= 8, 10 & 12 Ft. Only.

STREAM SIDE

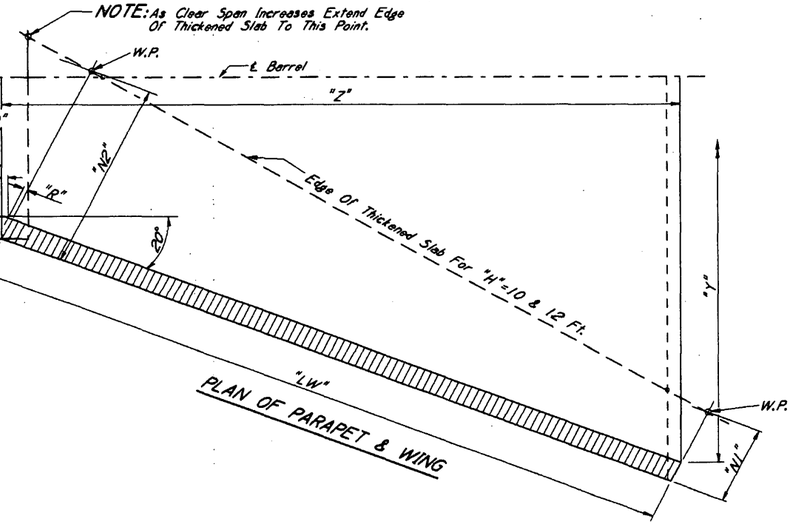
NOTE: This Detail Shows Typical Scheme For Bars T And V.



PLAN OF APRON & BOTTOM SLAB

Spacing For Bars W

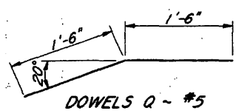
NOTE: As Clear Span Increases Extend Edge Of Thickened Slab To This Point.



PLAN OF PARAPET & WING

GENERAL PLAN

Drawn For Single Cell 10' x 10' Culvert



DOWELS Q ~ #5

BAR BENDING DETAILS

Dimensions Are Out To Out

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
WINGS WITH 3:1 SLOPE
FOR
BASIC CULVERT DRAWING
SINGLE CELL
HEIGHTS 6-12 FT.
SPANS 6-24 FT.

REVISIONS | BY | DATE

DESIGNED	NA	CHECKED	BJJ	ISSUED	TMT
DETAILED	ALT	DATE	07-11-97	DATE	08-01-97

WORKING NUMBER IWS-3

SHEET NUMBER 374

CULVERT DIMENSIONS

CULVERT HEIGHT "H"	"J"	"LW"	"N1"	"N2"	"R"	"Z"	"Y" CLEAR SPAN 6'	7'	8'	9'	10'	12'	14'	16'	18'	20'	22'	24'
10'	8'-4"	26'-7 1/2"	2'-11"	6'-6"	1 3/8"	25'-3 3/8"					28'-3 3/8"	30'-3 3/8"	32'-3 3/8"	34'-3 3/8"	36'-3 3/8"	38'-3 3/8"	40'-3 3/8"	
12'	9'-7"	30'-7 1/2"	3'-3"	7'-0"	1 3/8"	29'-0 3/8"						33'-0 3/8"	35'-0 3/8"	37'-0 3/8"	39'-0 3/8"	41'-0 3/8"	43'-0 3/8"	45'-0 3/8"

ESTIMATED QUANTITIES-CULVERT (L=150 FT.)

CULVERT HEIGHT "H"	CLEAR SPAN 6' CONC. cu yd.	6' REINF. STEEL lb.	7' CONC. cu yd.	7' REINF. STEEL lb.	8' CONC. cu yd.	8' REINF. STEEL lb.	9' CONC. cu yd.	9' REINF. STEEL lb.	10' CONC. cu yd.	10' REINF. STEEL lb.	12' CONC. cu yd.	12' REINF. STEEL lb.	14' CONC. cu yd.	14' REINF. STEEL lb.	16' CONC. cu yd.	16' REINF. STEEL lb.	18' CONC. cu yd.	18' REINF. STEEL lb.	20' CONC. cu yd.	20' REINF. STEEL lb.	22' CONC. cu yd.	22' REINF. STEEL lb.	24' CONC. cu yd.	24' REINF. STEEL lb.
10'									254.22	33,861	288.33	38,823	326.12	47,936	378.95	58,275	435.83	69,729	502.54	82,504	573.13	97,852		
12'											346.82	47,412	378.50	55,883	420.53	61,540	479.61	72,629	542.69	82,907	621.36	97,045	706.08	110,084

HEIGHT = 12 FT.

BAR LISTS FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 12'	14'	16'	18'	20'	22'	24'	DIM. X	DIM. X1	LENGTH
T1	#4	2	2	2	2	2	2	2			S+1'-6"
T2	#4	2	2	2	2	2	2	2			S+2'-3"
T3	#4	2	2	2	2	2	2	2			S+3'-0"
T4	#4	2	2	2	2	2	2	2			S+3'-9"
T5	#4	2	2	2	2	2	2	2			S+4'-6"
T6	#4	2	2	2	2	2	2	2			S+5'-3"
T7	#4	2	2	2	2	2	2	2			S+6'-0"
T8	#4	2	2	2	2	2	2	2			S+6'-9"
T9	#4	2	2	2	2	2	2	2			S+7'-6"
T10	#4	2	2	2	2	2	2	2			S+8'-3"
T11	#4	2	2	2	2	2	2	2			S+9'-0"
T12	#4	2	2	2	2	2	2	2			S+9'-9"
T13	#4	2	2	2	2	2	2	2			S+10'-6"
T14	#4	2	2	2	2	2	2	2			S+11'-3"
T15	#4	2	2	2	2	2	2	2			S+12'-0"
T16	#4	2	2	2	2	2	2	2			S+12'-9"
T17	#4	2	2	2	2	2	2	2			S+13'-6"
T18	#4	2	2	2	2	2	2	2			S+14'-3"
T19	#4	2	2	2	2	2	2	2			S+15'-0"
T20	#4	2	2	2	2	2	2	2			S+15'-9"
T21	#4	2	2	2	2	2	2	2			S+16'-6"
T22	#4	2	2	2	2	2	2	2			S+17'-2"
T23	#4	2	2	2	2	2	2	2			S+17'-11"
T24	#4	2	2	2	2	2	2	2			S+18'-8"
T25	#4	2	2	2	2	2	2	2			S+19'-5"
T26	#4	2	2	2	2	2	2	2			S+20'-2"
T27	#4	2	2	2	2	2	2	2			S+20'-11"
T28	#4	2	2	2	2	2	2	2			S+21'-8"
T29	#4	6	6	6	6	6	6	6			S+21'-8"
U	#4	12	12	12	12	12	12	12			30'-3"
V1	#4	28	32	36	40	44	48	52	28'-8"	1'-8"	30'-4"
V2	#4	4	4	4	4	4	4	4	26'-7"	1'-8"	28'-3"
V3	#4	4	4	4	4	4	4	4	23'-10"	1'-8"	25'-6"
V4	#4	4	4	4	4	4	4	4	21'-1"	1'-8"	22'-9"
V5	#4	4	4	4	4	4	4	4	18'-4"	1'-8"	20'-0"
V6	#4	4	4	4	4	4	4	4	15'-7"	1'-8"	17'-3"
V7	#4	4	4	4	4	4	4	4	12'-10"	1'-8"	14'-6"
V8	#4	4	4	4	4	4	4	4	10'-1"	1'-8"	11'-9"
V9	#4	4	4	4	4	4	4	4	7'-4"	1'-8"	9'-0"
V10	#4	4	4	4	4	4	4	4	4'-7"	1'-8"	6'-3"
W1	#7	20	20	20	20	20	20	20	6'-5"	W+9'-6"	W+15'-11"
W2	#7	20	20	20	20	20	20	20	6'-0"	W+8'-6"	W+14'-6"
W3	#7	12	12	12	12	12	12	12	5'-8"	W+7'-8"	W+13'-4"
W4	#7	12	12	12	12	12	12	12	5'-4"	W+6'-10"	W+12'-2"
W5	#6	12	12	12	12	12	12	12	5'-0"	W+6'-0"	W+11'-0"
W6	#6	12	12	12	12	12	12	12	4'-8"	W+5'-2"	W+9'-10"
W7	#5	12	12	12	12	12	12	12	4'-3"	W+4'-2"	W+8'-5"
W8	#5	12	12	12	12	12	12	12	3'-11"	W+3'-3"	W+7'-2"
W9	#4	12	12	12	12	12	12	12	3'-7"	W+2'-3"	W+5'-10"
W10	#4	8	8	8	8	8	8	8	3'-4"	W+1'-7"	W+4'-11"
W11	#4	8	8	8	8	8	8	8	3'-1"	W+1'-0"	W+4'-1"
W12	#4	4	4	4	4	4	4	4	3'-0"	W+8"	W+3'-8"
Y1	#4	8	8	8	8	8	8	8			5'-8"
Y2	#4	8	8	8	8	8	8	8			9'-8"
Y3	#4	8	8	8	8	8	8	8			13'-8"
Y4	#4	8	8	8	8	8	8	8			17'-8"
Y5	#4	8	8	8	8	8	8	8			21'-8"
Y6	#4	8	8	8	8	8	8	8			25'-8"
Y7	#4	8	8	8	8	8	8	8			29'-8"
Y8	#4	24	24	24	24	24	24	24			30'-3"

HEIGHT = 10 FT.

BAR LISTS FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 10'	12'	14'	16'	18'	20'	22'	DIM. X	DIM. X1	LENGTH
T1	#4	2	2	2	2	2	2	2			S+1'-2"
T2	#4	2	2	2	2	2	2	2			S+1'-8"
T3	#4	2	2	2	2	2	2	2			S+2'-5"
T4	#4	2	2	2	2	2	2	2			S+3'-2"
T5	#4	2	2	2	2	2	2	2			S+3'-11"
T6	#4	2	2	2	2	2	2	2			S+4'-8"
T7	#4	2	2	2	2	2	2	2			S+5'-5"
T8	#4	2	2	2	2	2	2	2			S+6'-2"
T9	#4	2	2	2	2	2	2	2			S+6'-11"
T10	#4	2	2	2	2	2	2	2			S+7'-8"
T11	#4	2	2	2	2	2	2	2			S+8'-5"
T12	#4	2	2	2	2	2	2	2			S+9'-2"
T13	#4	2	2	2	2	2	2	2			S+9'-9"
T14	#4	2	2	2	2	2	2	2			S+10'-6"
T15	#4	2	2	2	2	2	2	2			S+11'-3"
T16	#4	2	2	2	2	2	2	2			S+12'-0"
T17	#4	2	2	2	2	2	2	2			S+12'-9"
T18	#4	2	2	2	2	2	2	2			S+13'-6"
T19	#4	2	2	2	2	2	2	2			S+14'-3"
T20	#4	2	2	2	2	2	2	2			S+15'-0"
T21	#4	2	2	2	2	2	2	2			S+15'-9"
T22	#4	2	2	2	2	2	2	2			S+16'-6"
T23	#4	2	2	2	2	2	2	2			S+17'-3"
T24	#4	2	2	2	2	2	2	2			S+17'-11"
T25	#4	2	2	2	2	2	2	2			S+18'-7"
T26	#4	2	2	2	2	2	2	2			S+18'-10"
U	#4	12	12	12	12	12	12	12			26'-3"
V1	#4	24	28	32	36	40	44	48	24'-11"	1'-8"	26'-7"
V2	#4	4	4	4	4	4	4	4	22'-7"	1'-8"	24'-3"
V3	#4	4	4	4	4	4	4	4	19'-10"	1'-8"	21'-6"
V4	#4	4	4	4	4	4	4	4	17'-1"	1'-8"	18'-9"
V5	#4	4	4	4	4	4	4	4	14'-4"	1'-8"	16'-0"
V6	#4	4	4	4	4	4	4	4	11'-7"	1'-8"	13'-3"
V7	#4	4	4	4	4	4	4	4	8'-10"	1'-8"	10'-6"
V8	#4	4	4	4	4	4	4	4	6'-1"	1'-8"	7'-9"
V9	#4	4	4	4	4	4	4	4	3'-4"	1'-8"	5'-0"
W1	#6	20	20	20	20	20	20	20	5'-10"	W+8'-1"	W+13'-11"
W2	#6	20	20	20	20	20	20	20	5'-5"	W+7'-2"	W+12'-7"
W3	#5	20	20	20	20	20	20	20	5'-0"	W+6'-3"	W+11'-3"
W4	#5	12	12	12	12	12	12	12	4'-8"	W+5'-7"	W+10'-3"
W5	#5	12	12	12	12	12	12	12	4'-5"	W+4'-11"	W+9'-4"
W6	#4	12	12	12	12	12	12	12	4'-2"	W+4'-1"	W+8'-3"
W7	#4	12	12	12	12	12	12	12	3'-10"	W+3'-5"	W+7'-3"
W8	#4	12	12	12	12	12	12	12	3'-5"	W+2'-7"	W+6'-0"
W9	#4	12	12	12	12	12	12	12	3'-2"	W+2'-0"	W+5'-2"
W10	#4	8	8	8	8	8	8	8	2'-11"	W+1'-4"	W+4'-3"
W11	#4	8	8	8	8	8	8	8	2'-8"	W+8"	W+3'-4"
Y1	#4	8	8	8	8	8	8	8			5'-4"
Y2	#4	8	8	8	8	8	8	8			9'-4"
Y3	#4	8	8	8	8	8	8	8			13'-4"
Y4	#4	8	8	8	8	8	8	8			17'-4"
Y5	#4	8	8	8	8	8	8	8			21'-4"
Y6	#4	8	8	8	8	8	8	8			25'-4"
Y7	#4	16	16	16	16	16	16	16			26'-3"

Barry Kolar

ADDITIONAL BAR LIST FOR WINGS & APRONS

BAR	SIZE	H = 10 FT. NO.	H = 10 FT. LENGTH	H = 12 FT. NO.	H = 12 FT. LENGTH
F	#4	8	27'-6"	8	31'-8"
Q	#5	72	3'-0"	88	3'-0"
Q5	#4	4	9'-7"	4	11'-7"
R1	#4	8	W+7'-1"	8	W+8'-4"
R2	#4	8	W+6'-2"	8	W+7'-5"
R3	#4	12	W+4'-9"	12	W+6'-0"
R4	#4	12	W+3'-4"	12	W+4'-7"
R5	#4	12	W+1'-11"	12	W+3'-2"
R6	#4	12	W+6"	12	W+1'-9"
R7	#4			12	W+4"

REVISIONS	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
WINGS WITH 3:1 SLOPE
FOR
BASIC CULVERT DRAWING
SINGLE CELL
HEIGHTS 6-12 FT.
SPANS 6-24 FT.

WORKING NUMBER IWS-3

DESIGNED NA | CHECKED BJJ | ISSUED TMT
DETAILED MJC | DATE 07-11-97 | DATE 08-01-97

SHEET NUMBER 375.1

ESTIMATED QUANTITIES-CULVERT (L=150 FT.)

CLEAR SPAN

CULVERT HEIGHT "H"	6'		7'		8'		9'		10'		12'		14'		16'		18'		20'		22'		24'	
	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.	CONC. cu yd.	REINF. STEEL lb.
6'	107.46	14,893			135.35	19,617			167.07	25,896	202.64	31,851	253.05	40,088	297.38	46,586	353.30	58,125	413.39	68,544				
8'					174.41	26,894			203.83	30,286	241.63	35,276	295.28	42,787	346.61	52,747	401.98	62,531	461.34	73,117				

CULVERT DIMENSIONS

CULVERT HEIGHT "H"	"J"	"LW"	"N1"	"N2"	"R"	"Z"	"Y" CLEAR SPAN 6'	7'	8'	9'	10'	12'	14'	16'	18'	20'	22'	24'
6'	5'-9"	18'-4 8/16"			1 1/2"	17'-5 3/8"	18'-7 1/2"		20'-7 1/2"		22'-7 1/2"	24'-7 1/2"	26'-7 1/2"	28'-7 1/2"	30'-7 1/2"	32'-7 1/2"		
8'	7'-4"	23'-4 8/16"			1 1/2"	22'-2 5/8"			24'-1 3/8"		26'-1 3/8"	28'-1 3/8"	30'-1 3/8"	32'-1 3/8"	34'-1 3/8"	36'-1 3/8"		

⚠ HEIGHT = 8 FT.

BAR LISTS FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 8'	10'	12'	14'	16'	18'	20'	DIM. X	DIM. X1	LENGTH
T1	#4	2	2	2	2	2	2	2			S+10"
T2	#4	2	2	2	2	2	2	2			S+1'-5"
T3	#4	2	2	2	2	2	2	2			S+2'-0"
T4	#4	2	2	2	2	2	2	2			S+2'-11"
T5	#4	2	2	2	2	2	2	2			S+3'-8"
T6	#4	2	2	2	2	2	2	2			S+4'-5"
T7	#4	2	2	2	2	2	2	2			S+5'-2"
T8	#4	2	2	2	2	2	2	2			S+5'-11"
T9	#4	2	2	2	2	2	2	2			S+6'-7"
T10	#4	2	2	2	2	2	2	2			S+7'-4"
T11	#4	2	2	2	2	2	2	2			S+8'-1"
T12	#4	2	2	2	2	2	2	2			S+8'-10"
T13	#4	2	2	2	2	2	2	2			S+9'-7"
T14	#4	2	2	2	2	2	2	2			S+10'-4"
T15	#4	2	2	2	2	2	2	2			S+11'-1"
T16	#4	2	2	2	2	2	2	2			S+11'-10"
T17	#4	2	2	2	2	2	2	2			S+12'-7"
T18	#4	2	2	2	2	2	2	2			S+13'-4"
T19	#4	2	2	2	2	2	2	2			S+14'-1"
T20	#4	2	2	2	2	2	2	2			S+14'-10"
T21	#4	2	2	2	2	2	2	2			S+15'-7"
T22	#4	2	2	2	2	2	2	2			S+16'-3"
T23	#4	6	6	6	6	6	6	6			S+16'-6"
U	#4	12	12	12	12	12	12	12			23'-0"
V1	#4	20	24	28	32	36	40	44	21'-11"	1'-8"	23'-7"
V2	#4	4	4	4	4	4	4	4	19'-2"	1'-8"	20'-10"
V3	#4	4	4	4	4	4	4	4	16'-5"	1'-8"	18'-1"
V4	#4	4	4	4	4	4	4	4	13'-8"	1'-8"	15'-4"
V5	#4	4	4	4	4	4	4	4	10'-11"	1'-8"	12'-7"
V6	#4	4	4	4	4	4	4	4	8'-2"	1'-8"	9'-10"
V7	#4	4	4	4	4	4	4	4	5'-5"	1'-8"	7'-1"
W1	#5	24	24	24	24	24	24	24	4'-6"	W+6'-9"	W+11'-3"
W2	#5	20	20	20	20	20	20	20	4'-1"	W+5'-7"	W+9'-8"
W3	#5	12	12	12	12	12	12	12	3'-7"	W+4'-7"	W+8'-2"
W4	#4	12	12	12	12	12	12	12	3'-3"	W+3'-7"	W+6'-10"
W5	#4	12	12	12	12	12	12	12	2'-11"	W+2'-7"	W+5'-6"
W6	#4	12	12	12	12	12	12	12	2'-7"	W+1'-7"	W+4'-2"
W7	#4	8	8	8	8	8	8	8	2'-3"	W+1'-0"	W+3'-3"
W8	#4	8	8	8	8	8	8	8	2'-0"	W+5"	W+2'-5"
Y1	#4	8	8	8	8	8	8	8			4'-10"
Y2	#4	8	8	8	8	8	8	8			8'-0"
Y3	#4	8	8	8	8	8	8	8			11'-2"
Y4	#4	8	8	8	8	8	8	8			14'-4"
Y5	#4	8	8	8	8	8	8	8			17'-6"
Y6	#4	8	8	8	8	8	8	8			20'-8"
Y7	#4	16	16	16	16	16	16	16			23'-0"

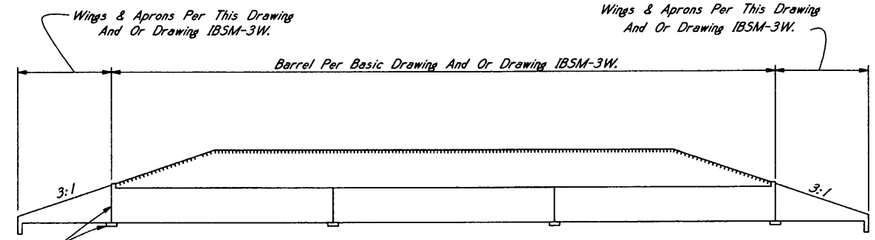
⚠ HEIGHT = 6 FT.

BAR LISTS FOR WINGS & APRONS

BAR	SIZE	NO. REQUIRED SPAN 6'	8'	10'	12'	14'	16'	18'	20'	DIM. X	DIM. X1	LENGTH
T1	#4	2	2	2	2	2	2	2	2			S+8"
T2	#4	2	2	2	2	2	2	2	2			S+1'-5"
T3	#4	2	2	2	2	2	2	2	2			S+2'-2"
T4	#4	2	2	2	2	2	2	2	2			S+2'-11"
T5	#4	2	2	2	2	2	2	2	2			S+3'-8"
T6	#4	2	2	2	2	2	2	2	2			S+4'-5"
T7	#4	2	2	2	2	2	2	2	2			S+5'-2"
T8	#4	2	2	2	2	2	2	2	2			S+5'-11"
T9	#4	2	2	2	2	2	2	2	2			S+6'-8"
T10	#4	2	2	2	2	2	2	2	2			S+7'-5"
T11	#4	2	2	2	2	2	2	2	2			S+8'-2"
T12	#4	2	2	2	2	2	2	2	2			S+8'-11"
T13	#4	2	2	2	2	2	2	2	2			S+9'-7"
T14	#4	2	2	2	2	2	2	2	2			S+10'-4"
T15	#4	2	2	2	2	2	2	2	2			S+11'-1"
T16	#4	2	2	2	2	2	2	2	2			S+11'-10"
T17	#4	2	2	2	2	2	2	2	2			S+12'-7"
T18	#4	6	6	6	6	6	6	6	6			S+13'-0"
U	#4	12	12	12	12	12	12	12	12			18'-0"
V1	#4	16	20	24	28	32	36	40	44	17'-1"	1'-8"	18'-9"
V2	#4	4	4	4	4	4	4	4	4	14'-1"	1'-8"	15'-9"
V3	#4	4	4	4	4	4	4	4	4	11'-4"	1'-8"	13'-0"
V4	#4	4	4	4	4	4	4	4	4	8'-7"	1'-8"	10'-3"
V5	#4	4	4	4	4	4	4	4	4	5'-10"	1'-8"	7'-6"
V6	#4	4	4	4	4	4	4	4	4	3'-1"	1'-8"	4'-9"
W1	#4	20	20	20	20	20	20	20	20	4'-0"	W+5'-4"	W+9'-4"
W2	#4	12	12	12	12	12	12	12	12	3'-8"	W+4'-9"	W+8'-5"
W3	#4	12	12	12	12	12	12	12	12	3'-5"	W+4'-0"	W+7'-5"
W4	#4	12	12	12	12	12	12	12	12	3'-0"	W+3'-2"	W+6'-2"
W5	#4	12	12	12	12	12	12	12	12	2'-8"	W+2'-3"	W+4'-11"
W6	#4	12	12	12	12	12	12	12	12	2'-4"	W+1'-4"	W+3'-8"
W7	#4	12	12	12	12	12	12	12	12	2'-0"	W+5"	W+2'-5"
Y1	#4	4	4	4	4	4	4	4	4			4'-10"
Y2	#4	4	4	4	4	4	4	4	4			8'-1"
Y3	#4	4	4	4	4	4	4	4	4			11'-3"
Y4	#4	4	4	4	4	4	4	4	4			14'-5"
Y5	#4	4	4	4	4	4	4	4	4			17'-7"
Y6	#4	4	4	4	4	4	4	4	4			18'-0"

ADDITIONAL BAR LIST FOR WINGS & APRONS

BAR	SIZE	H = 6 FT. NO.	H = 6 FT. LENGTH	H = 8 FT. NO.	H = 8 FT. LENGTH
F	#4	8	18'-10"	8	24'-2"
O	#5	28	3'-0"	72	3'-0"
OS	#4	4	5'-7"	4	7'-7"
R1	#4			8	W+6'-1"
R2	#4			12	W+4'-8"
R3	#4			12	W+3'-3"
R4	#4			12	W+1'-10"
R5	#4			12	W+5"



SIDE ELEVATION OF CULVERT

See Drawing No. IBJL-1 For Joint Locations

NOTE:

Auxiliary Slabs "W" And Vertical Construction Joints At The Wings Are Required Only Where Called For By The Basic Drawing And Auxiliary Slabs "W" Are Not To Be Used For Culvert Heights Of Less Than 8 Feet.

GENERAL NOTES:

This Drawing Shows The General Details Necessary To Modify A Single Cell Culvert For Wings With 3:1 Slope.

All Governing Dimensions, Reinforcing Details And General Requirements Of Basic Culvert Drawing Shall Apply Except As Specifically Modified By This Drawing And Or Drawing IBSM-3W.

Barrel Details On Basic Culvert Drawing Shall Be Used With Cover From 2'-6" To The Maximum Shown On Basic Culvert Drawing. With Cover Less Than 2'-6" And More Than Maximum Shown On Basic Culvert Drawing, Use Drawing IBSM-3W For Barrel Details.

Quantities Shown On This Sheet Are For Culverts With Basic Culvert Barrels And Wings With 3:1 Slope Per This Drawing. Quantities Shown On Drawing IBSM-3W Are For Culverts With Barrels Per Drawing IBSM-3W And Wings With 3:1 Slope Per This Drawing And Drawing IBSM-3W. Quantities Not Shown On This Sheet And Or Drawing IBSM-3W Are Same As Shown On Basic Culvert Drawing.

Quantities Shown On This Sheet Are For Complete Culvert Of The Length Noted And Include Barrel, Parapets, Wings, Aprons, Cut-Off Walls, Auxiliary Slabs "W" Where Required And Two Auxiliary Slabs "J".

Quantities Shown On This Sheet Will Be Used As A Basis For Final Payment For Culverts Constructed In Accordance With This Drawing And Basic Culvert Drawing.

BY	DATE	REVISIONS
BJJ	2-17-98	Revised HEIGHT Dimensions.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

WINGS WITH 3:1 SLOPE
FOR
BASIC CULVERT DRAWING
SINGLE CELL
HEIGHTS 6-12 FT.
SPANS 6-24 FT.

DESIGNED NA | CHECKED BJJ | ISSUED TMT
DETAILED MJC | DATE 07-11-97 | DATE 08-01-97

WORKING NUMBER IWS-3

SHEET NUMBER 375.2

GENERAL DATA & ESTIMATED QUANTITIES FOR BOX CULVERTS UNDER HIGH COVER

LESS THAN 2'-6" COVER ~ L=150 FT.

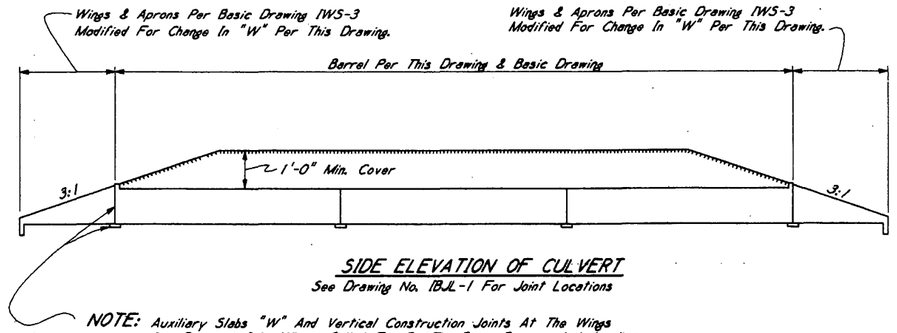
AREA OF OPENING sq. ft.	SIZE OF CULVERT ft. x ft. "S"x"H"	"T"	"V"	"W"	BARS "A1" SIZE	BARS "A1" SPACING	BARS "A2" SIZE	BARS "A2" SPACING	BARS "B" SIZE	BARS "B" SPACING	ESTIMATED QUANTITIES TOTAL CONC. cu yd.	TOTAL REINF. STEEL lb.	PER LIN. FT. BARREL CONC. cu yd.	PER LIN. FT. BARREL REINF. STEEL lb.	1 AUX. SLAB "J" CONC. cu yd.	1 AUX. SLAB "J" REINF. STEEL lb.
36	6x6	7½"	7"	1'-2½"	#7	1'-4"	#7	1'-4"	#6	7"	107.46	24,232	0.5910	148.70	0.35	21
48	8x6	8½"	7½"	1'-3½"	#7	1'-4"	#7	1'-4"	#6	7"	135.35	27,665	0.7631	170.57	0.46	26
60	10x6	10"	8½"	1'-5"	#8	1'-4"	#8	1'-4"	#7	8"	175.92	37,495	1.0195	235.30	0.56	32
72	12x6	10"	8½"	1'-5"	#8	1'-4"	#8	1'-4"	#7	8"	196.36	41,365	1.1430	260.12	0.66	38
84	14x6	11½"	10"	1'-6½"	#8	1'-2"	#8	1'-2"	#7	7"	249.42	51,691	1.4825	326.91	0.77	44
96	16x6	1'-1"	11½"	1'-8"	#9	1'-4"	#9	1'-4"	#8	8"	308.74	63,079	1.8637	402.74	0.88	50
108	18x6	1'-2½"	1'-1"	1'-9½"	#9	1'-2"	#9	1'-2"	#8	6"	374.31	82,725	2.2865	531.78	1.00	55
120	20x6	1'-3½"	1'-2"	1'-10½"	#10	1'-4"	#10	1'-4"	#10	8"	431.68	102,396	2.6553	662.72	1.10	61
64	8x8	9"	8"	1'-9"	#6	11"	#6	11"	#6	6½"	174.41	33,785	0.9136	200.79	0.46	27
80	10x8	9½"	8"	1'-9½"	#6	11"	#6	11"	#6	6½"	199.40	37,613	1.0597	225.06	0.56	32
96	12x8	11"	9"	1'-11"	#7	1'-0"	#7	1'-0"	#6	6"	248.03	46,176	1.3611	280.42	0.67	38
112	14x8	1'-0½"	10½"	2'-0½"	#8	1'-2"	#8	1'-2"	#7	6½"	307.40	58,797	1.7338	363.17	0.78	44
128	16x8	1'-2"	11½"	2'-2"	#8	1'-0"	#8	1'-0"	#8	7½"	368.22	71,924	2.1162	449.28	0.88	50
144	18x8	1'-3"	1'-1"	2'-3"	#8	11"	#8	11"	#8	6½"	430.59	85,897	2.5092	542.12	1.00	55
160	20x8	1'-4½"	1'-2½"	2'-4½"	#8	10"	#8	10"	#8	5½"	507.66	103,667	2.9992	658.46	1.11	61
100	10x10	9½"	9"	2'-3½"	#7	1'-2"	#7	1'-2"	#6	6"	238.01	43,978	1.2300	256.53	0.57	32
120	12x10	11"	10"	2'-11"	#7	1'-0"	#7	1'-0"	#7	7"	288.34	54,124	1.5453	322.43	0.67	38
140	14x10	1'-0½"	11"	3'-0½"	#7	10"	#7	10"	#7	6"	344.80	67,197	1.9007	408.57	0.78	44
160	16x10	1'-2"	1'-0"	3'-2"	#8	1'-0"	#8	1'-0"	#8	7"	407.33	79,324	2.2963	487.12	0.89	50
180	18x10	1'-4"	1'-1½"	3'-4"	#9	1'-1"	#9	1'-1"	#8	6½"	491.33	94,336	2.8334	588.09	1.00	56
200	20x10	1'-5"	1'-3"	3'-5"	#9	1'-0"	#9	1'-0"	#8	5½"	562.44	112,523	3.2870	706.45	1.11	61
220	22x10	1'-6"	1'-4"	3'-6"	#9	11"	#9	11"	#9	6"	631.75	134,176	3.7284	849.34	1.22	67
144	12x12	11½"	10½"	3'-8½"	#7	11"	#7	11"	#7	6½"	340.38	63,119	1.7539	368.01	0.68	38
168	14x12	1'-2"	11½"	3'-11"	#8	1'-0"	#8	1'-0"	#7	6"	415.39	75,713	2.2273	449.40	0.79	44
192	16x12	1'-3"	1'-0"	4'-0"	#8	11"	#8	11"	#8	7"	467.96	88,313	2.5556	531.12	0.89	50
216	18x12	1'-4"	1'-1½"	4'-1"	#8	10"	#8	10"	#8	6"	538.02	105,272	3.0000	643.11	1.00	56
240	20x12	1'-6"	1'-3"	4'-3"	#9	11"	#9	11"	#8	5½"	633.59	123,999	3.6111	766.88	1.11	61
264	22x12	1'-7"	1'-4"	4'-4"	#11	1'-5"	#11	1'-5"	#10	8"	707.12	139,652	4.0782	871.98	1.22	67
288	24x12	1'-8½"	1'-5½"	4'-5½"	#10	1'-0"	#10	1'-0"	#9	6"	804.50	160,598	4.7024	1,006.78	1.33	73

MAX. 10 FT. COVER ~ L=150 FT.

SIZE OF CULVERT ft. x ft. "S"x"H"	"T"	"V"	"W"	BARS "A1" SIZE	BARS "A1" SPACING	BARS "A2" SIZE	BARS "A2" SPACING	BARS "B" SIZE	BARS "B" SPACING	ESTIMATED QUANTITIES TOTAL CULVERT CONC. cu yd.	TOTAL CULVERT REINF. STEEL lb.	PER LIN. FT. BARREL CONC. cu yd.	PER LIN. FT. BARREL REINF. STEEL lb.	1 AUX. SLAB "J" CONC. cu yd.	1 AUX. SLAB "J" REINF. STEEL lb.
6x6															
8x6															
10x6															
12x6	10"	8½"	1'-5"	#8	1'-4"	#8	1'-4"	#7	8"	196.36	41,365	1.1430	260.12	0.66	38
14x6	11½"	10"	1'-6½"	#8	1'-2"	#8	1'-2"	#7	7"	249.42	51,691	1.4825	326.91	0.77	44
16x6	1'-1"	11½"	1'-9"	#9	1'-4"	#9	1'-4"	#8	8"	308.74	63,079	1.8637	402.74	0.88	50
18x6	1'-2½"	1'-1"	1'-9½"	#9	1'-2"	#9	1'-2"	#8	6"	374.31	82,725	2.2865	531.78	1.00	55
20x6	1'-3½"	1'-2"	1'-10½"	#10	1'-4"	#10	1'-4"	#10	8"	431.68	102,396	2.6553	662.72	1.10	61
8x8															
10x8	9½"	8"	1'-9½"	#6	11"	#6	11"	#6	6½"	199.40	37,613	1.0597	225.06	0.56	32
12x8	11"	9"	1'-11"	#7	1'-0"	#7	1'-0"	#6	6"	248.03	46,176	1.3611	280.42	0.67	38
14x8	1'-0½"	10½"	2'-0½"	#8	1'-2"	#8	1'-2"	#7	6½"	307.40	58,797	1.7338	363.17	0.78	44
16x8	1'-2"	11½"	2'-2"	#8	1'-0"	#8	1'-0"	#8	7½"	368.22	71,924	2.1162	449.28	0.88	50
18x8	1'-3"	1'-1"	2'-3"	#8	11"	#8	11"	#8	6½"	430.59	85,897	2.5092	542.12	1.00	55
20x8	1'-4½"	1'-2½"	2'-4½"	#8	10"	#8	10"	#8	5½"	507.66	103,667	2.9992	658.46	1.11	61
10x10	9½"	9"	2'-3½"	#7	1'-2"	#7	1'-2"	#6	6"	238.01	43,978	1.2300	256.53	0.57	32
12x10	11"	10"	2'-11"	#7	1'-0"	#7	1'-0"	#7	7"	288.34	54,124	1.5453	322.43	0.67	38
14x10	1'-0½"	11"	3'-0½"	#7	10"	#7	10"	#7	6"	344.80	67,197	1.9007	408.57	0.78	44
16x10	1'-2"	1'-0"	3'-2"	#8	1'-0"	#8	1'-0"	#8	7"	407.33	79,324	2.2963	487.12	0.89	50
18x10	1'-4"	1'-1½"	3'-4"	#9	1'-1"	#9	1'-1"	#8	6½"	491.33	94,336	2.8334	588.09	1.00	56
20x10	1'-5"	1'-3"	3'-5"	#9	1'-0"	#9	1'-0"	#8	5½"	562.44	112,523	3.2870	706.45	1.11	61
22x10	1'-6"	1'-4"	3'-6"	#9	11"	#9	11"	#9	6"	631.75	134,176	3.7284	849.34	1.22	67
12x12	11½"	10½"	3'-8½"	#7	11"	#7	11"	#7	6½"	340.38	63,119	1.7539	368.01	0.68	38
14x12	1'-2"	11½"	3'-11"	#8	1'-0"	#8	1'-0"	#7	6"	415.39	75,713	2.2273	449.40	0.79	44
16x12	1'-3"	1'-0"	4'-0"	#8	11"	#8	11"	#8	7"	467.96	88,313	2.5556	531.12	0.89	50
18x12	1'-4"	1'-1½"	4'-1"	#8	10"	#8	10"	#8	6"	538.02	105,272	3.0000	643.11	1.00	56
20x12	1'-6"	1'-3"	4'-3"	#9	11"	#9	11"	#8	5½"	633.59	123,999	3.6111	766.88	1.11	61
22x12	1'-7"	1'-4"	4'-4"	#11	1'-5"	#11	1'-5"	#10	8"	707.12	139,652	4.0782	871.98	1.22	67
24x12	1'-8½"	1'-5½"	4'-5½"	#10	1'-0"	#10	1'-0"	#9	6"	804.50	160,598	4.7024	1,006.78	1.33	73

MAX. 15 FT. COVER ~ L=150 FT.

AREA OF OPENING sq. ft.	SIZE OF CULVERT "S"x"H"	"T"	"V"	"W"	BARS "A1" SIZE	BARS "A1" SPACING	BARS "A2" SIZE	BARS "A2" SPACING	BARS "B" SIZE	BARS "B" SPACING	ESTIMATED QUANTITIES TOTAL CULVERT CONC. cu yd.	TOTAL CULVERT REINF. STEEL lb.	PER LIN. FT. BARREL CONC. cu yd.	PER LIN. FT. BARREL REINF. STEEL lb.	1 AUX. SLAB "J" CONC. cu yd.	1 AUX. SLAB "J" REINF. STEEL lb.
36	6x6															
48	8x6	8½"	7½"	1'-3½"	#7	1'-4"	#7	1'-4"	#6	7"	135.35	27,665	0.7631	170.57	0.46	26
60	10x6	10"	8½"	1'-5"	#8	1'-4"	#8	1'-4"	#7	8"	175.92	37,495	1.0195	235.30	0.56	32
72	12x6	11½"	9½"	1'-6½"	#8	1'-2"	#8	1'-2"	#7	7"	222.55	46,721	1.3161	294.86	0.67	38
84	14x6	1'-1"	11"	1'-8"	#9	1'-4"	#9	1'-4"	#8	7"	278.97	61,477	1.6780	392.44	0.78	44
96	16x6	1'-2½"	1'-0½"	1'-9½"	#9	1'-2"	#9	1'-2"	#8	6"	341.63	76,378	2.0815	490.61	0.89	50
108	18x6	1'-4"	1'-2"	1'-11"	#10	1'-4"	#10	1'-4"	#9	7"	410.54	91,481	2.5267	590.02	1.00	56
120	20x6	1'-5½"	1'-3½"	2'-0½"	#10	1'-2"	#10	1'-2"	#10	8"	485.75	110,534	3.0137	715.73	1.12	62
64	8x8	9"	8"	1'-9"	#6	11"	#6	11"	#6	6½"	174.41	33,785	0.9136	200.79	0.46	27
80	10x8	10½"	9"	1'-10½"	#7	1'-1"	#7	1'-1"	#6	5½"	219.24	42,584	1.1898	258.13	0.57	32
96	12x8	1'-0½"	10"	2'-0½"	#7	10"	#7	10"	#6	5"	276.56	53,785	1.5484	331.03	0.67	38
112	14x8	1'-2"	11½"	2'-2"	#8	1'-0"	#8	1'-0"	#7	5½"	339.34	67,605	1.9434	421.88	0.79	44
128	16x8	1'-3½"	1'-0½"	2'-3½"	#9	1'-1"	#9	1'-1"	#8	6½"	403.43	82,164	2.3475	518.98	0.89	50
144	18x8	1'-4½"	1'-2½"	2'-4½"	#9	1'-0"	#9	1'-0"	#8	5½"	474.08	99,896	2.7955	634.54	1.01	56
160	20x8	1'-6½"	1'-4½"	2'-6½"	#9	11"	#9	11"	#8	5"	570.47	117,089	3.4129	747.86	1.12	62
100	10x10	11"	10"	2'-11"	#7	1'-1"	#7	1'-1"	#7	7"	265.42	48,882	1.4095	289.13	0.58	33
120	12x10	1'-1½"	11"	3'-1½"	#7	11"	#7	11"	#7	6"	332.26	60,374	1.8318	364.51	0.68	38
140	14x10	1'-2"	1'-0½"	3'-2"	#8	1'-0"	#8	1'-0"	#7	5½"	384.54	72,962	2.1616	447.50	0.79	44
160	16x10	1'-4"	1'-1½"	3'-4"	#8	11"	#8	11"	#8	6"	459.08	88,960	2.6358	552.16	0.90	50
180	18x10	1'-6"	1'-2½"	3'-6"	#9	11"	#9	11"	#8	5½"	541.71	109,929	3.1636	690.65	1.01	56
200	20x10	1'-7"	1'-4½"	3'-7"	#9	10"	#9	10"	#8	5"	623.28	128,496	3.6868	812.43	1.12	62
220	22x10	1'-8½"	1'-6"	3'-8½"	#9	10"	#9	10"	#9	5½"	714.81	147,782	4.2746	939.78	1.23	68
144	12x12	1'-1"	11½"	3'-10"	#7	10"	#7	10"	#7	5½"	373.28	70,831	1.9686	418.68	0.69	38
168	14x12	1'-3"	1'-0½"	4'-0"	#8	10"	#8	10"	#7	5"	444.01	87,880	2.4151	530.35	0.79	44
192	16x12	1'-5"	1'-1½"	4'-2"	#8	10"	#8	10"	#8	6½"	522.86	95,549	2.9152	580.63	0.90	50
216	18x12	1'-6"	1'-3"	4'-3"	#9	11"	#9	11"	#8	5½"	597.35	117,186	3.3889	722.86	1.01	56
240	20x12	1'-8"	1'-4½"	4'-5"	#9	10"	#9	10"	#8	5"	697.59	136,141	4.0309	846.68	1.12	62
264	22x12	1'-9"	1'-5½"	4'-6"	#11	1'-3"	#11	1'-3"	#10	7"	775.38	158,717	4.5262	994.05	1.23	68
288	24x12															



SIDE ELEVATION OF CULVERT

See Drawing No. IBJL-1 For Joint Locations

NOTE: Auxiliary Slabs "W" And Vertical Construction Joints At The Wings Are Required Only Where Called For By The Basic Drawing And Auxiliary Slabs "W" Are Not To Be Used For Culvert Heights Of Less Than 8 Feet.

REVISIONS | BY | DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BOX CULVERT DRAWING

IBS CULVERTS MODIFIED

FOR HIGH COVER

WINGS WITH 3:1 SLOPE

DESIGNED NA | CHECKED BJJ | ISSUED TMT

DETAILED MJC | DATE 07-11-97 | DATE 08-01-97

WORKING NUMBER IBSM-3W

SHEET NUMBER 380

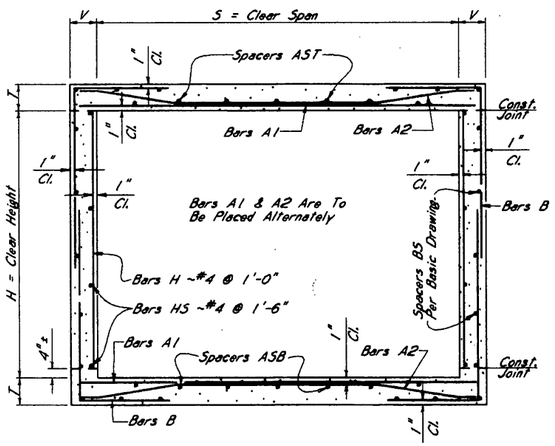
GENERAL DATA & ESTIMATED QUANTITIES FOR BOX CULVERTS UNDER HIGH COVER

MAX. 20 FT. COVER ~ L=150 FT.

AREA OF OPENING sq. ft.	SIZE OF CULVERT ft. x ft. "S"x"H"	"T"	"V"	"W"	BARS "A1" SIZE	BARS "A1" SPACING	BARS "A2" SIZE	BARS "A2" SPACING	BARS "B" SIZE	BARS "B" SPACING	ESTIMATED QUANTITIES TOTAL CULVERT CONC. cu. yd.	TOTAL CULVERT REINF. STEEL lb.	PER LIN. FT. BARREL CONC. cu. yd.	PER LIN. FT. BARREL REINF. STEEL lb.	1 AUX. SLAB "J" CONC. cu. yd.	1 AUX. SLAB "J" REINF. STEEL lb.
36	6x6	7½"	7"	1'-2½"	#7	1'-4"	#7	1'-4"	#6	7"	107.46	24,232	0.5910	148.70	0.35	21
48	8x6	9½"	8"	1'-4½"	#7	1'-2"	#7	1'-2"	#6	6"	147.56	31,102	0.8436	193.46	0.46	27
60	10x6	11½"	9½"	1'-6½"	#8	1'-2"	#8	1'-2"	#7	7"	199.35	42,363	1.1742	266.92	0.57	32
72	12x6	1'-1"	10½"	1'-8"	#8	1'-0"	#8	1'-0"	#7	6"	249.20	53,634	1.4923	341.78	0.68	38
84	14x6	1'-2½"	1'-0½"	1'-9½"	#9	1'-2"	#9	1'-2"	#8	7"	312.88	66,233	1.9026	423.43	0.79	44
96	16x6	1'-4"	1'-2"	1'-11"	#9	1'-0"	#9	1'-0"	#8	6"	379.02	82,947	2.3292	535.08	0.91	50
108	18x6	1'-6"	1'-3½"	2'-1"	#10	1'-2"	#10	1'-2"	#10	8"	461.01	103,863	2.8611	672.31	1.02	56
120	20x6	1'-7½"	1'-5"	2'-3½"	#10	1'-0"	#10	1'-0"	#10	7"	540.70	127,776	3.3781	830.49	1.13	62
64	8x8	10"	9"	1'-10"	#6	1'-2"	#6	1'-2"	#6	6"	192.31	36,192	1.0309	216.15	0.47	27
80	10x8	11½"	10"	1'-11½"	#7	11"	#7	11"	#7	7"	239.38	47,131	1.3220	287.60	0.58	33
96	12x8	1'-1½"	11"	2'-1½"	#9	1'-3"	#9	1'-3"	#7	6½"	299.04	57,832	1.6960	358.43	0.68	38
112	14x8	1'-3½"	1'-0½"	2'-3½"	#8	11"	#8	11"	#7	5"	371.71	73,706	2.1561	462.52	0.79	44
128	16x8	1'-5"	1'-2"	2'-5"	#9	11"	#9	11"	#8	6"	444.16	92,864	2.6152	588.95	0.91	50
144	18x8	1'-6½"	1'-4"	2'-6½"	#9	11"	#9	11"	#8	5"	528.00	109,784	3.1502	700.39	1.02	56
160	20x8	1'-8½"	1'-6"	2'-8½"	#9	10"	#9	10"	#9	5½"	629.23	132,925	3.7994	853.28	1.14	62
100	10x10	11½"	11"	2'-11½"	#7	11"	#7	11"	#7	6½"	282.15	53,328	1.5191	319.54	0.58	33
120	12x10	1'-1½"	1'-0"	3'-1½"	#8	1'-0"	#8	1'-0"	#7	5½"	343.64	66,984	1.9074	408.58	0.69	39
140	14x10	1'-3½"	1'-1½"	3'-3½"	#8	11"	#8	11"	#8	6½"	419.12	79,930	2.3881	494.14	0.80	44
160	16x10	1'-5"	1'-3"	3'-5"	#9	11"	#9	11"	#9	7"	494.24	100,249	2.8673	627.36	0.91	50
180	18x10	1'-7½"	1'-4"	3'-7½"	#9	10"	#9	10"	#8	5"	589.12	120,876	3.4753	762.94	1.02	56
200	20x10	1'-9"	1'-6"	3'-9"	#10	1'-0"	#10	1'-0"	#9	5½"	685.09	142,933	4.0926	908.83	1.14	62
144	12x12	1'-2"	1'-0½"	3'-11"	#8	1'-0"	#8	1'-0"	#7	5"	399.91	76,761	2.1430	457.87	0.70	39
168	14x12	1'-4½"	1'-2"	4'-1½"	#8	10"	#8	10"	#8	6½"	487.59	89,762	2.7006	543.52	0.81	45
192	16x12	1'-6"	1'-2½"	4'-3"	#9	11"	#9	11"	#8	5½"	554.14	109,631	3.1203	674.34	0.91	51
216	18x12	1'-7½"	1'-4½"	4'-4½"	#9	10"	#9	10"	#8	5"	647.76	128,528	3.7199	797.68	1.02	56
240	20x12	1'-10"	1'-5½"	4'-7"	#10	11"	#10	11"	#9	5½"	755.25	156,303	4.4084	981.79	1.13	62

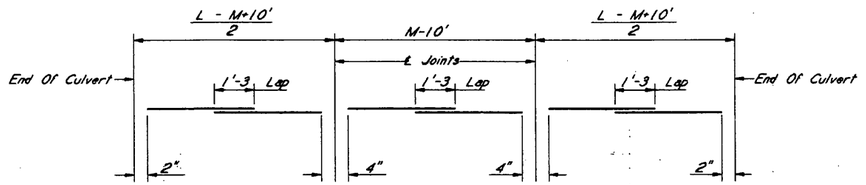
MAX. 25 FT. COVER ~ L=150 FT.

SIZE OF CULVERT ft. x ft. "S"x"H"	"T"	"V"	"W"	BARS "A1" SIZE	BARS "A1" SPACING	BARS "A2" SIZE	BARS "A2" SPACING	BARS "B" SIZE	BARS "B" SPACING	ESTIMATED QUANTITIES TOTAL CULVERT CONC. cu. yd.	TOTAL CULVERT REINF. STEEL lb.	PER LIN. FT. BARREL CONC. cu. yd.	PER LIN. FT. BARREL REINF. STEEL lb.	1 AUX. SLAB "J" CONC. cu. yd.	1 AUX. SLAB "J" REINF. STEEL lb.
6x6	8"	7½"	1'-3"	#7	1'-4"	#7	1'-4"	#6	7"	114.27	24,440	0.6358	150.06	0.36	21
8x6	10"	8½"	1'-5"	#7	1'-2"	#7	1'-2"	#6	6"	155.52	31,343	0.8961	195.00	0.47	27
10x6	1'-0"	10"	1'-7"	#8	1'-2"	#8	1'-2"	#7	7"	208.49	42,716	1.2346	269.21	0.58	33
12x6	1'-2"	11½"	1'-9"	#8	1'-0"	#8	1'-0"	#7	6"	269.80	54,382	1.6286	346.73	0.69	38
14x6	1'-4"	1'-1½"	1'-11"	#9	1'-2"	#9	1'-2"	#8	6"	343.46	71,759	2.1050	460.81	0.80	44
16x6	1'-5½"	1'-3"	2'-0½"	#9	1'-0"	#9	1'-0"	#8	5"	412.94	90,984	2.5540	588.62	0.91	50
18x6	1'-7½"	1'-5"	2'-2½"	#10	1'-2"	#10	1'-2"	#10	7"	502.67	112,281	3.1374	727.13	1.03	56
20x6	1'-9"	1'-6½"	2'-4"	#10	1'-0"	#10	1'-0"	#10	6"	585.82	138,954	3.6775	906.27	1.14	62
8x8	10½"	9½"	1'-10½"	#7	1'-1"	#7	1'-1"	#6	5½"	201.35	38,533	1.0903	232.30	0.47	27
10x8	1'-0½"	10½"	2'-0½"	#8	1'-2"	#8	1'-2"	#7	6½"	255.13	49,452	1.4251	303.47	0.58	33
12x8	1'-3"	11½"	2'-3"	#9	1'-2"	#9	1'-2"	#8	7½"	323.59	63,714	1.8565	396.44	0.69	38
14x8	1'-4½"	1'-1½"	2'-4½"	#8	10"	#8	10"	#8	6"	396.91	80,869	2.3218	509.99	0.80	44
16x8	1'-6½"	1'-3"	2'-6½"	#9	10"	#9	10"	#8	5½"	480.38	101,660	2.8534	647.44	0.91	50
18x8	1'-8"	1'-5"	2'-8"	#9	10"	#9	10"	#9	6"	567.75	119,371	3.4115	763.88	1.03	56
20x8															
10x10	1'-0½"	11½"	3'-0½"	#7	10"	#7	10"	#7	6"	298.96	57,474	1.6293	346.46	0.59	33
12x10	1'-2½"	1'-1"	3'-2½"	#8	11"	#8	11"	#7	5"	368.51	72,887	2.0705	447.80	0.70	39
14x10	1'-4½"	1'-2"	3'-4½"	#9	1'-0"	#9	1'-0"	#8	6"	440.50	88,502	2.5278	550.15	0.81	45
16x10	1'-6½"	1'-4"	3'-6½"	#9	11"	#9	11"	#9	6½"	532.67	107,927	3.1193	679.51	0.92	51
18x10	1'-9"	1'-5"	3'-9"	#10	1'-0"	#10	1'-0"	#9	6"	630.98	128,968	3.7500	816.77	1.03	56
20x10															
12x12	1'-3"	1'-1½"	4'-0"	#8	11"	#8	11"	#8	6"	426.81	83,372	2.3194	501.97	0.70	39
14x12	1'-5½"	1'-2½"	4'-2½"	#9	11"	#9	11"	#8	5½"	510.08	102,572	2.8475	628.39	0.81	45
16x12	1'-7½"	1'-3½"	4'-4½"	#9	10"	#9	10"	#9	6½"	594.60	119,284	3.3851	738.79	0.92	50
18x12	1'-9"	1'-5½"	4'-6"	#10	11"	#10	11"	#9	6"	691.70	141,765	4.0077	886.11	1.03	56
20x12															

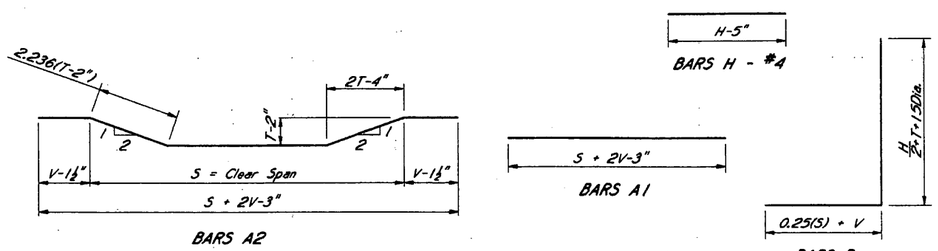


CROSS SECTION

Bars AST Tie To Bars A1 In Top Slab
Bars ASB Tie To Bars A1 In Bottom Slab
Bars BS Tie To Bars B



ONE SET OF BARS HS ~#4



BAR BENDING DETAILS

Dimensions Are Out To Out

GENERAL NOTES:

This Drawing Shows The Additional Reinforcing Bars And The Increased Dimensions And Reinforcing Bar Sizes Necessary To Modify A Single Cell Culvert For Cover Less Than Or In Excess Of That Provided By Basic Culvert Drawings.

All Other Dimensions, Reinforcement Details And General Requirements Of Basic Culvert Drawings Shall Apply Except As Specifically Modified By This Drawing And Drawing IWS-3.

Barrel Details Shown On This Drawing Shall Be Used With Cover Less Than 2'-6" And More Than Maximum Shown On Basic Culvert Drawings.

Quantities Shown On This Drawing Are For Culverts With Barrels Per This Drawing And Wings With 3:1 Slope Per This Drawing And Drawing IWS-3.

Quantities Shown On This Drawing For "Total Culvert" Are For Complete Culvert Of The Length Noted And Include Barrel, Parapets, Wings And Aprons, Cut-Off Walls, Auxiliary Slabs "W" Where Required And Two Auxiliary Slabs "J".

Quantities Shown On This Drawing Will Be Used As A Basis For Final Payment For Culverts Constructed In Accordance With This Drawing, Drawing IWS-3 And Basic Culvert Drawings.

BY / REVISIONS / DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

BOX CULVERT DRAWING

IBS CULVERTS MODIFIED

FOR HIGH COVER

WINGS WITH 3:1 SLOPE

WORKING NUMBER IBSM-3W

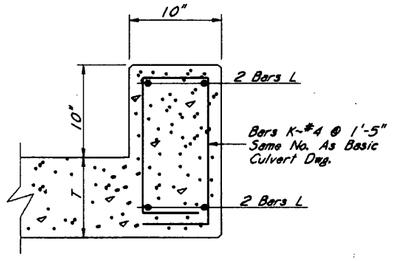
SHEET NUMBER 381

DESIGNED NA | CHECKED BJJ | ISSUED TMT

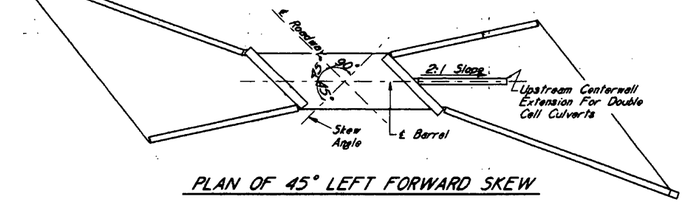
DETAILED ALT | DATE 07-11-97 | DATE 08-01-97

TABLE OF DIMENSIONS												
CULVERT HEIGHT "H"	"J"	"LW1"	"LW2"	"N1"	"N2"	"P"	"R1"	"R2"	"R3"	"U"	"W"	"Z"
6'	5'-9"	18'-9½"	31'-8⅝"			1.414Q+1.63'	5½"	6⅝"	3½"	7"	Per Supplementary Drawing	17'-3"
8'	7'-4"	23'-11⅛"	40'-4¾"			1.414Q+1.98'	7"	10⅛"	3⅝"	8½"		22'-0"
10'	8'-4"	27'-2⅞"	45'-10⅝"	2'-11"	6'-6"	1.414Q+2.33'	8½"	11½"	4⅛"	10"		25'-0"
12'	9'-7"	31'-3⅝"	52'-9⅞"	3'-3"	7'-0"	1.414Q+2.56'	9⅝"	1'-1⅛"	5⅛"	11"		28'-9"

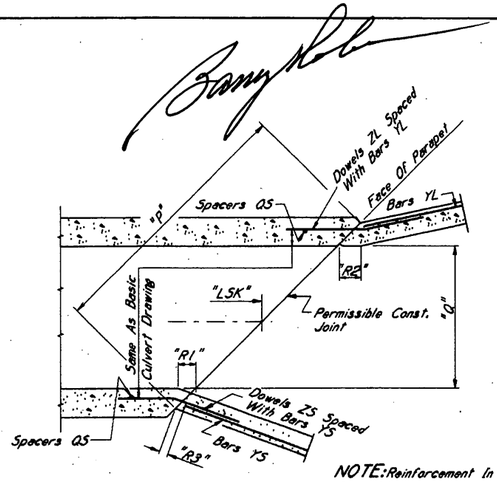
NOTE: Q For Single Cell Culvert = S (Clear Span)
Q For Double Cell Culvert = 2S+V



PARAPET DETAIL
Slab Steel Not Shown

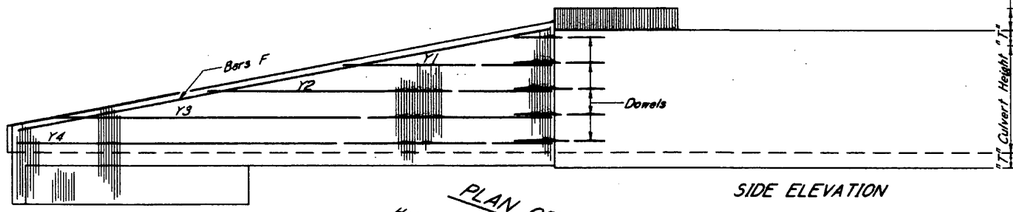


PLAN OF 45° LEFT FORWARD SKEW

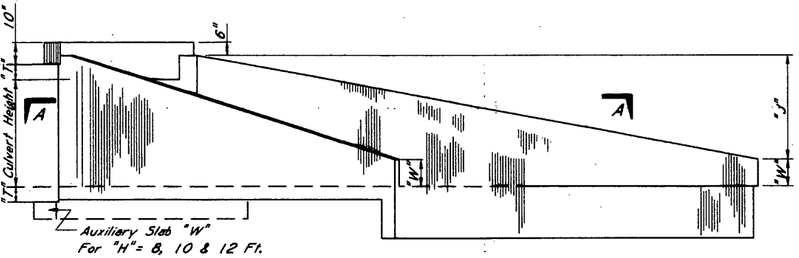


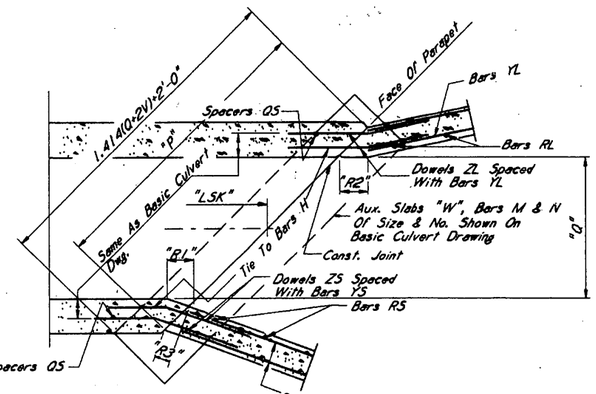
FOR "H"= 6 Ft.

NOTE: Reinforcement In Stream Face Of Wing Wall Required For H= 8, 10 & 12 Ft. Only.

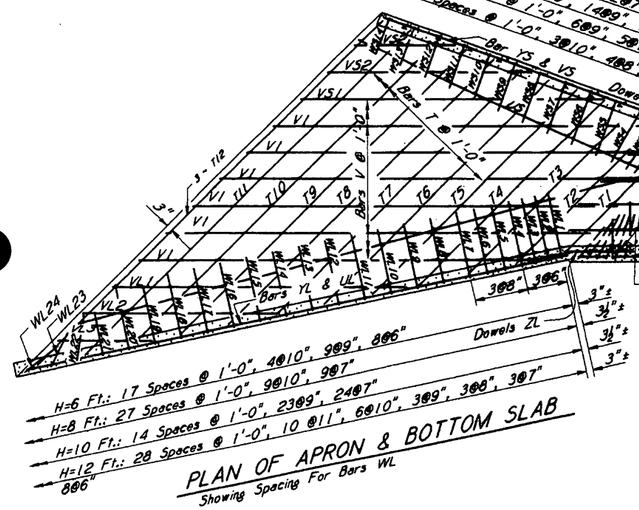


SIDE ELEVATION





FOR "H"= 8 THRU 12 Ft.

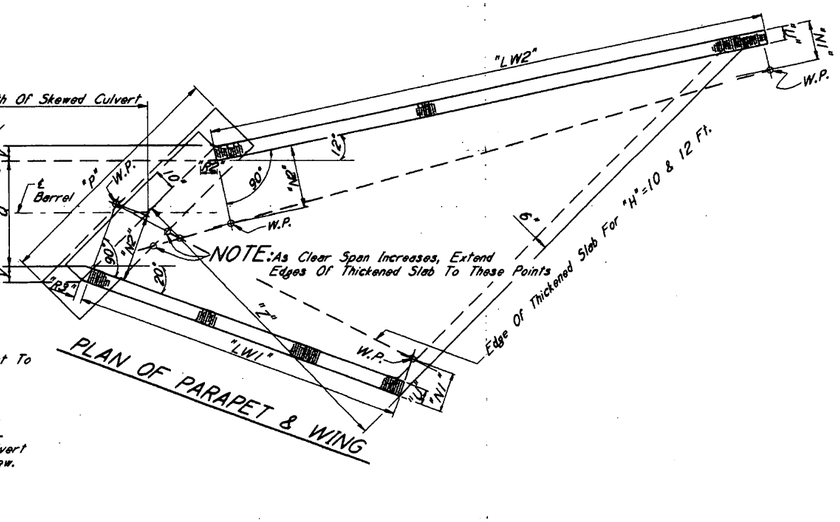


PLAN OF APRON & BOTTOM SLAB
Showing Spacing For Bars WS

PLAN OF APRON & BOTTOM SLAB
Showing Spacing For Bars WL

NOTE: Bars A, C & D Shall Be Cut To Fit Skew At End Of Barrel.

GENERAL PLAN
Drawn For A Single Cell Culvert On 45° Right Forward Skew.



NOTE: As Clear Span Increases, Extend Edges Of Thickened Slab To These Points

PLAN OF PARAPET & WING

SECTION A-A

BY	REVISIONS	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BOX CULVERT DRAWING
45° SKEW DETAILS
WINGS WITH 3:1 SLOPE
SINGLE & DOUBLE CELL CULVERTS

WORKING NUMBER ISK-45-3W
SHEET NUMBER 403.1

DESIGNED NA CHECKED BJJ ISSUED TMT
DETAILED MJC DATE 07-11-97 DATE 08-01-97

TABLE OF BARS V ~ #4						
CULVERT HEIGHT "H"	BARS V1		BARS VL1 - VLn		BARS VS1 - VSn	
	NO.	DIM. X	NO.	DIM. X	NO.	DIM. X
	Same As Basic Culvert Drawing					
6'		23'-11"	5	19'-6" To 4'-8"	5	19'-11" To 5'-0"
8'		30'-7"	7	26'-8" To 4'-6"	7	27'-2" To 4'-8"
10'		34'-10"	8	31'-5" To 5'-6"	8	31'-10" To 5'-7"
12'		40'-2"	10	37'-0" To 3'-8"	10	37'-6" To 3'-9"

TABLE OF BARS Y ~ #4				
CULVERT HEIGHT "H"	BAR	NO.	YL ~ LENGTH LONG WING	YS ~ LENGTH SHORT WING
6'	Y1 To Y5	1 Ea.	8'-6" To 30'-6"	4'-11" To 18'-0"
	Y6	1	31'-4"	18'-5"
8'	Y1 To Y6	2 Ea.	8'-6" To 36'-1"	4'-11" To 21'-3"
	Y7	4	40'-0"	23'-7"
10'	Y1 To Y6	2 Ea.	9'-5" To 43'-10"	5'-6" To 25'-11"
	Y7	4	45'-6"	26'-10"
12'	Y1 To Y7	2 Ea.	9'-11" To 51'-2"	5'-9" To 30'-3"
	Y8	6	52'-5"	30'-11"

TABLE OF BARS WL					
				LONG WING	
CULVERT HEIGHT "H"	BAR	NO.	SIZE	DIM. X	DIM. X1
6'	WL1 To WL39	1 Ea.	#4	4'-0" To 2'-0"	K+5'-7" To K
8'	WL1 To WL24	1 Ea.	#5	4'-6" To 3'-4"	K+7'-2" To K+3'-11"
	WL25 To WL46	1 Ea.	#4	3'-3" To 2'-0"	K+3'-9" To K
10'	WL1 To WL17	1 Ea.	#6	5'-10" To 5'-2"	K+8'-2" To K+6'-5"
	WL18 To WL36	1 Ea.	#5	5'-1" To 4'-3"	K+6'-4" To K+4'-2"
	WL37 + WL62	1 Ea.	#4	4'-2" To 2'-8"	K+4'-0" To K
12'	WL1 To WL28	1 Ea.	#7	6'-5" To 5'-2"	K+9'-4" To K+6'-0"
	WL29 To WL38	1 Ea.	#6	5'-1" To 4'-7"	K+5'-10" To K+4'-4"
	WL39 To WL48	1 Ea.	#5	4'-6" To 3'-11"	K+4'-2" To K+2'-6"
	WL49 To WL62	1 Ea.	#4	3'-10" To 3'-0"	K+2'-4" To K

TABLE OF BARS R ~ #4			
CULVERT HEIGHT "H"	BAR	NO.	LENGTH
8'	RS1 To RS14	1 Ea.	W+6'-7" To W+7"
	RL1 To RL25	1 Ea.	W+6'-8" To W+1"
10'	RS1 To RS16	1 Ea.	W+7'-7" To W+8"
	RS1 To RL29	1 Ea.	W+7'-8" To W+1"
12'	RS1 To RS19	1 Ea.	W+8'-10" To W+6"
	RL1 To RL33	1 Ea.	W+8'-11" To W+2"

K=W+5" For H= 6'
K=W+6" For H= 8'
K=W+8" For H= 10'
K=W+9" For H= 12'

TABLE OF BARS FL, FS, QS, ZL & ZS									
CULVERT HEIGHT "H"	BARS FL ~#4		BARS FS ~#4		SPACERS QS ~#4		DOWELS ZL ~#5		DOWELS ZS ~#5	
	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.	NO.	LGTH.
6'	2	31'-10"	2	19'-3"	2	5'-7"	7	4'-0"	7	3'-9"
8'	2	40'-8"	2	24'-8"	2	7'-7"	18	4'-0"	18	3'-9"
10'	2	46'-3"	2	28'-1"	2	9'-7"	18	4'-0"	18	3'-9"
12'	2	53'-3"	2	32'-4"	2	11'-7"	22	4'-0"	22	3'-9"

NOTE: The Number Of Bars Shown In The Tables Is The Number Required For One Complete Headwall Assembly At One End Of Culvert.

TABLE OF BARS WS					
				SHORT WING	
CULVERT HEIGHT "H"	BAR	NO.	SIZE	DIM. X	DIM. X1
6'	WS1 To WS24	1 Ea.	#4	4'-0" To 2'-0"	K+5'-6" To K
8'	WS1 To WS15	1 Ea.	#5	4'-6" To 3'-4"	K+7'-2" To K+3'-11"
	WS16 To WS28	1 Ea.	#4	3'-3" To 2'-0"	K+3'-8" To K
10'	WS1 To WS10	1 Ea.	#6	5'-10" To 5'-2"	K+8'-2" To K+6'-5"
	WS11 To WS22	1 Ea.	#5	5'-1" To 4'-2"	K+6'-3" To K+4'-0"
	WS23 To WS37	1 Ea.	#4	4'-1" To 2'-8"	K+3'-10" To K
12'	WS1 To WS17	1 Ea.	#7	6'-5" To 5'-2"	K+9'-4" To K+5'-11"
	WS18 To WS23	1 Ea.	#6	5'-1" To 4'-6"	K+5'-8" To K+4'-3"
	WS24 To WS29	1 Ea.	#5	4'-5" To 3'-10"	K+3'-11" To K+2'-5"
	WS30 To WS37	1 Ea.	#4	3'-9" To 3'-0"	K+2'-1" To K

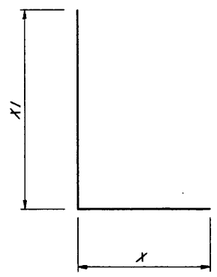
TABLE OF BARS L & M						
CULVERT HEIGHT "H"	BARS L			BARS M		
	NO.	SIZE	LENGTH	NO.	SIZE	LENGTH
6'	4	#8	P-4"			NONE
8'-12'	4	#9	P-4"	2	#4	1.414(Q+2V)+1'-8"

Bars K & N Per Basic Culvert Drawing Except Spacing Shall Be 1'-5".

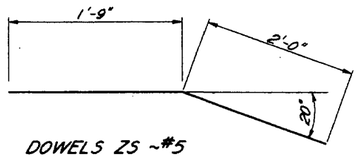
NOTE: Vertical Spacers QS And Dowels ZL And ZS Located Per Section A - A.

TABLE OF BARS U ~ #4		
CULVERT HEIGHT "H"	UL, NO. & LENGTH LONG WING	US, NO. & LENGTH SHORT WING
6'	3 @ 31'-4"	3 @ 18'-5"
8'	3 @ 40'-0"	3 @ 23'-7"
10'	3 @ 45'-6"	3 @ 26'-10"
12'	3 @ 52'-5"	3 @ 30'-11"

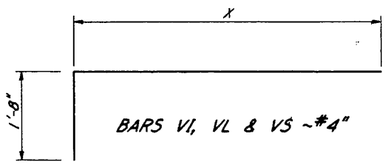
TABLE OF BARS T			
CULVERT HEIGHT "H"	BAR	NO.	LENGTH
6'	T1 To T17	1 Ea.	P-2" To P+16'-8"
	T18	3	P+17'-8"
8'	T1 To T21	1 Ea.	P+4" To P+21'-9"
	T22	3	P+22'-9"
10'	T1 To T24	1 Ea.	P+4" To P+25'-0"
	T25	3	P+26'-0"
12'	T1 To T28	1 Ea.	P To P+28'-11"
	T29	3	P+29'-11"



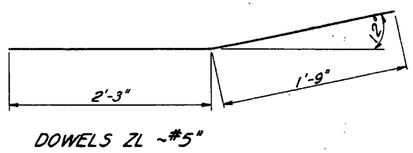
BARS WL & WS



DOWELS ZS ~#5



BARS VL, VL & VS ~#4"



DOWELS ZL ~#5"

BAR BENDING DETAILS
Dimensions Are Out To Out

GENERAL NOTES:
This Drawing Shows The General Details Necessary To Modify A Single Or Double Cell Culvert With Wings With 3:1 Slope For A 45° Skew.
All Governing Dimensions, Reinforcement Details And General Requirements Of Basic Culvert Drawings, And Or Drawings IBSM-2W And IBDM-2W Shall Apply Except As Specifically Modified Hereon.
A Complete Placing Plan Showing All Governing Dimensions, Bar List And Bending Details Shall Be Submitted To The Project Engineer For Approval Prior To Fabrication Of The Reinforcing Steel.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION
BOX CULVERT DRAWING
45° SKEW DETAILS
WINGS WITH 3:1 SLOPE
SINGLE & DOUBLE CELL CULVERTS

REVISIONS BY DATE

DESIGNED NA CHECKED BJJ ISSUED TMT
DETAILED MJC DATE 07-11-97 DATE 08-01-97

WORKING NUMBER ISK-45-3W
SHEET NUMBER 403.2

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

VPT 844+00.000
EL. 525.613

-1.0000%

VPC 855+00.000
EL. 514.613

1100 FT. Vertical Tangent

Total Length of Bridge = 230'-4"
Prestressed Conc. Type IV Beam Span (Continuous For Live Load Only)

1'-2" | 71'-0" | 94'-0" | 63'-0" | 1'-2"

Begin Bridge At
Sta. 850+65.44
F. G. 518.959

Sta. 851+37.61
F. G. 518.237

Sta. 852+31.61
F. G. 517.297

End Bridge At
Sta. 852+95.78
F. G. 516.635

NOTE: Omit Drain Holes This Span

3:1 NORMAL TO BENT (OR FLATTER)

Concrete Slope Paving

19'-9" Cl. Min.

3:1 NORMAL TO BENT (OR FLATTER)

Concrete Slope Paving

Approx. Existing Ground

62'-0" (Proposed Roadway)

Top Of Shaft
Elev. 487.000

Top Of Shaft
Elev. 488.000

70'-1½"

94'-0"

62'-1½"

① Steel Pile End Bent No. 1
Per Details On Sheets A4 & A6.
18 ~ Hp12x53 Steel Piles

④ Steel Pile End Bent No. 4
Per Details On Sheets A5 & A6.
18 ~ Hp12x53 Steel Piles

Int. Bents No. 2 & 3
Per Details on Sheets
No. A7 & A8.

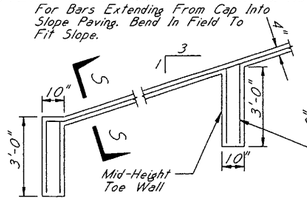
Bottom Of Shaft
Elev. 441.000
②

Bottom Of Shaft
Elev. 439.000
③

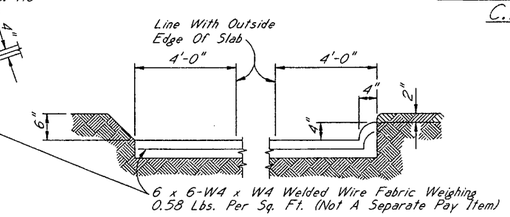
ELEVATION WITH PROFILE ALONG C.L. APPROACH ROADWAY

Scale 1" = 10'-0"

NOTE: See End Bent Details On Sheet No. A6 For Bars Extending From Cap Into Slope Paving. Bend In Field To Fit Slope.

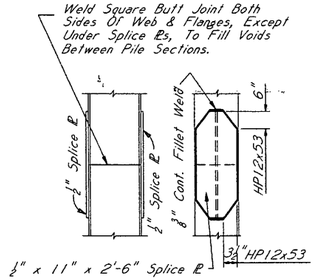


TYPICAL MID-HEIGHT TOE WALL
Typical Section Where Shown



SECTION S-S

SLOPE PAVING DETAILS



½" x 11" x 2'-6" Splice Pl

PILE SPLICE DETAIL
HP12x53 Steel Piles

MINIMUM PILE BEARING CAPACITY AND TIP ELEVATION SCHEDULE

Bent No.	Req'd. Bearing (Tons)	Steel Piling/ Drilled Shaft	Estimated Length	Tip Elevation
1	45	HP12x53	45'	467'
2	---	48"ø	46'	441'
3	---	48"ø	49'	439'
4	45	HP12x53	45'	465'

*** NOTE: Quantity Includes Slope Paving Required At Existing US 78 Over SR 9 Bridges.

SHAFT DESIGN LOAD REQUIREMENTS

Bent No.	Axial Load (Kips)	Moment (Ft.-Kips)
2	750	660
3	730	606

TEST PILE SCHEDULE

Bent No.	Min. Lgth.-Ft.	Tip Elevation
1	50'	462'
4	50'	460'

GENERAL NOTES:

Specifications: Mississippi Standard Specifications For Road and Bridge Construction, 2002.

No Change Of Plans Will Be Permitted Except By Written Approval Of The Bridge Engineer. Minor Changes In Detail Of Design Or Construction Procedure May Be Authorized By The 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".

Expension 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 Bridge Engineer For Approval Prior To The Manufacture Of Beams.

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 TEST PILE SCHEDULE And Will Be Paid For As Test Piles Only.

The Bridge Engineer May Authorize Test Piles Driven Outside The Structure Limits.

Test Piles Shall Be Driven As A Continuous Operation, To The Bearing Capacity And The Minimum Ground Penetration Shown In The TEST PILE SCHEDULE, Unless Otherwise Directed By The Bridge Engineer.

Permanent Piles Shall Be Driven To An Elevation No Higher Than The Elevation Shown In The MINIMUM BEARING AND TIP ELEVATION SCHEDULE.

When Feasible, Bearing Piles Shall Be Driven Full Length And Shall Be Spliced, Only, As Approved By The 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 Two And One Half (2 1/2) Times The Minimum Pile Bearing Capacity.

DRILLED SHAFT NOTES:

The Contractor Shall Notify The State Geotechnical Engineer At Least Three (3) Days In Advance Of Any Shaft Construction.

The Trial Shaft Shall Be Constructed At Location Shown On Sheet No. A2.

For Computation Of Quantities, Top Of Trial Shaft Shall Be Elev. 487.000 (Approximate Ground). Bottom Of Trial Shaft Shall Be Elev. 447.000.

Trial Shaft Reinforcing Steel Shall Be Identical To The Production Shaft Reinforcing Steel As Shown On Sheet No. A8.

Roller Type Centralizers Are Required For Construction Of All Drilled Shafts.

The Contractor Shall Obtain The Finish Ground Line Elevation At Each Production Shaft And Submit Them To The Bridge Engineer. The Construction Joint Between The Column And Shaft Shall Be Placed At This Elevation And The Reinforcing Steel Lengths Shall Be Modified Accordingly. The Contractor Should Be Aware That Final Tip Elevations For The Production Shafts Will Be Provided After Trial Shaft Has Been Constructed.

SPECIAL PROVISIONS REQUIRED:

Maturity Meters In Drilled Shafts . . . . . No. 907-803
Concrete Bridges And Structures . . . . . No. 907-804

DESIGN DATA:

Loading. HS20-44
Specifications. . . . . A.A.S.H.T.O., 2002
Roadway Width. . . . . 44'-0" Gutter To Gutter
Concrete. . . . . Class "AA" (4,000 p.s.i.)

PRE-FORMED PILE HOLE NOTE:

18"ø Pre-Formed Pile Holes May Be Required For Permanent Piles In The End Bents, As Determined By The Test Pile Results, Which Shall Be Driven Without A Pre-Formed Hole. If Required, Pre-Formed Pile Holes Shall Be Drilled To An Elevation Of 472.00 For Bent 1 And An Elevation Of 470.00 For Bent 4, Or As Directed By The Engineer.

ESTIMATED QUANTITIES

Item / Location	Transverse Grooving	Conventional Static Pile Load Test	HP12X53 Steel Piling	18" Pre-Formed Pile Holes	PDA Test Piles	Pile Restrike	Drilled Shaft 48"ø	Trial Shaft 48"ø	Exploration	Temporary Casing 48"ø	Class AA Bridge Concrete	71 Ft. Prest. Conc. Beam Type IV	94 Ft. Prest. Conc. Beam Type IV	63 Ft. Prest. Conc. Beam Type IV	Reinforcement	Concrete Railing	*** Concrete Slope Paving
	S.Y.	Each	L.F.	L.F.	Each	Each	L.F.	L.F.	L.F.	L.F.	C.Y.	L.F.	L.F.	L.F.	Lb.	L.F.	C.Y.
Spans	1013.33										315.57	493.21	652.17	437.21	63040	456	
End Bents		2	1530	1360	2	1					76.50				11717		524.44
Int. Bents							190	46	10	95	82.54				20992		
Total	1013.33	2	1530	1360	2	1	190	46	10	95	474.61	493.21	652.17	437.21	95749	456	524.44

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

COLLECTOR DISTRIBUTOR RD OVER S.R. 9

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

BY	REVISION	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER: A1 OF 17
SHEET NUMBER: 466

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

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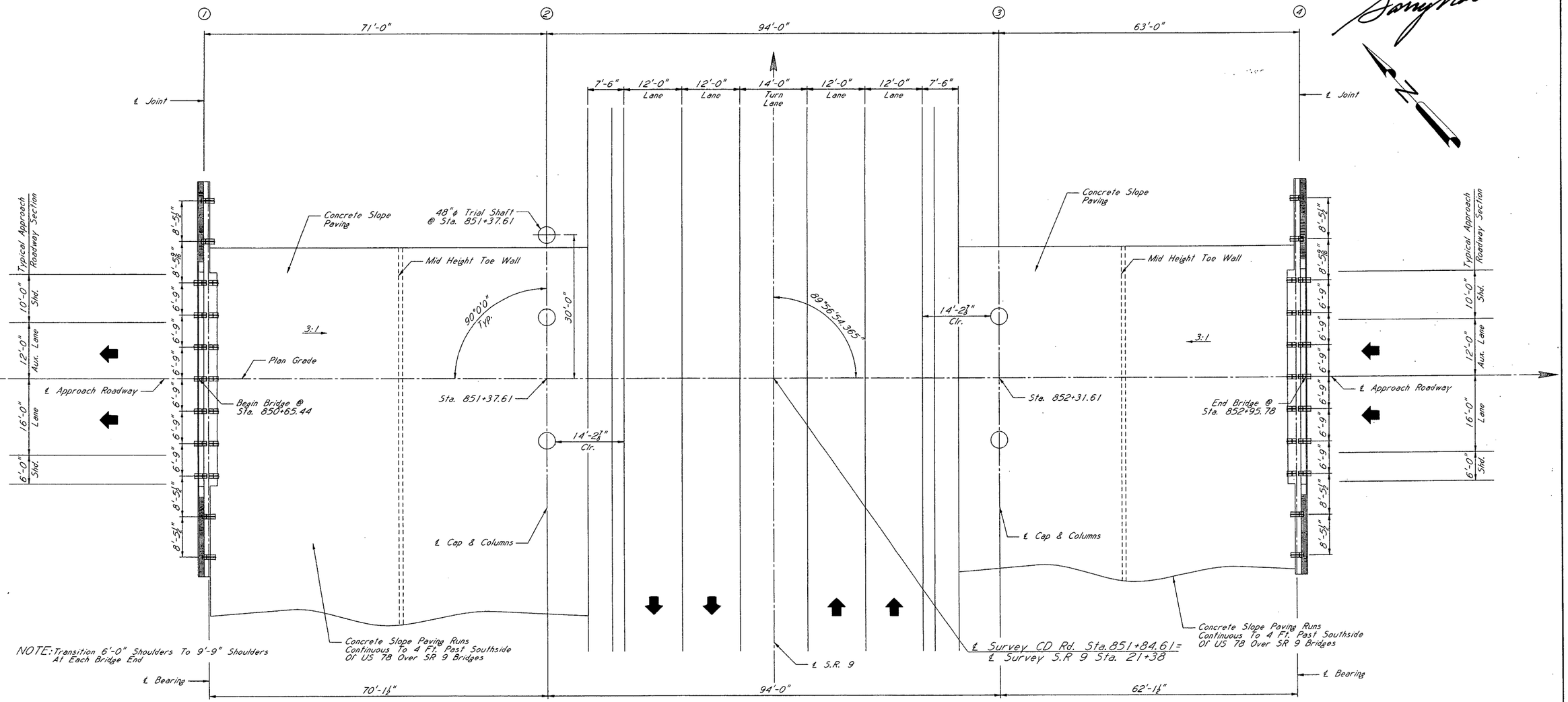
DESIGN TEAM: Florence & Hutcheson, Inc.

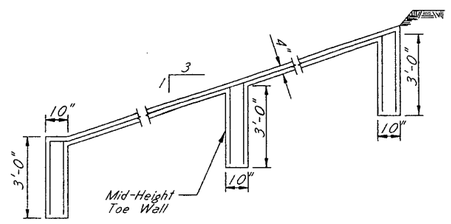
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

NOTE: Transition 10'-0" Shoulders To 13'-9" Shoulders At Each Bridge End





SLOPE PAVING DETAILS BETWEEN BRIDGES

FOUNDATION PLAN
Scale 1" = 10'-0"

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44
COLLECTOR DISTRIBUTOR RD OVER S.R. 9

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

BY	REVISION	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	1207

WORKING NUMBER A2 OF 17
SHEET NUMBER 467

DESIGN TEAM: Florence & Hutcheson, Inc.

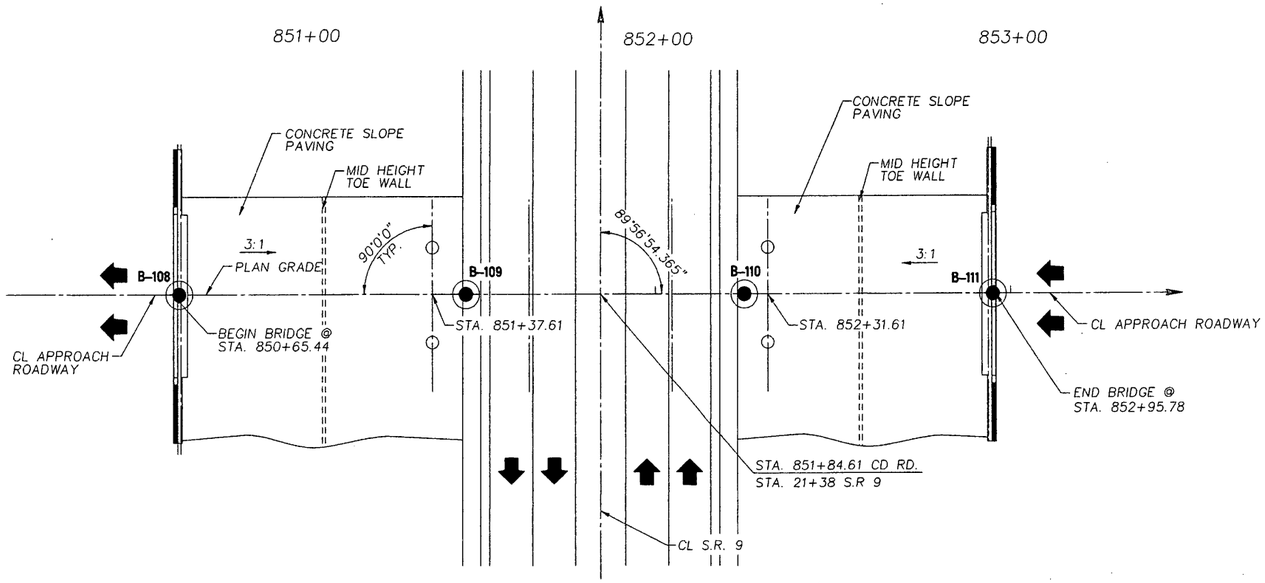
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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STATE	PROJECT NO.
MISS.	SP-0006-01(087)



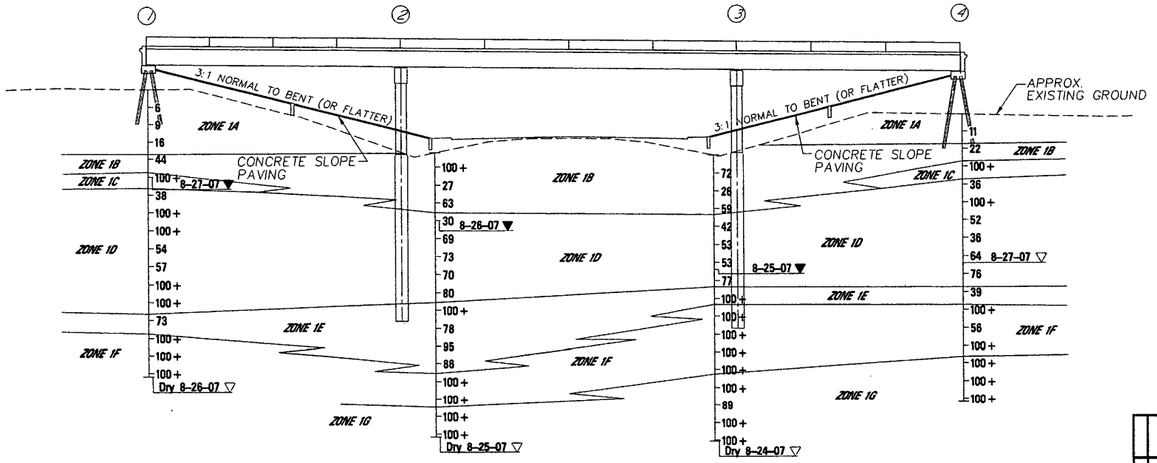
PLAN VIEW

SCALE 1"=20'-0"

NOTICE TO CONTRACTOR:

1. THE GENERALIZED SOIL PROFILE SHOWN WITH ITS VARIOUS SOIL ZONE DESCRIPTIONS AND INDICATED BOUNDARIES IS BASED UPON AN ENGINEERING AND GEOLOGICAL INTERPRETATION OF ALL AVAILABLE GEOTECHNICAL INFORMATION BY FLORENCE & HUTCHESON INC. AND MAY NOT NECESSARILY REFLECT THE ACTUAL VARIATION IN SUBSURFACE CONDITIONS BETWEEN BORINGS AND SAMPLES. DETAILED DATA AND FIELD INTERPRETATION OF CONDITIONS ENCOUNTERED IN INDIVIDUAL BORINGS ARE SHOWN ON THE BORING LOGS. THE GEOTECHNICAL REPORT IS AVAILABLE FOR INSPECTION THROUGH THE GEOTECHNICAL BRANCH.
2. SOUND ENGINEERING JUDGEMENT WAS EXERCISED IN PREPARING THE SUBSURFACE INFORMATION PRESENTED ON THIS SHEET. THIS INFORMATION WAS PREPARED AND IS INTENDED FOR MDOT DESIGN AND ESTIMATE PURPOSES. ITS PRESENTATION ON THE PLANS OR ELSEWHERE IS FOR THE PURPOSE OF PROVIDING INTENDED USERS WITH ACCESS TO THE SAME INFORMATION AVAILABLE TO THE MDOT. THIS SUBSURFACE INFORMATION INTERPRETATION IS PRESENTED IN GOOD FAITH AND IS NOT INTENDED AS A SUBSTITUTE FOR PERSONAL INVESTIGATION, INDEPENDENT INTERPRETATIONS OR JUDGEMENT BY OTHERS.
3. ALL STRUCTURAL DETAILS SHOWN ON THIS SHEET ARE FOR ILLUSTRATIVE PURPOSES ONLY AND MAY NOT BE INDICATIVE OF THE FINAL DESIGN CONDITIONS SHOWN ELSEWHERE IN THE CONTRACT PLANS.

SOIL STRENGTHS			
ZONE	C (ksf)	ø	ϑ (pcf)
1A	1.5	0°	110
1B	0.0	37°	110
1C	0.0	39°	115
1D	0.0	37°	110
1E	4.0	0°	120
1F	0.0	39°	115
1G	0.0	39°	115



ELEVATION WITH PROFILE ALONG C.L. APPROACH ROADWAY

SCALE 1"=20'-0"

ZONE 1 RIPLEY FORMATION

- 1A Firm to very stiff, light brown, sandy silt.
- 1B Medium dense to very dense, light & dark gray, clayey, fine sand with some gravel.
- 1C Very dense, light gray, silty, clayey, fine, medium and coarse sand with gravel.
- 1D Medium dense to very dense, dark gray, light gray, fine sand and clay with some shell fragments.
- 1E Hard, light gray, light green, dark gray, sandy clay with some shell fragments.
- 1F Very dense, light gray, dark gray, dark green, clayey, fine with some medium sand.
- 1G Very dense, light gray, dark gray, light green, clayey, fine sand.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

GENERALIZED SOIL PROFILE

COLLECTOR DISTRIBUTOR RD OVER S.R. 9

PROJECT No. 104969 /304000
SP-0006-01(087)

UNION COUNTY

BY	REVISION	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER: A3 OF 17

SHEET NUMBER: 468

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

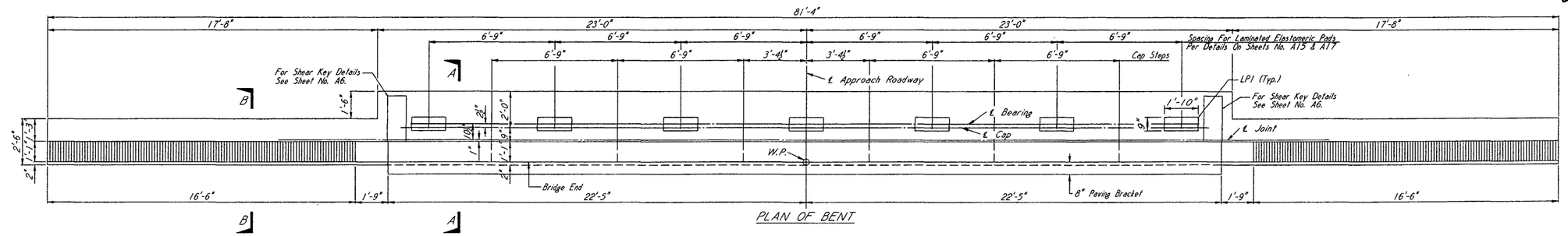
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DESIGN TEAM: Florence & Hutcheson, Inc.

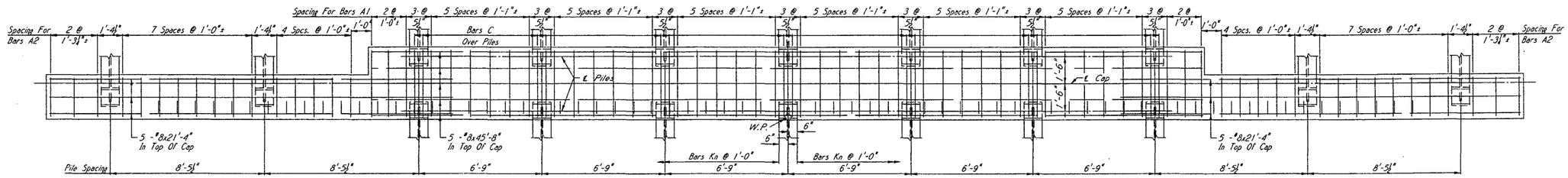
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

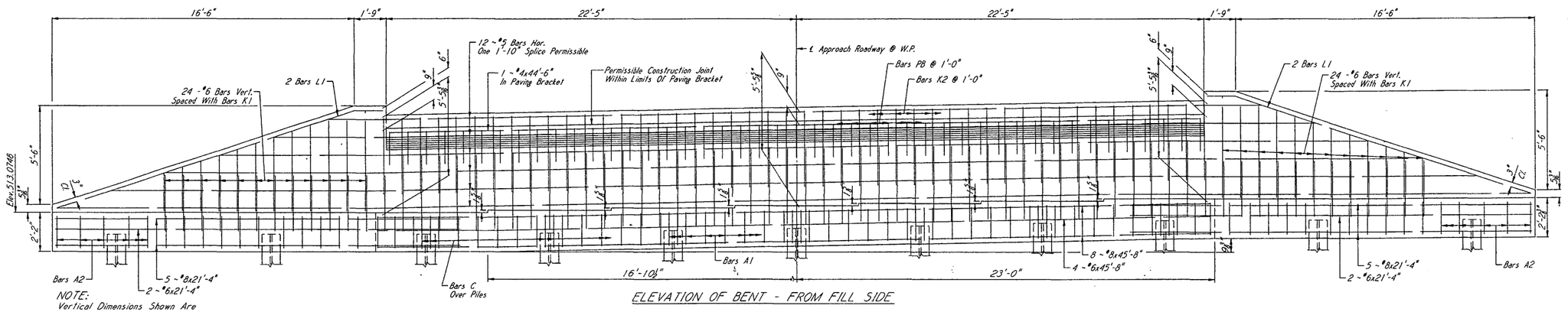


PLAN OF BENT



PLAN OF CAP
Showing Reinforcing Steel In Top Of Cap

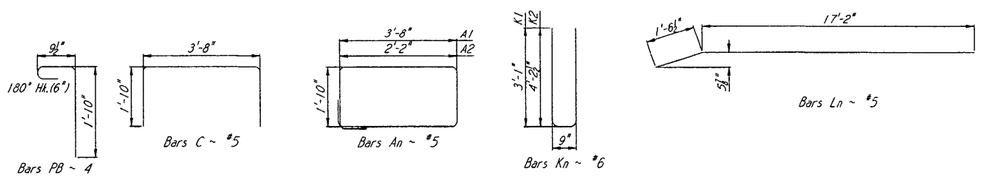
NOTE: Piles Shall Be Of The Size, Type, And Driven To The Minimum Bearing Capacity As Shown On The Layout Sheet Batter All Piles 2" Per Foot As Shown.



ELEVATION OF BENT - FROM FILL SIDE

NOTE:
Vertical Dimensions Shown Are Measured Along Fill Face Of End Wall (Bridge End).

For GENERAL NOTES And Other Details See Sheet No. A6.



BAR BENDING DETAILS
Dimensions Are Out To Out

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44
END BENT NO. 1 DETAILS

PROJECT No. 104696 /304000
SP-0006-01(087)
UNION COUNTY

DATE	BY	REVISION

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER A4 OF 17
SHEET NUMBER 469

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

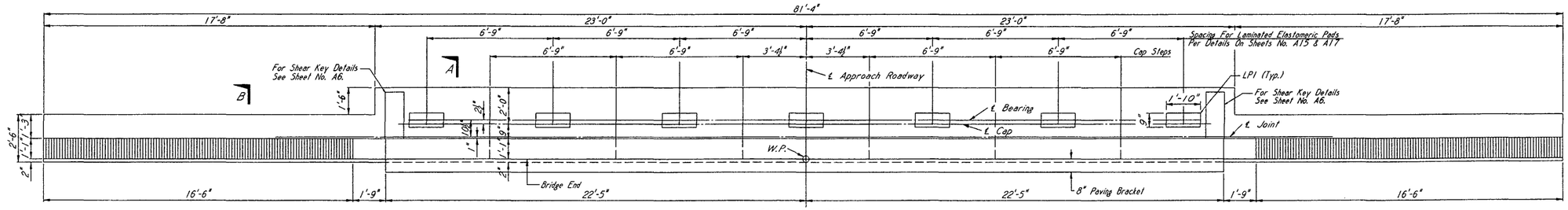
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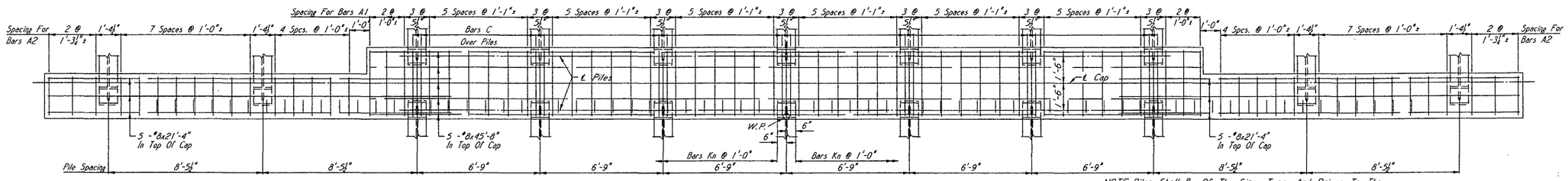
COUNTY : UNION /PONTOTOC

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STATE	PROJECT NO.
MISS.	SP-0006-01(087)

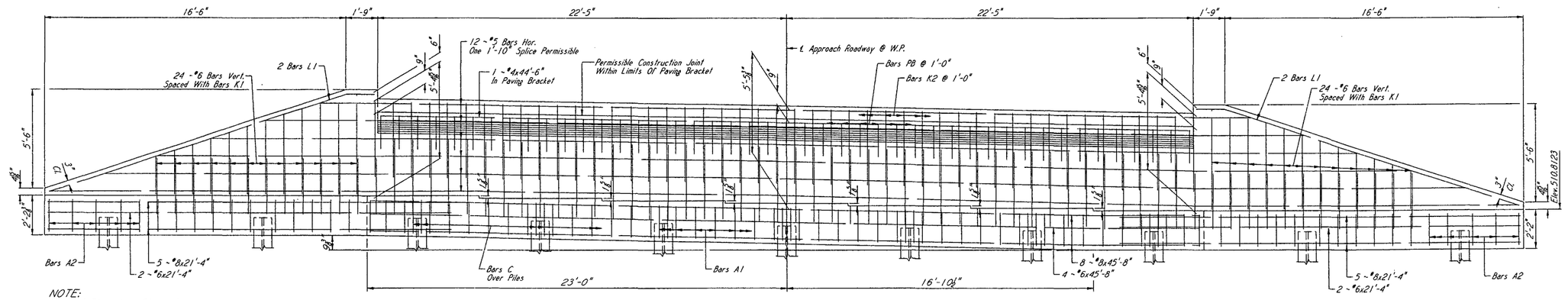


PLAN OF BENT



PLAN OF CAP
Showing Reinforcing Steel In Top Of Cap

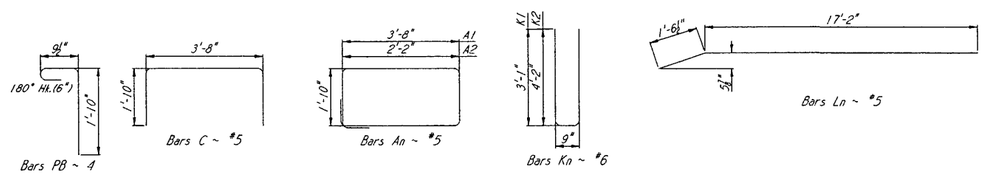
NOTE: Piles Shall Be Of The Size, Type, And Driven To The Minimum Bearing Capacity As Shown On The Layout Sheet Batter All Piles 2" Per Foot As Shown.



ELEVATION OF BENT - FROM FILL SIDE

NOTE:
Vertical Dimensions Shown Are Measured Along Fill Face Of End Wall (Bridge End).

For GENERAL NOTES And Other Details See Sheet No. A6.



BAR BENDING DETAILS
Dimensions Are Out To Out

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44
END BENT NO. 4 DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

WORKING NUMBER A5 OF 17
SHEET NUMBER 470

BY	REVISION	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12-07

DESIGN TEAM: Florence & Hutcheson, Inc.

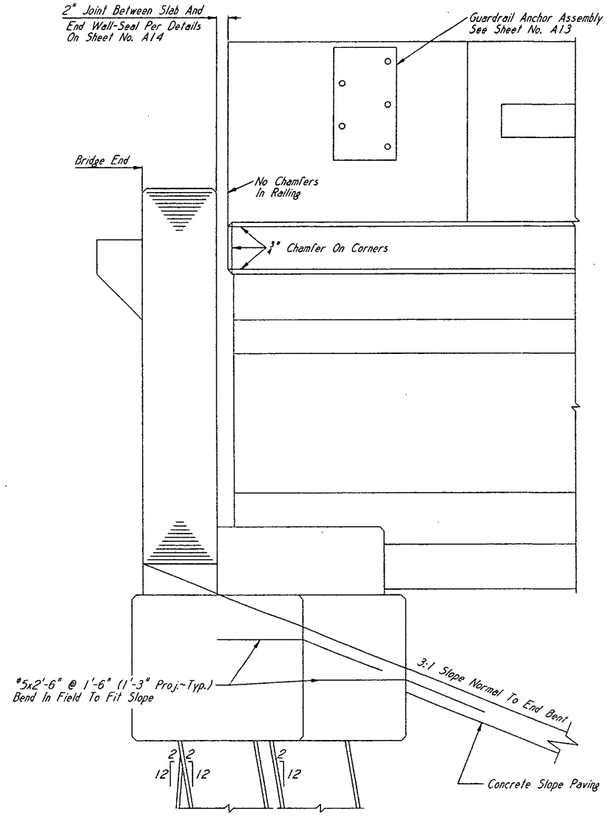
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PROJECT No. SP-0006-01(087)

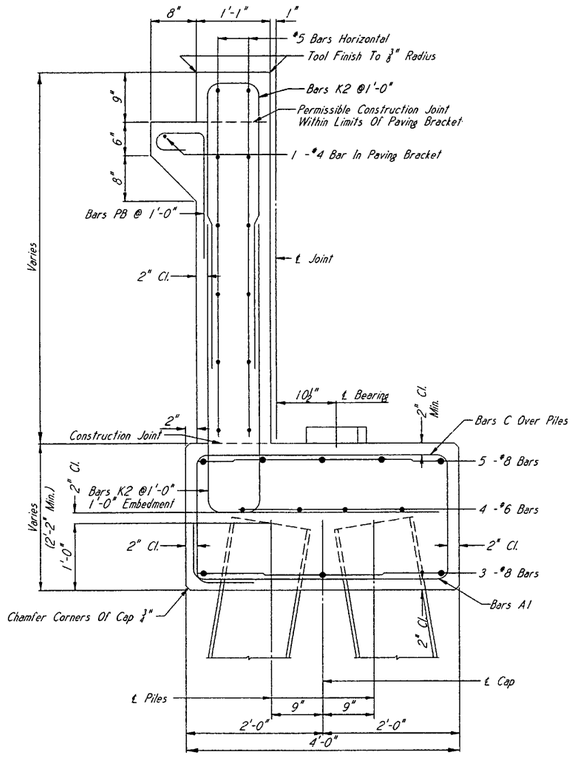
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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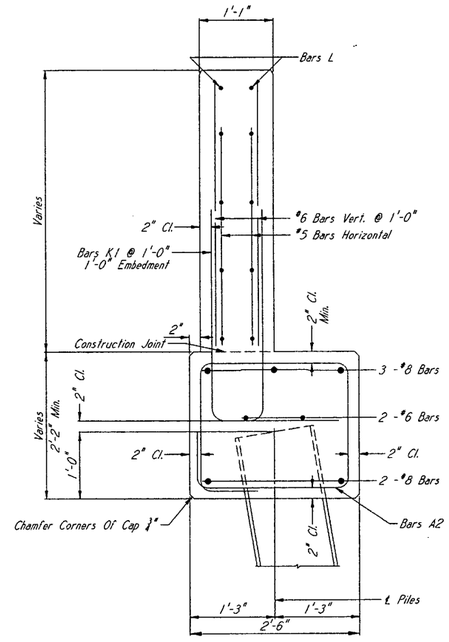
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



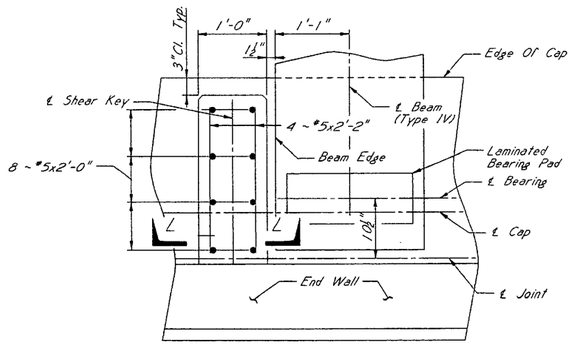
END ELEVATION



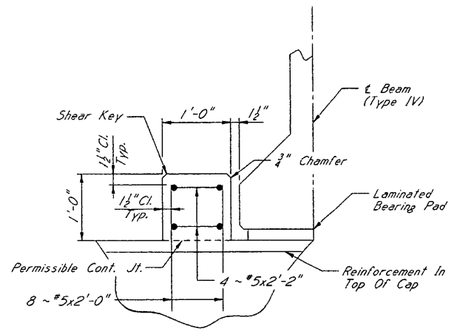
SECTION A-A



SECTION B-B



SHEAR KEY DETAIL



SECTION L-L

GENERAL NOTES:

All Concrete In End Bents Shall Be Class "AA".
Chamfer All Edges ¾", Unless Otherwise Noted.
Portion Of End Wall Between Top Of Cap And Permissible Construction Joint Shall Be Constructed After Placement Of Prestressed Concrete Beams. Portion Of End Wall Above Permissible Construction Joint Shall Not Be Constructed Until Bridge Deck Is In Place And Forms Removed.
Piles For End Bents Shall Not Be Driven Until Bridge End Fill Has Been Constructed To Grade.
Dimensions From Reinforcing Steel To Concrete Surfaces Are Clear Distances.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

END BENT DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	1207

WORKING NUMBER A6 OF 17

SHEET NUMBER 471

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

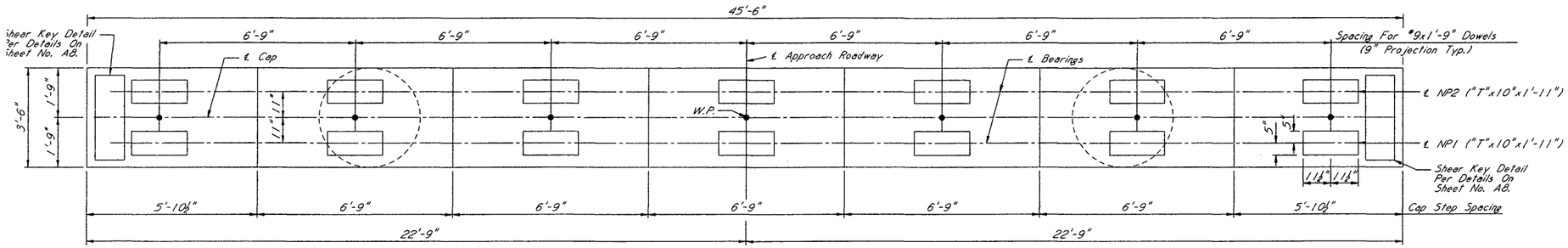
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DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

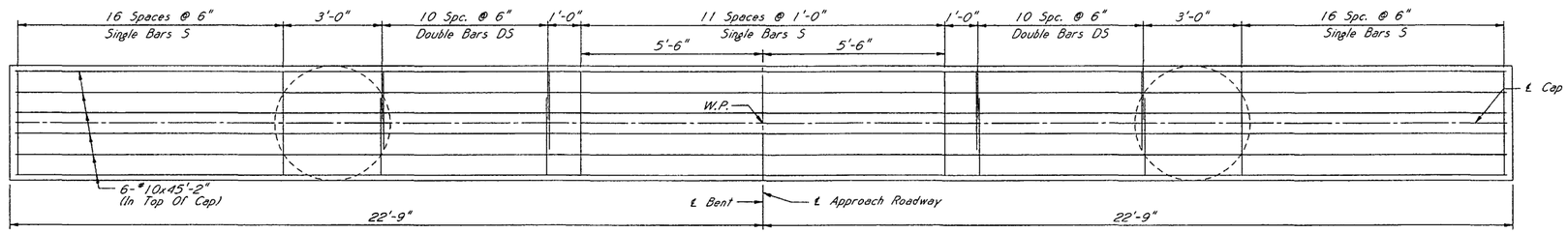
PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



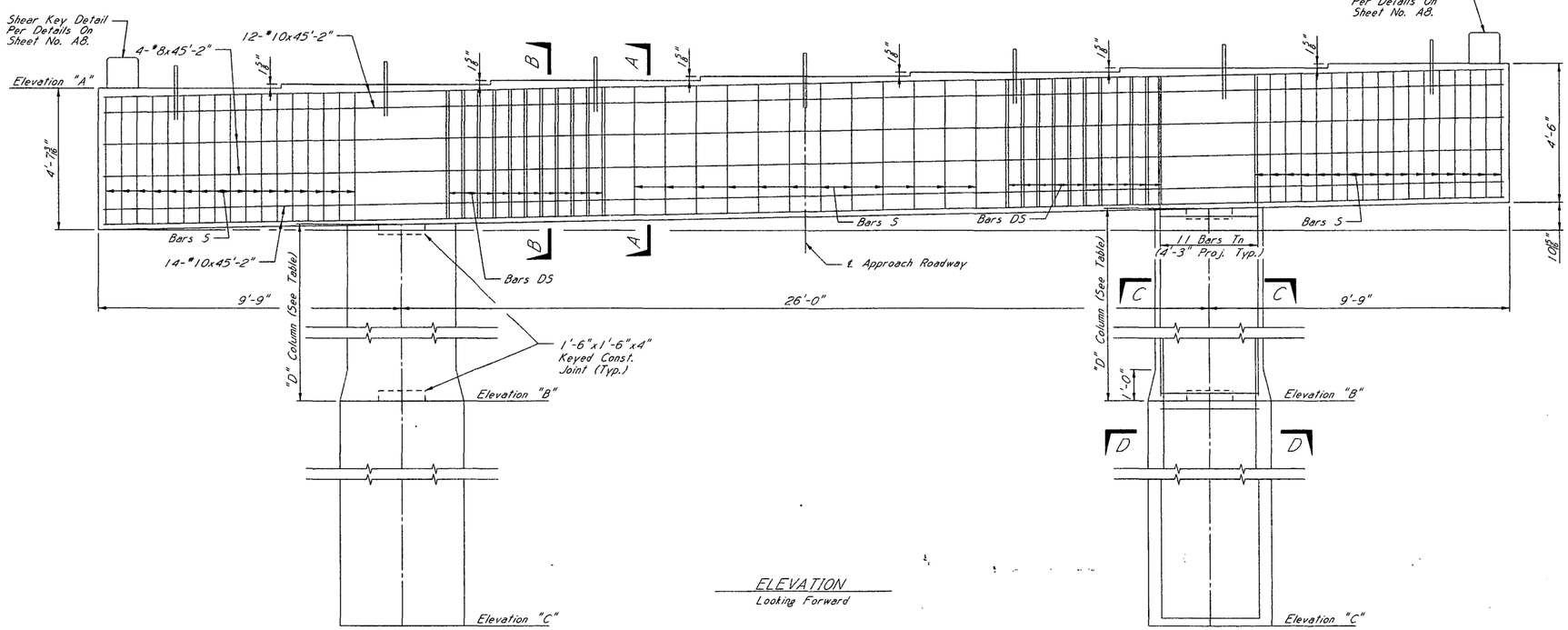
PLAN OF BENT
Showing Concrete Dimensions, Cap Steps & Anchor Dowels

NOTE: For Dimension "T" See Sheet No. A14.
For Neoprene Pad Details See Sheet No. A15, A16, & A17.



PLAN OF BENT
Showing Steel Reinforcing In Top Of Cap

TABLE OF VARIABLES				
Bent No.	"A"	"B"	"C"	"D"
2 Left Col.	512.474	487.000	441.000	21'-0⅛"
2 Right Col.		487.000	441.000	21'-7⅛"
3 Left Col.	511.534	488.000	439.000	19'-1⅞"
3 Right Col.		488.000	439.000	19'-7⅛"



ELEVATION
Looking Forward

NOTE: For GENERAL NOTES, Sections And Additional Details See Sheet No. A8.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

INT. BENTS NO. 2 & 3

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

WORKING NUMBER	SHEET NUMBER
A7 OF 17	472

REVISION	BY	DATE

DESIGNED CDB DETAILED CDB TRACED CADD
CHECKED SSP ISSUED DATE 12/07

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

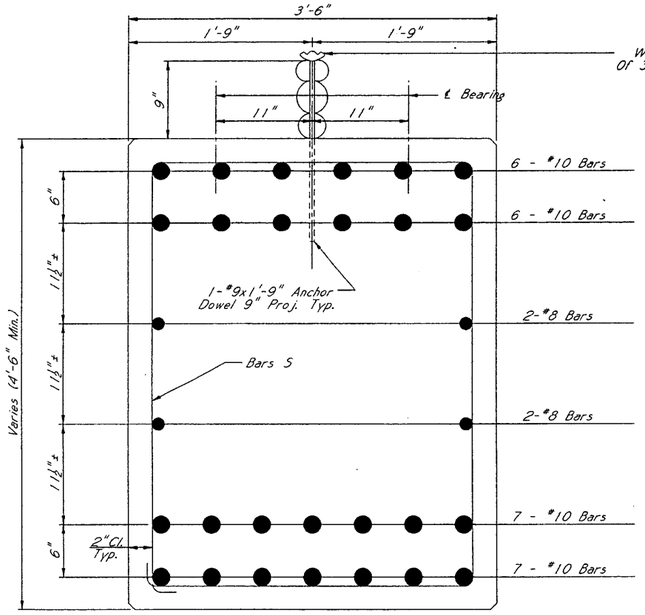
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DESIGN TEAM: Florence & Hutcheson, Inc.

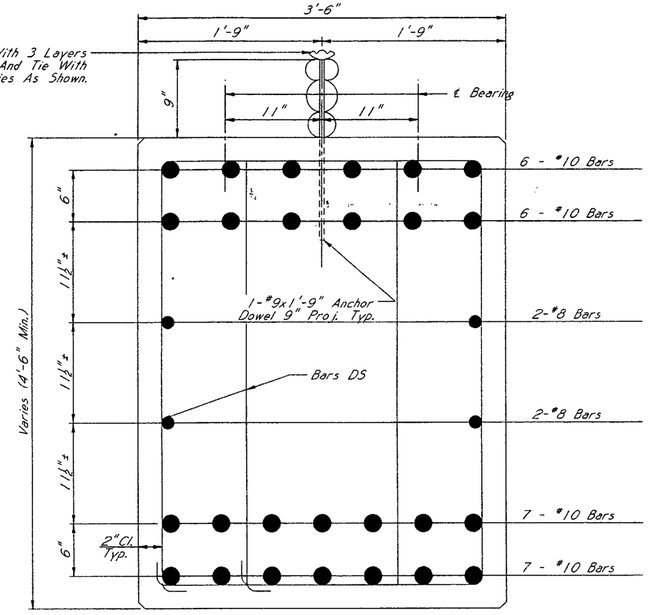
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

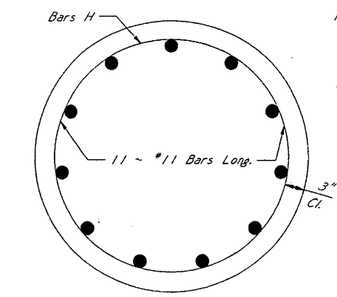
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



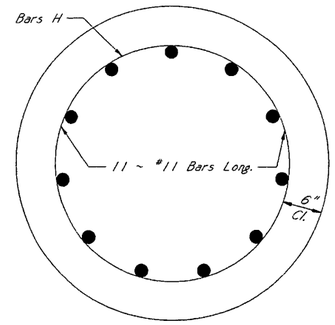
SECTION A-A



SECTION B-B

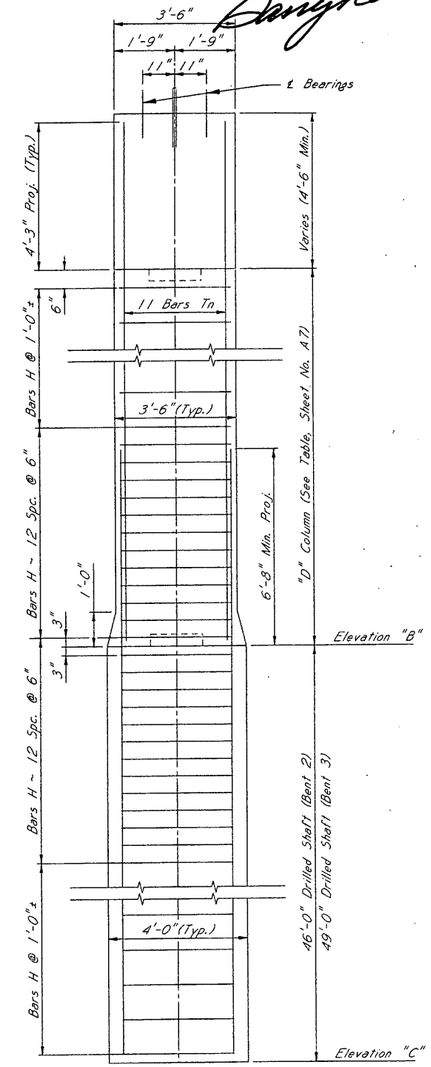


SECTION C-C

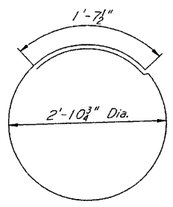


SECTION D-D

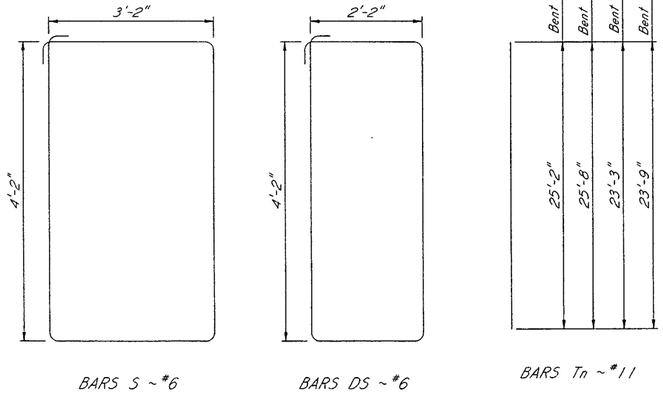
NOTE: Steel Projecting From Drilled Shafts Into Columns Will Be Included In The Cost Of The Drilled Shafts.



END ELEVATION
Showing Typical Shaft & Column Reinforcing

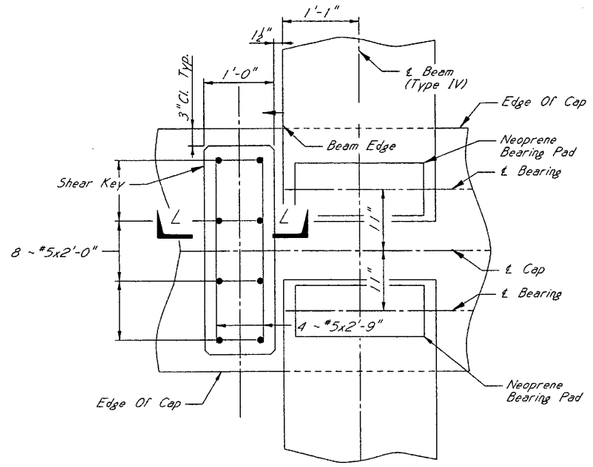


BARS H ~ #5

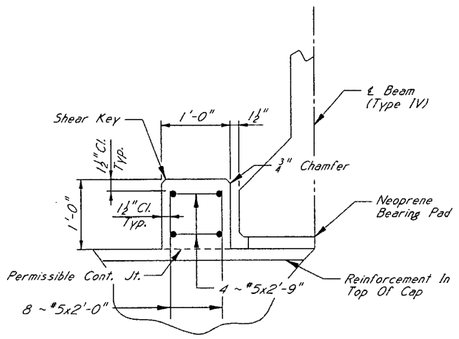


BARS S ~ #6 BARS DS ~ #6 BARS Tn ~ #11

BAR BENDING DETAILS
Dimensions Are Out To Out



SHEAR KEY DETAIL



SECTION L-L

GENERAL NOTES:
All Concrete In Cap Shall Be Class "AA".
Chamfer All Edges ¾" Unless Otherwise Noted.
Placing Dimensions From Reinforcing Steel To Concrete Surfaces Are Clear Distances.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

INT. BENT DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER A8 OF 17
SHEET NUMBER 473

BY
REVISION
DATE

FILAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

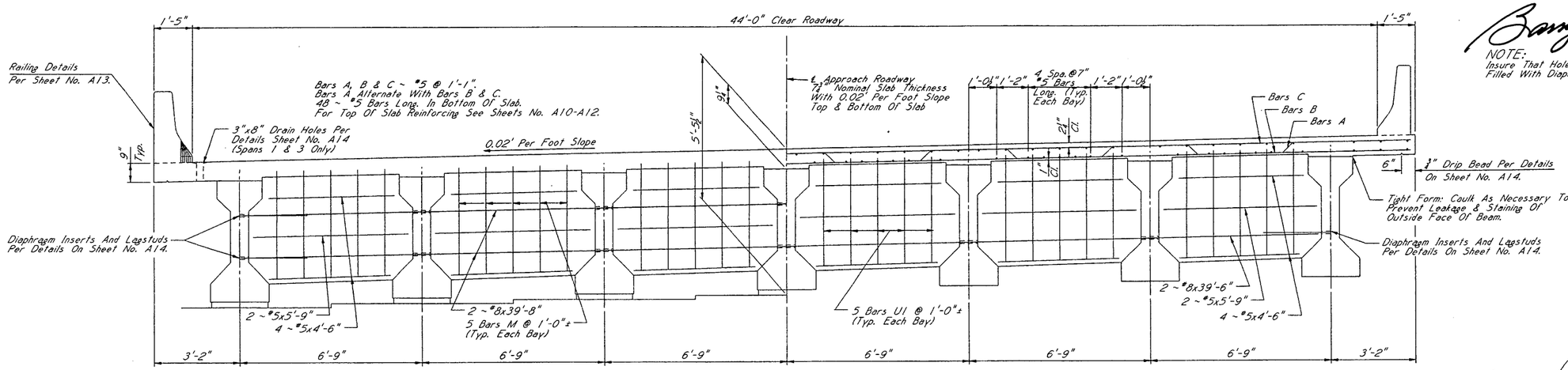
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DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

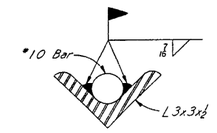
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



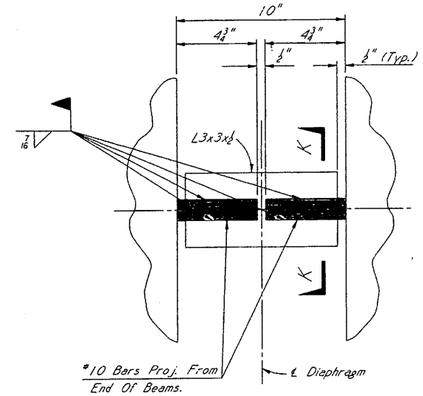
PART ELEVATION NEAR END OF SPAN
Showing 1'-0" End Concrete Diaphragm Details

PART SECTION NEAR INT. DIAPHRAGM
Showing Slab Reinforcing & 9" Int. Concrete Diaphragm Details

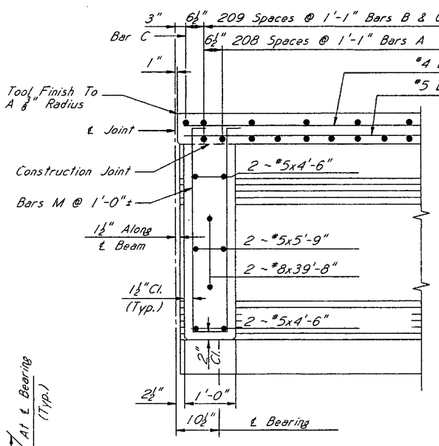
NOTE:
Insure That Holes In Beam Webs Are Completely Filled With Diaphragm Concrete.



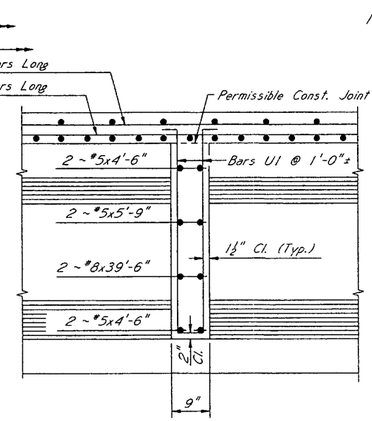
SECTION K-K



DETAIL "T"

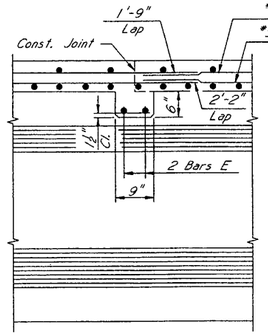


SECTION A-A



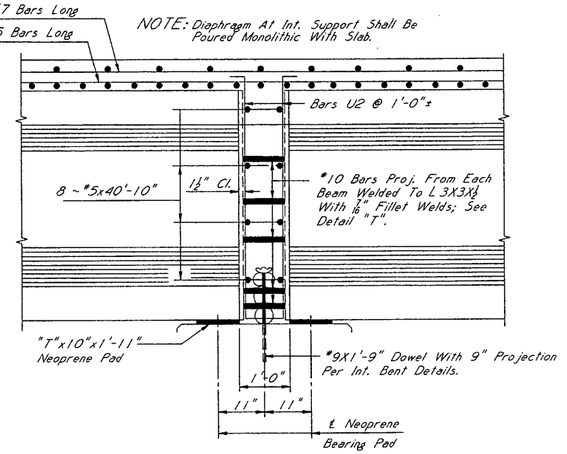
SECTION B-B

NOTE: Move Transverse Bars To Clear Construction Joint ± 2" Where Required.



SECTION C-C

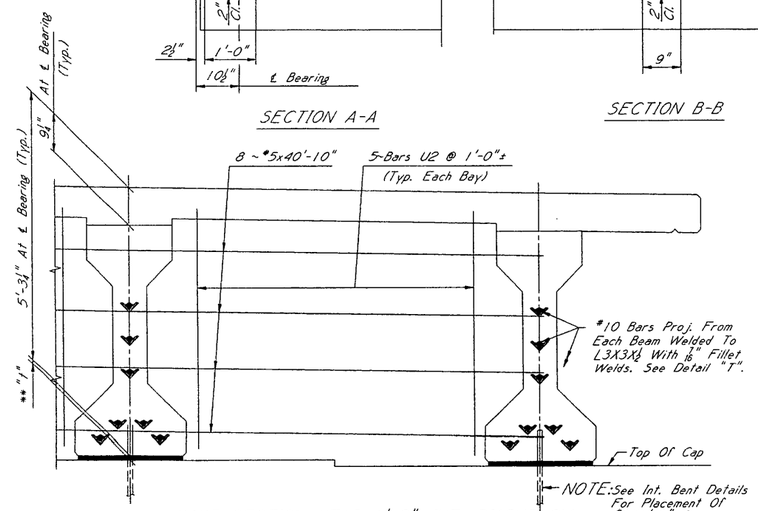
NOTE: Diaphragm At Int. Support Shall Be Poured Monolithic With Slab.



SECTION D-D

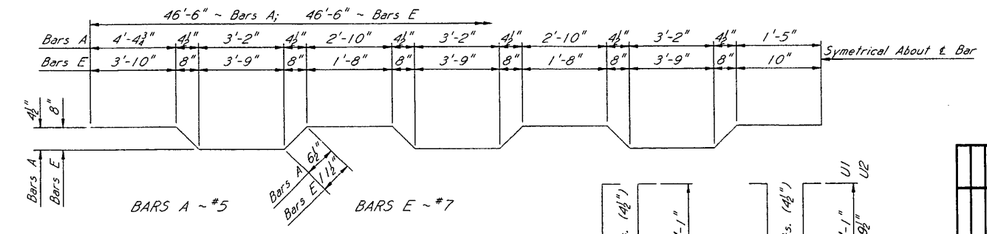
NOTE:
The Volume Of Concrete In The Fillets Between The Bottom Of The Nominal Slab And The Top Of The Beam Has Been Estimated By Using One Half (1/2) Of The Fillet Height, At The Bearing, Multiplied By The Top Flange Width And The Full Length Of The Beam. This Volume Shall Be Used For Final Pay Quantity.
For GENERAL NOTES, Railing Details And Other Typical Span Details See Sheets No. A13 & A14.

DESIGN DATA:
Specifications. . . . . A.A.S.H.T.O., 2002
Loading. H520-44
Slab Stresses. . . . . f'c=24,000 p.s.i. ; fc=1,600 p.s.i. ; n=8
Prestressed Beam Details. . .See Sheets No. A15, A16, & A17.

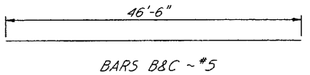


PART SECTION NEAR 1'-0" INT. DIAPHRAGM

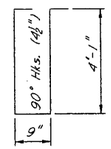
** For Dimension "t" See Sheet No. A14.



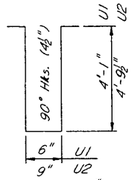
BAR BENDING DETAILS
Dimensions Are Out To Out



BARS B&C ~ #5



BARS M ~ #4



BARS Un ~ #4

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

SPAN DETAILS

PROJECT No. 104696 /304000
SP-0006-01(087)
UNION COUNTY

WORKING NUMBER	
A9 OF 17	
SHEET NUMBER	
474	

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12-07

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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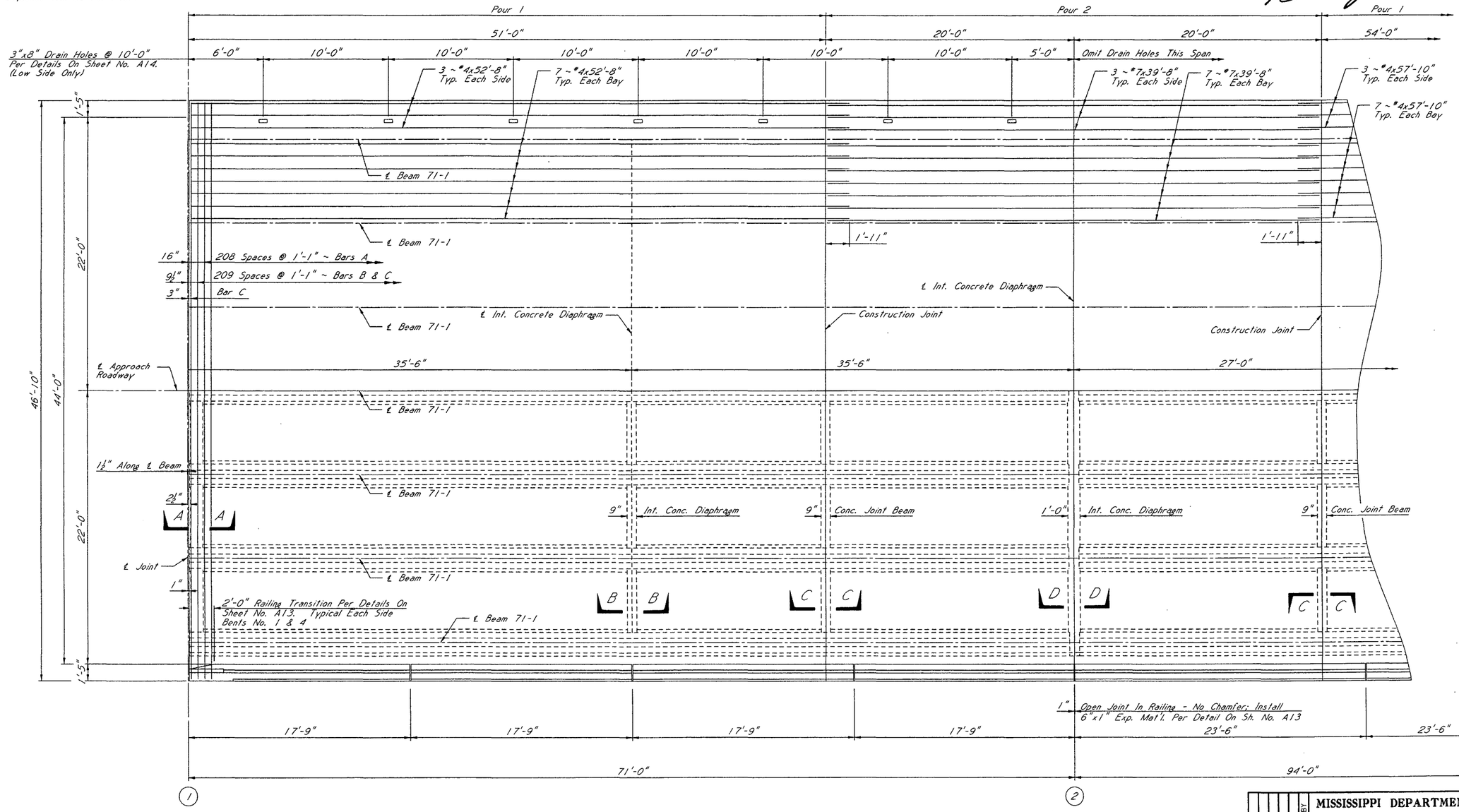
DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

NOTE: The Deck Pouring Schedule Shall Be As Shown On These Plans. No Alternate Sequence Will Be Permitted.



PLAN OF 71 FT. SPAN NO. 1
Top Half Showing Reinforcing In Top Of Slab
Bottom Half Showing Concrete Dimensions

TABLE OF RAILING BARS	
For One 71 Ft. Span	
Mark	No.
D	168
R	168
DT	16
RT	16

NOTE: For GENERAL NOTES And Other Span Details See Sheet No. A9, A13, & A14.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

71 FT. SPAN DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

WORKING NUMBER	SHEET NUMBER
A10 OF 17	475

BY	REVISION	DATE

DESIGNED CDB DETAILED CDB TRACED CADD
CHECKED SSP ISSUED DATE 12-07

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION
PLAN

06/14/2008 08:07:16 AM S:\2.DGN

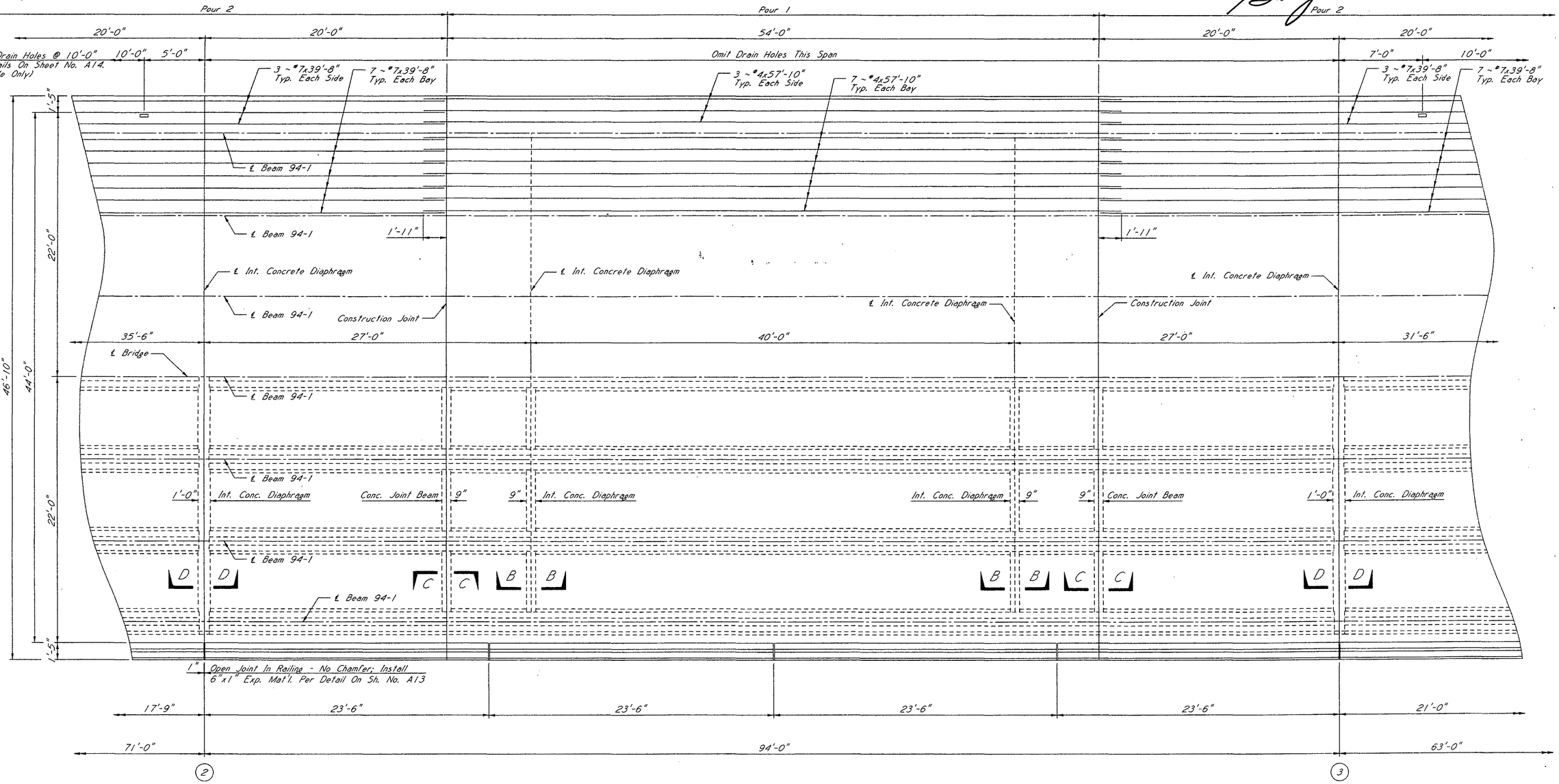
DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

NOTE: The Deck Pouring Schedule Shall Be As Shown On These Plans. No Alternate Sequence Will Be Permitted.

STATE	PROJECT NO.
MISS.	SP-0006-01(087)



PLAN OF 94 FT. SPAN NO. 2
Top Half Showing Reinforcing In Top Of Slab
Bottom Half Showing Concrete Dimensions

TABLE OF RAILING BARS	
For One 94 Ft. Span	
Mark	No.
D	238
R	238

NOTE: For GENERAL NOTES And Other Span Details See Sheet No. A9, A13, & A14.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

94 FT. SPAN DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER A11 OF 17
SHEET NUMBER 476

DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

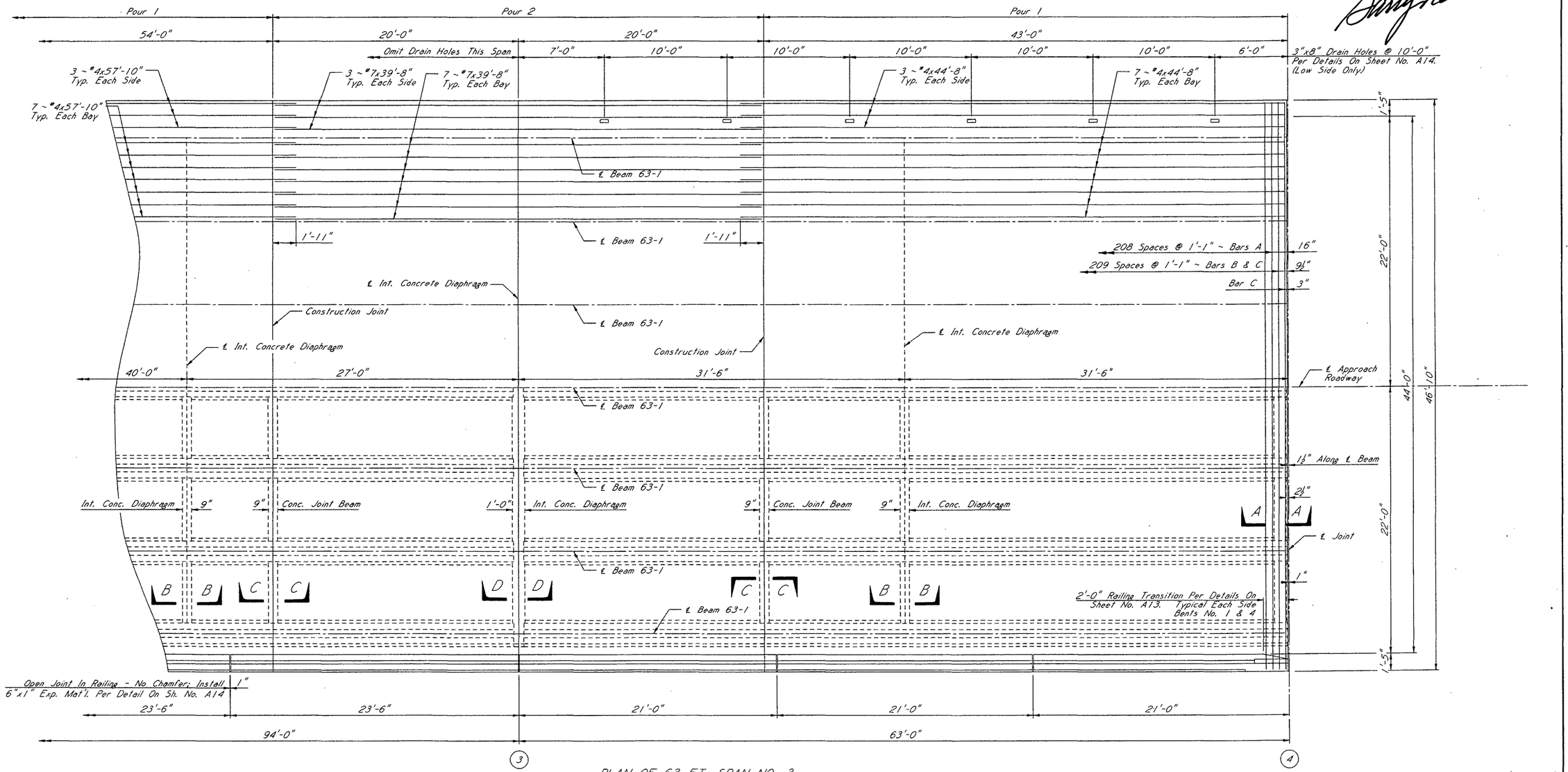
PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/14/2008 08:07:32 A476 S13.DGN

STATE	PROJECT NO.
MISS.	SP-0006-01(087)

NOTE: The Deck Pouring Schedule Shall Be As Shown On These Plans. No Alternate Sequence Will Be Permitted.



PLAN OF 63 FT. SPAN NO. 3
Top Half Showing Reinforcing In Top Of Slab
Bottom Half Showing Concrete Dimensions

TABLE OF RAILING BARS	
For One 63 Ft. Span	
Mark	No.
D	152
R	152
DT	16
RT	16

NOTE: For GENERAL NOTES And Other Span Details See Sheet No. A9, A13, & A14.

REVISION	BY	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

63 FT. SPAN DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	1207

WORKING NUMBER A12 OF 17
SHEET NUMBER 477

DESIGN TEAM: Florence & Hutcheson, Inc.

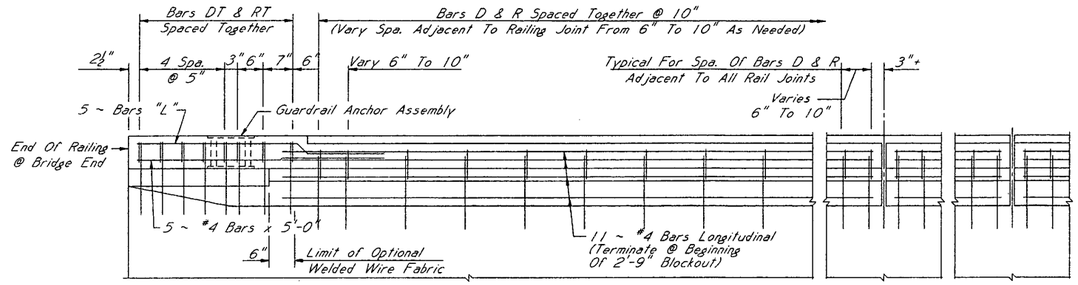
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

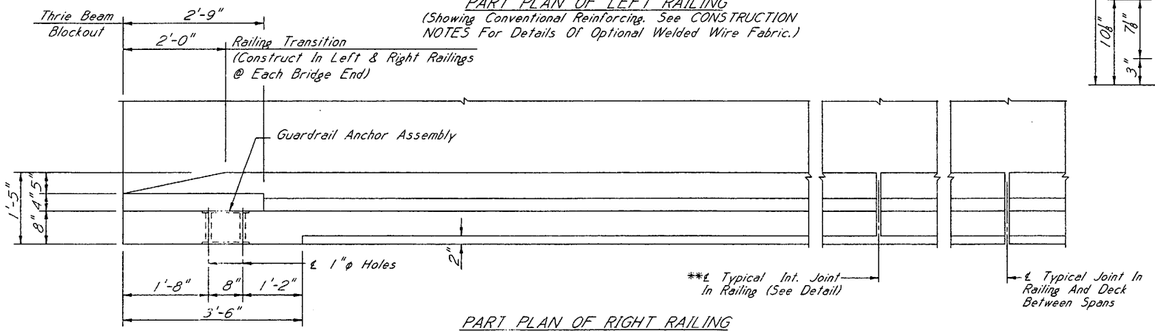
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

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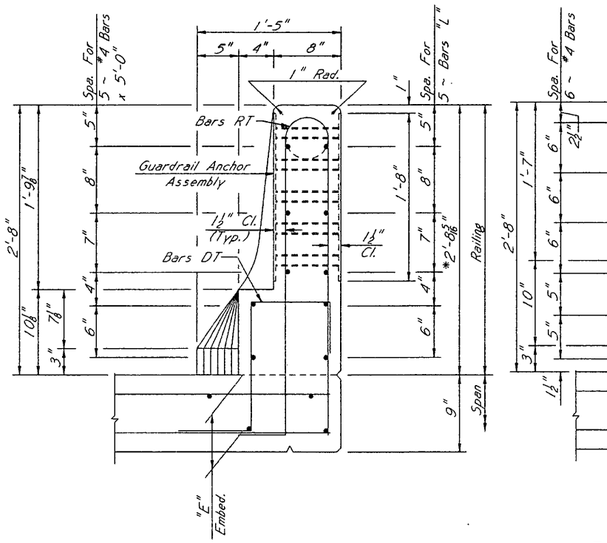
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



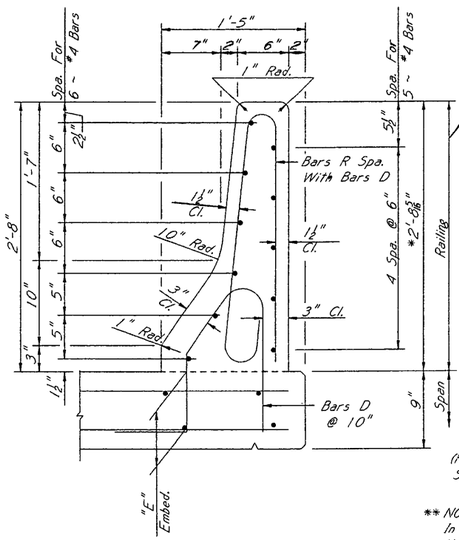
PART PLAN OF LEFT RAILING
(Showing Conventional Reinforcing. See CONSTRUCTION NOTES For Details Of Optional Welded Wire Fabric.)



PART PLAN OF RIGHT RAILING
(Showing Concrete Dimensions)



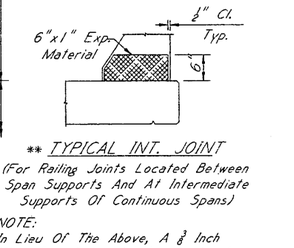
END ELEVATION OF RAILING



TYPICAL SECTION OF RAILING

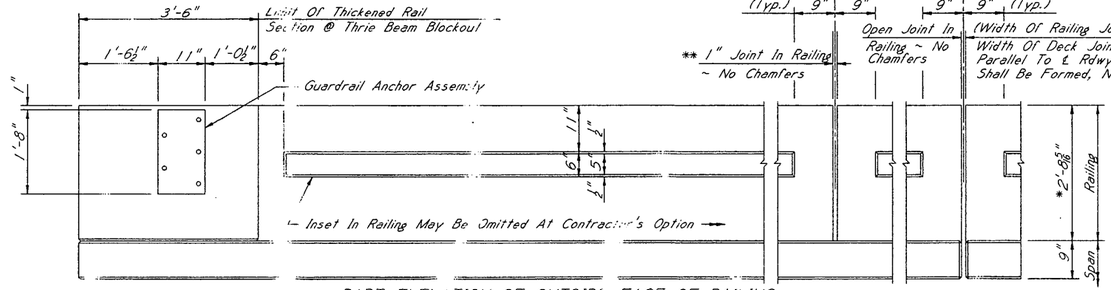
NOTE:
"E" = Slab Thickness (In.) - 1 Inch.

*NOTE:
This Dimension Shown Is For 0.02 ft/ft Slope. It Will Vary In Superelevated Sections.

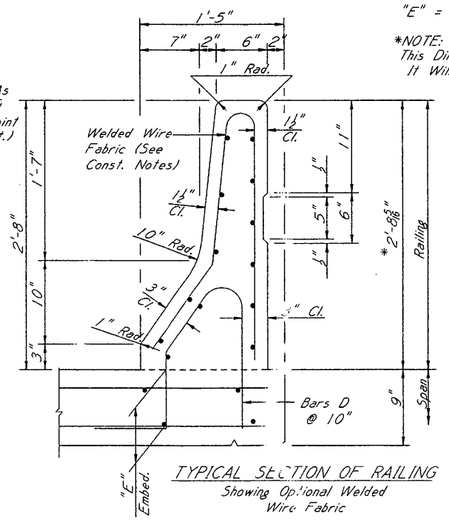


** TYPICAL INT. JOINT
(For Railing Joints Located Between Span Supports And At Intermediate Supports Of Continuous Spans)

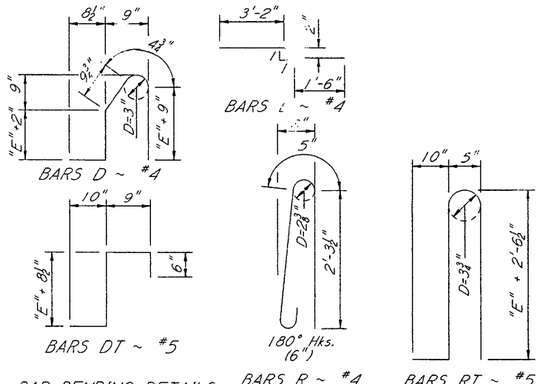
** NOTE:
In Lieu Of The Above, A ⅜ Inch Wide Saw Cut Joint Is Permitted When Railing Is Constructed Using Slipforming. Joint Is To Be Saw Cut To Within Six (6) Inches Of The Bridge Deck; 6"x1" Expansion Material Is To Be Omitted When Joint Is Saw Cut. Railing Joints Located At Bridge Deck Joints Shall Be Formed, Not Saw Cut. Railing Constructed By The Slipform Method Shall Be In Accordance with Section 615.03.2 Of The Mississippi Standard Specifications.



PART ELEVATION OF OUTSIDE FACE OF RAILING

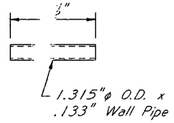


TYPICAL SECTION OF RAILING
Showing Optional Welded Wire Fabric



BAR BENDING DETAILS
Dimensions Are Out To Out

NOTE:
"E" = Slab Thickness (In.) - 1 Inch.



PIPE SLEEVE DETAIL

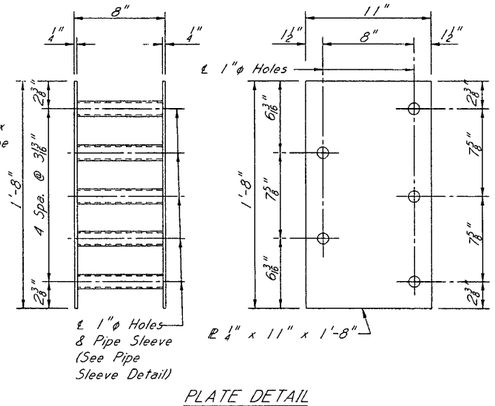
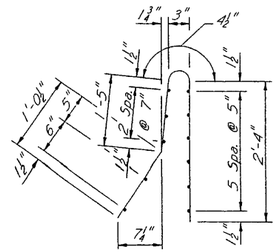


PLATE DETAIL
GUARDRAIL ANCHOR ASSEMBLY



WELDED WIRE FABRIC
(Optional - See CONSTRUCTION NOTES)

CONSTRUCTION NOTES:
Fabricate Guardrail Anchor Assemblies By Tack Welding Each End Of Pipe Sleeves To Plates. Plates Shall Be ASTM A 36 Steel. Pipes Shall Be ASTM A 120. Galvanize Complete Assemblies After Fabrication Per ASTM A 153.
Attach Assemblies Securely To Forms Prior To Pouring Railing Concrete To Assure That Exposed Surfaces Of The Assemblies Will Be Flush With Concrete Surfaces.
GUARDRAIL ANCHOR ASSEMBLIES SHALL BE INSTALLED IN BOTH LEFT AND RIGHT RAILINGS AT EACH END OF ALL BRIDGES.
Welded Wire Fabric Meeting The Requirements Of ASTM A 497 And Details Shown On This Sheet May Be Used As An Option To Conventional Railing Reinforcing. Longitudinal Wires Shall Be D8 Spaced As Shown In The BAR BENDING DETAILS And Vertical Wires Shall Be D8 Spaced At 4".
Welded Wire Fabric Shall Not Be Used In The 2'-9" Thrie Beam Blockout Reinforcement For The 2'-9" Thrie Beam Blockout Shall Consist Of Conventional Reinforcing As Shown In Details On This Sheet. The Longitudinal Bars Of The Conventional Reinforcing Shall Extend Beyond The 2'-9" Thrie Beam Blockout Into The Welded Wire Fabric A Minimum Distance Of 1'-6".

DESIGN DATA
Specifications.....A.A.S.H.T.O. 1992 & Int. Thru 1995
Concrete.....Class "AA"(4,000 psi)
Reinforcing.....ASTM A 615 Grade 60 (Fy = 60 ksi)

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

2' - 8" RAILING DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

WORKING NUMBER	SHEET NUMBER
A13 OF 17	478

BY	REVISION	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	1207

ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

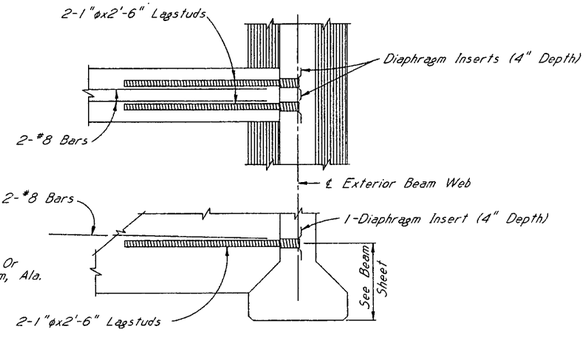
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DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

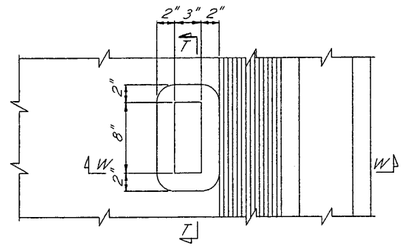
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



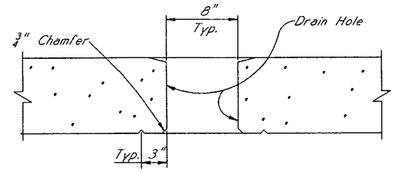
NOTE: Continuous Threaded Lagstuds And Diaphragm Inserts Shall Be As Manufactured By The Richmond ScrewAnchor Co.,Inc., Atlanta, Ga; By Meadow Steel Products Co.,Inc.,Birmingham, Ala. Or Dayton Superior Co.,Inc.,Birmingham, Ala.

PART SECTION

DIAPHRAGM INSERT AND LAGSTUD DETAILS

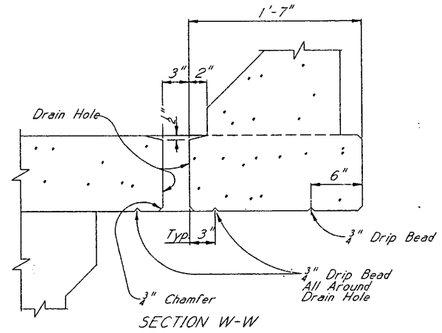


DETAIL "D"



SECTION T-T

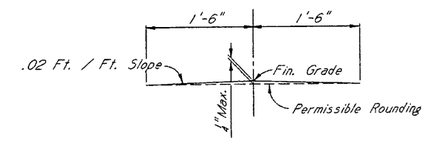
NOTE: Drain Holes Shall Be Located So That Bars B & C Will Not Be Cut. If Necessary One Bar A May Be Cut In Field.



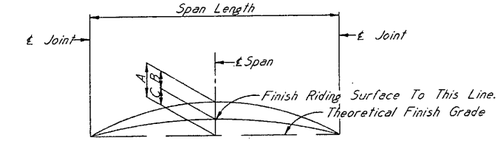
SECTION W-W

DRAIN HOLE DETAILS

Use Where Shown On The Span Detail Sheet.



CROWN DETAILS

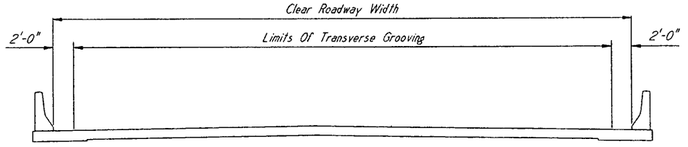


DEFLECTION DIAGRAM

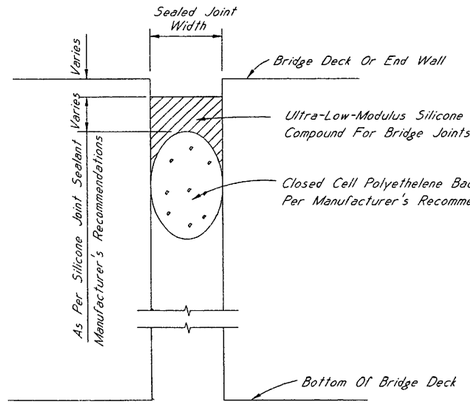
A = Total Recommended Allowance For Deflection.
B = Estimated Deflection Due To Dead Load Of Slab & Rail.
C = A-B = Net Initial Camber In Riding Surface, Which Includes An Allowance For Creep.

NOTE: For Values Of A,B & C, See Beam Detail Sheets.

NOTE: The Deflection Values Shown On The Beam Detail Sheets Were Prepared And Intended For Design And Estimation Purposes Only. It Is The Contractor's Responsibility To Determine Bridge Girder Deflections For Use In Calculating Bridge Deck Form Grades. Prior To Formwork Construction, The Contractor Shall Submit Three (3) Copies Of Deck Form Grades, Bridge Girder Deflections And Bridge Girder Profiles To The 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 And Shall Be Stamped By A Mississippi Registered Professional Engineer.



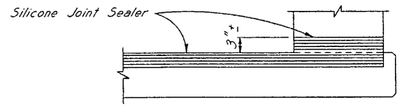
LIMITS OF TRANSVERSE GROOVING



TYPICAL SECTION

SILICONE SEALED JOINT

NOTE: The Contractor Should Be Aware That The Joint Opening (Width) Can Change At Temperatures Higher Or Lower Than The 60°F Design Width. Installation Of The Joint Sealer Material Shall Be In Accordance With Manufacturer's Recommendations.



ELEVATION AT END OF SPAN

NOTE: Seal All Open Joints As Shown On The Layout Sheet. Width Of Joint Is Shown In End Bent And Span Details. Seal Joint When It Is At Or Near Its Design Width. A Representative Of The Joint Sealant Manufacturer Shall Be Present At The Time Joint Sealing Begins To Ensure That The Contractor Is Properly Schooled In The Installation Of The Joint Material.

NEOPRENE PAD THICKNESS TABLE		
PAD NO.	PAD THICKNESS "T"	COMPRESSED PAD THICKNESS "t"
LP1	$2\frac{5}{16}$"	$2\frac{1}{4}$"
NP1	$1\frac{3}{16}$"	$1\frac{1}{8}$"
NP2	1"	$\frac{15}{16}$"

NOTE: Joints In Newly Constructed Bridge Decks Shall Be Protected From Damage Until Accepted For Maintenance By The State. Damaged Joints Shall Be Repaired At No Cost To The State.

GENERAL NOTES:

All Concrete In Span And Railing Shall Be Class "AA".
Chamfer All Edges ¾", Unless Otherwise Noted.
See Layout Sheet For Finishing Of Concrete Surfaces.
Placing Dimensions For Reinforcing Steel To Concrete Surfaces Are Clear Distances.
To Determine The Dimension From Finish Grade To Cap, The Assumption Is Made That The Compressed Thickness Of The Neoprene Pad Is As Shown In Table, And That The Original Camber Of The Beams Will Be Within The Limits Shown On The Beam Detail Sheets. The Bridge Engineer Shall Be Notified If The Cambers Not Within These Limits.

BY	REVISION	DATE

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

MISC. SPAN DETAILS

PROJECT No. 104969 /304000
SP-0006-01(087)

UNION COUNTY

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER A14 OF 17

SHEET NUMBER 479

DESIGN TEAM: Florence & Hutcheson, Inc.

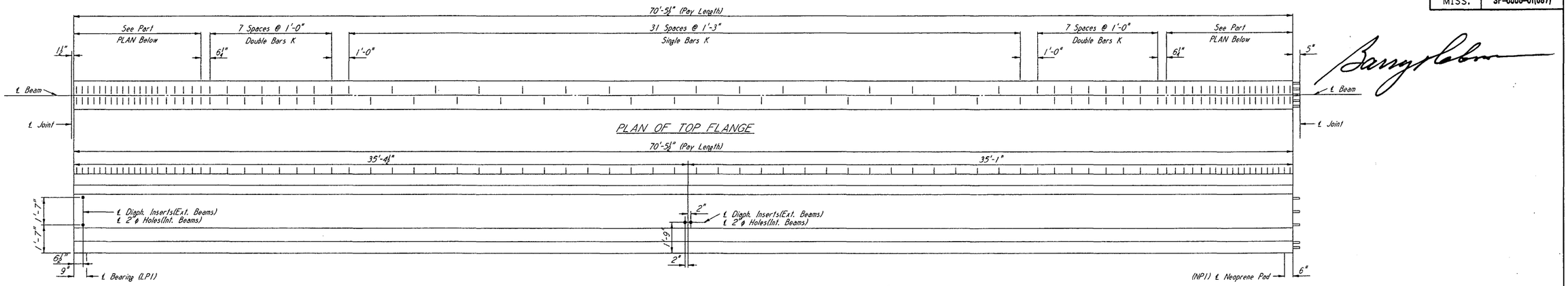
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

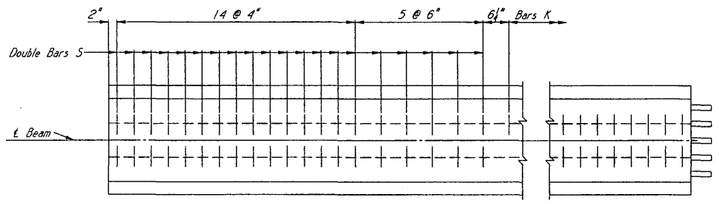
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STATE	PROJECT NO.
MISS.	SP-0006-01(087)

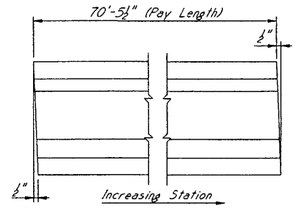


ELEVATION

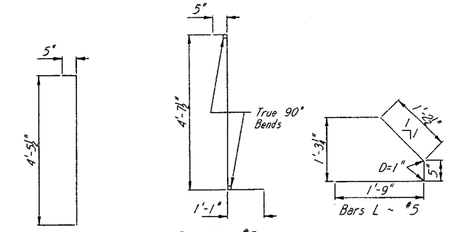
NOTE: For Beam End With #10 Bars Projecting(Rt. End), Cut Strands Flush-No Coating Required.
For Other Beam End(Lt. End), Cut Strands Flush And Weatherproof With Limestone Colored "Sonolastic" (Sonneborn Building Products), "GC-9 Synthacalk" (Pecora Corp.) Or Approved Equal, Meeting The Requirements Of Federal Specification No. TT-S-00227E Or TT-S-00230C, Applied According To Manufacturer's Directions.



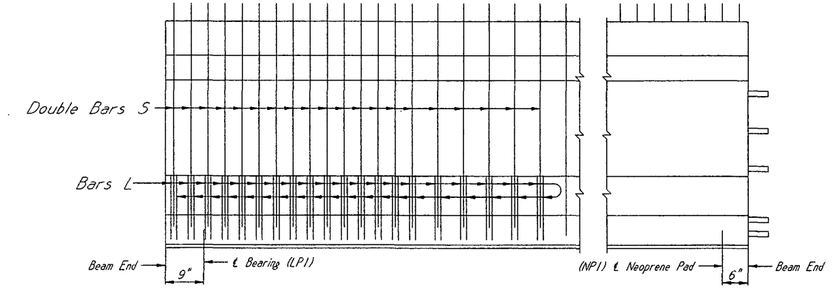
PART PLAN



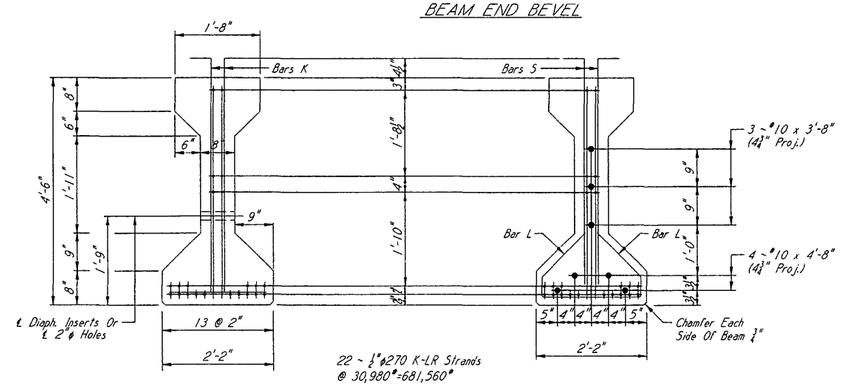
BEAM END BEVEL



BAR BENDING DETAILS
Dimensions Are Out To Out



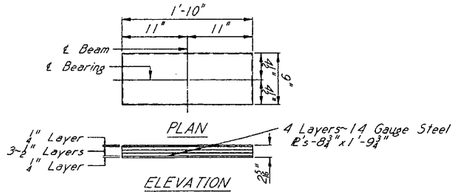
PART ELEVATION
Strands Not Shown For Clarity



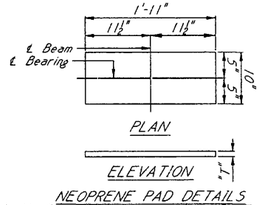
22 ~ ½"ø270 K-LR Strands @ 30,980#=681,560#

SECTION NEAR ℄ SPAN

END ELEVATION



NEOPRENE PAD DETAILS
Testing Acceptance Procedure Shall Be In Accordance With Section 714.10.6 Of The Specifications.
Elastomer Shall Have A Minimum Shear Modulus Of 120 p.s.i. At 73°F.
Bearing Area On Top Of Cap Shall Be Cast Smooth And True To Grade.



NEOPRENE PAD DETAILS
In No Case Shall Neoprene Pads Be Field Cut.
Bearing Area On Top Of Cap Shall Be Cast Smooth And True To Grade.

NOTE: For Dimension "T" See Sheet No. A14.

PRESTRESS REQUIREMENTS

For Deflection Diagram, See Misc. Span Details Per Sheet No. A14.

Strand Type	Minimum Breaking Strength	Initial Tension	Required Number And Location Of Strands						Maximum And Minimum Centroid For Total Number Of Strands				Distance From ℄ Span To Hold-Down Point	Camber Limits	Deflection Diagram			Minimum Concrete Strength At Time Of Release
			Total Number Strands	Straight Strands		Draped Strands			At ℄ Span		At Beam End				A	B	C	
				Number Strands	Centroid	Number Strands	Centroid ℄ Span	Centroid Beam End	Max.	Min.	Max.	Min.						
	lbs/strand	lbs/strand																
½"ø270 K-LR	41,300	30,980	22	22	1'-0⅜"	0	N/A	N/A	1'-1⅜"	11⅜"	1'-1⅜"	11⅜"	N/A	0 To 1"	½"	1"	¼"	4500

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

71 FT. BEAM DETAILS (TYPE IV)

PROJECT No. 104969 /304000
SP-0006-01(087)

UNION COUNTY

REVISION	BY	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER A15 OF 17

SHEET NUMBER 480

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

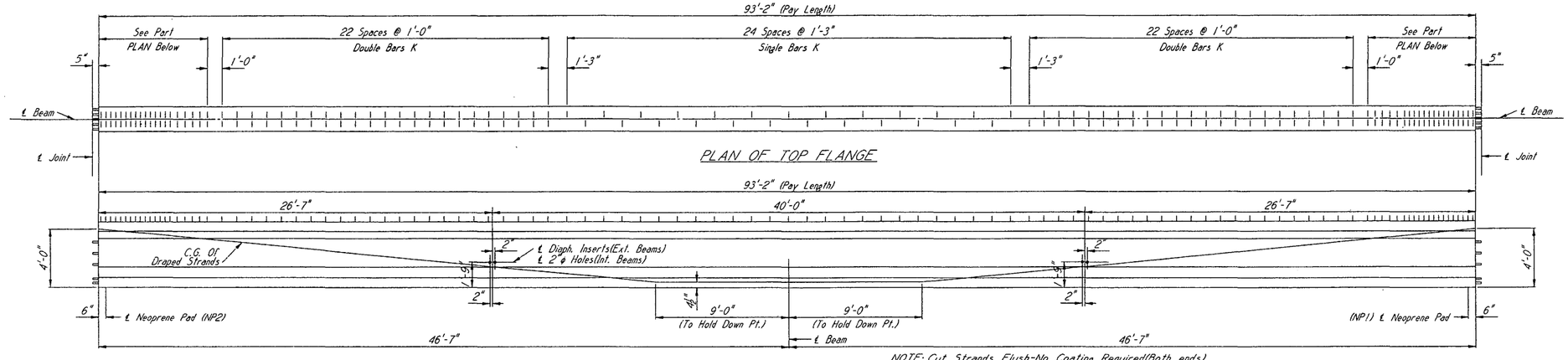
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DESIGN TEAM: Florence & Hutcheson, Inc.

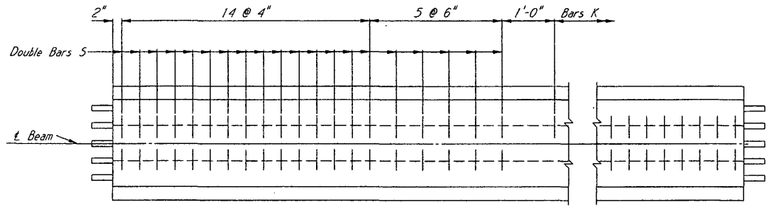
COUNTY : UNION /PONTOTOC

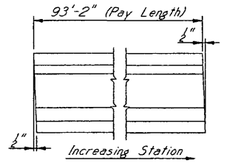
PROJECT No. SP-0006-01(087)

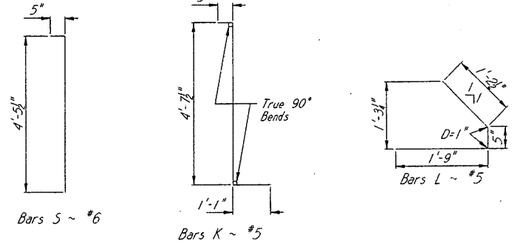
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



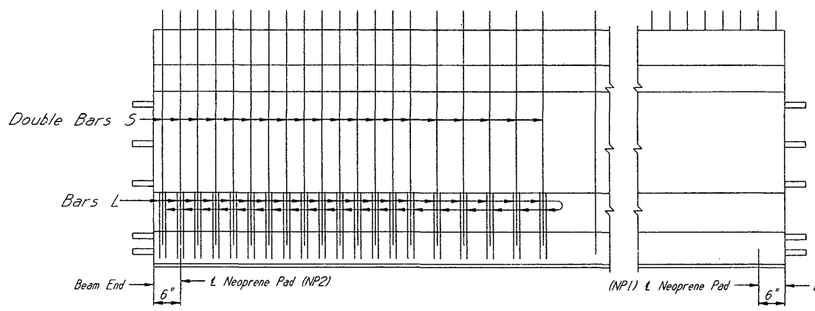
NOTE: Cut Strands Flush-No Coating Required(Both ends).



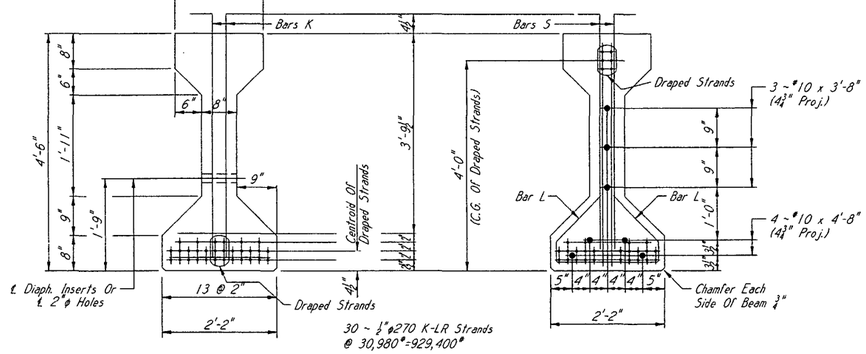




BAR BENDING DETAILS
Dimensions Are Out To Out

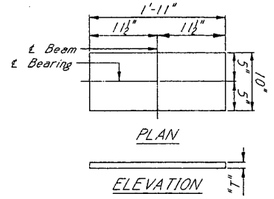


PART ELEVATION
Strands Not Shown For Clarity



SECTION NEAR ℄ SPAN

END ELEVATION



NEOPRENE PAD DETAILS
In No Case Shall Neoprene Pads Be Field Cut. Bearing Area On Top Of Cap Shall Be Cast Smooth And True To Grade.

NOTE: For Dimension "T" See Sheet No. A14.

PRESTRESS REQUIREMENTS

For Deflection Diagram, See Misc. Span Details Per Sheet No. A14.

Strand Type	Minimum Breaking Strength	Initial Tension	Required Number And Location Of Strands						Maximum And Minimum Centroid For Total Number Of Strands				Distance From ℄ Span To Hold-Down Point	Camber Limits	Deflection Diagram			Minimum Concrete Strength At Time Of Release
			Total Number Strands	Straight Strands		Draped Strands			At ℄ Span		At Beam End				A	B	C	
				Number Strands	Centroid	Number Strands	Centroid ℄ Span	Centroid Beam End	Max.	Min.	Max.	Min.						
	lbs/strand	lbs/strand																
½"ø270 K-LR	41,300	30,980	30	24	4"	6	4½"	4'-0"	5⅛"	3⅛"	1'-11⅝"	11⅞"	9'-0"	0 To 2½"	1⅛"	⅞"	7/16"	4500

GENERAL NOTES:

Beams Shall Be Manufactured In Accordance With Mississippi Standard Specification For Road & Bridge Construction, 2004.
The Tops Of Beams Shall Be Rough Floated. At Approximately The Time Of Initial Set The Entire Tops Of Beams Shall Be Scrubbed Transversely With A Coarse Wire Brush To Remove All Laitance And Produce A Roughened Surface For Bonding Slab. Other Surfaces Shall Be Finished Per Specifications.
Strand Pattern Detailed Is For ½"ø270 K-LR Strands. Shop Drawings Of Prestressed Beams Shall Include The Type And Location Of All Strands.
The Bridge Engineer Shall Be Notified If The Camber Of The Beam Is Not Within The Limits Shown In Table.
Concrete Shall Be Class "FX" And:
(a) Shall Have A 28-Day Cylinder Strength Of 6000 p.s.i.
(b) At Transfer Of The Tensioning Load, The Cylinder Strength Of The Concrete Shall Be As Shown In Table.
At The Contractor's Request A Suggested Concrete Design Mix Will Be Furnished With The Understanding That It Is The Contractor's Responsibility To Maintain 6000 p.s.i. Concrete.
If Any Cylinder Tests Below 6000 p.s.i., The Beam Represented Will Be Held On The Yard Until The 28-Day Strength Is Determined And Acceptance Or Rejection Has Been Established.

DESIGN DATA

Unit Stresses Are In Accordance With A.A.S.H.T.O., 2002.

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

94 FT. BEAM DETAILS (TYPE IV)

PROJECT No. 104969 /304000
SP-0006-01(087)

UNION COUNTY

BY	REVISION	DATE

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	12/07

WORKING NUMBER A16 OF 17

SHEET NUMBER 481

DESIGN TEAM: Florence & Hutcheson, Inc.

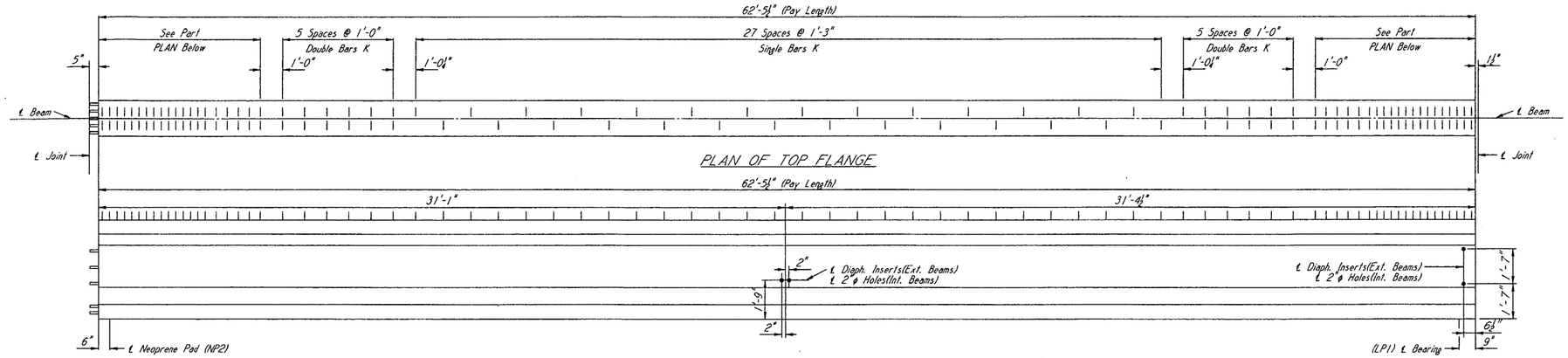
COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)

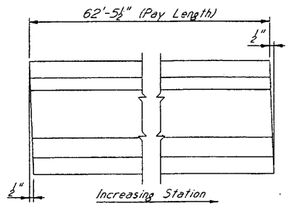
PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

06/14/2009 08:20:55 4481 S17.DGN

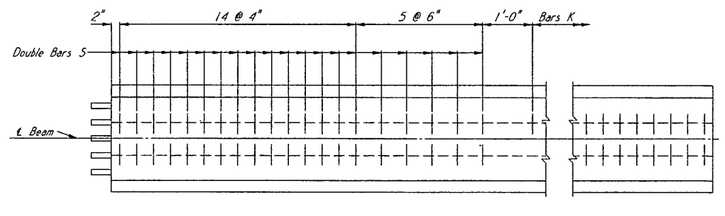
STATE	PROJECT NO.
MISS.	SP-0006-01(087)



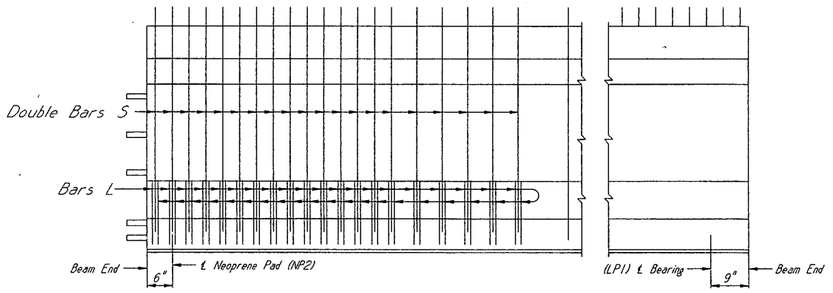
NOTE: For Beam End With #10 Bars Projecting(Lt. End), Cut Strands Flush-No Coating Required. For Other Beam End(Rt. End), Cut Strands Flush And Weatherproof With Limestone Colored "Sonolastic" (Sanneboro Building Products), "GC-9 Synthacalk" (Pecora Corp.) Or Approved Equal, Meeting The Requirements Of Federal Specification No. TT-S-00227E Or TT-S-00230C, Applied According To Manufacturer's Directions.



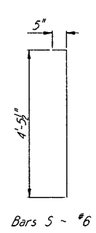
BEAM END BEVEL



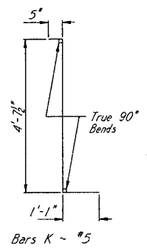
PART PLAN



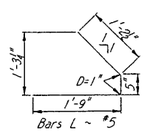
PART ELEVATION
Strands Not Shown For Clarity



Bars S ~ #6

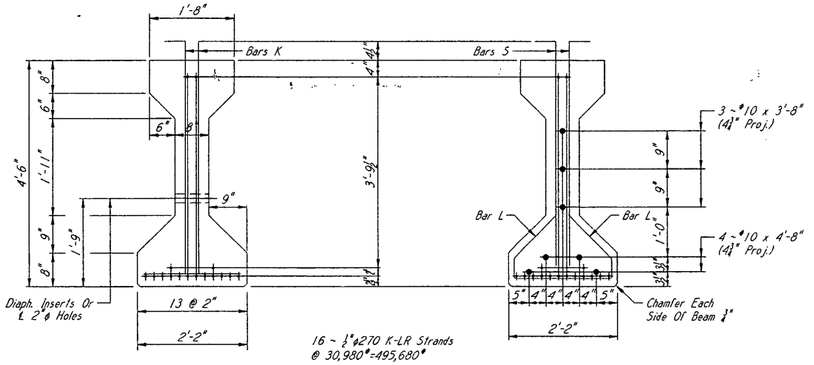


Bars K ~ #5



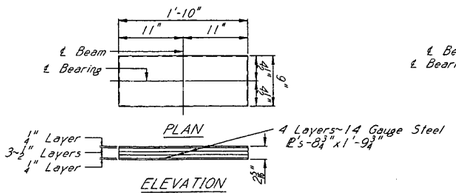
Bars L ~ #5

BAR BENDING DETAILS
Dimensions Are Out To Out



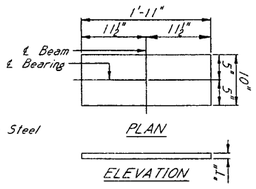
SECTION NEAR ℄ SPAN

END ELEVATION



NEOPRENE PAD DETAILS

Testing Acceptance Procedure Shall Be In Accordance With Section 714.10.6 Of The Specifications.
Elastomer Shall Have A Minimum Shear Modulus Of 120 p.s.i. At 73°F.
Bearing Area On Top Of Cap Shall Be Cast Smooth And True To Grade.



NEOPRENE PAD DETAILS

In No Case Shall Neoprene Pads Be Field Cut. Bearing Area On Top Of Cap Shall Be Cast Smooth And True To Grade.

NOTE: For Dimension "T" See Sheet No. A14.

GENERAL NOTES:

Beams Shall Be Manufactured In Accordance With Mississippi Standard Specification For Road & Bridge Construction, 2004.
The Tops Of Beams Shall Be Rough Floated, At Approximately The Time Of Initial Set The Entire Tops Of Beams Shall Be Scrubbed Transversely With A Coarse Wire Brush To Remove All Laitance And Produce A Roughened Surface For Bonding Slab. Other Surfaces Shall Be Finished Per Specifications.
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Concrete Shall Be Class "FX" And:
(a) Shall Have A 28-Day Cylinder Strength Of 6000 p.s.i.
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At The Contractor's Request A Suggested Concrete Design Mix Will Be Furnished With The Understanding That It Is The Contractor's Responsibility To Maintain 6000 p.s.i. Concrete.
If Any Cylinder Tests Below 6000 p.s.i., The Beam Represented Will Be Held On The Yard Until The 28-Day Strength Is Determined And Acceptance Or Rejection Has Been Established.

DESIGN DATA

Unit Stresses Are In Accordance With A.A.S.H.T.O., 2002.

PRESTRESS REQUIREMENTS

For Deflection Diagram, See Misc. Span Details Per Sheet No. A14.

Strand Type	Minimum Breaking Strength	Initial Tension	Required Number And Location Of Strands						Maximum And Minimum Centroid For				Distance From ℄ Span To Hold-Down Point	Camber Limits	Deflection Diagram			Minimum Concrete Strength At Time Of Release
			Total Number Strands	Straight Strands		Draped Strands			Total Number Of Strands						A	B	C	
				Number Strands	Centroid	Number Strands	Centroid		At ℄ Span		At Beam End							
							℄ Span	Beam End	Max.	Min.	Max.	Min.						
	lbs/strand	lbs/strand																
½"ϕ270 K-LR	41,300	30,980	16	16	8⅛"	0	N/A	N/A	9⅛"	7⅛"	9⅛"	7⅛"	N/A	0 To 1"	1"	1"	1"	4500

MISSISSIPPI DEPARTMENT OF TRANSPORTATION

OVERPASS AT STA. 850+65.44

63 FT. BEAM DETAILS (TYPE IV)

PROJECT No. 104969 /304000
SP-0006-01(087)
UNION COUNTY

WORKING NUMBER	SHEET NUMBER
A17 OF 17	482

DATE	REVISION	BY

DESIGNED	CDB	DETAILED	CDB	TRACED	CADD
CHECKED	SSP	ISSUED		DATE	1207

PLAN
ROADWAY DESIGN DIVISION
MISSISSIPPI DEPARTMENT OF TRANSPORTATION

08/14/2008 08:21:17 A482 S18.DGN

DESIGN TEAM: Florence & Hutcheson, Inc.

COUNTY : UNION /PONTOTOC

PROJECT No. SP-0006-01(087)